



SANJAULI VIBES

(A Multidisciplinary e-journal)

OPEN ISSUE



An Organ of:

GOVERNMENT COLLEGE SANJAULI

(Centre of Excellence)

Shimla (H.P.)- 171006

(GOLDEN JUBILEE YEAR 2019)

Patron

Dr. C.B. Mehta; Principal

Advisors

Prof. P.K. Ahluwalia

Prof. Roshan Lal Sharma

Dr. Janesh Kapoor

Editorial Board

Dr. Sarita Sharda

Dr. Ram Lal Sharma

Dr. Roop Lal

Dr. Vikram Bhardwaj

Issue Editor

Dr. Ram Lal Sharma

Vol. I; No. 1 (August 2019)



SANJAULI VIBES

(A Multidisciplinary e-journal)

OPEN ISSUE

An Organ of:

GOVERNMENT COLLEGE SANJAULI

(Centre of Excellence)

Shimla (H.P.)- 171006

(GOLDEN JUBILEE YEAR 2019)

Table of Contents

S. No.	Title	Author
<i>Editorial</i>		
1	Leveraging Digital Skills for Excellence: A Case Study of Himachal Pradesh	G.P. Kapoor
2	Challenges and Issues in Water Resources Management for Economic Development	R.L. Sharma
3	Digital Payment System in Rural India: Issues and Future prospects	Ajay Kumar/Rakesh Singh
4	Towards a Cashless Society	Shivani Sood/Malvika Sharma
5	The Circle of Sustainability	Yogesh Kumar
6	Interface between Oral Narratives and Documented History	Vikram Bhardwaj
7	The Architectural Development of Banjar Valley	Kishori Lal Chandel
8	English Language: Nature and Directions of Change	Praveen Kumar
9	Construing a Virtual Society	Janesh Kapoor
10	Globalization and Translation	Dipali Sharma Bhandari
11	Chemicals in Everyday Life	Rita Chandel
12	Organic beekeeping in himachal pradesh:emerging scenario,future challenges and strategies	Minakshi Sharma

Editorial

It is with immense pleasure and a deep sense of satisfaction that we introduce the first number of the e- journal “Sanjauli Vibes”, a multidisciplinary on-line journal of Government College sanjauli (Centre of Excellence), Shimla (H.P.), being launched on the occasion of the Golden Jubilee Year of this great and historic institution. Being the very first edition of the journal, it has been designed as an open issue and covers a wide range of subjects from Economics, History, Himachali folk-lore, culture and architecture to literature and issues of language and translation. The subsequent issues of the journal will be more focussed in terms of thematic and academic issues so as to embark upon an in-depth and varied research on areas of social, economic, cultural, historic and contemporary issues which affect us directly. Efforts will also be made to acquire regular ISSN Number for our journal and to get it listed in the UGC list of approved journals so that the research papers published in it are properly indexed and recognized. A note of thanks and appreciation is duly extended to the academics who have contributed their articles to the first issue of the journal.

With warm regards

Ram Lal Sharma

Editor

Leveraging Digital Skills for Excellence: A Case Study of Himachal Pradesh

G. P. Kapoor

Associate of Professor
Centre of Excellence
G.C. Shimla - 6 (H.P.)

It was a technical changing scenario, to think online network learning environment and resources for science, technology and mathematics in late nineties. It was to disseminate the information and impart the knowledge for formal and informal education; hence, efforts were made, open and flexible system, as much as possible without making a centralized investment which led everlasting overall development into a narrow path. But many challenges still remained as how to leverage the advantages of digital technologies for the benefit of culture and society and almost two decades have passed since the phrase "World Wide Web" and its enabling technology burst onto the scene and with increase of it a dramatic fall is found in the cost of production as well as environment friendly. In the arena of digital, Make in India is an initiative which is preceded by the Government of India and leveraging digital skill for excellence is the part of it.

The prime minister of India had indicated about these initiatives in his independence speech in the year 2014. After an enormous brain storming it was launched on 25 September, 2014 at Vigyan Bhawan function by introducing a Logo of Ioin. The logo of Ioin indicates striding lion made of cogs symbolizing manufacturing strength and national pride. A workshop was organized in this regard on 29 December, 2014 by the Department of Industrial Policy and promotion, which was chaired by the prime minister and attended by the cabinet ministers, chief secretaries of states and various industry holders. The primary objective behind the initiative was to focus on 25 sectors of the economy and to attain the inclusive growth through job creation and skill enhancement. Some of these sectors are: automobiles, chemicals, IT, pharmaceuticals, textiles, ports, aviation, leather, tourism and hospitality, wellness, railways, auto components, design manufacturing, renewable energy, mining, bio-technology and electronics. Anyhow, some of the initiatives are taken in Himachal Pradesh in the area of Digital Skills which is an essential component of make in India to enhance the profitability. The basic aim behind it is to leverage the excellence in capacity building through community-based mechanism. It is mandatory to increase the profitability, and to adequately increase the

profitability, to achieve this objective, it is also essential to decrease the cost of production as well as to reduce the corruption and inefficiency which is the basic need of the present scenario in developing countries.

Need of the Study

- Indian economy has a vast potential to develop, formulate and execute plans and policies. Indians are capable to mark a dent in world economy but how to harness the talent of increasing population and save the environment for future generation. So much so the major problems like lack of technology, illiteracy, adequate human management, operational management, political will and finance do exist in all the developing and underdeveloped countries.
- The greatest issue that Indian economy is facing shortage of funds for growing population and how to create new opportunities for employment generation and development, secondly, increasing regional disparities and income inequalities but due to gaps in the policies and programmes the required targets are not achieved in the desired direction after almost 70 years where hopefully, make in India and digital India can play a significant role to fill the gaps.

Objectives: The basic objective of the study is to analyse the growth of leveraging digital skills for excellence with reference of state of Himachal Pradesh the corporate sector along with public sector after liberalisation reforms were initiated in the year 2017. Following are the objectives for this research paper.

- ❖ To examine the growth of Digital Saksharta Abhiyan (DISHA),
- ❖ To study the impact of DISHA on Lokmitra Kendra Transmission,
- ❖ To evaluate the Aadhaar registration performance,
- ❖ Appraisal of moral responsibility Himswan and e-district.
- ❖ Road map to leveraging digital skills.

Methodology: To achieve the above-mentioned objectives five indicators have been selected to study the overall performance. Secondary data of six indicators DISHA (Digital Saksharta Abhiyan, LMK/CSC (Lok Mitra Kendra/Customer Service Centre), AADHAR, HIMSWAN (Himachal State Wide Area Network), e-DISTRICT and E-procurement have been collected from the govt. office, like directorate of information technology and statistical office of Shimla. The time

period covered in the study is stretched from the year 2012-13 to 2016-17 and averages are calculated to synthesis the overall annual increase of each indicator and for the growth it is stretched from the year 2013-17. The growth rates of the above-mentioned indicators are calculated as per the following equation:

$$\text{Log (Yt)} = \alpha + \beta^t + e$$

Log (Yt) = Log of selected variable to compute the exponential growth rates.

α =Constant of the model, β =co-efficient of the time (growth rate) and e=error

Annual growth rates are also calculated with the following formula:

$$\text{Log (Yt)} = (\text{Yt}-\text{Yt}-1)$$

Yt =Log of selected variable to compute growth rates, Yt is first value of the of the indicator and Yt-1) second value of the indicator for the successive year.

Some of the Initiatives being taken in Himachal Pradesh in the area of Digital Skills and Leveraging Digital Skills to improve the G2C interface and also, provide an employment are as follows:

1. DISHA (Digital Saksharta Abhiyan) ¹

This scheme aims to make six crore persons in rural areas, across States/UTs, digitally literate, reaching to around 40% of rural households by covering one member from every eligible household by 31st March, 2019.

The scheme has been started in Himachal Pradesh in the Month of March, 2017. The Scheme would empower the citizens in rural areas by training them to operate computer or digital access devices (like tablets, smart phones etc.), send and receive e-mails, browse Internet, access Government services, search for information, undertake digital payment etc., hence, enable them to use the Information Technology and related applications especially Digital Payments to actively participate in the process of nation building. The Scheme aims to bridge the digital divide, specifically targeting the rural population including the marginalized sections of society like Scheduled Castes (SC)/Scheduled Tribes (ST), Minorities, Below Poverty Line (BPL), women and differently-able persons and minorities.

¹CSC e-Governance Services India Limited

In Himachal Pradesh, the scheme has been rolled out through Citizen Service Centers, further Government and Private Universities and Colleges have also been asked to set up DISHA centers to impart this training, the state education department has been asked to set up Disha Centers in the Govt. schools too.

The following Table 1 shows the statics of training imparted under this scheme through 1392 CSCs as on 30 October, 2017 out of total population of 7140,000².

Table 1

Consolidated Status PMGDISHA till 24/11/2017				
Sr. No.	District	Students Registered	Training Completed	Certified Candidate
1	BILASPUR	7186	6918	3377
2	CHAMBA	8288	7778	2768
3	HAMIRPUR	6092	5605	2006
4	KANGRA	9181	7290	2981
5	KINNAUR	3546	3514	1421
6	KULLU	5405	5230	1198
7	LAHUL AND SPITI	8	8	1
8	MANDI	6452	5544	2021
9	SHIMLA	6049	5940	1615
10	SIRMAUR	3289	2777	1268
11	SOLAN	5504	5300	1464
12	UNA	3870	3592	1708
	Total	64870	59496	21828

Table 1 also depicts that only 91.71per cent has completed the training programe and out of it only 33.64 per cent are declared certified candidates. It means more motivation is required in this direction.

2. LMK/CSC (Lok Mitra Kendra/Customer Service Centre)³

The Common Service Centre (CSC) scheme popularly known as Lokmitra Kendra project in Himachal Pradesh aims to establish 3366 e-Governance centers at Panchayat level in the state. The scheme, as approved by the Government of India, envisions CSCs as the front-end delivery points for Government, private and social sector services to rural citizens of India, in an integrated manner. CSCs would be the platform for fundamental transformation of the ways in which lots of development challenges would be specified to in rural India.

² Statistical office of Himachal Pradesh

³ DIT, H.P.

The centers are being established under the Public Private Partnership (PPP) mode thus leveraging the support of various stakeholders such as State Governments, local bodies, opinion makers and agencies/ institutions involved or having interest, commercial or otherwise, in rural areas/ markets. The project envisages various direct/indirect social as well as economic benefits to the rural masses.

Better dissemination of government information at the remotest corner, resulting in better awareness among rural masses about various Govt. Schemes and bringing in transparency, saving in time & cost of people visiting, district headquarters time and again for getting information, lodging complaints & inquiring their status etc. The reduction in response time by the concerned departments and increase in their accountability to people of the State, virtual extension counters for the Government, by way of using these centers for getting the departmental data entered and transmitted from time to time, a platform for the people to interact with each other on areas of mutual interests e.g. matrimonial, sales/purchases, additional income opportunities from Citizen Information Centers by using them for General Training, Word Processing and Data Entry jobs, and extending Internet Access, employment generation by opening up of Citizen Information Centers throughout the State in the private sector and accelerating the growth of Internet Service Providers (ISPs) throughout the State are also the extra benefits to the rural society.

113 services are provided through CSCs in Himachal Pradesh. Some of the services are HPSEBL Bill Payment, HRTC Ticket Booking, Aadhar Printing, Crop Insurance, online complaints/information to Police, Employment Exchange Services, Nakal Jamaabandi, e-Samadhan grievance redressal service, Jail Varta, Election Department Services, Birth/Death Registration, issuance of certificate etc.

Total 2168 Lok Mitra Kendras are operational and transactions carried out by them for last five years are as follows:

G2C Services, Table 2: LMK transactions for FY 2012 to 2017⁴

	2012-13	2013-14	2014-15	2015-16	2016-17	
	Transaction	Transaction	Transaction	Transaction	Transaction	Average
HPSEBL	20,21,136	30,00,892	28,23,717	31,51,828	30,05,205	28,00,556
IPH	1,34,897	1,68,080	1,25,697	1,11,754	1,05,905	1,29,267
HRTC	3,635	7,385	2,785	237	1,243	3,057
Nakal Jamabandi	2,59,513	5,89,937	6,10,776	8,23,585	10,57,223	6,68,207

⁴ Source: ibid

HPSSC	-	-	-	183	5,052	2,618
MC Water	-	-	-	4,974	6,586	5,780
MC Tax	-	-	-	3,030	1,786	2,408
Total	24,19,181	37,66,294	35,62,975	40,95,591	41,83,000	

It is reveals in Table 2 that due to this training transaction in LMK has registered continues increase from the year 2012-13 to 2016-17 except in the year 2014-15. This dip is because of IPH transaction in CSC.

Table 3: LMK Transactions Value for FY 2012 to 2017⁵

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	
	Amount	Amount	Amount	Amount	Amount	Average
HPSEBL	75,90,66,034	1,33,09,53,904	1,26,69,06,078	1,40,84,81,203	1,46,70,67,976	1,24,64,95,039
IPH	2,74,87,291	4,05,19,033	3,55,14,456	3,65,47,793	4,11,44,407	3,62,42,596
HRTC	26,91,635	55,75,854	21,55,450	2,49,915	9,69,727	23,28,516
Nakal Jamabandi	3,37,306	10,28,363	11,06,401	14,85,441	18,78,932	11,67,289
HPSSC	-	-	-	50,371	13,37,160	6,93,766
MC Water	-	-	-	1,40,01,443	1,42,93,299	1,41,47,371
MC Tax	-	-	-	38,03,294	23,91,729	30,97,512
Total	78,95,82,266	1,37,80,77,154	1,30,56,82,385	1,46,46,19,460	1,52,90,83,230	

The Table 3 shows that the, on an average, the value has registered decrease in the year 2014-15 due to three departments HPSEBL, IPH and HERC. The report from business to consumer services shows that the account transaction of 2,75,066 hastransferred the total amount for Rs.15,38,35,699 (Table 4)

Table 4: B2C Services: (Report from April 2017 to Oct 2017 – excluding Aug 2017)⁶

Scheme	Transaction Count	Amount
Apna Print	34	10170
Bharat Bill Payment System	171	88473
CSC Aadhaar	51926	1322008
CSC Banking	589	187130
CSC Services	3586	58245
e-Legal Service	1	115
Financial Services	690	242977
Food Safety and Standards Authority of India	4499	1964300
Indian Navy	4	276
Individual Household Latrine (IHHL)	317	317
Insurance	41526	123836588
Recharge	126162	14815319
Education	4526	452668

⁵ Source: ibid

⁶ Source: ibid

Travel and Hotel	1096	5715516
Health	586	221451
Veterinary	2	100
PAN Card Services	37212	4042413
Passport Services	1368	136800
Income Tax	255	86466
Railway	494	617175
VLE Bazaar	20	10899
Ujala – EESL	2	26295
Total	2,75,066	15,38,35,699

3. AADHAR⁷

AADHAR seeks to empower residents of India with a unique identity and a digital platform to authenticate anytime, anywhere. In terms of Aadhar generation, Himachal Pradesh ranked 3rd in the country despite very difficult topography. The data on Aadhar generation in Himachal Pradesh for the last five years is as follows:

Table 5 Aadhaar Generation⁸

Year	2013	2014	2015	2016	2017 (till Nov.)	Average
Tentative Aadhaar Generation	18,85,542	2,22,927	2,26,468	5,38,129	2,37,531	6,22,119

AADHAR based Direct Benefit Transfer or DBT is an attempt to change the mechanism of transferring subsidies launched by Government of India. This program aims to transfer subsidies directly to the people through their bank accounts. It is hoped that crediting subsidies into bank accounts will reduce leakages, delays, etc. The Table 5 indicates that Aadhar generation has registered a continuous increase in this field.

The Direct Transfer Benefit transfer data for Himachal Pradesh for the last five years is as follows:

Table 6: AADHAR DBT Transactions Details for FY 2012 to 2017⁹

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	
	Transaction	Transaction	Transaction	Transaction	Transaction	Average
SVUCY	566	3,880	3,863	3,560	4,178	3,209
JSY	4	4	2	2	3	3
IGMSY	3,458	7,122	8,577	8,008	8,577	7,148
PMOBC	1,081	2,400	5,297	5,193	5,419	3,878

⁷ Source: ibid

⁸ Source: ibid

⁹ Source: ibid

PMSC	1,789	11,769	12,568	12,190	5,419	8,747
Total	6,898	25,175	30,307	28,953	23,596	

It is observed in the Table 6 that direct benefits of subsidies has registered decrease in the year 2016-17 due to last month code of conduct of election year in the state.

Table 7: AADHAR DBT Transactions Values (in Rs.) for FY 2012 to 2017¹⁰

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	
	Amount	Amount	Amount	Amount	Amount	Average
SVUCY	56,60,000	3,88,00,000	3,86,30,000	3,56,00,000	4,17,80,000	3,20,94,000
JSY	2,800	2,800	1,400	1,400	2,100	2,100
IGMSY	30,97,720	1,45,79,220	2,71,00,000	2,56,78,500	2,71,00,000	1,95,11,088
PMOBC	23,14,050	3,20,85,877	3,76,20,831	3,99,77,151	4,48,95,264	3,13,78,635
PMSC	52,56,200	32,91,88,389	31,81,35,954	31,88,61,737	4,48,95,264	20,32,67,509
Total	1,63,30,770	41,46,56,286	42,14,88,185	42,01,18,788	15,86,72,628	

The impact of Aadhaar direct benefit transaction has been seen in the Table 7, which means decrease in transaction also registered a dip in the value of Aadhar direct benefits too.

AADHAR seeding is a process by which Aadhar numbers of residents are included in the service delivery database of service providers (In this Case he service provider is Bank) for enabling de-duplication of database and Aadhar based authentication during service delivery. The status of AADHAR seeding in Himachal Pradesh is as follows:

The Table 8 reveals that only one department EPFO is required to be boosted up which registered below than 50 per cent seeding, whereas central schemes and state schemes has registered 100 per cent seeding.

Table 8 The status of AADHAR seeding in Himachal Pradesh

S. No.	Scheme	Seeding Percentage
1	Public Distribution System (PDS)	95.71%
2	MNREGA	97.87%
3	National Social Assistance Programme (NSAP) – NIC	77.57%
4	National Social Assistance Programme (NSAP) – National	84.04%
5	National Social Assistance Programme (NSAP) – State	85.49%
6	Pradhan Mantri Jan-Dhan Yojana (PMJDY)	74.60%
7	Employees' Provident Fund Organisation (EPFO)	39.04%
8	Modified Direct Benefit Transfer(MDBTL) – LPG	92.16%
9	Modified Direct Benefit Transfer(MDBTL) – Bank	87.34%
10	State Schemes (11 schemes)	100.00%
11	Central Schemes (12 schemes)	100.00%
12	Pariwar Register	50.28%

¹⁰ Source: ibid

4. HIMSWAN (Himachal State Wide Area Network)¹¹

Himachal State Wide Area Network (HIMSWAN) project is a revolutionary step towards enhancing good governance. By setting up HIMSWAN, the State Government intends to modernize the communication infrastructure in the State to create a state of the art and reliable network for G2C, G2E, G2B and G2G interfaces.

The Project is aimed at providing HIMSWAN link to Government Offices and Integrated Community Service Centers at State, District, Sub-Divisional, Tehsil and Block headquarters in Himachal Pradesh. The Data on the Number of Horizontal offices connected to HIMSWAN year wise is as follows:

Table 9¹²

Financial Year	2013-14	2014-15	2015-16	2016-17
Count	1325	1702	2060	2241

The Table 9 explains 1.69 per cent increase in the year 2016-17 as compared to the year 2013-14. If network is increased to 100 per cent it would save the time and paper less work also saves the environment.

5. e-District¹³

Districts are the de facto front-end of government where most Government-to-Consumer or G2C interaction takes place. The e-District project was conceptualized to improve this experience and enhance the efficiencies of the various departments at the district-level to enable seamless service delivery to the citizen.

Table 10: District Transactions Report¹⁴

e-District Transactions Report, As on 23-Nov-2017						
S. No.	Name of Department	Service Name	Year Wise Transactions Details			Average
			2015	2016	2017	
1	Panchayati Raj Department/Urban Development Department	BRC	16	135	51	67.33
2		DRC	2	43	97	47.33
3		MRC	2	18	78	32.67
4	Panchayati Raj Department	CPR	0	50	384	217
5	Rural Development Department / Urban Development Department	BPLC	0	21	131	76
6		AR-NREGA	0	6	5	5.5
7		AW-NREGA	0	4	0	2
8	Department of Labour & Employment	AREMW	0	0	1	1

¹¹ Source: ibid

¹² Source: ibid

¹³ Source: ibid

¹⁴ Source: ibid

9		AMTWR	0	0	2	2
10		ARMTWR				
11		MWCLRg	7	0	0	2.33
12		MWCLRn				
13		RSCE	4364	36	1405	1935
14		RSCE				
15		REECL	177	0	67	81.33
16		ACLL	1426	0	246	557.33
17		RCLL				
18	Revenue Department	RCCM	720	8238	3735	4231
19		AAC	0	123	1179	651
20		ABAC	0	6	79	42.50
21		ABHC	0	1649	12106	6877.50
22		ACC (SC/ST)	0	486	4400	2443
23		ACC	0	569	5840	3204.5
24		ADCC	0	135	535	335
25		ADC	0	52	307	179.5
26		AFFC	0	1	2	1.50
27		AIC	0	1479	11132	6305.50
28		AIC (N)	0	1	3	2
29		ALHC	0	203	1107	655
30		AMCC	0	6	50	28
31		AOC	0	1069	4772	2920.50
32		ARAC	0	2	25	13.50
33	Women & Child Welfare Department	BHAY	0	21	3536	1778.50
34		CMBP	0	31	1171	601
35		MTAMSY	0	20	727	373.50
36		WRM	0	0	97	97
37	SC, OBC and Minority Affairs Department	ASCIC	0	0	11	11
38		ADIC	0	0	1	1
39	Department of Labour & Employment	REBCW-	0	0	21	21
40	Electricity Department	EBP	0	0	4	4
Grand Total			6,714	14,404	53,307	

Some of the services delivered through this project are like certificates, licenses, public distribution system etc. In certification services creation of certificates for income, domicile, caste, Birth, Death etc. and in licenses services arms licenses, business licenses are included. In public distribution system (PDS) issues like of ration cards and in social welfare schemes disbursement of old-age pensions, family pensions, widow pensions, etc., are covered. In complaint related issues, unfair prices, absentee teachers, non-availability of doctor, etc., and in RTI, online filing and receipt of information relating to the Right to Information Act and in

linking with other e government projects, registration, land records, and driving licenses, etc., are covered. Information dissemination about government schemes, entitlements, etc. and in assessment of taxes like property tax, and other government taxes as well as in utility payment, payments relating to electricity, water bills property taxes, etc. are discussed and training is provided. The total fifty-two numbers of G2C services have been rolled out in this project. Almost, 3000 officials have been trained to provide online services. 1252 laptops have been provided to Patwaris for delivering revenue service online. An interface has been provided to the Administrative Reforms Department to monitor services cover under the Public Service Guarantee Act.

The project won the Gold category Award in Smart E-Governance and SKOCH order of merit award in 2016-17. The Table 10 has showed on line registration of different services by the different departments and it is observed that in some of the cases they registered a dip e.g. BRC, CPR, REECL, RCLL etc. First of all, it is because the full record of some the services have not been received up to the end of December by the department. Secondly, citizens have a choice to use any mode of portal i.e. on line or off line.

6. E-Procurement¹⁵

E-Procurement (electronic procurement) is the business-to-business or business-to-consumer or business-to-government purchase and sale of supplies, work, and services through the Internet as well as other information and networking systems, such as electronic data interchange and enterprise resource planning. The objective behind this is to maintain the transparency and accountability.

Table 11: No. of Departments using e-Procurement for the FY 2013 to 2018¹⁶

Financial Year	2013-14	2014-15	2015-16	2016-17	2017-18 (till Oct.)	Average
No. of Departments	10	15	20	26	28	76.6
No. of Tenders	2793	3385	5281	6181	3795	4287
Tender Value (crores)	1,843.63	2,405.70	2,441.06	2,473.35	1,741.98	2,181.14
Average	2864.21	4201.9	6114.69	88652.12	4403.66	

¹⁵ Source: ibid

¹⁶ Source: ibid

The Table 11 has showed a continuous increase in number of department participation, registration of tenders and tender value also. Otherwise also they have positive relationship with each other.

CONSOLIDATED PMGDISHA

If consolidated PMG-DISHA is compared among all the states and union territories, targets are very high to be achieved and few union territories and Sikkim have not even opened the account which is very disappointing.

Consolidated PMGDISHA Table 12 for different Sates:¹⁷

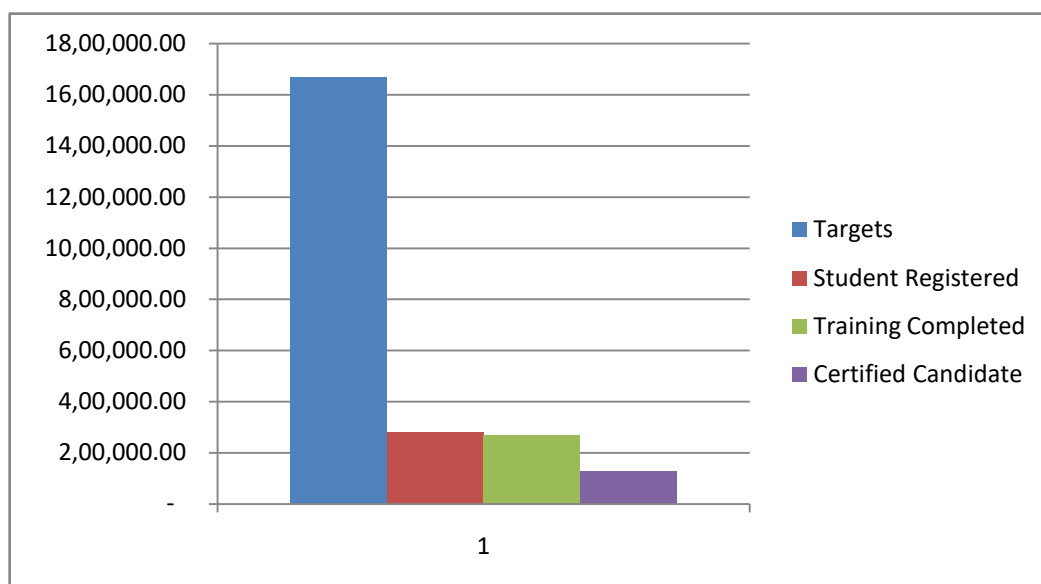
S. No.	State	Targets	Students Registered	Training Completed	Certified Candidate
1	ANDAMAN & NICOBAR ISLANDS	18000	0	0	0
2	ANDHRA PRADESH	2028000	176509	168171	95232
3	ARUNACHAL PRADESH	77000	216	200	30
4	ASSAM	1929000	34829	30169	319
5	BIHAR	6630000	702926	669481	320110
6	CHANDIGARH	2000	0	0	0
7	CHHATTISGARH	1412000	579462	551783	260797
8	DADRA AND NAGAR HAVELI	13000	1	1	0
9	DAMAN AND DIU	4000	0	0	0
10	DELHI	30000	0	0	0
11	GOA	40000	2	2	0
12	GUJARAT	2497000	675224	651327	331185
13	HARYANA	1191000	612257	599948	308342
14	HIMACHAL PRADESH	444000	70873	69348	23515
15	JAMMU AND KASHMIR	658000	106843	101314	47378
16	JHARKHAND	1803000	917021	889398	384181
17	KARNATAKA	2705000	292910	280973	141275
18	KERALA	1257000	10848	10568	3000
19	LAKSHADWEEP	1000	0	0	0
20	MADHYA PRADESH	3784000	664137	645607	288643
21	MAHARASHTRA	4433000	447123	413844	195061
22	MANIPUR	137000	5591	5380	1649
23	MEGHALAYA	171000	78	68	2
24	MIZORAM	38000	4323	4283	2207
25	NAGALAND	101000	1172	1172	773
26	ODISHA	2517000	669811	636995	317120

¹⁷ Source: ibid

27	PUDUCHERRY	28000	5513	5303	2209
28	PUNJAB	1247000	228870	221618	123556
29	RAJASTHAN	3712000	670234	658113	309990
30	SIKKIM	33000	0	0	0
31	TAMIL NADU	26790008	302750	284892	143442
32	TELANGANA	2028000	183425	175312	90466
33	TRIPURA	195000	28900	28653	14863
34	UTTARAKHAND	506000	139351	131776	72465
35	UTTAR PRADESH	11171000	2281521	2168200	953846
36	WEST BENGAL	4481000	258120	242584	99482
	Total	6,00,00,000.00	1,00,70,840.00	96,46,483.00	45,31,138.00
	Average	6,66,666.67	2,79,745.56	2,67,957.86	1,25,864.94

It is seen in fig.1 that certified students are very less of rural India as compared to students registered and training completed as well as many more efforts are required to achieve the set targets.

Figure1



It is observed in the fig.2 the annual growth rates of procurement is increasing at the highest rate of 39.1 per cent and transaction of LKM at the lowest level 11.8 per cent, hence, growth of its value also at the lower level. It has indicated that citizens are still not using the digital mode for their daily uses.

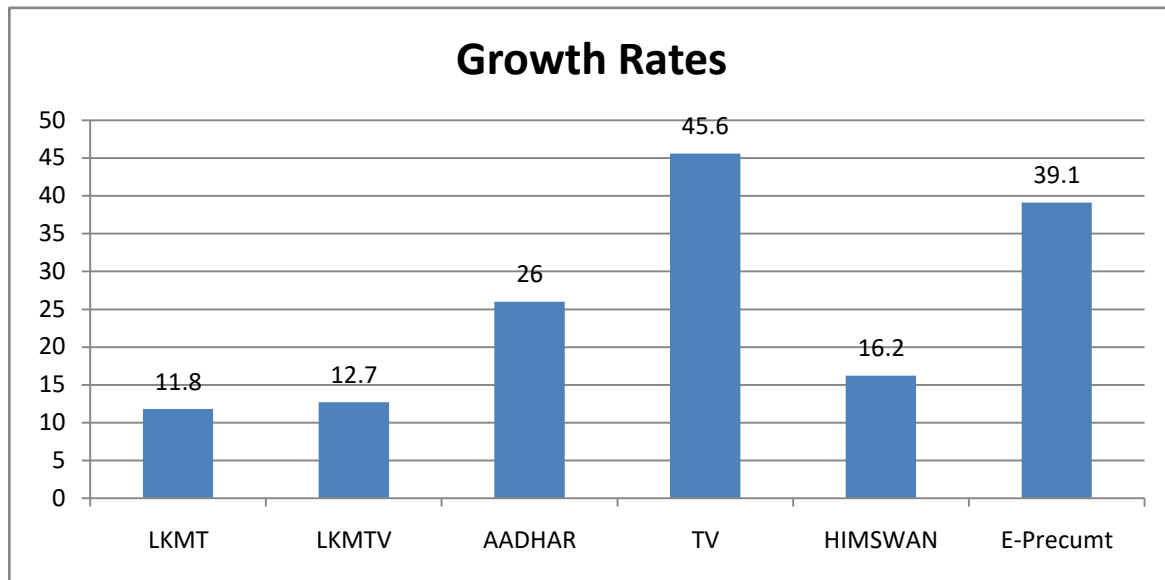
Table 13 Growth¹⁸

Indicator	Year	Growth
LKMT	2013-17	11.8

¹⁸ Source: Compiled from the data

LKMTV	2013-17	12.7
AADHAR	2013-17	26.0
TV	2013-17	45.6
HIMSWAN	2013-17	16.2
E-Precuet	2013-17	39.1

Figure 2



Conclusion: It is a great challenge to all the states, how to motivate the rural youth towards the leverage of digital India and further to the centre government to boost the efficiency and overall transparency. It is not only beneficial to increase the efficiency but it is also important to save the environment through digital India. Despite mounting evidence to the contrary, the impression that Aadhaar is helping the poor persists and would curtail the corruption, yet citizens have some hesitations which has to be removed by awareness campaign.

During the hearing on mandatory linking of Aadhaar with permanent account number cards in the Supreme Court, reports on Aadhaar “data leaks” were emerging by the dozens. Suddenly, there was a feel good heart-warming story of Aadhaar helping pensions in Rajasthan. {Singh 2017}.

Road Map

It is important to increase both transparency and profitability, and to increase them, more quality digital skill centre has to be opened in rural areas for the rural people. It would be necessary to take the feedback from the trainees or employers of the trainees. These trained people can also be encouraged further to impart the knowledge and disseminate the

information to benefit the idle youth and some set remuneration may be given through their counsellor or Pradhan.

The digital education can be started at elementary standard onwards and appropriate infrastructure for digital skill development should be provided. The gap between serious requirement and need has to be assessed to bridge up with special and appropriate strategies.

The linking of digital skill development with government and private sector can also be helpful to leverage the digital skill. Leveraging digital skill can reduce the corruption would increase the efficiency through DISHA, LMK, HIMSWAN, e-Procurement etc. Hence, if rural population is tapped more for leveraging digital skill, poverty line can be narrowed down by saving the more by curtailing the government expenditure on paper and further spending more investment on multipurpose projects to generate more income. It can be more helpful in reducing the income inequalities and regional disparities.

Abbreviations:

1. SVUCY – Swami Vivekananda Utkrist Chhartavriti Yojna
2. JSY – Janani Surksha Yojna
3. IGMSY – Indra Gandhi Matritav Shurksha Yojna
4. PMOBC – Post Matric Scholarship for OBC Students
5. PMSC – Post Matric Scholarship for SC Students
6. BRC- Birth Registration & Certificate
7. DRC- Death Registration & Certificate
8. MRC- Marriage Registration & Certificate
9. CPR- Copy of Pariwar Register
10. BPLC - Application for BPL Certificate
11. AR-NREGA - Application for Registration under MGNREGA
12. AW-NREGA- Application for Work under MGNREGA
13. AREMW- Application for Registration of Employing Migrant Workmen
14. AMTWR- Application for Motor Transport Worker Registration
15. ARMTWR- Application for Renewal of Motor Transport Worker Registration
16. MWCLRg- Migrant Workmen Contractor License Registration
17. MWCLRn- Migrant Workmen Contractor License Renewal
18. RSCE- Registration of Shops and Commercial Establishment
19. RSCE- Renewal of Shops and Commercial Establishment
20. REECL- Registration of Establishment Employing Contract Labour
21. ACLL- Application for Contract Labour License
22. RCLL- Renewal of Contract Labour License
23. RCCM- Revenue Court Cases Management
24. AAC- Application for Agriculturist Certificate

25. ABAC- Application for Backward Area Certificate
26. ABHC- Application for Bonafide Himachali Certificate
27. ACC- Application for Caste (SC/ST) Certificate
28. ACC- Application for Character Certificate
29. ADCC- Application for Dogra Class Certificate
30. ADC- Application for Domicile Certificate
31. AFFC- Application for Freedom Fighter Certificate
32. AIC- Application for Income Certificate
33. AIC (N)- Application for Indigent (Needy Person) Certificate
34. ALHC- Application for Legal Heirs Certificate
35. AMCC- Application for Minority Community Certificate
36. AOC - Application for OBC Certificate
37. ARAC- Application for Rural Area Certificate
38. BHAY- Beti Hai Anmol Yojna
39. CMBP- CM Bestowing Plan (Mukhya Mantri Kanyadaan Yojana)
40. MTAMSY- Mother Teresa Asahay Matri Sambal Yojana
41. WRM- Widow Re-Marriage
42. ASCIC- Application for Sr. Citizen ID Card
43. ADIC- Application for Disability ID Card
44. REBCW- Registration of Establishment Under the Building and Other Construction Workers
45. EBP- Electricity Bill Payment

References:

1. Bhagwati Jagdish, (2004), *In Defense of Globalization*, Oxford University Press, New Delhi.
2. Bhalla D. IAS (2017), *World Economic Crises and India*, IMR Media, Pvt Ltd, Gurgaon, India.
3. Gupta SP, (1988), *Statistical Method*, Sultan Chand and Sons Publishers, New Delhi.
4. Jaison John, (2017), *GST Dispute Resolution Mechanism A Sonstituional Farce?* EPW, Vol LII No 48, Pg. 15-18. Mumbai.
5. Jalan Bimal, (2004), *Indian Economy, Problems and Prospects*, Penguin Groups, New Delhi.
6. Jean Dreze et-al. (2017), *Adhaaar and Food Security in Jharkahnd*, EPW, Vol. LII no 50, pg.50-59, Mumbai.
7. Khera Reetika,(2017) *Impact on Welfare Programmes*, EPW, Vol. LII no 50, pg.61-69, Mumbai.

8. Kumar Anjali, (1989), *India's Manufactured Export, 1957-1980 Studies in the Export of Non Traditional Industry*, Oxford University Press, Bombay.
 9. Sasikumar C R and Kumar Shyam, (2012), *Reforms 2020*, RAIN TREE, Rupa Publication India Pvt.Ltd. New Delhi.
 10. Tharoor Shashi, (2013), *India the future is Now*, Wisdom Tree Ansari Road, New Delhi.
-

Challenges and Issues in Water Resources Management for Economic Development

R.L. Sharma

Associate Professor in Economics

Centre of Excellence

Govt. College Sanjauli, Shimla-6

Water is one of the most important resources for any country. Two thirds of the Earth's surface is covered by water and the human body consists of 75 percent of it. It is evidently clear that water is one of the prime elements responsible for life on earth. Ancient Indians knew the indispensability of water for life on Earth. According to ancient beliefs, the universe comprised of five basic elements: earth, water, light, air, and space. As per the Rig Veda, all life evolved from water. Water has a unique place in all the planet's renewable resources. It is essential for sustaining all forms of life, food production, economic development, and for general human well-being. It is impossible to substitute for most of its uses. Civilizations owe their evolution to water ever since the beginning of humankind. Agriculture was the main reason that our ancestors chose to settle near the water bodies.

This precious resource is a crucial factor for our economy. It is a vital component not only for agriculture, industry, and transportation but also for forestry, recreation, and environment. All these properties of water impart its great utility for human beings. The surface water and ground water resources of the country play a major role in agriculture, hydropower generation, livestock production, industrial activities, forestry, fisheries, navigation, recreational activities, and the like.

The world today faces imminent threats due to water scarcity with implications for world peace, justice and security. Globally, only 0.4 per cent of total water on mother earth is at our disposal for meeting our needs, of which, roughly 70 percent is used for agriculture, 22 percent for industry and 8 percent for domestic purposes. According to an estimate by 2030 the global demand for fresh water demand would be above 40% above the existing reliable and sustainable supply of fresh water. Water scarcity affects socio-economic growth. World Economic Forum's Global Risk Report 2016 recognized water crisis as the third risk in the list of top ten risks in terms of impact. Estimates indicate that around 4 billion people or two-thirds of the world's population face severe water shortage for at least one month every year. Water scarcity can result in low productivity and crop failure, leading to food shortages, increasing prices and subsequent hunger. The major concern and the challenge is to maintain water

sustainability with emerging challenges of inter-sectoral allocation of water and rising conflicts due to diversions of water from distant sources.

Challenges in water management

Water management consists of all the steps taken within a given society concerning the interface of that society with the water resource. These actions include adjustments in individual and social behaviour in response to water resource conditions. In the earliest stages of socio-economic development, it attempts to improve the natural relationship between man and water by enhancing the positive attributes of water and controlling its negative attributes. The nature and extent of these attempts vary with water resource conditions and national circumstances, but water management is a major activity in many nations or at least can be identified as an important national need. Many examples can be found where resolvable water problems continue to exist due to the inadequacy of the management response. As demands for water related services continue to increase in relation to a resource that is relatively fixed in supply and subject to degradation from many sources, water management efforts will become even more significant.

Water management involves a wide range of public and private activities. Within the public sector, the most obvious water management activity is the construction and operation of water projects, but management also involves many less visible activities. Project construction and operation requires a series of supporting activities such as data collection and analysis, planning, and financial management. In addition, other elements of water management include such diverse public sector activities as taxation, public assistance, regulation, and conflict resolution. In fact, a nation's water management system is an integral part of the overall political structure and cannot be considered in isolation of the general socio-cultural framework. A major factor determining the structure of a nation's water management system is delineation of the boundary between public and private sectors of activity. The water management system of a nation where natural resources are publicly owned and developed will be substantially different from that of a capitalistic nation where natural resources are subject to private property rights and managed within the framework of a competitive market. In general, the former approach involves more direct management activity by public authorities. Although the private sector plays a significant role in water development and use in capitalistic economic systems, yet the government's involvement is substantial. The government must define property rights in water and establish procedures for enforcement and conflict resolution. The private rights are generally defined as subordinate to public rights such as navigation. In addition to constraints imposed through the process of property rights definition, governmental influence is also exerted through economic incentives in such forms as tax policies and through direct regulation. Regulation can take many forms but is generally intended to constrain the exercise of private rights to protect the public interest from excessive adverse effects of private activities.

Mismatch of demand and supply of water

The origin of water scarcity is largely geographical, its impact can be measured in terms of social, economic and environmental. High water scarcity prevails in areas with high population density or the presence of much irrigated agriculture or both. According to an estimate, globally four billion people face severe water scarcity at least for one month of the year. The impact of water scarcity on agriculture is evident from agriculture productivity. Any fall in agriculture

productivity or crop failure in the extreme situation leads to loss of livelihoods for the farmers. Fall in income in agriculture spreads across all sectors of the economy through backward and forward linkages. Water scarcity results in rising income disparity which leads to reduced demand for the manufactured goods and services. It may lead to general economic recession. The impact of water scarcity on manufacturing and service sector differ depending on their demand intensities. In manufacturing sector activities like textile bleaching and dyeing, leather processing, food processing and beverages, pulp and paper industries will bear maximum impact of water scarcity. In the service sector, maximum impact is on hospitality, medical services and construction activities. This has direct and indirect impact on employment and income level at macro level. Shimla town was established by Britishers as summer capital of India with the bearing capacity of 20000 populations. Drinking water scheme was installed to feed the existing population with 20 million liters. Now the population of the town and its agglomeration has increased to about 300000 but the availability of water has increased to only 30 million liters which is a shortfall of 14 million liters of water. The water problem of town aggravated this year due to less rainfall and snowfall in winter. The acute water scarcity resulted water after the interval of 10-12 days. This is not an isolated example of acute shortage of water in urban areas. In Pune, Maharashtra, the government is relying on water tankers to meet the increasing demand of water. There are reports on industrial shutdowns due to shortage of water.

Availability of Drinking Water

Only 1% of the total water available can be used for human consumption. Most of the Indian cities depend upon underground water to meet their urban water demand. All the cities with pumping locations around the city face steep decline in water table. Chennai in 2005 faces a severe drought due to which large amount of underground water was extracted to cope up the urban area water demands resulting in the fall of water table from 8 to 10 meters (Veena Srinivasan et al, 2010). The fall in ground water table has been recorded for the pumping location on seasonal and perennial rivers e.g. water table in Haryana, along Yamuna river, is also going down speedily due to intensive use in agriculture and supply for urban areas. There are many similar examples in Punjab and across India. Cities, the concrete jungle, are characterized by impervious surfaces or surfaces with very high runoff coefficient. The water which should percolate in the Earth in the form of rain also get drained off very fast which increases the depletion of available water resources. Due to climatic variation, there is a change in rainfall pattern and also rainfall availability is reducing. Population pressure in urban areas is putting more pressure on water resources both in urban and rural areas. There are reports on industrial shutdowns due to shortage of water. The recycling of water helps in underground water recharge, and also protect natural ecological environment. One third of India's districts are affected by severe drought, affected some 33-crore people in 256 districts in 10 states. This shortage of water across the States has led to crop failure, mass forced migration, suicide, death, closing down of health care facilities and industry. It has seriously affected the health of women and children. Water has become the most scarce and commoditized product of the 21st century. "In fact, water is to the 21st century, what oil was to the 20th century". To get a bucket of drinking water is a struggle for most women in the country. The virtually dry and dead water resources have led to acute water scarcity, affecting the socio-economic condition of the society. The draught conditions have pushed villagers to move to cities in search of jobs.

Whereas, women and girls are struggling hard for the search of water in the villages, the time lost in fetching water can be translated into financial gains, leading to a better life for the family. If opportunity costs were taken into account it would be clear that in most of the rural areas, households are paying far more for water supply than the often-normal rates in urban areas. Also, if this cost of fetching water which is almost equivalent to 150 million women day each year, is converted into a loss for the national exchequer about 10 billion rupees per year.

Problems of Floods and Droughts

The Indian land mass receives an average of about 4000 billion cubic meters of precipitation and the average annual flow in the rivers is estimated to be 2000 billion cubic meters, the balance being lost to immediate evaporation and soil moisture. Two-thirds of the water resources are contributed by the Ganga-Brahmaputra-Meghna river basin covering one-third of the geographical area of the country. Consequently, the remaining parts have to be satisfied with the balance resource. In India about 80-90 percent of the run-off in most of rivers occurs in the four monsoon months from June to September. It is creating harmful abundance of water during monsoon and acute scarcity in summer. We don't have any efficient management system to control the floods and droughts by using the surplus monsoon water during deficient rains in drought. In India, the flood damages are also on the increase due to people's intervention and encroachments on the river beds. This restricts the free flow of water and damages the property. The other challenge is the drought management, which is estimated that about 1/3 of the geographical area are in India making it a drought prone. Drought is a natural disaster and represents a situation of water shortage and crop failure. The drought prone area should be made less vulnerable through soil moisture conservation management through water harvesting practice. The average availability of water in India is about 2000 m³ per person per year. It will be further reduced in the coming years as the population is increasing at the rate of 2 percent per annum even though the minimum water requirement is about 1700 m³/person as fixed by U.N. agencies and World Bank. If the availability of water is 1000 m³, it is considered as a water scarcity state. Though the water availability in India should not be a cause for anxiety, since water availability in Israel is only 450 m³/per person per year but still they are managing it very well. We can use the latest technology in water management through drip irrigation and recycling of sewage water for irrigation. In spite of sufficient land, water and technology available in the country we are still unable to manage the resources as per our requirements.

The water storage capacity created per person in different countries of the world is as follows

Country	Storage created/per person in M3
USA	5961
Australia	4717
Brazil	3388
China	2486
India	200

There are about 45000 large dams in the world of which 46 percent are in China, 14 percent in USA, only 9 percent is in India. The storage capacity created in USA is about 65MHM compared

to India's 18MHM. The fact is that both the countries have the same quantity of water from rain and the USA, the population is only 30 crore compared to India's population of 121 crore.

Climate Change and Water Resources

Climate change is not only a major global environmental problem, but also an issue of great worry to a country like India. The impact of future climatic change is expected to be more severe in developing countries such as India, whose economy is largely dependent on agriculture. India is under stress due to population increase and associated demands for energy, fresh water and flood. Availability of numerous water bodies and perennial river systems makes the Indian sub- continent one of the wettest places in the world. Large Himalayan Rivers including the Indus, the Ganges and the Brahmaputra are perennial sources of fresh water. Their flow is reduced during non-monsoon periods. Their flow mainly depends on the monsoon rainfall and groundwater recharge. The change in temperature, precipitation and other climatic variables are likely to influence the amount of runoff in Indian rivers. The runoff in the Himalayan Rivers is expected to be highly vulnerable to climate change because warmer climate will increase the melting of snow and ice. Melting of glaciers and reduction in solid precipitation in mountain regions would have a direct impact on water resources affecting the supply of drinking water, irrigation, hydropower generation and other uses of water. The glacial melt is expected to increase under changed climatic conditions, which would lead to increased summer flow in some river systems for a few decades, followed by a reduction in flow as the glaciers would retreat continuously. These changes will have great impact on the economy because the economy is closely linked to natural resource base and climatically sensitive sectors like agriculture, water and forestry. India may face a major threat because of projected change in climate. High flood levels can cause substantial damage to key economic sectors: agriculture, infrastructure and housing. Flood and drought management schemes have to be planned keeping in view the increasing in severity of floods and droughts.

Water Pollution

Water pollution is a major environmental issue. It has become challenge to provide safe drinking water in India. The largest source of water pollution in India is untreated sewage. Other sources of pollution include agricultural runoff and unregulated small-scale industry. Most rivers, lakes and surface water in India are polluted.

A 2007 study found that discharge of untreated sewage is the single most important source of pollution of surface and ground water in India. There is a large gap between generation and treatment of domestic waste water in India. The problem is not only that India lacks sufficient treatment capacity but also that the sewage treatment plants that exist do not operate and are not maintained. The majority of the government-owned sewage treatment plants remain closed most of the time due to improper design or poor maintenance or lack of reliable electricity supply to operate the plants, together with absentee employees and poor management. The waste water generated in these areas normally percolates into the soil or evaporates. The uncollected waste accumulates in the urban areas causing unhygienic conditions. It releases pollutants that leach into surface and ground waters. Indian cities lack sewerage treatment plants. Industrial and domestic waste water is discharged in rivers, ponds

and in wells resulting in pollution of natural water resources. There are few examples of waste water reclamation and water reuse in Indian cities but largely people still hesitate to use it. . In a recent example the hill town Shimla, Himachal Pradesh faced acute water shortage and jaundice outbreak due to contaminated water supply, affecting around 80-85 percent of the towns' local population. Untreated sewage water was released in the nearby stream and it was pumped for the drinking water in the town due to this contaminated water about 200 people died of jaundice in the town. Shimla is not an isolated example according to a 1992 World Health Organization study which reported that out of India's 3,119 towns and cities, just 209 have partial sewage treatment facilities, and only 8 have full wastewater treatment facilities. Downstream, the river water polluted by the untreated water is used for drinking, bathing, and washing. A 1995 report claimed 114 Indian cities were dumping untreated sewage and partially cremated bodies directly into the river Ganges. The lack of toilets and sanitation facilities causes defecation in rural and urban areas of India, like many developing countries. This is a source of surface water pollution. The sewage discharged from cities, towns and some villages are the predominant cause of water pollution in India. A joint study by PGIMER and Punjab Pollution Control Board in 2008 revealed that in villages along the Nullah. In the water fluoride, mercury, beta-endosulphan and heptachlor pesticide were present more than the permissible limit (MPL) in ground and tap water. Plus, the water had high concentration of COD and BOD (chemical and biochemical oxygen demand), ammonia, phosphate, chloride, chromium, and arsenic and chlorpyrifos pesticide. The ground water also contained nickel and selenium, while the tap water had high concentration of lead, nickel and cadmium. This water is unsafe, because pollution degrades water quality. Water pollution severely limits the amount of water available to the Indian consumers, industries and above all to agriculture.

Sustainable Agriculture

In India about 70 percent people are living in rural areas and are still dependent on agriculture. About 43% of India's geographical area is used for agriculture activities. The estimated food grain production in India was approximately 275 million tons during 2016-17. But still Indian agricultural production systems are facing the challenges of increasing food production to meet the ever increasing population without damaging the future resource base i.e. the ecosystem. The cropping pattern and crops of rice-wheat is the backbone of India's food security as both the crops contribute more than 80% to the total food basket of India and also utilizes large portion of irrigation water in this process. As per official estimates, irrigation potential in the country is 139.9 million hectares. It is expected that 54% of it would be realized from surface irrigation and remaining 46% from ground water sources. The prospects seem grim as only 63.255 million hectares of area has been irrigated so far, which is 45.5% of the net area sown in the country. The maximum contribution to irrigated area is of tube wells at 61.7% followed by canals at 26.7%; others sources at 9.3% and tanks at 2.59% respectively. These statistics are showing that we are largely dependent on ground water level and canals. But the sources of climatic changes and other socio-economic parameters are not giving positive signals for its sustainability. Water scarcity is a paramount concern that affects growth and sustainable development. It parallels the climate change effects in terms of space and scale. Both these intertwined concerns are challenging human security and crossing the boundaries of nations. Water crisis and its impacts are unambiguously noticeable at the local, regional, national and trans-boundary levels. Water insecurity threatens peace not only by accelerating existing

conflicts, but also by creating the risk of new conflicts. It is closely linked to food security and economic growth prospects at all these four different levels. To be precise, water scarcity makes development inequitable and unsustainable. There are many poverty-stricken economies that are yet to transform themselves on social, economic and other parameters. Water crisis in these economies may rather lead to regressive developmental changes, even if right corrective policy and institutional interventions on other developmental fronts are in place. Water scarcity makes development unsustainable not only in poor economies, but also in relatively well-off economies. The rapid increase in the demand for water accompanied by the shrinking supply of limited water sources increases social costs for those economies. Noticeably, social costs are borne mainly by the poor (UNESCO, 2015). This situation also brings in the intra-generation equity notion of sustainable development. That is, managing water in a sustainable manner could significantly contribute to poverty reduction in water-starved countries like India. Water, once considered to be a renewable resource, is gradually becoming a non-renewable resource. Hence, current water management practices warrant a new and conservative approach. Water-based ecosystem benefits constitute a significant amount of income for the poorer households (TEEB, 2010 p. 9). Therefore, managing water resources and their ecosystems properly is crucial for reducing poverty and inequality in the Indian context. For example, Chilika Lake in the state of Odisha generates ecosystem benefits equivalent to Indian Rupees (INR) 4,000 million per year and a larger percentage of the benefits are shared by the households at the community and local levels (Kumar, 2010 p. 17). This implies that in the absence of such direct benefits, either the beneficiaries would have been poorer by INR 4,000 million per year or an equivalent amount of tax payers' income from other parts of India have to be brought into the Chilika region every year in order to compensate for the welfare loss. Most of the ecosystem benefits are complementary to households' consumption activities. Certain benefits are used as an input to produce food, for example, irrigation water, some benefits are used to prepare food, for example, water for cooking purpose, and some other benefits are used as food, for example, fish, aquatic plants and so on. Thus, managing water sources does ensure the increased availability of such complementary benefits to the households, thereby enhancing their food security. Undeniably, the current level of poverty and inequality in India has both direct and indirect links with the gradual deterioration of water resources. Notably, most of the water-based ecosystem benefits are *non-marketable* in nature and, therefore, their contribution to economic welfare is not being adequately captured by the existing market systems. In other words, the market fails in reflecting the *scarcity value* of water and its ecosystem services, leading to their mismanagement. There are government/policy failures too. Governments in the developing and emerging world are yet to incorporate the economic values of the natural resources in their national accounting systems (Ahmed, El Serafy & Lutz, 1989p. 3). Degradation of water sources by pollution from various point and non-point sources is a serious concern in India. Although water in many river basins is treated as surplus, the reality is that it can no longer be used for productive purposes. The social costs (or the social benefits lost) due to water pollution in India has not yet been adequately quantified in economic terms. In other words, water is a critical factor in India's

overall growth and sustainable development and, therefore, even a small depreciation in water as a natural capital leads to a more than proportionate decline in the inter and intra-generational economic welfare. Access to safe drinking water is vital for human wellbeing (UNDP2006). Achieving universal access to improved water supply and sanitation (WSS) facilities by 2030 is one of the Sustainable Development goals.

The concerted attempts to secure and maintain water sustainability, however, needs to take note of not only the existing challenges, but also the emerging concerns. Some of the concern areas, the effects of which will increasingly be faced in India, includes: emerging challenges of inter-sectoral allocation of water, rising conflicts due to diversion of water from distant sources to cities and industries, conservation and protection of water sources, and protection of local sources of drinking water both for rural and urban areas to meet the demand for water supply. Growing urbanization, infrastructure and urban development, water pollution and climate change induce impact on environment and natural resources. These are the major issues and challenges before the planners for the sustainable development as well as to redefine the role of water for economic development. There is true proverb in Hindi “Jal hai to Kal hai” which means if there is water then our future is safe. However, man has been mercilessly misusing this precious resource given by nature. Our economic well-being is directly or indirectly related to the usage and availability of water resources.

References:

Kumar, M.D., Z. Shah, S. Mukherjee and A. Mudgerikar (2008), “Water Human Development and Economic Growth: some International Perspectives”, *ICRISAT Campus, Patancheru*, April 2-4, 2008, Vol. 2, pp. 841-857.

Mukherjee S, Z. Shah and M.D. Kumar (2010), “Sustaining Urban water supplies in India: increasing role of Large Reservoirs”, *Water Resources Management*, Vol. 24, no. 10 pp 2035-2055.

Veena Srinivasan and Sharachchandra Lele (2016) “Why we must have water budget”, *The Hindu*, 29 March, 2016.

World Economic Forum (2016), *The Global Risk Report 2016* (11th Edition)

Online [http:// Indian Express.com/after –jaundice –outbreak –Shimla-faces-another-crisis-that of –water](http://IndianExpress.com/after-jaundice-outbreak-Shimla-faces-another-crisis-that-of-water). 14th April, 2016.

Online [http:// Indian Express.com/ Pune/Maharashtra/drinking water crisis](http://IndianExpress.com/Pune/Maharashtra/drinking-water-crisis). 14th April, 2016.

Government of India, National Accounts Statistics (various issues), Central Statistical Organization.

Government of India, Agricultural Statistics at a Glance (various Issues), Ministry of Agriculture.

Government of India, Yojana, (various Issues) published by Ministry of Information and Broadcasting.

Government of India, Kurukshetra (various Issues) Ministry of rural Development.

Stavins, R. N. (2001). Experience with market-based environmental policy instruments (Discussion Paper 01-58). Washington, DC: *Resources for the Future*. *Google Scholar*

National Statistical Organization. (2013, March). Green national accounts in India: A framework. Ministry of Statistics and Programme Implementation, Government of India. *Google Scholar*

TEEB (2010). Mainstreaming the economics of nature: A synthesis of the approach, conclusions and recommendations of TEEB. Retrieved from <http://www.teebweb.org/publication/mainstreaming-the-economics-of-nature-a-synthesis-of-the-approach-conclusions-and-recommendations-of-teeb/> *Google Scholar*

Stavins, R. N. (2001). Experience with market-based environmental policy instruments (Discussion Paper 01-58). Washington, DC: *Resources for the Future*. *Google Scholar*

Ahmed, Y. J., El Serafy, S., Lutz, E. (1989). *Environmental accounting for sustainable development*. Washington, DC: The World Bank. *Google Scholar*

Kumar, R. (2010, March). Assessing the ecosystem services of Chilika. *Chilika Newsletter*, 5, 17–18. *Google Scholar*

Digital Payments System in Rural India: Issues and Future Prospectus

Ajay Kumar

Assistant Professor, in Economics

Govt. College Dhaneta (H.P.)

Rakesh Kumar

Assistant Professor in Economics

Govt. College Darlaghat (H.P.)

Abstract

In the present paper the introduction of Digital Payment System has seen as a right path towards the growth and development of the economy. The announcement by the Government

of India in 2016 has seen as the major historical movement towards demonetization of currency notes worth Rs'1000 and Rs'500. After November 8th 2016, some changes took place in Indian economy. The objective of the present paper is to study the positive impact of Digitization of payment system, problems and challenges of Digital Payments in Rural India and appropriate suggestions for effective implementations of Digital Payments.

Keywords: Rural Economy, Digital Payment System, Demonetization, Digital Transactions.

1. Introduction:

Rural development is vital to the development of the nation. Growth is never merely by chance; it is the result of forces working together. And in India, the forces are marching in the right direction to take the nation to new horizons. Rural development implies both the economic betterment of people as well as greater social transformation. Major part of India's rural economy is powered by cash transactions with a small number of people having bank accounts. In India, Agriculture is a highly cash centric activity as both the input and output channels work predominantly on cash transactions and sale, transport, marketing and distribution of harvest to *mandis* is also cash-dependent. India is a developing economy with focus on to achieve sustainable development. To achieve sustainable development, it is important that all sections of the society get equal opportunity and participate in nation building. Lack of awareness of digital financial literacy, especially among the rural population is a major challenge in the country, more so in light of the Government's recent demonetization and plans to make India a cashless economy. There is urgent need to create awareness among the citizens, especially in rural areas regarding digital finance services and also enable/support in access to digital finance services options. Technology is one of the key aspects through which large number of people especially from rural India can be reached. Common Service Centres (CSC) function as last mile delivery points of Government and public services for citizens in rural and remote areas of the country. Due to their spread and availability of ICT infrastructure, the CSCs have been given the mandate of spreading financial inclusion in rural and remote areas through services ranging from opening of bank accounts, banking facilitation, disbursing MGNREGS and various social security schemes entitlements, insurance and pension, etc. As such, CSCs can be leveraged to provide the rural population with awareness and access of Digital Financial Services to bring them under formal financial system

World Bank Development Research Group, in its report on August 28, 2014 reported digital payments in to the economies of developing nations and addresses the crucial issues of broad economic growth and individual financial empowerment about how digital payments benefits for both senders and receivers (**World Bank Report,2014**).“The benefits of digital payments go well beyond the convenience of many people in developed economies associated with the technology,” said Dr. Leora Klapper, Lead Economist (**World Bank Development Research Group**). “Digital financial services lower the cost and increase the security of sending, paying and receiving money. The resulting increase in financial inclusion is also vital to women’s empowerment.” The vision of the Government is to establish the digital platforms and the regulatory assurance to pull the hundreds of millions of currently excluded people in to full participation in the modern economy. The digital payments market in India is expected to reach \$1 trillion by 2023. Incidentally, the global payments market itself is growing at a rapid rate and is expected to cross the \$2 trillion mark by 2020(**NASSCOM**). In an effort to transform the country into a “less-cash” society under the Digital India campaign, the Government of India has been promoting the use of digital payment methods such as banking cards, Unstructured Supplementary Service Data (USSD), mobile wallets, internet banking, mobile banking, Aadhaar-enabled Payment Systems (AEPS) and micro ATMs. As part of the ‘Digital India’ campaign, the Government aims to create a ‘digitally empowered’ economy that is ‘Faceless, Paperless, and Cashless’. These methods are easy to make, more convenient and provide customers the flexibility to make payments from anywhere and at any time. These are a good alternative to traditional methods of payment and speeded up transaction cycles.

2. Need of the Study:

Financial inclusion is one of the foremost policy challenges facing India today. As of 2014, approximately 53% of India’s population had access to formal financial services.¹ since then; the Government has taken several significant steps towards including a greater percentage of India’s population within the umbrella of formal financial services. The inception of the PMJDY has undertaken a commendable task of opening approximately 25.68 crore bank accounts.² In order to catalyze the process of attaining greater financial inclusion the goal of including over 90% of underserved sections of society in the ambit of formal finance by the year 2021.³The Digital India programme is a

flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.

3. Objective of the Study:

1. To know the problems and challenges of digital payment in rural India
2. To offer an appropriate suggestion for effective implementation of digital payment.

4. Research methodology:

The study based on secondary information/data. Different journals, newspapers, books and relevant websites have been consulted in order to make the study an effective one.

The present study is an attempt to examine the Digital payment system in India.

Conceptual Framework:

5. Digital Financial Services

There is need to provide digital access to and use of formal financial services by excluded and marginalized sections of society. There are three key components of any such digital financial services: a digital transactional platform, retail agents, and the use by customers and agents of a device, usually a mobile phone, to transact via the platform.

Cards: Meaning and Advantage

Usually issued by banks and can be classified on the basis of their issuance, usage and payment by the card holder.

- To withdraw cash from ATM.
- Purchase of goods and services at Point of Sale (POS) and online purchase.
- To pay all kinds of utility bills.
- To pay for any service at any location where there is a Card reader / POS machine.

Major Types:

1. Prepaid Cards:
2. Debit Cards
3. Credit Cards

Prepaid Cards: Uses

- Can be used for limited amount of transaction.
- Can be recharged like mobile recharge.
- Safe to use

Debit Cards: Uses

- User can use this card to withdraw cash up to the limit present in his/her bank account.
- It can also be used only for domestic fund transfer from one person to another.

Credit Cards:Uses

- Used domestically and internationally.
- Unlike debit cards, in case of credit cards, a customer can also withdraw beyond the amount of money present in his bank account. But there is a limit for each credit card up to which extra money can be withdrawn.

USSD (Unstructured Supplementary Service Data):

Meaning and Advantage:

It is a service which aims to take banking services to every common man in the country. The service allows every customer to access banking services with a single number.

- Simple and easy to use.
- GPRS Connection not required.
- More secure than SMS

Uses:

- Link your mobile number to your bank account.
- Get Mobile Money Identifier (MMID) and Mobile Pin (MPIN).

AEPS (Aadhar Enabled Payment System) :

Meaning and Advantage:

It is a payment service empowering a bank customer to use Aadhar as his/her identity to access his/ her respective Aadhar enabled bank account and perform basic banking transactions.

- Eliminates the threat of any fraud and non-genuine activity.
- Easy to use, safe and secure payment platform to avail benefits by using Aadhar

number.

- Facilitates inter-operability across banks in a safe and secured manner.

Uses:

- Cash Withdrawal
- Balance Enquiry
- Cash Deposit
- Aadhar to Aadhar Funds Transfer
- Purchase at Fair Price Shops with AEPS.

UPI (Unified Payments Interface) :

Meaning and Advantage:

It is a system for instant, electronic payments through user's smart phone. It is an advanced version of Immediate Payment Service (IMPS) which was used to transfer money between bank accounts. Like IMPS, UPI will facilitate round-the-clock funds transfer service.

- Very simple application and can be used by anyone.
- Instant and secure authentication and can be initiated anywhere.
- Opens up the pathway for a completely cashless digital society.
- Can be used to send a request for money, like an invoice.

Uses:

- Eliminates the need to share User's name, bank account number, IFSC code, or bank branch.
- UPI also eliminates the use of physical tools like debit cards.
- No need to use multi-step processes like net-banking.

E- Wallet (Electronic wallet):

Meaning and Advantage:

- It is a type of electronic card which is used for transactions made online through a computer or a Smartphone.
- The utility of e-wallet is same as a credit or debit card.
- An e-wallet needs to be linked with the individual's bank account to make payments.

Uses: It has two components:

Software and Information:

- Software component stores personal information and provides security and encryption of the data whereas
- Information component is a database of details provided by the user which includes their name, shipping address, payment method, amount to be paid.

e-wallet used for

- Bank Account
- Smart phone
- 2G/3G/4G connection
- A free wallet app

6. Prospects of Digital Payments:

- I. Promoting financial inclusion through cash less payment instruments which are awareness, availability, acceptability, affordability, and accessibility.
- II. To create awareness about cashless/ banking transactions, Government should ensure basic necessities in Rural Areas. Financial literacy is a must for bringing more and more people to the digital platform.
- III. Digitalization of payments ultimately help all forms of Govt. Central, State and Local Govt. to earn more income for developmental and social activities and to reduce generation of black money and block the circulation of fake currency will bring more transparency to the economy.
- IV. Digital payment methods provide more economic freedom, give an opportunity to establish new technologies and developments of industries, more employment opportunities, increase in per capita income and improve quality of life of the people.
- V. Digital payment is an effective and modern payment system is positively correlated with economic growth. In the growth of Global economy, digital currency has a key role for transaction of money for businessmen, consumers and governments around the world.

7. Challenges of Digital Payment in Rural India:

- I. Awareness programme would be conducted in rural area about using the digital payments like Smartphone based transactions, feature phone-based transactions, usage of credit or debit card as majority of the Indian people buying goods and services only for cash-based transaction habits in rural area and called cash based economy.

- II. ICT services are not available in many locations and proper services are not available for the customers in rural areas.
- III. There is a need of online payment training for operating accounts and conducting transactions. For easy accessibility ATM centers should be provided within at least at a distance of 2 kms.
- IV. The other major issue is that of multiple holding of cards in urban and semi urban areas show low rural penetration.
- V. Poor connectivity and lower literacy level particularly in rural parts of the country makes it problematic.
- VI. As for decades India has been cash-based economy and majority of the people in rural areas prefer cash transactions and do not wish to accept digital payments system either through using debit card or credit card or any other. There are other barriers too like mindset, habits and language. Most of the digital transactions have English as a medium of transaction, thus making it difficult for the rural people to comfortably use the mobile or internet banking facilities.
- VII. The challenge of gaining the trust of customers is one of the key challenges faced by the mobile wallets, digital transaction service providers like banks, fin-tech companies etc.

8. Suggestions:

- I. Educationist such as schoolteachers, village Development officers, health workers and anganwadi workers, etc. must educate the people about the financial inclusion and digital economy.
- II. The Digital India Campaign twice or thrice in a year in a mass scale can be conducted in the country. It is an appropriate way to propagate the digital India campaign both in rural as well as urban areas.
- III. Public and private sectors can converge around a payments platform, and enable innovation and competition in additional financial services. Governments should make clear vision to ensure that the private sector is an effective, competitive, transparent, and efficient partner.
- IV. Make a strong regulator for digital payments for proper coordination and implementation. Make all banks responsible to form a training team at branch level with bank staff and skilled volunteers to train the local merchants and public in digital payments.

- V. The self-help groups (SHGs) can be of great help to the people in the promotion of digital banking systems in the rural areas. More and more SHGs must be given the charge of Bank Mitras (friend) who can extend their help to the bank, post offices and Bank corresponding for proliferation of digital economy.

9. Policy implication and Scope for further Research:

Priorities should be to large scale awareness campaigns, enhanced national education websites and curriculums, digital financial literacy, road shows and programmes, financial and digital empowerment seminars and exhibits. National financial education programmes, paying particular attention to the needs of the most vulnerable target groups. Ensure that consumers are aware of their potential exposure to digital crimes, and their rights and responsibilities in relation to these. The role of digital payments in driving financial inclusion and economic opportunity has come to global prominence in recent years. The progress of many countries and demographic groups has been substantial, as policymakers have moved to create inclusive and accessible digital payments ecosystems. However, policymaking in this area can be challenging for a variety of reasons, including the rapid evolution of new technologies and consequent business models, as well as market-specific factors. This note is intended to offer suggestions to policymakers to help them to achieve the further benefits that digitizing payments can offer. The advantages are not only financial inclusion and improved individual living standards for the most vulnerable, but also include vital macro-economic growth drivers like enhanced productivity and economic participation. This note leverages and adds significantly to a growing body of detailed knowledge about key policy steps that will underpin success. While government officials are the primary audience, it is crucial to recognize that successful policymaking requires close and genuine collaboration, as well as knowledge-sharing between public and private sectors.

10. Conclusion:

In a nutshell, nearly three years after demonetization of high value currency, cash in circulation continues to be high. According to the data with the Reserve Bank of India, notes in circulation totalled Rs. 21.61 lakh crore by July, 2019 registering a steady rise from Rs. 19.1 lakh crore by July 20 last year. While this is lower than the May – end 2019 figure of Rs. 21.71 lakh crore, it is much higher than the Rs. 17.74 lakh crore notes in circulation before demonetization as on November 4, 2016. Similarly, number of ATMs in the country has decreased but the number of transactions per day per ATM rose from 121 in September 2016 to a high of 145 in December last year before setting at 130 in April this year. Moreover, it can be said that people are comfortable using cash, especially where penetration of internet and banking services is low.

Also, the cost of digital transactions continues to be higher and it is passed on to the consumers when compared to cash.

References:

1. World Bank Financial Inclusion Index Data (2014), Available at URL: <http://datatopics.worldbank.org/financial-inclusion/country/india>.
 2. PMJDY Progress Report, Available at URL: <http://pmjdy.gov.in/account>
 3. RBI Committee on Medium Term Path on Financial Inclusion, *Report of the Committee on Medium Term Path on Financial Inclusion*.
-

Towards a Cashless Economy

Shivani Sood

Asstt. Prof. Commerce
G.C. Shimla – 6

Malvika Sharma

Asstt. Prof. Commerce
G.C. Shimla - 6

The trend towards use of non-cash transactions and settlement began in daily life during the 1990s, when electronic banking became popular. These methods have potential to be very helpful for central governments and economies, in the context of global negative inflation and quantitative easing and central control of the money supply. However, a loss of cash also transfers complete control of transactions, interests and individual use of money and information about these to the nation state and third-party providers, since the individual cannot avoid their money being held in an external system capable of regulation and control.

It has been seen that large denomination notes of any currency are often associated with criminal activities, counterfeiting and tax evasion. Moreover, our money-based system fails in so many ways. It keeps people from pursuing their true dreams and giving up on their goals in exchange of a well-paying but unsatisfying job. It keeps people poor while making the rich richer. It's the ultimate multi-level pyramid scheme, where those at the top do great and those at the bottom fail. So maybe a cashless system would work better.

Crypto currency is a digital asset that has come out to be a very popular medium of exchange in the recent times. It is a kind of digital currency, virtual currency or alternative currency. These uses decentralized control as opposed to centralized electronic money and central banking systems. The decentralized control of each crypto currency works through distributed ledger technology, typically a block chain that serves as a public financial transaction database. Bit coin, first released as open-source software in 2009 is considered the first decentralized crypto currency.

Bit coin is known as “digital gold” because of its similarity to gold in its value. It allows people to send money without the interference of banks and their attraction lies in their transferability, ability to not be duplicated or manipulated and their security. This new technology can bring significant changes to societies around the world. Many of the economic challenges that societies face can be solved by the use of crypto currencies.

According to a UN DESK REVIEW combining technologies such as block chain, artificial intelligence and the internet could enable the sustainable development agenda scale. Block chain and Bit coin are seen as possible currencies for remittances. They create potential for local merchants in poorer countries to participate in international commerce. It’s a possible solution to multiple issues such as combating bank de-risking, transaction costs and surveillance. They can be used for humanitarian related issues including donor financing, monitoring supply chains and data protection. Thus many countries like The United States, Australia, Canada, Finland, Bulgaria, United Kingdom, Germany etc. have come ahead and legalised crypto currency.

The critics of crypto currency include some prominent global financiers, who recently suggested that bit coin was mostly useful for drug dealers and murderers. While this is an extreme view, it is true that crypto currencies have been used for money laundering, tax evasion and dodging international sanctions. Governments wishing to tighten their banking and tax evasion to prevent these practices will have to carefully monitor the new market of digital coins. Also, nobody can accurately predict the development of crypto currencies. If their staggering growth continues, crypto currencies could become a viable competition for national currencies, affecting the deposits and balance sheets in commercial and central banks. This could ultimately lead to the end of the monetary system as we know it today.

Many countries like China, Russia, Vietnam, Bolivia, Columbia, Ecuador etc. have regulated, restricted or banned private digital currencies such as Bit coin. While supposedly helpful to the global economy and in fighting against crimes and terrorism, it also means that groups, individuals and causes could be deprived of cash by the simplest expedient of preventing their access to cashless transaction media.

In India an inter-ministerial committee set up by the government on virtual currencies has proposed banning of private crypto currencies by enacting a law and imposing fines and penalties for carrying on activities related to such crypto currencies.

A cashless economy is surely convenient and fast; however it also increases ignorance to individual spending and vulnerability to fraud. Consumer’s ignorance to spending increases as they are less aware when swiping their card to complete a transaction than if they budgeted their money and paid cash. Their vulnerability to frauds increases because corporations keep record of credit and debit transactions, but they don’t keep a record of cash transactions.

In the end although with the increased access to internet and globalisation, cashless economies are certainly the future, but we need to tread this path cautiously. We must take precaution to protect the economy of our country and not let it be placed in some block chain. With the

greater thrust of the present-day Government on cashless transactions, steps need to be taken to protect the 1.25 billion populations, many of who are vulnerable to fraud, cheating, which has become more prominent with the advent of internet and cashless economy. Strong laws are needed to be in place to protect citizens against the misuse and abuse of this form of economy.

The Circle of Sustainability

Yogesh Kumar

Asstt. Professor (Chemistry)

Govt. College, Shimla -6

"Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."

It won't be long before we are faced with diminishing natural resources and landfills overflowing with waste. In such a situation, how can Circular Economy help circumvent the inevitability of a resource crisis and make the economy truly circular?

Circular economy thrives on low carbon, sustainable society unlike Linear economy which is based on consumption, disposal, therefore the former concept has become a buzzword in the policy making area. Circular economy is a reformative system in which all resources input and waste, emissions and energy leakage are minimised by enhancing the use of energy and narrowing material waste, this is achieved through improvement in design, maintenance, repair, remanufacturing, recycling and up cycling.

Circular economy has started to take a shape now and gained better structure, understanding and implementation support. Work has been done in terms of business and economic models. Consumer facing companies including beverage manufacturing and apparel companies are working along the extended producer responsibilities to make sure their packaging and end products are utilised efficiently again in the circular chain rather than being disposed of.

Construction activity at any level causes pollution, but effective design and use of sustainable material can go a long way in minimising its impact. Green building helps in reducing waste, water and carbon footprint, thereby focussing on the health of occupants. The developers too are helping housing societies to set up compost plants. As resources such as land, metals and other construction materials are finite; the need for moving towards this has started in real estate space. Some of the measures are in process as landfill usage, using prefabricated structures, extending use of cycled CDW (Construction and Demolishing Waste).

India is well on its way towards becoming a circular economy by initiating measures as banning plastic, promoting daily use of recyclable or reusable material and encouraging use of renewable energy. Sustainable buildings and circular economy are intertwined and can effectively help India attains some targets of Sustainable developmental goals. The concept of sustainable development can be interpreted in many different ways, but at its core is an

approach to development that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society.

All too often, development is driven by one particular need, without fully considering the wider or future impacts. We are already seeing the damage this kind of approach can cause, from large-scale financial crises caused by irresponsible banking, to changes in global climate resulting from our dependence on fossil fuel-based energy sources. The longer we pursue unsustainable development, the more frequent and severe its consequences are likely to become, which is why we need to take action now.

Living within our environmental limits is one of the central principles of sustainable development. One implication of not doing so is climate change. But the focus of sustainable development is far broader than just the environment. It's also about ensuring a strong, healthy and just society. This means meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity.

Not necessarily. Sustainable development is about finding better ways of doing things, both for the future and the present. We might need to change the way we work and live now, but this doesn't mean our quality of life will be reduced.

A sustainable development approach can bring many benefits in the short to medium term, for example: Savings - As a result of SDC scrutiny, government has saved over 60m by improving efficiency across its estate. Health & Transport - Instead of driving, switching to walking or cycling for short journeys will save you money, improve your health and is often just as quick and convenient. The way we approach development affects everyone. The impacts of our decisions as a society have very real consequences for people's lives. Poor planning of communities, for example, reduces the quality of life for the people who live in them.

Sustainable development provides an approach to making better decisions on the issues that affect all of our lives. By incorporating health plans into the planning of new communities, for instance, we can ensure that residents have easy access to healthcare and leisure facilities. We all have a part to play. Small actions, taken collectively, can add up to real change. The SDC's job is to help make this happen, and we do it through a mixture of scrutiny, advice and building organisational capacity for sustainable development.

Creating a sustainable built environment, through design, construction and management, enables all people to live well, within environmental limits. Our built environment should inspire us and make us feel proud of our local areas and diverse heritage. It should reduce whole life carbon and materials costs through efficient use of resources (energy, waste, water). It should provide environments that contribute to our physical and mental health and enhance creativity and productivity. Our built environment also needs to be flexible and adaptable to future uses, and be resilient to cope with local effects of climate change. Whilst new built environments strive to meet these aspirations we must not forget the legacy of our existing buildings and infrastructure, constructed when standards for efficiency were much lower. This means that requirements for retrofitting to tackle resource efficiency are vitally important.

Enabling communities to lead local renewal projects with a neighbourhood-scale approach is the most cost-effective way to ensure our villages, towns and cities are fit for the future and create the conditions for people to thrive. Through empowering community groups to come together to tackle issues of local priority, and to work in partnership with local authorities and

businesses, multiple benefits can be delivered. Such upgrades to our physical infrastructure not only tackle climate change, they can also deliver reliable and efficient transport networks, improve health and well being, secure a healthy natural environment, improve long-term housing supply, maximise employment opportunities, and make our communities safer and more cohesive.

In Wales, the SDC has taken a central role in helping to achieve a low carbon built environment. In November 2008 the SDC launched a groundbreaking Green Building Charter in conjunction with WAG and the Design Commission for Wales. Over 50 organisations have signed up to support progress towards low or zero carbon buildings. To co-ordinate the work of the signatories, the SDC supported the formation of the Wales Low/Zero Carbon Hub – a partnership of public, private and voluntary sectors.

SDC Scotland has had a central role in creating better planning policy in Scotland. The Scottish National Planning Framework 2 integrates sustainable development principles in planning processes. It provides a valuable instrument in making planning outcomes in Scotland more sustainable but there is much work to be done to integrate the sustainable development principles into all local planning decisions.

Even if we stop burning coal, oil and natural gas right now, the world would still continue to get warmer. Stabilising emissions does not stabilise climate, as long as the gases keep rising, even at current rates. So, we need to reduce emissions 1% to 2% per year. If we don't start now, we will have to cut 3% to 4% per year, which would be even more daunting. So how do we strike a balance? The world has been awaiting a dramatic green revolution where countries and individuals begin to change their ways of doing business and change their lifestyles to become more environment friendly and more considerate of the well-being of the planet. However, that has not motivated governments to enter into binding international agreements to address the problem.

Fortunately, the failure of the governments has not rubbed off on the passion and enterprise of individuals and indeed some corporations to envision a greener future. Countries like India and China have always argued that it is the advanced economies that must do more to mitigate climate change. Developing countries, still in the catch-up mode, cannot afford to sacrifice the quest for growth by going green at any cost. There is no waste in the natural system: the same materials have been recycled for billions of years. All we have to do is to relearn the lessons. 'Greenovators' can motivate banks, financial institutions and venture capitalists to put more money into interesting new green ideas. Let us see some examples.

Now soon we reach an era of clean, inexhaustible energy depends on technology. Solar and wind energies are intermittent: when the sky is cloudy or the breeze dies down, fossil fuel or nuclear plants must kick in to compensate. Current from wind, solar or geothermal energy can be used to extract hydrogen from water molecules. In the future, hydrogen can be stored in tanks, and when energy is needed, the gas could be run through a fuel cell, a device that combines hydrogen with oxygen. The result: pollution-free electricity, with water as the only by-product.

Renewable sources can help, from village-scale hydropower to household photovoltaic system to bio-gas stoves that convert dung into fuel. The cost of solar photovoltaics (pv) fell by 50% in recent times, which means that large scale solar electricity is increasingly within our grasp. More than a million rural homes in developing countries get electricity from solar cells. At

present, 65,000 solar systems are being installed every month in Bangladesh, and about 3.5 million homes are already using solar energy.

Ultimately, we can meet our energy needs without fouling the environment. To begin with, widespread government subsidies for fossil fuel and nuclear energy --estimated at \$500 billion per year -- must be dismantled to level the playing field for renewable sources.

Global energy demand is expected to triple by the middle of this century. The earth is unlikely to run out of fossil fuels by then, given its vast reserves of coal, but it seems unthinkable that we will continue to use them as we do now because of the potential threat to environment. The world has gradually moved toward cleaner fuels -- from wood to coal, from coal to oil, and from oil to natural gas. Renewable energy sources are the next step.

Interface between Oral Narratives and Documented History

A Case Study of Shimla Hills

Vikram Bhardwaj
Asstt. Professor (History)
G.C. Shimla -6

Abstract:

This study intends to highlight oral narrative¹⁹ as an alternative source for the writing of history, for those regions which are inhabited by numerous ethnic and tribal communities and where historical sources²⁰ are in dearth, and whatever sources are there, are in the form of folklore. The history and culture of such communities or groups are rooted in oral traditions and can only be traced through oral evidences²¹, which introduce an entirely new dimension to the study of such areas²². The territory of Simla Hills²³ fit in these criteria and the study is concentrated to this region only. This paper is an attempt to correlate the oral narrative of the field of study (Simla Hills) with the existing literary documents, and to put forward a new historical analysis about the past of this region. In this work main emphasis would be on the folk beliefs and its practices, how they have emerged, what they signify and what historicity they possess.

¹⁹ A narrative (or story) is any account of connected events, presented to a reader or listener in a sequence of written or spoken words, or in a sequence of (moving) pictures. Definition of "narrative" Oxford English Dictionary. It is derived from the Latin verb *narrare*, "to tell", which is derived from the adjective *gnarus*, "knowing" or "skilled".

²⁰ Written documents and archaeological evidences.

²¹ Primitive societies have long relied on oral tradition to preserve a record of the past in the absence of written histories.

²² E.P. Thompson, *The voice of the Past: Oral History*, Oxford, 1978, p. 88. The value of the oral traditions in the context of African societies in the writing of the social history has been emphasized by Jan Vansina in his monumental work *Oral Tradition: A case study: historical methodology*, Chicago, 1955, pp. 142-182.

²³ Shimla comprises of erstwhile hill states: Balson, Bushahr, Bhaji and Koti, Darkoti, Tharoch & Dhadi, Kumharsain, Khaneti & Delath, Dharni, Jubbal, Keothal, Madhan, Rawingarh, Ratesh, and Sangri, Kotkhai, Theog, Gund.

INTRODUCTION:

Oral narratives, also known as ‘Lore’²⁴, are important sources for the writing of history. They are significant to explain and understand societies in the context of preserving cultural diversity and protecting minority cultures, especially of those indigenous peoples and marginalized social groups who are living in the far flung remote areas and are cut-off from the rest of the world. Oral narrative is an important element of the cultural heritage of every group, tribe, community and nation. They reinforce the sense of ethnic and social identity to the people in the form of folk memory and folk learning.

Oral narratives are quite important for the reconstruction of the history of the people, as every folk group has its own collective notion and perception²⁵ of its past, which influences the thoughts, actions, and practices of its members, who determine what is significant about their past and what must be transmitted and about how that past had affected the present. They are valuable historical narrative documents in their own right and not just merely supplements to the written record. They record the story of events and people, that history had forgotten. It adds the human side and presents the individual as a person—a perspective usually absent from written documents. Oral history²⁶, gives history back to the people in their own words. And in giving a past it also helps them towards a future of their own making (Thompson, 1978:226).

Oral narratives are the core of the culture and they provide a complement to the written historical literature and the combination of both can give a correct picture of the past. It also serves as a tool for corrective method to rewrite culturally true history and to discard the irrelevant portions from history, so the importance of oral narrative in the construction of ethnic identity and in the formation of memory and of a ‘usable past’ cannot be underestimated. Study of oral narratives in folklore is a living and still developing tradition, rather than just a memory of the past. It is through such an understanding that it is considered as an important source of history. Both of them are in interface to each other, which cannot be denied. *Wayland Hand* (1966) in an address to the Oral History Association stated that, “oral

²⁴ Oxford advance learner, 8th edition “**knowledge and in-formation related to a particular subject**, especially when this is not written down; the stories and traditions of a particular group of people”.

²⁵ Group’s perceptions about its past is important because it contain and provide the context for all kinds of folklore, providing in-group perspectives on what has been culturally meaningful over time

²⁶ **Oral history** is the collection and study of historical information about individuals, families, important events, or everyday life. Oral history strives to obtain information from different perspectives, and most of these cannot be found in written sources.
http://en.wikipedia.org/wiki/Oral_history

narratives, folk legends and beliefs were particularly important sources of the history of the common man, because such traditions provided oral history with a time depth"²⁷. Mphahlele (1970:1) has, regarded it as having been "a universal phenomenon through the ages." In the same vein, Agatucci (1998:7) asserts that they still reverberates in new writings and continues "to enrich the global human experience and its creative expressions". This view reflects a sound evaluation of its importance because "every human culture in the world seems to create stories (narratives) as a way of making sense of the world" (Agatucci, 1998:1).

ORAL-NARRATIVES : ITS METHOD AND THEORY:

Oral-narratives are community's collective perceptions about their past²⁸ which is visible in its folklore²⁹, transmitted orally or imitatively from one generation to the next and so on, in the form of folk memory³⁰ and folk learning³¹, which includes : *folk- art, folk craft, folk tools, folk costume, folk customs, folk beliefs, folk medicine, folk recipes, folk music, folk dance, folk games, folk gestures and folk speech, as well as those verbal forms of expression which have been called folk literature but which are better described as verbal art.*³² It can also be termed as *oral history*³³, *oral traditions*³⁴ or *folk-history*, but it is not the same, as *life history*,³⁵ it exists in variations³⁶ (Klintberg), which is the beauty of this. Ralph S. Boggs in his article on *Folklore: Materials, Science, Art*³⁷ has also explained it "as a body of variants of basic forms."³⁸

²⁷Green, Thomas A. Green, *Folklore An Encyclopedia of Beliefs, Customs, Tales, Music, And Art*, B Santa Barbara, California Denver, Colorado Oxford, England, 1997, p.485.

²⁸ Green Thomas A. *Folklore, An Encyclopedia Of Beliefs, Customs, Tales, Music, And Art*, (Edited) Santa Barbara, CaliforniaDenver, ColoradoOxford, England, 1997,p. 448.

²⁹ Folklore can be summarized as the traditions, beliefs, customs and superstitions of a culture, handed down informally in fables, myths, legends, proverbs, riddles, songs and ballads. (The word "Folklore" was first proposed, more or less in its present sense, by William John Thoms in Athenaeum of August 22, 1846, proposing that the singular word 'folklore' should be used in English to denote the "the manners, customs, observances, superstitions, ballads, proverbs" and other materials "of the olden time." He argued that the word 'folklore', being the composite of 'folk' (people) and 'lore' (knowledge), would be a good Anglo-Saxon compound instead of all other somewhat cumbersome terms (instead of the Latinate *popular antiquities*). Since then this word has been widely adopted into Spanish, Portuguese, Italian, French and other languages, notably of the Romance group. Germans were using *Volkskunde for folklore* as Grimm brothers used this term in their work published in 1812)

³⁰ 'A body of recollection of legends, myths connected with the past that persists among a group of people'.

³¹ Sills, David. L., *International Encyclopedia of the Social Sciences*, The Macmillan Company & The Free Press, Vol. 5, p. 496. "it comprehends all knowledge that is transmitted by the words of mouth and all craft and techniques that are learned by imitation or example, as well as the products of these craft (material culture, custom and traditions)".

³² Sills, David. L., *International Encyclopedia of the Social Sciences*, The Macmillan Company & The Free Press, Vol. 4

³³ Green Thomas A. *Folklore, An Encyclopedia Of Beliefs, Customs, Tales, Music, And Art*, (Edited) Santa Barbara, CaliforniaDenver, ColoradoOxford, England, 1997, p.452 "Spoken narratives recounting and commenting upon significant past events."

³⁴ http://en.wikipedia.org/wiki/Oral_tradition Oral tradition and oral lore is cultural material and tradition transmitted orally from one generation to another.

³⁵ Encyclopædia Britannica. *Encyclopædia Britannica Ultimate Reference Suite*. Chicago: Encyclopædia Britannica, 2011." "History is the discipline that studies the chronological record of events based on a critical examination of source materials and usually presenting an explanation of their causes". The term history stands for three related but sharply different concepts: (a) past human events; past actuality; (b) the record of the same; (c) the process or technique of making the record."

³⁶ "Traditional cultural forms that are communicated between individuals through words and actions and to exist in variation". MFC-001, *Folklore and Culture: Conceptual Perspective*, Indira Gandhi National Open University, New Delhi, 2009. p.9.

³⁷ Dundes, Alan. *Folklore Critical Concepts in Literature and Cultural Studies*, Edt. Vol I. Routledge, 2005, p 3

³⁸ Ibid, p. 3.

For any group, folk history provides a representation of the past, which can justify motives and actions, explain social structures, and establish an alternative worldview. Dorson³⁹, Lynwood Montell⁴⁰, William Ivey, Jan Vansina⁴¹ and Henry Glassie⁴² have demonstrated that, 'the authenticity of folk history rests upon its depiction of what is significant in the past for members of a community'. Ivey, Glassie, and Vansina further stressed that oral history records the psychological truth about a community's past and its beliefs about the present.

Oral-narrative is a part of folklore, the term which has always remained a debatable subject⁴³ since its coinage by Thoms⁴⁴, among the European and American scholars, and in India the situation is not much different⁴⁵. In popular usage, the term *folklore* is sometimes restricted to oral literature tradition. However, in modern usage, folklore is an academic discipline, the subject matter of which (also called folklore) comprises the sum-total of traditionally derived or orally or imitatively transmitted literature, material culture and custom of sub-cultures within predominantly literate and technologically advanced societies. Folklore is a body of traditional belief, custom, and expression, handed down largely by word of mouth and circulating chiefly outside of commercial and academic means of communication and instruction. Every group bound together by common interests and purposes, whether educated or uneducated, rural or urban, possesses a body of traditions which may be called its folklore. Into these traditions enter many elements, individual, popular, and even "literary," but all are absorbed and

³⁹ Richard M. Dorson (1964) has estate the importance of oral tradition as a part of folk and oral history "What the state paper is to the historian and creative work to the literary scholar, the oral traditional text is—or should be—to the student of folklore"³⁹. Richard Dorson (1970) has expressed the need to enlarge the scope of oral history to include folk history and emphasized the need to record a community's view of what was and is important in its past—not just commentary on elite categories

⁴⁰ Montell (1970) noted that oral folk history consisted of a core of truth with narrative embellishments. The historical distortion that occurred could be attributed to patterning, telescoping, and legend displacement. 'Oral histories are valuable historical documents in their own right and not just merely supplements to the written record'. He stressed that oral folk history provided a complement to written historical literature, for it added the human side and presented the individual as a person—a perspective usually absent from written documents.

⁴¹ Ivey, and Vansina further stressed that oral history records the psychological truth about a community's past and its beliefs about the present. Jan Vansina drew a further distinction between oral history and oral tradition by specifying that the latter consists of verbal messages from the past beyond the present generation; oral history consists of recollections and commentary about events within the informant's lifetime. Thus, oral history can be regarded as comparable to written documents, and other sources, and so on that involve a first assessment of events.

⁴² Henry Glassie specifically described folklore as the discipline that recorded the story of events and people that history had forgotten

⁴³ Confusion lies in the double use of the word folklore to signify both the contents and the study of the traditional materials. Further misunderstanding results from the varying sense of folklore in different counties. Also see, Standard Dictionary of Folklore, Ed, Maria Leach, New York, 1945, pp.398-408. 'Twenty one definitions on folklore are there in this work.' Folklore's implications changed over time to become more comprehensive. The amorphous term "folklore" tends to emphasize its diverse nature, consisting of, for example, the "traditional customs, tales, sayings, or art forms preserved among a people"⁴³. In this sense, the term applies not only to ideas, or words, but also to physical objects. Archer Taylor (Kuruk, 1999: Introduction) explains its multi-faceted implications in very clear terms: The folklore of physical objects includes the shapes and uses of tools, costumes, and the forms of villages and houses. The folklore of gestures and games occupies a positioned intermediate between the folklore of physical objects and the folklore of ideas. Typical ideas transmitted as folklore are manifested in the customs associated with birth, marriage, and death, with the lesser events of life, with remedies for illnesses and wounds, with agriculture, the trades, and the professions, and with religious life. ... Verbal folklore includes. tales of various kinds (marchen, jests, legends, cumulative tales, exempla, fables, etiological tales), ballads, lyric folk song, Children's songs, charms, proverbs and riddles. (Taylor, Definitions)

⁴⁴ Green Thomas A. *Folklore, An Encyclopedia Of Beliefs, Customs, Tales, Music, And Art*, (Edited) Santa Barbara, California Denver, Colorado Oxford, England, 1997

⁴⁵ Lok Varta, Dundes, Alan. *Folklore Critical Concepts in Literature and Cultural Studies*, Edt. Vol I. Routledge, 2005, pp 105. 'The joint use of these words as Lok Varta is of recent origion which can be said gaining currency from near about 1920 onwards as V.S. Agarwala is probably the first person who suggested this name for the western folklore". Other synonyms , Pauranik-katha and,Loksahity.

assimilated through repetition and variation into a pattern which has value and continuity for the group as a whole. (Benjamin A. Botkin, 1938). Anthropologist and humanists have defined it differently, but their definitions are in fundamental agreement, in excluding all learning that is transmitted by writing. 'Objects which are mass produced and knowledge which is acquired through books or formal education includes the total body of learning are a part of culture, but they are not folklore'⁴⁶, this implies that the oral nature is the most important attribute of this field of study and its importance in historical study can also not be undermined. Here arises a basic question which the core historians raise, "*Without writing there is no history - only myth - and no historians - only story-tellers*"⁴⁷ (M. T. Clanchy). But we should also keep in mind that, in every community there are people who have knowledge and skills to share — ways of knowing and doing that often come from years of experience and have been preserved and passed down across generations. As active participants in community life, these bearers of tradition are primary sources of culture and history. They are, as folklorist Barbara Kirshenblatt-Gimblett writes, "Living links in the historical chain, eye witnesses to history, and shapers of a vital and indigenous way of life. They are unparalleled in the vividness and authenticity they can bring to the study of local history and culture"⁴⁸." Through documenting their memories and stories, the past comes to life in the present, filled with vivid images of people, places, and events. And it is not only the past that we discover: we learn about the living that is a vital part of daily experience. These stories, memories, and traditions are powerful expressions of community life and values. They anchor us in a larger whole, connecting us to the past, grounding us firmly in the present, giving us a sense of identity and roots, belonging and purpose⁴⁹. Marc Bloch has pointed out, 'The human memory is a marvelous instrument of elimination and transformation - especially what we call collective memory'. Society is never just a localized aggregate of people but exists by virtue of its members' narrative and conceptual awareness of other times and places⁵⁰. In a broad conception of history the historical basis includes the whole of people's life throughout its existence⁵¹. By preserving the

⁴⁶ Sills, David. L., *International Encyclopedia of the Social Sciences*, The Macmillan Company & The Free Press, Vol. 5, p. 496

⁴⁷ The Interface between the Written and the Oral, Jack Goody, Review by: M. T. Clanchy, *The English Historical Review*, Vol. 105, No. 416 (Jul., 1990), pp. 708-709, Published by: Oxford University Press, Stable URL: <http://www.jstor.org/stable/570770>.

⁴⁸ Hunt, Marjorie, *The Smithsonian Folklife and Oral History Interviewing Guide*, Smithsonian Institution, Center for Folklife and Cultural Heritage Washington, 2003, p. 8.

⁴⁹ Ibid, pp. 8.

⁵⁰ Beyond the Horizon: Essays on Myth, History, Travel and Society, Ed. Clifford Sather & Timo Kaartinen. *Studia Fennica Anthropologica*. 2008. 240

⁵¹ Vladimir Propp. *Theory and history of Folklore*, Translation by, Ariadn y. Martin and Richard P. Martin and others, Manchester University press, 1984, p, 48.

memory of the past events and narratives about the historic legends, they live in the peoples memory as oral and the unwritten history⁵².

Modern scholars suggest that, *'oral history loses power as time depth increases, it cannot account for the earliest yeras. Written history loses power as social breath increases, it cannot account for most people'*. In this regard Allan Navin⁵³ affirms that, folklore and ballads are among the most beautiful and alluring of the sources of history. They have the dewy freshness of the morning of the human race upon them, for they have sprung in the main from times and communities, innocent of written literature. The ballad in particular, which often throws a bright prismatic light upon manners, customs, beliefs, and primitive emotions, is the composition rather of a folk than of an individual. It rose from the heart and lips of a whole people. These compositions usually contain little explicit and authentic fact, but they are nonetheless valuable⁵⁴. Richard Dorson has also signified the importance of oral sources by identifying it as one of the four broad sectors in folkloristic, viz., Oral Literature, Material Culture, Social Folk Custom and Performing Folk Arts (Handoo, 1985: pp. 7-14), which have great significance for the reconstruction of history.

In the recent past in history, great changes and new trends have come up. It was in the 1930s that the term "history from below" was coined by the French historian, Georges Lefebvre, which however gained importance only in the 1960s through the writings of British Marxist historians like EP Thompson. "History from below" also had exponents like Emmanuel Le Roy Ladurie of the Annales School through what is called "cultural history" or the "history of the mentalities". "History from below" is an attempt to understand "real" people, to expand the frontiers of social history in accordance with what Marx called the need to understand the "masses". It promoted the evaluation of the lives and thoughts of pre-modern peasants, the development of the working class, the activities and actions of women and men, which were regarded as unimportant by scholars. This kind of the concept can be fully followed, if the oral narratives are given due importance in the study of history and scientifically correlated with the study. However, there are pertinent dangers in its direct usage as a source of history as well, so herein lays the responsibility of the historian. JB Bhattacharjee summarizes its place in history thus: "...historians will not use folklore as a source without examining the acceptability of the information according to the standard methods of verification of sources and elimination of

⁵² Ibid, p. 51.

⁵³ The modern concept of oral history was developed in the 1940s by Allan Nevins and his associates at Columbia University.

⁵⁴ Gulati.G.D. Mewat Folklore Memory History, Dev Publishers & Distributors, New Delhi2013, p.4. Also see, Allan Navin, the gate way of History, Indian reprint, Bombay, 1968,p.79.

the possible impact of ignorance or motive or compulsion in each narration. The use of folklore material is recommended when the standard sources are either scanty or absent, or the folklore is able to provide additional information or to supplement the conventional sources” (Bhattacharjee, 2003: p. 29). In the application of folklore contents and implications to history, of discerning the “historical sense” in folklore, the historian will have to be aware of the thin line that exists between history and myth, tradition and folk tales , that between oral history and oral tradition, as also between history, oral history and oral tradition. This calls for a combination of methodologies of history and folklore⁵⁵. Oral History is the “spoken narratives recounting and commenting upon significant past events”⁵⁶. But not all that is in oral tradition is oral history. Although many folklorists use the terms oral tradition and oral history synonymously but from the point of view of a historian they are distinct, For oral historians, historical significance resides in what scholars or other recognized authorities determine to be important to the society at large. The latter, in contrast to oral history, provides commentary on what members of a socially “insignificant” group believe to have affected their lives. Although such distinctions exist, most folklorists have disregarded them in practice and used the directed methods of oral history to elicit full-fledged narratives as well as commentary about locally and nationally significant events.

WRITING / DOCUMENTED HISTORY: ITS METHOD AND THEORY:

All human cultures tell stories about the past regarding deeds of ancestors, heroes, gods, or animals’ sacred to particular peoples. They were chanted and memorized long before there was any writing which to record them. Their truth was authenticated by the very fact of their continued repetition. History, which may be defined as an account that purports to be true of events and ways of thinking and feeling in some part of the human past, stems from this archetypal human narrative activity. While sharing a common ancestry with myth, legend, epic poetry, and the novel, history has of course diverged from these forms. Historians can say nothing about those persons or events that cannot be supported, or at least suggested, by some kind of documentary evidence. “History is the discipline that studies the chronological

⁵⁵In this, the works of Jan Vansina (*Oral Tradition as History*) (1985), Richard Dorson (*Folklore and Folklife: An Introduction* (1972)) and David Bynum (*Oral Evidence and the Historian: Problems and Methods* (1973)), would be extremely helpful in providing such methodologies.

⁵⁶Green Thomas A. *Folklore, An Encyclopedia Of Beliefs, Customs, Tales, Music, And Art*, (Edited) Santa Barbara, CaliforniaDenver, ColoradoOxford, England, 1997,pp. 452-55.

record of events based on a critical examination of source materials and usually presenting an explanation of their causes”⁵⁷. The term history stands for three related but sharply different concepts: (a) past human events; past actuality; (b) the record of the same; (c) the process or technique of making the record. History, originally meant inquiry, investigation, research, exploration or information and not a record of data accumulation - the usual present-day meaning of the term. In a broader sense history is a systematic account of the origin and development of humankind, a record of the unique events and movements in its life. It is an attempt to recapture however imperfectly, that which is, in a sense, lost forever.⁵⁸ “The study of man’s dealings with other men and the adjustment of the working relation between human groups”⁵⁹ Herbert Butterfield, a respected philosopher of history, wrote that “*history deals with the drama of human life as the affair of individual personalities, possessing self-consciousness, intellect, and freedom.*”⁶⁰

History is the result of the interplay of man with his environment and with his fellowmen. It is the living past of men, an attempt through centuries to reconstruct, describe and interpret his, own past. In modern times, particularly from the period of Niebuhr and Ranke, it has come to mean, the attempt to reconstruct the past in “a scholarly fashion, sticking to certain definite rules of establishing fact, interpreting evidence, dealing with source material.”⁶¹ ‘History as a discipline can never be subjective but it should be completely scientific and objective and if it is not, then it is not true history.’⁶²

The writing of history⁶³ is based on the critical examination of sources, the selection of particular details from the authentic materials in those sources, and the synthesis of those details into a narrative that stands the test of critical examination. Modern historians aim to reconstruct a record of human activities and to achieve a more profound understanding of them. In the 20th century the scope of historical evidence has greatly expanded by using the scientific techniques to find out the actual past. Just as the methods at the disposal of

⁵⁷ Encyclopædia Britannica. *Encyclopædia Britannica Ultimate Reference Suite*. Chicago: Encyclopædia Britannica, 2011.

⁵⁸ Sreedharan, E. *The Textbook of Historiography 500 BC to AD 2000*, Orient Black Swan. 2009. P. 1.

⁵⁹ Majumdar, R.C., ed. *The Vedic Age*, London, 1951 p. 37.

⁶⁰ Herbert Butterfield, *Christianity and History*, Scribner’s, New York 1950, p. 26.

⁶¹ Marwick, *What History Is*, p. 14, in E.Sreedharan, *The Textbook of Historiography 500 BC to AD 2000*, Orient Black Swan. 2009. P. 2.

⁶² Ranke, Leopold von, in E.Sreedharan, *The Textbook of Historiography 500 BC to AD 2000*, Orient Black Swan. 2009. P. 171-187.

⁶³ Historians use the four common modes of expression while writing historical works: (1) **Description**: It presents an account of sensory experience—the way things look, feel, taste, sound, and smell—as well as more impressionistic descriptions of attitudes and behavior, (2) **Narration**: As important as both making a point and providing clear descriptions are, narratives tell stories, and stories are the bedrock of history. Without narratives, history would die as a discipline. Narratives tell us what happened, usually following the sequence of events as they happen, one event after the other, (3) **Exposition**: Expositions explain and analyze—philosophical ideas, the causes of events, the significance of decisions, the motives of participants, the working of an organization, and the ideology (4) **Argument**: Historians use argument in their writing to take a position on a controversial subject. An argument also seeks to prove that other points of view are wrong.

historians have expanded, so have the subject matter. Sophisticated studies of oral traditions, combined with advances in archaeology, have changed our outlook regarding the past.

The earliest histories were mostly stories of disasters, of wars, including the statesmen and generals who figured in them. In the 20th century, however, historians shifted their focus from statesmen and generals to ordinary workers and soldiers⁶⁴. Until relatively recent times, however, most men and virtually all women were excluded from history because they were unable to be written. Virtually all that was known about them passed through the filter of the attitudes of literate elites. The challenge of seeing through that filter has been met by historians in various ways and the use of the oral narratives to find out the past is one of them. Through these means even the most oppressed peoples have had at least some of their history restored⁶⁵. Historians have also become interested in psychological repression—i.e., in attitudes and actions that require psychological insight and even diagnosis to recover and understand. For the first time, the claim of historians to deal with the feelings as well as the thoughts of people in any part of the human past has been made.

Writing history involves a special way of thinking because the past in all its complexity cannot be recaptured like an instant replay. Real life has no instant replay; history does not repeat itself. The stuff of history—human experience—moves ceaselessly, changing endlessly in a process so complicated that it is like a turning kaleidoscope that never makes the same pattern twice. Consequently, knowing history is only possible through the stories that are told about it, stories that are told by many people, supported by many different kinds of evidence, told in different ways in different times and in different places. Historical research and historical thinking always involve listening to a multitude of voices, mute perhaps on the page but speaking through human intellect, as historians try to sort them all out and arrive at the story that is most plausible.

As *E.H. Carr* has said, “History is a continuous process of interaction between the historian and his facts, an unending dialogue between the present and the past”,⁶⁶ he had further laid emphasis on two points. ‘First history is not collection of facts but interpretation of facts given by the historian. Secondly, he pinpointed the facts that this process of the fact and

⁶⁴ ‘Subaltern studies- studies relating to the hitherto neglected sections of society’, in E.Sreedharan , p 206.

⁶⁵ Ibid,p 492-96.

⁶⁶ Carr,E.H., What is History. Penguin. 1980 p. 30.

the interpretation on the part of the historian goes on ad infinitum'.⁶⁷ Sooner or later old and new facts will come into limelight and they would be newly interpreted by the historian. So history entails a progressive process and does not postulate any ultimate history⁶⁸. Likewise Prof. G.C. Pande has given a philosophical touch to this by saying "history is the remembrance of what really happened by its critical enquiry where learning and criticism relate to the self"⁶⁹. Prof. D.D. Kosambi correlate history with Sociology and regards sociology as broad based upon economic factors. He maintains that "history is presentation in chronological order of successive changes in the means and relations of production"⁷⁰. In other words he implies that successive changes in social history are directly governed by changing condition of the means of production, composition and their interrelation with the human factor. Hence it can be said that history entails a systematic and scientific study of every walk of life in the past, interpreted in such a way that it may sub serve the purpose of throwing a relevant light on the present also. "The function of the historian is neither to love the past nor to emancipate himself from the past, but to master and understand as the key to the understanding of the present. Great history is written precisely when the historian's vision of the past is illuminated by insight into the problems of the present....."⁷¹ In this regard R. G Collingwood had stated "We might be standing on the threshold of an age in which history would be as important for the world as natural science had been between 1600 and 1900."⁷²

None of this is to say that history writing has assumed a perfect or completed form. It will never do so: examination of its past reveals remarkable changes in historical consciousness rather than steady progress toward the standards of research and writing that represent the best that historians can do today. Nevertheless, 21st-century historians understand the pasts of more people more completely and more accurately than their predecessors did and this is due to the scientific use of the oral narratives.

ORAL NARRATIVES AND HISTORY IN INTERFACE:

⁶⁷ Agarwal, R.S., Important Guidelines on Research Methodology (Specially for research in History), B.R. Publishing Corporation, Delhi , 1983, p. 8.

⁶⁸ Ibid, pp. 8-9.

⁶⁹ Pande, G.C., *The Meaning And Process of Culture*. Agra, 1972 p. v.

⁷⁰ Kosambi, D.D. *The Culture and Civilization of Ancient India in Historical Outline* , Delhi, 1972, p 10.

⁷¹ Ibid. p 24.

⁷² Collingwood, R. G. in E.Sreedharan, *The Textbook of Historiography 500 BC to AD 2000*, Orient Black Swan. 2009. P .v

History *does* involve telling a story, and while facts are essential in telling a story, they are not enough. In writing about history, a historian tells the story of his thinking about a topic and formulates a central *argument* — or *thesis*. He allows for the possibility, and explains what resulted from the events unfolding as they did. All historical writing begins as an effort to answer questions about origins, happenings, and consequences. The art of history lies in combining fact and interpretation to tell a story about the past. In this narration the sources of oral nature also plays an important part as they give the information which are not there and fill up the voids which are there in the documented works

According to Historical method it is important to distinguish between the true and the false. Thus their stories are a “patterned, coherent account of the human past intended to be true”⁷³. In the study of history, “truth” is complicated, contradictory, and often obscure. Every historical event happens one time and becomes separated from the present by the steady accumulation of other events happening day by day. Instead, we must rely on evidence from the past such as memories of those who were there and objects from that time to guide us as we tell the story. But all these are mere records, subject to many interpretations and subject also to the tricks memory plays even on eyewitnesses. We can never fully relive on the event exactly as it happened. The evidence for past events is therefore always incomplete and fragmentary. Many pieces of evidence are lost, and others are often faded and warped. Historians fit the pieces together as carefully as possible, but holes remain in the picture they try to reconstruct. They do their best to fill in the holes with inferences that seem plausible and that fit the available facts. What emerges may closely resemble what happened, but we can never be completely sure that what we know as history is an exact replica of the past. Our knowledge of history is always in flux, and historians are always in dialogue, not only with the primary sources of the events they write about but also with other historians of those events and the other evidences such as oral narratives too.

Every event we study in history existed in its own network of cause and effect, its own set of relations between people and events, its own modes of thought, usually taken for granted by the societies themselves, often assumed to be a divine ordination that could not be changed. Yet we can never fully abandon our own perceptions; we cannot recover the past exactly as people then thought of life and the world. “Historians must always put something of

⁷³ J. H. Hexter, *The History Primer*, Basic Books, New York, 1971, p 5.

themselves into the stories they tell; never are they empty vessels through which the records of the past spew forth as if they were an untouched truth about a past”⁷⁴. This inevitable insertion of the historian into historical accounts is what J. H. Hexter called an application of “the second record,”⁷⁵ encompassing “everything which historians bring to their confrontation with the record of the past”⁷⁶ and it is not for the distortion of the history or to mislead the reader but to fill up the blank spaces in the historical episode with other relevant data which has been provided by other sources and in which narratives plays an important part.

As regards its importance as an alternative source to fill up gaps in history, it may be stated that the historian must first of all be aware of the basic difference between history and folklore, myths and legends; second, that the historian be trained in the finer details of methodology of both history and folklore as well, so as to generate a holistic and a meaningful reconstruction of the past, corroborated by other evidences. By following these principles we can come to the conclusions that oral sources can provide a valuable perspective on oral history analysis because of their familiarity with the processes of oral traditions. Combining the methods of oral history with that documented history can give a somewhat more correct picture of the past. It can also serve as a tool for corrective method to rewrite culturally true history and to discard the irrelevant portions from history. This further strengthens the argument that oral narratives are in interface with the written documented history.

FIELD OF STUDY

Himachal Pradesh situated in the heart of the Western Himalayas is specifically known with the term ‘Dev Bhoomi’ (‘The Land of Gods’⁷⁷) and its divinity has also been elaborated in Skand Purana⁷⁸. Himachal, “The Land of The Abode Of Snow”⁷⁹ is a state geographically cut across with mountain ranges, rivers, and valleys, dividing the inhabitation into distinct cultural regions which has given birth to several interesting socio-cultural practices, in which the institution of the village God is most remarkable. These institutions have history behind them rooted in the mist of the past remembered in the form of oral narratives;

⁷⁴ Marius, Richard & Melvin E. Page, *A Short Guide To Writing About History*. Pearson Education, New York. 2007 ,p.5.

⁷⁵ Ibid., p. 7.

⁷⁶ J. H. Hexter, *The History Primer*, Basic Books, New York, 1971,p. 79.

⁷⁷ Sharma. B.R., *Gods of Himachal Pradesh*, Indus Publishing Company in association with Institute Of Integrated Himalayan Studies, H.P. University, Shimla, 2007, p. 11.

⁷⁸ Ibid. pp.2 “He who thinks of Himachal, though he should not behold it, is greater than he who performs worship at Kashi. In a hundred years of gods, I could not tell thee of the glories of Himachal. As the dew is dried up by the morning sun, so are the sins of the mankind by the sight of Himachal”⁷⁸.

⁷⁹ Ahluwalia, M.S., *History of Himachal Pradesh*, Intellectual Publishing House, New Delhi. 1983, p. 2. The word Himachal derives its origin from two Hindi words, ‘Him’ and ‘Achal’ meaning “Snow” and “Lap” respectively. Thus etymologically, Himachal Pradesh stands for a region which lies in the slopes and foot-hills of snow i.e. the Himalayas..

perhaps this is the reason which makes Himachal a richest Indian state in terms of folklore. Till recently Himachal Pradesh did not have any appreciable written literature to boast about. But it had its oral-narratives, having extraordinary richness and intrinsic values, which even the dust of time, could not obscure. This literature is now passing through a critical period, as modernity is fast casting its effects upon the age old traditions, due to which it has lost its one-time prestigious place in the socio-religious sphere of the society. Its loss will simply mean the end of the historical legacy which has been kept by the people for generation.

The history of Himachal Pradesh goes back to the dawn of human civilization. The early history of Himachal Pradesh is an account of migration of the people of different races from Indian plains and Central Asia. Its history is perhaps the most unique and remarkable one as compared with that of any other region of the Himalaya. The history of Himachal is the history of *Kols (Proto-Austroloid)* the earliest inhabitants of the area. In the Vedas, they have been called the *Dasas*, the *Dasyus*, the *Nishadas*, etc. Perhaps the *Kolis*⁸⁰, *Halis*⁸¹, the *Doms*⁸², the *Chomangs* and *Domangs* who are the inhabiting tribes in different parts of Himachal are the descendants of that very ancient race. Some two thousand years before Christ, a more powerful people, the *Khashas*, an offshoot of the Aryan race, entered the racial arena of Himachal Pradesh and became the new master of the hills and turned the *Kinnar-Kirat Desha* into *Khash Desh*. They assimilate those tribes and were, in turn, influenced by them, which gave birth to the new social structure.

The *Khashas* organised themselves into the unitary groups which lead to the birth of several small units called as *mavanas*. Later on, these political units developed into republics, popularly known as *janapadas*. Important *janapada* to this region were the *Audumbara*, the *Trigrata*, the *Kuluta*, and the *Kulinda* etc. These *janapadas* continued to flourish for a long time till the breakup of Harsha's empire in the mid 7th century A.D. The place on these *janapadas* were taken by Rajput who founded several states, such as *Nurpur*, *Bilaspur*, *Suket*, *Mandi*, *Jubbil*, *Keonthal*, *Baghal*, *Baghat*, *Sirmaur* and sever small *Shimla Hill* states etc. Though the *Khashas* lost their political dominance to the Rajputs, but they did not lose their cultural heritage as it is still seen even today in the social cultural practices of these people in the vast parts of the western Himalayas.

⁸⁰ Peoples of India Himachal Pradesh Volume XXIV, ed. K.S. Singh, Anthropological Survey of India, Manohar, New Delhi, 1996, pp. 344-47. Koli is a scheduled caste and means the remote inhabitants of Kolarian region.

⁸¹ Ibid, pp.269-273. Hali isa scheduled caste

⁸² Ibid, pp. 200-204. Dom / Dumna/Bhanjra a scheduled caste

SHIMLA HILL STATES:

Shimla district of Himachal Pradesh lies between the longitude 77°00" and 78°19" east and latitude 30°45" and 31°44" north, has its headquarters at Shimla city. It is surrounded by Mandi and Kullu in the north, Kinnaur in the east, Uttarakhand in the south, Sirmaur in the west. The elevation of the district ranges from 300 meters (984 ft) to 6,000 meters (19,685 ft). The topology of the district is rugged and tough. Shimla district derives its name from Shimla town which was once a small village. Shimla district in its present form came into existence from 1st Sept, 1972 on the reorganization of the districts of the state. The most commonly practiced religion in the district is Hinduism. Hindi and Pahari are the languages spoken here. Agriculture and Horticulture are the major sources of income.

The tract of the country lying between the rivers Satluj and Yamuna was divided into a variety of large and small states, governed by the chiefs more or less independent, in proportion to their means and power. Among those, the states of Bushahr and Sirmaur were the important ones and they occupied the largest portion of the area. The remaining territory was divided into a number of petty chieftains, all of which were recognized under the appellations of the *Bara Thakurais* or twelve lordships and *Athara Thakurais* or eighteen lordships.

The ***Bara Thakurais*** were: *Keonthal, Baghal, Baghat, Bhajji, Koti, Kunihar, Kuthar, Dhami, Mahlog, Mangal, Beja, Bharoli.*

Athara, Thakurais were located in the mid- Himalayan valleys of the Satluj, Giri and Pabar rivers. These principalities were: *Jubbal, Sari, Rawingarh, Balson, Ratesh, Ghund, Madhan, Theog, Kumharsain, Khaneti, Delath, Karangla, Kotgarh-Kotkhai, Darkoti, Tharoch, Dhadi, Sangri, Bharauli.*

Under these Thakurais distinct cultural pattern emerged which in long run gave birth to different folklore, and they further to the belief systems of this area which is clearly visible in the temple art and architecture and the peculiar Devta belief system of this area.

The ancient history of Simla Hill like other regions of India is lost in obscurity, because of the lack of accurate source material, due to which very little is known about its past history.

Unlike medieval kingdoms of Northern India, this region remained almost a semi-autonomous scattered region under several dynastic petty rulers during the medieval ages; Sir Alexander Cunningham had also shed some light in his work regarding this kind of state affairs in this region⁸³, when petty chiefs, bearing the title of Ranas and Thakurs, exercised authority either as independent rulers or under the suzerainty of a paramount power. The period during which they ruled is spoken of as the *Apthakuri* or *Apthakurai*, while the territories of the Rana was called *Ranhun* and of a Thakur, Thakuri, or Thakurai⁸⁴. These states were of very diminutive size, and their boundaries were liable to constant change, according as each ruler gained ascendancy or yielded to superior forces. The complex physiography, varied climate and inaccessible nature made it impossible for any major empire to annex the entire area. Here and there small territories have been annexed by various outside rulers at times but they failed to keep those territories under them for a long period. Even the local petty states were never that much resource full, that they can establish an empire in this region. This was the main reason due to which the territory comprising the present Himachal Pradesh had never developed into an independent sovereign state during early ancient period. This position continued through the Sultanate and Mughal rule and later on during the Gurkha invasion no major drastic political change took place. It was only under the British rule that these petty states were brought under the Central Administration and Authority and finally some stability was there.

ORAL NARRATIVES AND DOCUMENTED HISTORY OF SIMLA HILLS

In Simla Hills folklore is a legendary tradition contained in popular beliefs, institutions, practices, oral literature, arts and pastime of the mental and spiritual life of the folk, here folklore is not merely a reflection of an abstract cultural; it exists in everyday life as a means of creating culture. This 'rich oral tradition', according to Chetan Singh in his article, 'seemed to have served the purpose that popular literature came to fulfill in other societies'⁸⁵. What D.N. Majumdar had observed in connection with the Khasas of Gharwal Himalayas, A.F.P. Harcourt⁸⁶

⁸³ Hutchison. J. J. Ph. Vogel, *History of the Punjab Hill States, Vol -I, Lahor, 1933, p.1*. Reports of the Archaeological Survey of India and the Ancient Geography of India.

⁸⁴ Ibid. p.12.

⁸⁵ Chetan Singh, The Place Of Myth, Legend and Folklore in Western Himalaya, in. Popular Literature and Pre-Modern Societies in South Asia, ed, Singh, Surinder & Ishwar Dayal Gaur, Pearson Longman, Delhi, 2008, p. 41.

⁸⁶ Ibid, p 79...the faith is Hinduism; but it is not the religion of orthodox.....beside Hinduism, serpent-worship is also practised..... (Harcourt 1972: 59).

in case of Kullu and Gerald D. Berreman⁸⁷ regarding Sirkanda (Kumaon) can be applied to this region also: that though they are Hindus and they worship Hindu gods and goddesses, they have “partiality for ancestor spirits, queer and fantastic demons and gods and for the worship of stones, weapons, dyed rags and symbols. The sun, the moon and the constellation are their gods.” (Majumdar, 1944: 150)⁸⁸, and it is clearly visible in the oral narratives and the belief system of this region. The argument of Srinivas can also be applied in this region too. The people are not orthodox Hindus and their belief systems are the source of their socio-cultural life which depicts its folk-history. They are not highly Sanskritized or Brahmanical, they do not adhere closely to written prescription and proscription of the post-Vedic Hinduism. (Srinivas, 1952, p. 30: 1956).⁸⁹

Folk beliefs of Simla Hills constitute the traditions, legends⁹⁰, rituals and myths and customs of its society. They exist as folk knowledge and are practiced as customary behaviour. They do not exist solely in the abstract but they actual exist in practice and behavior, which are visible in their rites and rituals performed during the religious festivals. *Alan Dundes* structural definition of folk beliefs⁹¹ can be related to this area to some extent. While *Butler* view regarding folk beliefs as, ‘narratives (memorates and legends), customs, rituals, and rhymes’⁹², gives detail that how these genres of folklore share the traditional elements with the religious and the heroic legend⁹³, which gives birth to a complex cultural practices followed in the remote corners as Simla Hills. ‘Folk beliefs are often part of complex cultural processes that involve not only belief but also values and other behaviours and that find expression in different genres of folklore’.

Simla Hills has plenty of oral narratives in form of folk beliefs and legends associated to it in which local deities are the central figure. The region have several great deities which includes, Vedic and puranic gods, incarnations of

⁸⁷ Berreman Gerald D., *Hindus of the Himalayas*, Oxford University Press, 1963, California, pp. 80 “Most Pahariare Hindus, as evidenced by their own profession of faith and by application of any realistic definition of that term to observation of the behaviour they exhibit and the beliefs they profess relating to the supernatural world ”

⁸⁸ Bande, Usha., *folk Traditions and Ecology in Himachal Pradesh*, Indus Publishing Company in association with Institute Of Integrated Himalayan Studies, H.P. University, Shimla, 2006, p.79.

⁸⁹ *Ibid*, pp. 80.

⁹⁰ The term *legend* (Definition of the legend began with the founders of folkloristics, Jacob and Wilhelm Grimm. They pointed out its main characteristic by contrasting it to the *tale* in the introduction of the collection *Deutsche Sagen* (1816).) is derived from the Latin word *legere* (To read; thus, the term originally labelled a piece of reading, referring to a book. Today, in common parlance, a legend is still regarded as an untrue story believed by the gullible). “A story from ancient times about people and events, that may or may not be true. Oxford Advanced learner’s Dictionary of current English, Eighth Edition, Oxford University Press, Oxford New York, 2010, p.880

⁹¹ Green, Thomas A. Green, *Folklore An Encyclopedia of Beliefs, Customs, Tales, Music, And Art*, B Santa Barbara, California Denver, Colorado Oxford, England, 1997, pp. 89, “A broad genre of folklore that includes expressions and behaviours variously called superstition, popular belief, magic, the supernatural, old wives’ tales, folk medicine, folk religion, weather signs, planting signs, conjuration, hoodoo, root work, portents, omens, charms, and taboos”

⁹² *Ibid*, pp. 89-97. ‘Folk beliefs are often expressed in narrative form.’

⁹³ *Heroic legend* is identified as a long epic poem composed of traditional motifs and performed orally in song, accompanied by a musical instrument. Heroic legend tells about a known or fictional historical hero or heroine.

gods and goddesses, rishi gods, gods having powers to cure ailments, primitive spirit etc. These gods and the folklores associated to them are the guardians of traditional value system which is governing the life of the people in this area. This unique amalgamation of good and evil spirits as gods has tremendous effect on social and religious sentiments of the people residing in the region and has given birth to diverse folklore. Religious institutions are the pivotal point of the culture and history of this region. These are the places from where the origin of narratives can be traced. Famous temples of Simla Hills which can shed some light in this regard are: *Bhimakali (Sarahan, Rampur)*, *Bijat Devta (Sarahan, Chopal)*, *Bijat Devta (Jorna, Chopal)*, *Rairmool Devi (Balsan, Theog)*, *Baneshwar Devta (Pujarli, Kotkhai)*, *Kawar Jakh Devta (Dodra Kawar, Rohru)*, *Maneshwar Temple (Manan)*, *Piri Devi (Jubbal)*, *Doom Devta (Upper Shimla) all are of Tower Temples*⁹⁴. *Koteshwar Mahadev, Koti, Shimla (Sutlej Valley Stlye)*⁹⁵.

To understand the oral narratives we can follow the approach of Chetan Singh, who has rightly argued that, “one of the most useful instruments for understanding myth, legends and folklore of this region should be the concept of Sanskritization, and rather broad but relevant two-fold division that is usually made between the Great and Little tradition.”⁹⁶ Sanskritization was a process that enabled certain sections of the society to improve their position in the existing social order. The Great and Little Traditions, on the other hand, seemed to represent the entire ideological and religious spectrum within which such improvement in status could take place. One needs to emphasize, however, that even though Brahmanical culture provided the framework for the process of Sanskritization, it was not installed from popular customs. It synthesized and incorporated diverse aspects of folk belief, and in doing so it established a cultural continuity between the Great and Little traditions. Local traditions interacted with an influential Brahmanical one that successfully accommodated many of their principal beliefs and also provided an intelligentsia that mediated between regional diversities; yet it would be difficult to deny that there was also a tendency for the Brahmanical Great tradition to

⁹⁴ When The Chalet Style Structure Is Raised To Three Or More Storeys Height So That The Verandah All Around Extend Beyond The Walls To Form A Cantilevered Structured, As If A Chalet Placed On High Pedestal. Locally Such Buildings Are Called ‘Kot’ Or ‘Koti’ Temple. Tower Temples Are Built On A Square Plinth And All The Four Walls Are Of The Same Size.

⁹⁵ Sutlej Valley Style is a fusion of pent-roof and pagoda roof. Erected on the framework of massive *deodar* beams, placed on the elevated masonry platform. temple generally has an open *Mandap* in many cases there may be the *Pradakshina-path* around the sanctum sanctorum. the roof is in pent or composite pent-n-gable type. Roof over sanctum sanctorum is multi-tiered receding roof, surmounted by a *Kalasha*.

⁹⁶ Chetan Singh, *The Place Of Myth, Legend and Folklore in Western Himalaya*, in. *Popular Literature and Pre-Modern Societies in South Asia*, ed, Singh, Surinder & Ishwar Dayal Gaur, Pearson Longman, Delhi, 2008, p. 43

superimpose some of its own thinking upon non-Brahmanical belief systems (see Srinivas 1952/1965:167)⁹⁷.

Two important traditions which are followed in this region and have oral narratives behind it can be studied in this aspect. Historically it is very difficult to prove their historicity but via the media of folklore they could be understood in detail. They are *Bhundda* and *Buddhi Diyaudi*.

BHUNDDA:

A legend goes on that, *Bhoonda Yajna*⁹⁸ was started by Rishi Parshuram⁹⁹ after the deification of Mamelesa, whose progeny from Bhrigu Rishi called *Bedas*¹⁰⁰ performs the most important ceremony, the rope sliding ceremony in *Bhoonda yagna*. The *Beda* is a small tribe of the menial class found in Garhwal, Kullu, Suket and some interior parts of Simla Hills¹⁰¹. This festival is still celebrated in numerous places in Shimla and outer Seraj regions. The *Bhoonda* is also called as *Narmedha* and is also related to Nirmand village whose name also signifies nearly the same meaning and is famous for its ancient Parshuram temples. It is said that the Narmedh text in this temple mentions the Bhunda sacrifice¹⁰². At one time, it was held at all the places where Parshuram stayed and meditated, which are: Kao, Mumail, Neerath, Nirmand and Dutlanagar. All these five places are famous for ancient temples¹⁰³. After close analysis of this narrative and the legendary story it can be said that it comes in the category of historical

⁹⁷ Ibid. p. 43.

⁹⁸ Kayshap.P.C., *Living Pre-Rigvedic And Early Rigvedic Traditions Of Himalayas*, Chapter 3, Bhunda: *The Narmedha* Pratibha Prakashan, delhi,2000, pp.81-115.. see also, B.R Sharma., *Gods Of Himachal Pradesh*, Indus Publishing Company In Association With Institute Of Integrated Himalayan Studies, H.P. University, Shimla, 2007, p. 145. (Bhunda; the rope sliding ceremony is believed to have been started by Lord Parshuram, after the completion of his Sadhna.)

⁹⁹ Traditions in the region west of Kalindi give credit for it, to the legendary Parshuram.

¹⁰⁰ According to J.S. Gally (personal communication) *Beba* plays an important ritualistic role during the religious function called as *Bhunda*. *The priest first become possessed and then squats on a wooden board*. The board is then placed on a tightrope, one end of which is tied to the hill and the other to the valley below. The priest slides on the rope on the wooden board from hilltop to the valley. Soon after his journey devotees pluck his hairs and cloths, believing that the relics will bring good luck. If the priest survives this tightrope journey, he will be treated as a god and highly respected. If he slips from the board and falls to his death during the tightrope journey, people regard his death as sacrifice to the god. Mills, Margaret. A., Peter J. Clause and Saran Diamond, ed. *South Asian Folklore An Encyclopedia*, Reutledge, New York, 200., pp. 2; Elliot, H.M., and John Dowson. 1964. *The history of India as told by its own historians Vol. 4*. Allahabad. Kitab Mahal. See also *Gazetteer of the Shimla Hill States 1910*, Punjab States Gazetteer Volume VIII, Indus Publishing Company, New Delhi, 1995, pp.30-31.

¹⁰¹ *Gazetteer of the Shimla Hill States 1910*, Punjab States Gazetteer Volume VIII, Indus Publishing Company, New Delhi, 1995, pp.30-31.

¹⁰² Chauhan, Kuldeep *The great Indian rope trick The Bhunda narmedh mahayajna was held this time amid much fanfare*, **Sunday, January 8, 2006, Chandigarh, India, The Tribune**

¹⁰³ Kao is famous for Kamakesha Mata temple, Mumail for Mamleshwar Mahadev, Neerath for Sun temple, Nirmand for Ambika Devi & Parshuram Kothi and Dutlanagar for Dattatreya temple.

legend¹⁰⁴, as some historical facts are there in this. Kayshap have argued that, “the ritual Bhunda, appears to be a survivor of an age when the Rigvedic society was in intellectual ferment and the existing beliefs and practices were being questioned and critically examined”¹⁰⁵. Bhunda is meant to be held every twelfth year, it is a terminal of a cycle of four yajnas, performed three years after the other. All four Yajnas in the chain- Badhoji, Badhpur, Shant and Bhunda¹⁰⁶ are prima facie the Vedic medhi sacrifices, *ajmedh* (goat sacrifice), *Gomedh* (cow sacrifice), *Asvamedh* (horse sacrifice) and *vedic Purusmedh Naramedha* (human sacrifice)¹⁰⁷. Bhunda has been a part of the culture of several erstwhile states in Simla hills. It is believed that Bhunda is performed to propitiate local *devis* and *devtas*. The deities, in turn, ring out evil spirits and ring in goodwill and prosperity for the villagers. The continuity of this festival in the modern age is only to the oral traditions which are been kept alive by the masses in these regions.

BUDDI DIYAUDI:

Another oral narrative is of Buddhi Diyaudi, which have some similarity with the Rig Vedic episode of *Indra* and *Vrta*¹⁰⁸. Till date **buddi diyaudi**¹⁰⁹ (**buddhi diwali**) is celebrated in the Naga Devta Temple at Malen of Kotgarh

¹⁰⁴ Grimm brothers identified, three kinds of folk legends, which were: *historical*, those related to an event or a personality of historical significance; *mythological* (demonological), those concerning human encounters with the supernatural world and endowment with supernatural power and knowledge; and *etiological* (explanatory), about the nature and origins of animate and inanimate things.

¹⁰⁵ Kayshap.P.C. p, 145.

¹⁰⁶ Bhunda festival is performed believing that it will make local deity happy and He will shower prosperity and goodwill on the villagers. The main hero of the festival, a man from Beda tribe who is designated to perform the ritual, starts taking meal once in a day when only one month is left for the festival. He starts weaving the sacred rope by collecting the 'Munji' grass, on which he is going to slide on the day of the festival. On the final day of the Bhunda festival all the **local deities are invited to the place of event** where priests and a large number of audience gather to witness the traditional Bhunda celebration. The Beda man takes bath, wears a white dress (kafan) and worship the local deity after which he is accompanied to the site of the event with drum beats. **The sacred rope weaved by the Beda** is tied to a high point on a hill at one side and at another side it is tied to a point across a ravine deep down on the ground. The Beda then sits on a wooden sliding saddle tied to the rope with his hands pointing upwards and slides down the ropeway, where his wife sits like a widow. If the man is able to survive and perform the event successfully, he and his family become rich as they are bestowed with huge amount of money and jewelery from the temple fund and is carried to the temple on a palanquin where hundreds of goats are sacrificed by the villagers in the name of local deity. But if the man is not able to survive, then his family is taken care off by the villagers

¹⁰⁷ Kayshap.P.C , p .145.

¹⁰⁸ Rigveda narrates the Indra version of the conflict, *Diyaudi* tells the Vrtra side of the story. The 3-day graphic depiction of the myth gives a blow-by-blow account of the moves and counter moves, offensive and defensive, cunning and deceit in the long-drawn out bloody struggle in which Indra succeeded in freeing the Saptsindhu waters.

¹⁰⁹ Kayshap.P.C., *Living Pre-Rigvedic And Early Rigvedic Traditions Of Himalayas*, Chapter 1, *Buddhi Diyaudi: The Indra-Vrtra Legend*, Pratibha Prakashan, delhi,2000, pp.7-48. People in Kullu, Kinnaur, Sirmaur and Shimla Districts of Himachal Pradesh have been celebrating it for centuries. A large number of villagers, irrespective of caste and creed, arrive here in large numbers and celebrate it by dancing and singing around a bonfire during night. It is an ancient festival and celebrated with complete traditional fervor. There is no communal difference in caste and creed in this festival. People from surrounding villages participate in this festival spread from three days to a week, depending on local traditions and custom and sing vintage songs named Kavya. During this Kavya, two teams, one representing the Gods and the other Vritasur, are involved in a verbal fight and the folk music is played. Festivities start on the first 'amavasya', or new moon of the lunar half, after the regular Diwali. During the day, a rope shaped like a snake and made of grass is worshipped. It represents the evil spirit. Two priests would chant songs and dance around it. Later, they would take the rope and cut it in the field to represent the killing of evil. Another legend associates it with the Mahabharata battle which is said to have started on the first day of Buddhi Diwali. People dance and sing folklore related to the epic Mahabharata through the night in front of bonfires, amid the beating of drums and playing of trumpets to appease the gods. They carry out processions with the flame of the bonfire. As per tradition, villagers take animals to a nearby temple where the sacrificial ceremony is performed on 'amavasya'. The severed heads are offered to the deities and the meat is taken home for cooking. The feast is shared by villagers. Even the leftover meat is stored for consumption during winter. Actually, the celebrations mark the onset of a harsh winter. In some villages, this festival is related to agricultural activities. Once agricultural activities are over, people celebrate Buddhi Diwali to share some time together.

region and in several other areas in the remembrance of killing of the demon. This unique fair is exclusive only to the *Yamuna, Saraswati*¹¹⁰, *Satluj* and *Beas* watersheds of Himalayan region. 'Buddhi Diyaudi'¹¹¹ presents a kaleidoscope view of the deeds of the mighty rivals in a do-or-die struggle for power and supremacy. Indra is in possession of fire and Vrta holds water. Each covets the other's possession. Vrta makes determined bids to snatch fire, but in the end loses water and his life too. The three days graphic depiction of the myth gives a blow-by-blow account of moves and counter-moves, offensive and defensive, cunning and deceit in the long-drawn out bloody struggle. Rigveda narrates Indra version of the conflict; Diyaudi tells the Vrta side of the story. It is thus a saga of a vanquished hero, who for scholars and Indra worshippers might have been an element of nature, a mythical character in Creation Drama or an anti-hero in the cosmic play The Focus of the Rigveda is primarily on the success of Indra in freeing the Saptasindhu waters from Vrta's control and in this conflict water was released after killing Vrta.

Similar kind of narratives is also related to other temples and one of the examples is Mamleshwar Mahadev Temple, situated at village Mamel Karsog. In several parts of Himachal we hear such kind of similar narratives, in which the demon or the demonic god was killed by the other god who came from outside and after doing so he was established as a deity in that area, and the defeated and vanquished one was also established as a minor god.

It gives a clear cut picture that how in this part of the Western Himalayas the greater and the little tradition diffused and assimilated and gave birth to a composite culture.

The legends of *Mahasu Devta*¹¹² are also important folk narratives of *Simla Hills*. He is one of the most important deities not only in Simla but also in the surrounding districts as well as in Uttra Khand also. Similarly there are narratives related to Baidra Devta, Doom Devta, Koteswar, Lankra Veer, Nag Devta, Nar Singh Veer, Parshuram and Shingul Devta, who are worshiped in a vast area.

¹¹⁰ The **Sarasvati River** is one of the chief **Rigvedic rivers**, mentioned in ancient **Sanskrit** texts. The **Nadistuti** hymn in the **Rigveda** (10.75) mentions the Sarasvati between the **Yamuna** in the east and the **Sutlej** in the west, and later Vedic texts like Tandy and Jaiminiya Brahmanas as well as the **Mahabharata** mention that the Sarasvati dried up in a desert

¹¹¹ Kayshap.P.C., Chapter 1, *Buddhi Diyaudi: The Indra-Vrta Legend*, Pratibha Prakashan, delhi,2000, pp.7-48.

¹¹² Mahasu Devta is an important deity of the region with several folk-beliefs and related folklore. Ballads are sung in this region in praise and worship of Mahasu Devta *Gazetteer of the Simla Hill States, 1910, Jubbal State*, p. 13) defined the cult Mahasu "apparently a derivative of Shaivism the name being probably a corruption of Maha Shiva," Handa, O.C, naga Cults and Traditions in the western Himalayas, Indus Publishing Company, New Delhi. 2004. Pp. 227 "The cultic influence of Mahasu Devta is not restricted to this *pargana* only, but it extends over a vast mountainous area of the two contiguous states, Himachal Pradesh and Uttaranchal, between the Satluj and the Yamuna rivers. So overwhelming has been the influence of Mahasu Devta in the parts of Himachal Pradesh that there was a large district named after this deity as the Mahasu district. On reorganisation, that district was bifurcated to form the Shimla and Solan districts, incorporating the area transferred from Punjab.

What all these legends and narratives depict is a question to be answered, but one thing is crystal clear that all of them are part and parcel of a single belief system, which have nurtured them, some facts and figures disclose some history behind them, but proving it is a tedious task. Folklore and history here are in interface to each other and to understand them both have to be studied side by side. All these legendry stories are the part of the culture of this region and all folk-believes and other legends are in one way or other related to this narratives and different temples, which is the pivotal point in the overall cultural heritage of this region. This folklore has given birth to the culture of this area and the culture has further enriched the folklore to a large extend.

Conclusion:

Man has always expressed himself in terms of certain basic needs such as food, clothing and shelter, social and political organization, and knowledge of his environment and transmission of such knowledge, self-expression, and religious and philosophical beliefs. Such activities together make up the culture pattern.¹¹³ Cultures do not remain wholly static or isolated, but change over periods of time and interact with other cultures. Culture interacts both in peace and war. When a people come to have a highly complex cultural pattern resting upon an intricate social organization and exerting wide control over nature, they may be said to have achieved what is called 'civilization'¹¹⁴. Civilization in all its varied aspects constitutes the subject matter of history. Such a cultural approach to history would make it a ***biography of civilization***. This is the process how the cultural growth took place in the western Himalayas.

Although the present day cultural pattern of Simla hills, is heavily burdened with the Brahmanic bias, yet the core content is still intact. Folklore of the legends is true, to a large extent, with only some changes depending upon the idiosyncrasies of the individual narrators. Under the Brahmanic onslaught most of the ancient temples might have lost their actual identity and were adopted into the Brahmanical fold and re-christened after the name of the ancient rishis and munis, but in this process of cultural diffusion and assimilation, both the Great and the Little tradition affected each other to a large extant. Neither the indigenous culture was fully destroyed nor was the

¹¹³ Wallbank and Taylor, *Civilization Past and Present*, Vol 1, 4-7 in E.Sreedharan, *The Textbook of Historiography 500 BC to AD 2000*, Orient Black Swan. 2009. P. 1.

¹¹⁴ Ibid., 7.

brahmanical culture able to establish its dominance. And this was only due to the rich tradition of folklore which kept the core of the old culture intact and alive. The written tradition of the popular culture and the oral tradition of the indigenous culture have enriched each other and due to this, in this region they are in interface to each other, both of them are to be studied side by side to come to accurate conclusions. The study of history of the area is incomplete without the study of folklore as oral sources provide a valuable perspective on oral history analysis due to their familiarity with the processes of oral traditions. Combining the methods of oral history with that documented history can give a somewhat more correct picture of the past. It can also serve as a tool for corrective method to rewrite culturally true history and to discard the irrelevant portions from history. This further strengthens the argument that oral narratives are in interface with the written documented history.

References:

1. Agarwal, Vasudeva. S, *Ancient Indian Folk Cult*, Prithivi Prakashan, Varanasi. 1970.
2. Agarwal, R.S. *Important Guidelines on Research Methodology (Especially for research in History)*, B.R. Publishing Corporation, Delhi, 1983.
3. Ahluwalia M.S. *History of Himachal Pradesh*, Intellectual Publishing House, 2nd ed., New Delhi, 1983.
4. Ali B. Sheik, *History: Its Theory and Method*, Macmillan, Delhi, 1999.
5. Allan Navin, the gate way of History, Indian reprint, Bombay, 1968
6. Arya, Subhashini, *Himadri Temples A.D. 700-1300*, Indian Institute of Advanced Studies, Simla. 1994.
7. Balokhra Jag Mohan, *The wonderland Himachal Pradesh*, H.G. Publishing, New Delhi, reprint, 2001.
8. Bande Usha, *Folk Traditions And Ecology in Himachal Pradesh*, Indus Publishing Company, Delhi, in association with Institute of Integrated Himalayan Studies H.P. University, Shimla, 2006.
9. Bande, Usha, *Preserving Ecology through Folklore: A Study of the Folk Traditions of Himachal Pradesh*. Institute of Integrated Himalayan Studies, H.P. University, Shimla, 2006.
10. Barnard, Alan and Spencer Jonathan, *Encyclopaedia of Social and Cultural Anthropology*. (eds.) Routledge, London 1996.
11. Baxi, Upender, *Law in Subaltern Studies' in Subaltern Studies VII (eds.)*, Partha Chatterjee and Gynendra Pandey. Oxford India Paperback: New Delhi.1993.
12. Ben-Amos Dan & Kenneth S. Goldstein, *Folklore performance and Communication*, ed., Mouton, the Hague, 1975.
13. Ben-Amos Dan, *Folklore in Context Essays*, South Asian Publishers, New Delhi.
14. Berreman Gerald D., *Hindus of the Himalayas*, Oxford University Press, California,1963
15. Bezbaruah M.P., *Fairs and festivals of India*, Volume III, ED., Gyan Publishing House , New Delhi,2003.
16. Bhasin Raaja, *Simla The Summer Capital Of The British India*, Rupa & Co, New Delhi, 2011.
17. Blackburn, H Stuart. & A.K. Ramanujan, *Another Harmony New Essays On The Folklore Of India*, ed., Oxford University Press, Delhi, 1986.
18. Bluestein, Gene, *The voice of the Folk: Folklore and American Literary Theory*, University of Massachusetts Press, Massachusetts, 1972.
19. Brentnall Mark, *The Princely and Noble Families of the Former Indian Empire Vol. I : Himachal Pradesh*, Indus Publishing Company, New Delhi, New Delhi, 2004.
20. Bronner, Simon J. *Following Traditions: Folklore in the Discourse of American Culture*, Utah State University Press, Logan, 1998.
21. Brown, Robert, *Illustrated Encyclopaedia of People and Culture of the World: A graphic account of the characteristics, customs, languages, religions and folklore of the human family*, Aryan Books International, New Delhi, 1994.
22. Buck E.J, *Simla Past And Present*, 2nd ed. Minerva book House, Simla, reprint 1989.
23. Chaudhari Minakshi, *Himachal A Complete Guide to the Land of Gods*, Rupa & Co. New Delhi, 2006.

24. Chaudhury, Sujit, *Folklore and History: A study of the Hindu Folkcults of the Barak Valley of Northeast India*, KK Pub. New Delhi.
25. Chetan Singh, the Place of Myth, Legend and Folklore in Western Himalaya, in. Popular Literature and Pre-Modern Societies in South Asia, ed, Singh, Surinder & Ishwar Dayal Gaur, Pearson Longman, Delhi, 2008
26. Chetwode, P, *Kullu- The End of the Hibitable World*, John Murray, London, 1972.
27. Choudhury Roy, *Pranab Chandra, Temples and Legends of Himachal Pradesh*, Bharatiya Vidya Bhawan. Bombay. 1981.
28. Clarke W Kenneth, Marry W. Clarke, *Introducing folklore*, , Holt, Rinehart and Winston, Inc, Ney Work, 1966.
29. Claus, Peter J., Indian Folklore; papers present at the Indo- American Seminar on Indian Folklore, Mysore 1980-1987, Central Institute of Indian Languages, Mysore, 1987.
30. Clifford Sather & Timo Kaartinen, *Beyond the Horizon: Essays on Myth, History, Travel and Society*, Ed. Studia Fennica Anthropologica . 2008.
31. Crook W, *Folklore of India*, Aryan Books International, New Delhi, 1993.
32. Crook W, *An Introduction to the Popular Religion and Folklore of Northern India*, Asian Educational Service, New Delhi, reprint, 1994.
33. Crook W, *The Native Races of the British Empire Northern India*, Niyogi Books, New Delhi, 2012.
34. Crook W, *The North-Western Province Of India Their History, Ethnology, And Administration*, Niyogi Books, New Delhi, 2012.
35. Dacott Alice Elizabeth, *Simla Village Tales , folktales from the Himalayas*, Pilgrim Publishing, Varanasi, 2003
36. Dharwadker Vinay, *The collected essays of Ramanujan*, ed., Oxford university Press, New Delhi, 2012.
37. Dorson, Richard *Folklore and Folklife: An Introduction*, ed., Chicago University Press: Chicago. 1972.
38. Dundes Alan *The Study Of Folklore*, Printice-Hall, N.J.,1965
39. Dundes Alan, *Folklore Critical Concepts in Literary and Cultural Studies Vol I to IV, ed.*, Routledge , London, 2005.
40. Dundes, Alan, *Essays in Folkloristics*, Folklore Inst, Meerut, 1978.
41. Dundes, Alan. *Folklore Matters*, University of Tennessee Press: Knoxville. 1989.
42. Durga Bhagat, *An Outline of Indian Folklore*, Popular Book Depot, Bombay, 1958.
43. E.P. Thompson, *The voice of the Past: Oral History*, Oxford, 1978,
44. Edmanson, Munro.S., *Lore; In Introduction to the Science of Folklore and Literature*, Holt, Richehart & Winston, New York, 1971.
45. Elliot, H.M., and John Dowson, *The history of India as told by its own historians*. Allahabad Kitab Mahal, 1964.
46. Encyclopædia Britannica. *Encyclopædia Britannica Ultimate Reference Suite*. Chicago: Encyclopædia Britannica, 2011
47. Gairola, Tara Dutt, and D.A. Barker. 1917. *Games and festivals of Garhwal*. Journal of the United Province Historical Society 1(1): 160-167.
48. Gardiner Patrick, *Theories of History*, ed., The Free Press, New York, 1959.
49. *Gazetteers' of Shimla Hill State 1910*, Punjab District Gazetteers Volume VIII, Indus Publishing Company Delhi, reprint, 1995.
50. *Gazetteers' of the Shimla District 1904*, Punjab District Gazetteers Volume VIII A, Indus Publishing Company, Delhi, 1997.
51. Gill, M.S, *The Himalayan Wonderland*, Vikas Publications, Delhi. 1972.
52. Green A Thomas, *Folklore, An Encyclopedia Of Beliefs, Customs, Tales, Music, And Art*, (Edited) Santa Barbara, 1997.
53. Green, Thomas A. Green, *Folklore An Encyclopedia of Beliefs, Customs, Tales, Music, And Art*, B Santa Barbara, California Denver, Colorado Oxford, England, 1997.
54. Guha, Ranajit, *Elementary Aspect of Peasant Revolution*, OUP: New Delhi.
55. Gulati.G.D. *Mewat Folklore Memory History*, Dev Publishers & Distributors, New Delhi, 2013.
56. Gumperz, John & Hymes, Dell, *Directions in Sociolinguistics: The Ethnography of Community*, ed., Basil Blackwell. New York.1986.
57. Handa O.C, *Ancient Monuments Of Himachal Pradesh*, Museum of Kangra Art, Dharamshala, Department of Language And Culture, Govt. Of Himachal Pradesh, Simla, 2010
58. Handa O.C, *Naga Cults and Traditions in the Western Himalayas*, Indus Publishing Company, Delhi, 2004.
59. Handa O.C, *Panorama Of Himalayan Architecture Volume I, Temples*, Indus Publishing Company, New Delhi, 2008.
60. Handa O.C, *Pashami Himalaya Ke Lok Kalian (Hindi)*, Indus Publishing Company, New Delhi, New Delhi, 1988.

61. Handa O.C, *Temple Architecture of Western Himalayas-Wooden Temples*, Indus Publishing Company, New Delhi, 1998
62. Handa O.C, *Wood Carving In The Himalayan Region*, Indus Publishing Company, New Delhi, in association with Institute of Integrated Himalayan Studies H.P. University, Shimla, 2006.
63. Handoo Jawaharlal, *Folklore: An Introduction*. Central Institute of Indian Languages: Mysore. 1989.
64. Hans Hendriksen, *Himachal Studies, Vol. I. Vocabulary, Vol. II. Texts*, Kommissioner; Denmark, 1976 & 1979.
65. Haranata, S.R., *Himachal Ke Mandir Aur Unse Juri Lok Kathen (Hindi)*, Minerva Book House, Simla. 1991.
66. Haviland, William A. *Cultural Anthropology*. Harcourt Brace Jovanovich Publishers, 6th edition: Orlando, Florida. 1990.
67. *Himachal Past and Present*, Directorate of Correspondence Courses, Himachal Pradesh University, Simla, 1975.
68. http://en.wikipedia.org/wiki/Oral_tradition.
69. Hunt. Marjorie, *The Smithsonian Folklife and Oral History Interviewing Guide*, Smithsonian Institution, Center for Folklife and Cultural Heritage Washington, 2003.
70. Hutchison, J. and J.Ph. Vogel. *History of Punjab Hill States Vol I-II*, Department of Language and Culture, Himachal Pradesh, Shimla, reprint, 2000.
71. Hymes, Dell, *Language in Culture and Society*, ed., Allied Publishers: Bombay. 1964.
72. J. H. Hexter, *The History Primer*, Basic Books, New York, 1971.
73. Jan Vansina *Oral Tradition: A case study: historical methodology*, Chicago, 1955.
74. Kanwar Pamela, *Essays on the Urban Patterns in Nineteenth Century Himachal Pradesh*, Indian institute of Advanced Studies, Rashtrapati niwas, Shimla, 1999.
75. Kanwar Pamela, *Imperial Simla the political Culture of the Raj*, Oxford University Press, New Delhi, 2012.
76. Kashyap P.C. *Living Pre-Rigvedic and Early Rigvedic Traditions of Himalayas*, Pratibha Prakashan, Delhi, 2000.
77. Kaviraj, Sudipta, 'The Imaginary Institution of India', in *Subaltern Studies VII*.
78. Kayshap.P.C., *Living Pre-Rigvedic And Early Rigvedic Traditions Of Himalayas*, Chapter 1, *Buddhi Diyaudi: The Indra-Vrtra Legend*, Pratibha Prakashan, delhi, 2000.
79. Korom Frank J. *South Asian Folklore Greenwood Folklore Handbook*, Greenwood Press, London, 2006,
80. Kosambi, D.D. *The Culture and Civilization of Ancient India in Historical Outline*, Delhi, 1972.
81. Lalit, C.R.B. *Thoda: A Martial Game of the Khasha People of Himachal Pradesh*. In *Mahabharata In The Tribal And Folk Traditions Of India*, ed. K.S. Singh. Shimla: Indian Institute of Advanced Studies; New Delhi: Anthropological Survey of India. 1993
82. Lyord, L. William and Alexander Gerard, *A Narrative Of A Journey From Caunpoor To The Boorendo Pass In The Himalayan Mountain 1821-22*, Vol I-II, Asian education Services, India, New delhi 2010.
83. Main Goverdhan, *Festivals, Fairs and Customs Of Himachal Pradesh*, New Delhi. Indus Publishing house. 1992.
84. Main Goverdhan, *Wooden Temples of Himachal Pradesh*, Indus Publishing Company, New Delhi, 1999.
85. Majumdar R.K., *Historiography*, Srivastav, SBD Publisher, Delhi, 2000.
86. Majumdar, R.C., ed. *The Vedic Age*, London, 1951.
87. Marius, Richard & Melvin E. Page, *A Short Guide To Writing About History*. Pearson Education, New York. 2007
88. Mead, Margaret. *An Anthropologist at Work: Writing of Ruth Benedict*. Greenwood Press: Connecticut. 1959.
89. MFC-001, *Folklore and Culture: Conceptual Perspective*, Indira Gandhi National Open University, New Delhi, 2009.
90. Mian Goverdhan Singh, *History of Himachal Pradesh*, Yugbodh Publishing House, Delhi, 1982.
91. Mills, Margaret. A., *Peter J. Clause and Saran Diamond*, ed. *South Asian Folklore An Encyclopedia*, Reutledge, New York, 2003.
92. Minhas Poonam, *Traditional Trade and Trading Centres in Himachal Pradesh*, including trade Routes and trading Communities, Indus Publishing Company, New Delhi, 1998.
93. Mitto Hari Krishan, *Himachal Pradesh*, , NBT India, reprint 2010.
94. Moorcraft, William & George Treck, *Travels in the Himalayan Provinces of Hindustan and Punjab*, 1938, Reprint by Language Department, Punjab, Patiala. 1970.
95. Munro S. Edmonson, *Lore: An Introduction to the Science of Folklore and Literature*, Holh, Rinehart & Winston, Inc., New York, 1971.
96. Muthukumaraswamy, M.D, *Folklore as Discourse*, ed., National Folklore Support Centre; Chennai. 2006.
97. Myers Helen (.) *Ethnomusicology: An Introduction*, ed., Macmillan, New York. 1992.
98. Nagar, Shanti Lal, *The Temples of Himachal Pradesh*, Aditya Prakashan, New Delhi, 1990.

99. Negi Jaideep, *The Begar & Beth system in Himachal Pradesh (A Study of Erstwhile Simla Hill States.)*, Reliance Pub. House, New Delhi, 1995.
100. Oakley, E.S., *Himalayan Folklore*, Vintage Books, Gurgoan, 1988.
101. Oxford Advanced learner's Dictionary of current English, Eighth Edition, Oxford University Press, Oxford New York, 2010, p.880
102. Pande, G.C., *The Meaning And Process of Culture*. Agra, 1972
103. Panikkar, K.N., *Folklore of Kerala*. NBT: New Delhi. 1991.
104. Pattanayak, D.P. & Clause, Peter.J., *Indian Folklore*, Central Institute of Indian Language, Mysore, 1981.
105. Propp V. *Morphology of the Folktale*, University of Texas Press, Austin, reprint 2001.
106. Propp Vladimir. *Theory and history of Folklore*, Translation by, Ariand y. Martin and Richard P. Martin and thers, Manchester University press, 1984.
107. Ranchan, Som P. And H.R. Justa, *Folktales of Himachal Pradesh*. Bharatiya Vidya Bhawan. Bombay. 1981.
108. Reddy P. Chenna, M. Sarat Babu *Folklore in the new millennium*, , Research India Press, New Delhi, 2004,
109. Roy Chaudhury Pranab Chandra, *Temples and Legends of Himachal Pradesh*, Bharatiya Vidya Bhawan, Bombay, 1981.
110. Roy, Buddhadev, *Folksongs of Bengal*, Firma Klm Private Ltd.: Calcutta. 1980.
111. Roy, Chaudhary, P.C., *Temples and Legends of Himachal Pradesh*, Bhartiya Vidya Bhawan, Bombay, 1981.
112. Sarada, Vadya, *Purana-Prabhavita Himachali Loka Jivana*, Satyam Publishing House, New Delhi, 2009.
113. Seethalakshmi, K.A., *Folktales of Himachal Pradesh*. New Delhi. Sterling Publications. 1972
114. Sengupta, Sankar, *Folklore and Folklife in India*. Indian Publications: Calcutta. 1975.
115. Sharda Vidya, *Purana Prabhavita Himachali Loka Jivana*, Satyam Publishing House, New Delhi, 2009.
116. Sharma B.R. *Gods of Himachal Pradesh*, Indus Publishing Company, Delhi, in association with Institute of Integrated Himalayan Studies H.P. University, Shimla, 2007.
117. Sharma B.R., M.R. Thakur, *Saroj Sankhyan Himachal Pradesh: Lok Jeevan Aur Paramparain (Hindi)*, ed., Himachal Art, culture and language Academy, Simla, 1987.
118. Sharma, B.R. & J.C. Sharma Pahari Bhasha tatha Sahitya (Hindi), ed., Indian institute of Advanced Studies, Rashtrapato nivas, Shimla, 2002.
119. Sharma, Bansi Ram. *Kinnara Loka Sathiya*, Lalita Prakashan. 1976.
120. Sills, David. L., *International Encyclopedia of the Social Sciences*, The Macmillan Company & The Free Press.
121. Singh Gurbhagat, *Literature and folklore after Post Structuralism*, Ajanta, Delhi, 1991.
122. Singh K.S, *Peoples of India Himachal Pradesh Volume XXIV*, ed., Anthropological Survey of India, Manohar, New Delhi, 1996
123. Sreedharan E, *A textbook of Historiography 500 BC to AD 2000*, Orient Black Swan, New Delhi, 2009.
124. Stucky, Nathan and Wimmer, Cynthia. *Teaching Performance Studies*. Southern Illinois University: Illinois. 2002.
125. Thakur M.R. *Folklore of Himachal Pradesh*, Indus Publishing Company, Delhi, in association with Institute of Integrated Himalayan Studies H.P. university, Shimla, 2006.
126. Thakur M.R. *Myths, Rituals and Beliefs in Himachal Pradesh*, Indus Publishing Company, New Delhi, New Delhi, 1997.
127. Thakur M.R., *Manoranjaka Pahari Loka-Kathaen (Hindi)*, Himachal pustak Bhandar, Delhi, 1985.
128. Thakur, Laxman S., *The Architectural Heritage of Himachal Pradesh*, Munshiram Manoharlal, New Delhi. 1996.
129. Thakur, Laxman S., *Where Mortals and Mountain Gods Meet Society and Culture in Himachal Pradesh*, ed., Indian Institute of Advance Studies, Shimla. 2002.
130. Thakur, Molu Ram, *Himachal Ki Loka Kathaen aura Asthaem*, NBT, New Delhi, 2008.
131. *The Interface between the Written and the Oral*, Jack Goody, Review by: M. T. Clanchy, The English Historical Review, Vol. 105, No. 416 (Jul., 1990), pp. 708-709, Published by: Oxford University Press, Stable URL: <http://www.jstor.org/stable/570770>.
132. Upadhyay, Neelmani, *Temples of Himachal Pradesh Architectural, Sculptural, Religious and Cultural significance*, Indus Publishing Company, New Delhi, 2008.
133. Utter Hans, *Trance, Ritual and Rhythm, The Cult of Mahasu Deota in the Western Himalayas*, B.R. Rhythms, Delhi.
134. Utter, Hans. *Trance, ritual and rhythm The Cult of Mahasu Deota in the Western Himalayas*, B.R. Rhythms, Delhi. 2010.
135. Vashisth Sudarshan, *Himalayan Gaatha(I) Dev Parampara (Hindi)*, , Suhani Books, Delhi, 2007
136. Vashisth Sudarshan, *Kailasa Para Candani (Hindi)*, Himachal Pustaka Bhandara, Delhi.
137. Verma V. *Shimla hills in the 19th Century*, B.R. Publishing Corporation, New Delhi, 2008.
138. Vidyarthi L.P., *The Tribal Culture of India*, Concept Publishing Company, 1985.

139. Vidyarthi L.P., *Essays in Indian Folklore*: paper presented to the centenary festival of RAI Bhadur S.C. Roy, Indian Pub, Calcutta, 1973.
140. Vyathit Gautam Sharma, *Folklore of Himachal Pradesh*, translated by Mrinal Pande, National Book Trust, New Delhi, 1984.
141. Vyathit Gautam Sharma, *Folklore of Himachal Pradesh (Hindi)*, National Book Trust, New Delhi, 1993.
-

The Architectural Developments of Banjar Valley, Kullu, Himachal Pradesh

Kishori Lal Chandel

Assistant Professor in History
Govt. College Shimla - 6

The early temple of Himachal Pradesh can be divided into major styles which are neither defined on the basis of deities to whom they are dedicated nor on geographical distribution, but on their peculiar shapes.¹ They are (i) the *nagara* (ii) the pen roofed and (iii) the pagoda. This classification does not include later medieval dome-shaped temples. The above mentioned temple styles can be seen in the Kulu valley of Himachal Pradesh.

The manifold cultural trends flowed into the Banjar valley of Kulu region from various parts of Northern India. They have left important mark on the artistic development of the area. Although varied stylistic influences can be detected, yet the architectural remains have certain regional characteristics because the architecture in this region, as elsewhere in India, has been influenced by the type of raw material available and the climate and the religious trends.

Raw material has often completely shaped architecture. The isolation of this tract almost forced the craftsmen to use material available within the region. Consequently, the use of wood figures prominently, especially, in the construction of the small village temples. It was desirable to use wood, firstly, because it was easily available, and secondly because a hard and resistant variety of wood, for example, the Dhar Deora temple, would part some measure of permanency to the structures.²

Stone, of course, has been used but, a variety which could be cut and dressed was not easily available. As a result, it was beyond the means of the villages to import this type of stone. They, instead, used rubble-masonry. The monarchs or other rich communities, who caused temples to be built, had to face such problems. Thus, in the larger stone and wooden temples, cut and dressed stone was used. Slate of a good quality has always been available locally; hence, the roofs of the pent-roofed and multi-tiered temples have been covered with neat tiles of slate.³

On the basis of recent filed survey we found that the temples of the Banjar valley are also divided into three principal styles. There are some examples of regional *nagara* styles. Such as: stone temple at Thata and stone temple in Koki. A stone temple at Koki is a very unique example of regional *nagara* styles of early medieval period. The architectural styles of different temples, which are located in the Banjar valley, can be divided into following category:

- (i) The *nagara* and its regional types
- (ii) The pent-roofed style, and
- (iii) The pagoda style.

The extent examples of architecture in the Banjar valley can be divided into two main types: religious and secular. Religious architecture is of different varieties. On the basis of style and material used, they may be classified into two types. i.e., stone and wooden structures.

The stone temples are in the *nagara* and regional *nagara* styles of northern India, and are without exception provided with a graceful curvilinear *sikhara*. This style is not indigenous to the hills and is a definite importation from the Indian plains, where the above style originated.⁴

The wooden temples can be divided into two categories: the timber bonded rectangular temples provided with the sharply sloping gabled roof and multi-tiered or the so called Pagoda style, which are built with a succession of superimposed roofs, each a little smaller than the below it.⁵

The wooden temples, especially the pent roofed type are the products of indigenous skills and form one of the characteristic features of the architecture of this region. Goetz is inclined to ascribe a Gupta origin to these simple temples. He states that in the style of the door frame and window niches with miniature columns parallels can be drawn with imperial and later Gupta architecture.⁶

So far as some of the details, mentioned by Goetz, are concerned, Gupta influence can be detected. But the basic architecture is very simple. Regarding the over-door scheme, we can say that the Gupta tradition must have been widespread at one time, which led to the adoption of this particular style; not only in temples, but also in the secular architecture, too.

THE *NAGARA* TEMPLES

Most historians agree that the *nagara* temple style has its home in the region between the Himalaya and the Vidhya in northern part of India. It has many sub varieties in different parts of northern India, shaped by the geographical climate and contrasting evolutionary artistic factors. As the name *nagara*, which means a city, suggests that the styles is not indigenous of Himachal. The archaeological evidence suggests that it was certainly borrowed from the northern plains in the 7th century A.D.⁷

Prior to the introduction of *nagara* temples in Himachal, timber and stone traditions had dominated the temple forms. After the downfall of Gupta Empire, the centre of India political activities moved from Pataliputa to Kanauj. The political instability in the northwest, central and eastern India resulted in the migration of people to the hills. It was transitional period when the Gupta art-idioms and traditions directly entered in Himachal.⁸

In the Banjar valley, only a few examples of the *nagara* styles of temples are traceable. There are some stone temples which are influenced by regional *nagara* styles. This type of architecture was never as popular as the wooden one, as stated earlier. Some temples have disintegrated as a result of earthquake, and other natural calamities. Stone temple at Koki is example of this style. However, about few stone temples have survived in the Banjar valley. Some were constructed in the medieval period with the introduction of Siva worship. Consequently, they are massive in size, but inartistic in execution. The earlier temples are much superior and seem to have been the work master craftsmen and sculptures.

General Features of Temples

A Hindu temple is synthesis of symbols. It is the abode of the God, the imminent spirit of the universe. It is, therefore, known by such terms as *devalaya*, *sivalaya*.⁹ Thus, in the Hindu temple, the focus of all attention is towards the God-head, immanent cella (*graphagriha*). This becomes the prime role of all architectural layout¹⁰ like the Greek temples; the Hindu temples were not designed for congregational worship. It was an object of devotion in itself.¹¹

The extent stone temples of the Banjar valley are of the modest size, endowed with considerable local craftsmanship and compositional variety. There are, generally square in plan. The *grabhagriha* is preceded by a rectangular covered porch, sometimes open, but more often closed. The *pradakṣiṇāpatha* or a circumbulatory path is conspicuous by its absence. The plan of the temples did not develop beyond this stage.

The construction of the temple is based on the trabeate principle and the individual ceiling are supported on the walls and pilasters, or on pillars with their architraves. The vaulted or domical ceiling is built on the principle of corbelling, well cut and dressed stone are used in the main part of temple. The stone courses are laid dry, one upon the other and kept in position by their weight and balance, sometimes they are clamped together with iron dowels.

In the Banjar valley, there are few examples of the *nagara* temples; stone temple at Koki, and stone temple at Thata are significant. Both temples are much smaller in composition.

(i) STONE TEMPLE, KOKI, BANJAR VALLEY

The Koki is located in western part of the Banjar valley. Because of its location in an isolated place it escaped the attention of scholars. The temple is the example of regional *nagara* style and is dedicated to Śiva. There are numerous stone sculptures in the temple complex that are dedicated to other gods and goddesses. These sculptures include those of Ganeśā, Saraswati and Brahmā. The indigenous stone temple at Koki is the very unique regional *nāgara* type temple in the entire western Himalayan region (Plate I)

As it stands this temple, has perfect proportions and rises gracefully to the modest height of approximately three to four meters. This is one of the temples in the valley, which has a distinct, well-molded plinth, having lotus, square and round moldings.

The temple is laid out in a square platform 86.36 cm. Over it stand four square stone pillars, in second stage of the temple is full of sculptures which are dedicated to various gods and goddesses (Figure 1)

This temple marks the era in which stone temple art had reached the Banjar valley from the Beas valley. This is one of the reasons, why everything represented here, is more lively than in any other temple. This temple form, perhaps, is survival of some of the temple forms depicted on the coins of the Trigarta *janapada*.



Pl. I Stone Temple, Koki, Banjar valley

(ii) STONE TEMPLE, THATA, BANJAR VALLEY

There is one well preserved stone temple in the village of Thata. This is situated at the western part of the Banjar valley. It is a Śiva shrine, the actual name of which is no longer available. In the absence of adequate sculptural details, it is difficult to assign a definite date to this temple. But judging from the five-tiered *sikhara*, it may well be assigned to the early medieval period (Plate II)

A diminutive shrine, it measures only 233 cm square. It is square in plan and unicellular in composition, without usual pillared portico. The walls are largely plain, carved only with a lotus and round moldings. The massive *sikhara* is divided into five parts by corner-*amalaka*. It is capped by an *āmalaka* and topped by a *kalaśa*. The *śukanāsa* has a round face of Sive carved in a niche specially designed for it (Figure 2)

In the temple, there are many stone sculptures which are dedicated various Brahmanical gods and goddesses. As it stands, this temple has perfect proportions and rises gracefully to the modest height of approximately, two to three meters, at its present formation.

The ceiling over the *grabhagriba* is flat, having a lotus in three concentric circles, carved in the centre. The door frame two recessed jambs, is absolutely plain.



Pl. II Stone Temple, Thata, Banjar valley

THE PENT ROOFED TEMPLES

The pent roofed temples are found in the largest number in every region of Himachal. The earlier experts on Himalayan architecture have classified these temples under various heading such as 'timber-bonded style', 'hill temples', 'indigenous style' and 'pent-roofed style'. The wooden style of architecture on archaeological evidence is said to have prevailed exclusively in

the valleys of the Himalaya. As the deodar forests are plentiful, wood has been used extensively in houses, places and other buildings.¹²

General Features

The temple of this style is rectangular, sometimes square, in plan and usually stands on low platform made of rough cut stones. The use of deodar wood and its arrangement with stone is one of the marked features of the pent roofed temples. Its construction methods are discussed by Thakur: First, two wooden beams are laid along opposite sides of a rectangular or square dry stone walls-a beam on the outsides and another inside. The wall at right angles has its beam laid on the two just mentioned. The intervening spaces being filled up with stone.¹³

The roof of the temple is mostly slated but originally it was made of wood, probably, slanting was done to give durability to it and also to avoid repeated change of wooden shingles. The angles of the roof depended on the arrangement of the row of planks being raised slightly to give a greater dip to keep out water and snow. The pointed roof is surmounted by a heavy ridge beam locally known by Kuruda, decorated with vassals (*andas*) and pots (*kalaśas*)¹⁴

The largest number of these temples in the Banjar valley is constructed in the so called 'Kothi' or the pent-roofed style, which is indigenous to the area. Their parallels can easily be found in the secular architecture, stylistically, such temples may be the earliest structural temples in the valley. Being dedicated to village deities, the Kothis are held in great esteem by the majority of the population. Consequently, they are kept in constant good repair, so that it is virtually impossible to date them conclusively. Moreover often only folk motifs are used to decorate these shrines, rendering the task of dating doubly difficult. Not very significant from the point of view of architectural development, the pent-roofed temples are, however, important examples of indigenous art, imagination and skill.

The temples built in this style have a rectangular plan, with the gabled roof, which is topped by a heavy ridge beam. This sometimes, consists of a complete tree trunk, which is carved into animal heads at the either end. A wooden verandah, often with a carved balustrade carving a row of cusped arches, runs right round the building and supports the roof with the uppermost beams, which project outwards for this purpose. From the eaves of the roof there hang the continuous fingers of wooden pendants, which rattle merrily in the wind. Such buildings sometimes have several storeys; in such cases the lower storey have none of the

details of the top storey and the structure then resembles a rectangular tower. Chaihni Kothi is significant examples of it.¹⁵

CHAIHNI KOTHI, CHAIHNI, BANGJAR VALLEY, KULU

Handa has briefly described this temple in his work, *Glimpses of the Western Himalaya*. Its popularly known as Chaihni Kothi. Chaihni¹⁶ has reputation of being the traditional home of the accomplished stone and wood workers. Whether this reputation justifies the existence of the towering structures in the village or the Great Tower in the village has lent that what is known as the Chaihni Kothi may be the tallest free standing structure of the hill architecture in the entire Himalayan region (Figure 3). The towering height of this structure is emphasized manifold by its strategic location on a spur, with all paths leading to it in steep ascent.¹⁷

The Chaihni Kothi in its present condition is approximately 131 feet tall. Some scholar elaborate that it lost its two upper storeys in the fateful Kangra earthquake of 1905. The restoration of the extant structure carried out by the people of the area has saved it from further damage, and it stands even today over the whole valley in its traditional majesty.

The Chaihni Kothi perhaps was built by some local Thakur around the seventeenth century as a defense tower which fact is revealed from the papered recesses in the walls overlooking the valley to position the match locks (Plate III). The date of the construction of the Kothi can be ascertained from the three Takari inscriptions carved on the walls of the Murli Manohar temple, located a few yards away from it. Their date is 1731 and 1749 Vikrami samvat, respectively, Murli Manohar temple was a bhandar of the *thakur*.

On the basis of recent research and three Takari inscriptions inscribed at the entrance of the Murli-Manohar temple, the Kothi was perhaps built by a local Thakur named Dhadh Thakru at village Kuthed. Thakur Dhadh, who was attacked by Raja Vidhi Singh, was killed in one of the encounters. After that Wazir Chaihnu of Bhalahni settled at Kuthed and the village was since named after him, and Kothi known as Chaihni Kothi, because Raja Vidhi Singh handed over village Kuthed to Wazir Chaihnu.¹⁸

The Kothi was made up to solid stone masonry with massive deodar beams laid horizontally at wide intervals in the style locally known as *Dholferra*, the upper storeys of the Kothi are of thick walls made of alternate layers of dressed hard whiter stone and the interlace framework of deodar beams. On the last storeys of the Kothi, these are small elevated wooden

altar on one corner. In it seven small images of the protective goddesses, locally called the Joginis, are placed. These Sapta-Matrikas are possible such as Brahmo, Maheshwari, Kaomari, Vaishnavi, Varahi, Indrani and Chamuda. At this floor, these are projected balcony all around, approximately 73 cms.



Pl. III Chaihni Kothi, Chaihni, Bangjar Valley, Kulu

MURLI MANOHAR TEMPLE, CHAIHNI, BANJAR VALLEY

There is one another example of pent roofed style of temple at Chaihni which is popularly known by the name of Murlidhar temple. The temple is located near the Chaihni Kothi. At the time of its origin it may be Thakur;s Bhandar, but at present it has been famous as Murli Manohar temple. This five-storeyed tall temple enshrines black stone image of Krishna, the flute player. This image was brought here from a temple at Manglaur, situated down in the Trithan Valley to save it from sacrilege by the Sikh Militia, who invaded the Kulu Kingdom.¹⁹ The temple is rectangular in its present plant. Besides its peculiar architecture we noticed some interesting Takari inscriptions discussed in the next chapter.



Pl. IV Murli Manohar Temple, Chaihni, Banjar valley

OTHER PENT ROOFED STYLE TEMPLES IN THE VALLEY

In the valley, there are many other examples of the pent roofed styles of temples; these types of temples are the residence of local god (*devatas*). Pent roofed styles of temples are called Kothis by the local people, due to residence of *devatas*. In the valley, examples of pent roofed temple are: Balu Nag Kothi, Shesh Nag Kothi, Sringa Rishi Bhandar, Local Devi (Pujalak) Kothi etc. All pent roofed temples were built in later medieval period and are prime representatives of the local architectural traditions of the Kulu valley.

THE PAGODA TEMPLES

Before examining the origin and development of Pagoda temples in Banjar and Sainj valleys, we must clarify that the word Pagoda stands for a tall buildings, divided into horizontal partitions marked on the outside either by pent roofed (tiered) above which are balconies or by simple cervices or corbelled masonry. We persistently adhere to call this type of temples the pagoda

style for two reasons. First, we use the term Multi-storied type, the name may be confused with multi-storied tower-type temples without a succession of superimposed roofs. Secondly, the word 'pagoda' is widely understood to mean a building with multi storey for multi-tiered, each one set back slightly below the other.²⁰

The word pagoda has been used in four different senses (i) an idol temple (ii) an idol (iii) a coin once current in south India and (iv) a name given to several trees found or cultivated in China and India.²¹

The pagoda style wooden temples form an important architectural class in the Banjar valley as well as around Kulu region. So far as their external appearance is concerned these temples form a common group along with the Pagodas of China, Japan and Nepal. The Pagoda temples of the Banjar valley and Nepal bear similar features. It is possible to link all these monuments to a common origin? Much attention had not been paid, so far, to this question.

General Features

The Pagoda style temples are built on a square plan generally, with occasional variations to rectangular plans. The temple is often erected on a terrace of rubble masonry, which is utterly devoid of interest. The temples are provided with an open and sometimes closed circumambulatory path. These wooden temples seldom have a porch, but some, for example, Jagesvara Mahadeva temple at Dalas, depicted a structure resembling a *mandapa* in front of the sanctum. In the cases of the later, however, it is almost a separate structure. It seems that *mandapa* was added later on to the temple.

The enclosing walls of the cellar of temples are made up of pillars and horizontal beams of wood. The space between the two is filled with rubble masonry, and sometimes without and dressed stone. The terrace, the walls are, also devoid of interest. In some cases the walls have window carved. The horizontal beams of the walls are, sometimes, carved with geometrical and floral motifs. In this respect, the Manu Rishi temple in Sainj valley can be mentioned as a good example.

There are few example of pagoda style of temples in the Banjar valley. One of them is historical and earlier than other temples. This temple is called Manu Rishi temples (Dhar

Deora). This temple has all characteristics of pagoda style which has been discussed by many scholars.

MANU RISHI TEMPLE (DHAR DEORA), SAINJ VALLEY, KULLU

The indigenous example of the pagoda style of temple is Manu Rishi temple at Dhar Deora, near the head of Sainj valley of Kulu region. The indigenous wooden temple at Dhar Deora is the loftiest pagoda type temple in the entire western Himalayan region.

This temple was brought to notice by Penelope Chetwode.²² She has, however, published its photograph in one of her articles captioned, '*Western Himalayan Hindu Architecture and Sculpture*' with a very brief description.

The five-tiered wooden pagoda temple at Dhar Deora is dedicated to Manu Rishi. The temple is laid out in a square plan with sides measuring 645 cms (Figure.4). Over it stand twelve unsquare wooden pillar, one of each of the four corners and two places equidistantly forming three division of each side. These pillars are the main load bearing structural components on which the superimposed load of rood rests. On their inner side is a one metre wide circumbulatory path all the four sides. Theis path encloses the sanctum sanctorum, made of half a metre thick wood and stone four walls in traditional style. The santum sanctorm is 266 cm square and enshrines a stone image of the Rishi (it looks like Siva) in bas-relief.

Manu Rishi temple has a total of five tiers; first four tiers are of square form. But, the fifth and topmost tier is circular and conical in shape. All the tiers are roofed with slates firmly nailed to the wooden planks beneath them. Surmounting the top tier is very high metallic *kalaśa*(Plate IV)

In the inner side of temple, there is wood carving on wood which are illustrative the stories of many gods and goddesses. The most important feature of the temple, there are four Takari inscriptions in wood carving of the inner side of temple. The Wooden door of the temple is fully carved. The ceiling is beautifully carved having a full blown lotus. Four Takari inscriptions are also carved in the wood.



Pl. IV Manushi Temple (Dhar Deora), Sainj Valley, Kullu

Notes and References

1. Laxman S. Thakur, *The Architectural Heritage of Himachal Pradesh: Origin and Development of Temple Styles*, New Delhi, 1996, p.26.
2. Pushpa Bindra, *A Study of Kulu region: From Earliest Times to the 18th Century A.D.*, (Ph.D. dissertation, Department of History, HP University), Shimla, 1977, p. 109.
3. Pushpa, Bindra, *ibid*, p. 110.
4. Krishna Deva, *Temple of North India*, New Delhi, 1969, p. 20.
5. V. C. Ohri, ed., *Arts of Himachal*, Shimla, 1975, p. 116.
6. H. Goetz, *Early Wooden Temples of Chamba*, Leiden, 1955, pp. 64-75.
7. Thakur, *The Architectural Heritage of Himachal Pradesh*, p. 28.
8. Thakur, *ibid*, p. 38.
9. Krishna Deva, *op. cit.*, p. 1.
10. K.V. Soundara Rajan, *Indian Temple Styles*, New Delhi, 1972, pp. 3-4.
11. Percy Brown, *Indian Architecture: Buddhist and Hindi Periods*, Bombay, 1971, p. 72.
12. Thakur, *op. cit.*, p. 87.
13. Thakur, *op. cit.*, p. 88.
14. *Ibid*.

15. Pushpa Bindra, op. cit., p. 174.
 16. One of the earliest accounts of this building occurs in Penelope Chetwode's article, 'Temples of the Western Himalaya', *the Architectural Review*, Vol. C1, III, (February 1973), No. 912, pp. 132-38, with excellent drawings by John Kankiwell (p. 133). Fuller account of its also appears in her *Kulu: The End of the Habitable World*, First India reprint, New Delhi, 1980, pp. 225-26.
 17. Main Goverdhan Singh, *Wooden Temples of Himachal Pradesh*, New Delhi, 1999, p. 95.
 18. For inscriptional details see Chapter V.
 19. Main Goverdhan Singh, *ibid.*, p. 27.
 20. Thakur, op.cit., p.105.
 21. *Ibid.*
 22. Penelope Chetwode, *Kulu: The End of the Habitable World*, P. 227. 28.
-

ENGLISH LANGUAGE: NATURE AND DIRECTION OF CHANGE

Praveen Kumar
Principal (Retd.)

English is an extremely rich language, with a huge and ever-growing literary corpus and vocabulary. One of the prime reasons for its incredibly large vocabulary comprising 750,000 words is its dramatic history. Unlike other languages that developed within the boundaries of a particular country or one distinct geographical region, English evolved over a period of 1600 years by crossing boundaries and through multiple invasions, absorbing unabashedly bits and pieces of multiple languages in its evolutionary progression. It belongs to the West Germanic language of the Indo-European language family that is related to Frisian, German and Dutch. The fact that 83% of the most common 1000 words in today's English are of Anglo-Saxon origin is enough to prove its historical linkages; its inclination to ravenously borrow words from other languages persists. Besides being the official language of many countries including India, English is the dominant language of the United Kingdom, the United States, Canada, Australia, New Zealand, Ireland and many island nations in the Caribbean Sea and the Pacific Ocean.

Some languages change more rapidly than others. Japanese, for instance, has not changed in a significant way in a thousand year; whereas the changes in English are both major and rapid. Many theories have been proposed to explain language change; they revolve around value judgment that languages somehow became more decadent once they left behind the complexities of Latin declensions (the changing of the form of the word to indicate its syntactic function in a sentence). They ignore the fact that English particles (words which have a grammatical function, e.g. infinitive 'to' in 'to fly') and auxiliary verbs make English complex in a

different way. Another theory which is rather unconvincing and devoid of the logical rigour of linguistics suggests that people have become lazier in their pronunciation, and they prefer easier option. But this theory doesn't explain how and by whom the easier option is decided. Yet another theory attributes the change to "quality slip"; it proposes that we learn incorrect versions from parents. But it ignores the fact that it is not only parents but also schools and peer groups who influence people's accents and vocabulary.

These theories are proposed by those who favour a prescriptive approach to grammar. For instance, splitting an infinitive is considered a grammatical sin, but Star Trek's opening lines 'to boldly go where no man has gone before' is a glaring example where usage is different from grammar rules. This line of thinking is presumably based on the fact that since this is not done in Latin, it can't and shouldn't be done in English. But except for stylistic clumsiness, there is no harm in splitting an infinitive. It is the usage which ultimately overrides any other considerations. Another prescription that sentences should not begin with 'and' or 'but' doesn't hold the ground on the same logic. This rule may be observed in formal writing but in spoken English and informal writing this is not followed. It shows that rules in grammar books do not always reflect how language is spoken by native speakers.

Another theory which appears more plausible proposes that social, economic and political events (migration, invasion and colonisation) are primarily responsible for the change. Trade, travel, technology also define and channel change in a significant way. This theory works in tandem with descriptive approach, i.e. how people actually use language. American linguist, William Labov put forward a different theory; he suggested that change happens when particular vowel sounds in certain words come to be regarded as signs of social and cultural identity by a small group of people. People who wish to be part of this group exaggerate that sound and use it frequently. The emergence of a certain accent referred to as 'Estuary English' illustrates it well.

This accent is associated with South East England, especially along the river Thames and its estuary. This variety came into public prominence when David Rosewarne published an article in TES (Times Educational Supplement) in 1984. He defined, "'Estuary English' as a variety of modified regional speech. It is a mixture of non-regional and local south-eastern English pronunciation and intonation. If one imagines a continuum with RP and London speech at either end, 'Estuary English' speakers are to be found grouped in the middle ground."¹ He argued that Estuary will eventually replace Received Pronunciation (RP). However, there is no clear-cut difference between Estuary English and Cockney English, and many linguists refuse to think of it as a distinct category. Estuary has phonetic features of the working-class London speech. But many young people see it as modern, up-front, high on 'street cred' and ideal for image-conscious trendsetters; and they use it just to sound cool. Celebrities who appear regularly on TV, Radio, and films sometimes use it and others copy it. Victoria Beckham, Jamie Oliver, Gordon Ramsay (both celebrity chefs and restaurateurs), and Adele are some of its prominent users. Late Amy Winehouse too was a practitioner. RP is perceived as exclusive and formal, whereas Estuary projects an approachable and flexible image. Many prefer it for business because it is friendly and informal. Some linguists alternatively call it London Regional

General British, Popular London, etc. Besides Estuary, Cockney, Scouse, Geordie, Welsh English, Northern Irish and a lot many other accents are being used by the British. Each accent reflects the history of the area it comes from, along with a strong sense of pride. In London where Cockney is no longer the preferred accent, a new accent has emerged. It may be called Multicultural London English or Jafaikan, a mixture of Caribbean, South Asian, West African and traditional London accent, which is spreading among other ethnic groups.

For many people, vocabulary is the only area of language in which change occurs. One way to create new words is by blending or combining (Rocumentary, for instance, is a documentary about a rock group). Another way is by conversion or changing the way a word is used, such as changing a noun to a verb, a method Americans love a lot. Turning the noun 'chair' into a verb in the expression 'chair a meeting' is one such example. Use of 'Google' as a verb is of a more recent origin. Sometimes a word is extended by adding a prefix or suffix (diskette for disc). Some people coin words out of sheer ignorance; President George W. Bush was famous for verbal gaffes, so much so that it gave rise to Bushism. He once used the word 'misunderestimated' in a speech, which was described by Philip Hensher (critic and journalist) as one of the most memorable additions to the language. He even found it expressive; probably we needed a word for the situation when we "underestimate by mistake". Who knows that people will not take fancy to the word and begin to use it more often? President Trump is also known to mangle words in his tweets. His use of 'covfefe' in the tweet 'despite the constant negative press, covfefe' bewildered the netizens. It was most probably a typo, but it generated so much interest among the people and the experts that it was debated endlessly whether the word was merely a spelling error or it had a meaning of its own. The word has been defined in a variety of ways. As a verb, it is defined as: "when your wife slaps your hand away from the keyboard, mid-tweet!" Netizens, typo and a whole host of words have crept into the English language due to developments in such diverse fields as technology, internet, business, hospitality, fashion, cuisine, etc. The rapid growth of internet and mobile has ensured a faster change in vocabulary, so much so that dictionaries are unable to keep pace with them. Compilers of OED asked people in 2001 to help them find out when the phrase "I could murder a curry" was used for the first time. A playwright, Alan Bennett, who has kept a regular diary for many decades, was able to find an entry in which his friend had used a variant of the phrase at least thirty years earlier. You could murder a cake or a beer if you were really hungry or thirsty, but now you could murder a curry as well.

How people use or rather twist words also makes an interesting reading. Dictionary.com announced that it had selected 'complicit' as its word of the Year for 2017. Complicit is 'choosing to be involved in an illegal or questionable act, especially with others.' This word is strongly linked to the present global climate and has been a popular term to describe the various players in Donald Trump's political orbit since his ascension to the presidency. 'Complicit' has sprung up in conversations about those who speak out against powerful figures in institutions and those who stay silent. Silence, they say, is complicity. Interest in the word was significantly spiked after a Saturday Night Live skit. The skit portrayed Scarlett Johansson as Ivanka Trump in an advertisement for a luxury perfume called 'Complicit: The fragrance for the woman who could stop all this but won't'. Next day Ivanka appeared on CBS morning show. She

was unhappy the way she had been portrayed, and in reply to a question she gave a twist to the word and said: "If being complicit wants to be a force for good and to make a positive impact, then I'm complicit." Americans were confused by Ivanka's distortion of the word's meaning. In 1990s 'bushlips' was chosen the new word of the Year. It was made up of Bush and lips, and it was a term for insincere political rhetoric. The word was created to highlight Bush's failed promise: "Read my lips: no new taxes". Oxford word of the year for 2018 is toxic. Its top ten collocates by absolute frequency are chemical, masculinity, substance, gas, environment, relationship, culture, waste, algae and air. Use of toxic chemical was particularly significant because a nerve agent poison had been used in London for eliminating a Russian intelligence officer and his daughter. Toxic environment has been more frequently used in reference to harmful workplace environment and the toll it takes on the workforce's mental health. Toxic culture at workplace resulted in mass walkouts at Google. Most motivational writers have suggested people to walk out of toxic relationships not only at the workplace but also in personal life.

Shakespeare used the phrase 'the King's English'; nowadays we still use the phrase 'Queen's English' (or Received English, or BBC English or High British) to refer to correct English in general or to a particular accent, which used to be considered the best model for BBC radio and learners of English to aim for. Researchers have analysed the pronunciation used by Queen Elizabeth II in her Christmas addresses delivered in the last 60 years or so, and the changes that have come over. It has been observed that it has undergone a change. In the 1950s it was of a variety known as 'Upper Received' but it is now close to Standard Received, still quite prestigious, but used more widely by a cross section of society. Just to give an example she would then say 'blek het' but now says 'black hat'; she would pronounce 'home' as 'haym' and 'in the sitay' for 'in the city'. Not only is Queen's pronunciation changing, gradual but less perceptible changes are coming in the English language in general. Perceptive students of the English language are beginning to realize that many more or less standard varieties that are allowable exist within English.

Differences in usage which emerge in a particular area gradually spread to other areas. For instance, grammar books tell us to move the tense one stage into the past for reported speech, but in actual use native speakers do not always do it. So, "I did it yesterday" is changed in the reported speech simply as, "She said she did it yesterday" with no tense change from past simple to past perfect. In conditional sentences, tenses are quite mixed in actual usage, whereas prescriptive grammar would find that unacceptable. In the use of subjunctive 'were' many native speakers take liberty. "I wouldn't have done that if I was you" is incorrect by the standards of grammar books because it is a mix of second and third conditional. 'Preposition' is another area where English is allowing a greater range of possibilities. When Beckham and his wife Victoria were at the peak of their popularity, T-shirts appeared in the markets which were printed with the slogan "bored of the Beckhams". The more common prepositions used with bored are 'with' or 'by', but 'of' has emerged as an option; however, it is still avoided in formal writing.

Globalization is also responsible for the rapid spread of new vocabulary. Words related to food and drinks are multiplying at a great speed. You could ask for a cup of coffee without much further explanation at some places, but at Starbucks, you could be given a wide choice of having either 'Caramel Cloud Macchiato', which is light and airy with layers of fluffy foam, cascading espresso, vanilla-flavoured syrup and a drizzle of caramel, or a 'Caffè Mocha', which is full-bodied espresso with bittersweet mocha sauce and steamed milk topped off with sweetened whipped cream. Many words change their meaning when they cross the Atlantic. For instance, a statement like: 'Third Bahubali film slated' may be taken differently in America and Britain. In the US it would mean that two films have already been made and buoyed by their success the third one is planned. In Britain, it may mean that the third has already been made and is nothing but trash. 'Slate' in British usage also means "to criticize severely". If someone says "I don't care" in response to the question whether one wants one's coffee with sugar or without sugar (equivalent to 'I don't mind'), it would simply mean that the person doesn't mind having it either way. In British usage, the person so replying may be considered grumpy or unsure of making up his mind. Words which are unusual do not survive and give way to simpler variants. Irregular plural of mouse is mice, but in relation to computers, it is mouses and not mice.

The definition of a native speaker also needs to be revised: earlier it referred to the speaker's place of birth and their mother's first language. But it is problematic. For instance in Hong Kong, an Indian origin speaker whose first language is English and who happens to speak it fluently is still not considered a native speaker. He is not thought to be good enough to teach English unlike a native speaker, who may have a strong regional accent but who grew up in some English-speaking country. The fact that the abilities of the said native speaker to teach grammar of his own language is below par doesn't become a disqualification for him.

Now the definition of a native speaker is undergoing change because there are many who are exposed to two or three languages and cultures. So, now anyone who uses language with great confidence in all situations may be considered a native speaker. It is worth noting that the number of non-native speakers is almost three times the number of native speakers. Hence, the aim should not be to think of speaking like a native speaker; a more desirable aim is to simply function competently in English. John Simpson, the past Chief Editor of the Oxford English Dictionary, observed that "there is no longer one English – there are many Englishes. The term 'World Englishes' was first introduced by Braj B. Kachru and Larry E. Smith in 1985. "World Englishes refers to different forms and varieties of English used in various sociolinguistic contexts in different parts of the world....The plural 'Englishes' emphasises that the language belongs to those who use it as their mother tongue or as an additional language, whether in its standard form or its localized variation."² Salman Rushdie stated it as early as 1983 that, "The English language ceased to be the sole possession of the English some time ago."³ In Braj Kachru's model, the spread of English can be perceived as three concentric circles: the Inner Circle, the Outer Circle and the Expanding Circle.⁴ English language has branched out into many alternative varieties which have gained recognition and acceptance. A few of them like Chinglish and Singlish have tenuous links with English and are no better than "international dialects with ties to English".

Hong Kong English is one such example of alternative English, and whose vocabulary includes words (*shroff*, *amah*) which are not found either in Chinese or in English. Some errors also occur due to the interference of the first language grammar (such as tense confusion, he/she and his/her applied interchangeably). Non-native speakers, who lack self-confidence and self-belief, tend to speak and write in accordance with the prescriptions in the grammar books. This may sometimes lead to rigid, unnatural and inelegant expressions. The New York Times has compiled a few samples of Chinglish which stand out for their oddities. 'Execution in Progress' 'slip and fall down carefully', 'derelict bin' leave no one in doubt that it will take years before Chinglish attains respectability and becomes a dependable vehicle of expression. An exchange of letters in the South China Morning Post in which a headmistress accused the Exams Authority of using an incorrect expression illustrates it nicely. She found the expression "Do not take away" printed on the question papers unacceptable. Her understanding that the word 'take' is a transitive verb and needs an object made her react. However, she completely ignored the fact that an object can be implied as well. Someone reacted that common sense in usage serves a better guide than the rigid application of rules. It is a normal practice to use 'push', 'keep upright', etc. in place of full expressions 'push the door' and 'keep upright the bottle', but the absence of objects causes no confusion.

Some people get upset when changes occur in a language because they consider many of those changes incorrect, unnecessary or superfluous. The view that borrowing words from other languages leads to the decline of a language is untenable. In fact, English has assimilated words from more than 300 other languages, and more than three-quarters of its vocabulary is Classical or Romance in origin. The purists, however, fail to appreciate the gains that accrue from English's liberality. For instance, the availability of three alternatives, *kingly* (Anglo-Saxon), *royal* (French) and *regal* (Latin) for denoting the same concept enrich rather than impoverish English. Language is both personal and shared, and its form at any given moment is an expression of the collective will. Language, and English in particular, is not stagnant, hence change, growth or decline are inevitable, whether an individual desires it or not. The world moves on and so does the language, irrespective of our perceptions, even our very existence.

Notes:

1. Rosewarne, David, 1984. 'Estuary English', *Times Educational Supplement*, 19 October 1984.
 2. Smith, L.E., 'World Englishes', *Key Concepts in Intercultural Dialogue*, No. 34, 2014.
 3. Rushdie, Salman. *Imaginary Homelands: Essays and Criticism 1981–1991*. New Delhi: Penguin, 1991.
 4. Kachru, B. (1992). *The Other Tongue: English across cultures*. University of Illinois Press.
-

Construing a Virtual Society: Passive Exclusion through Commercials and Television Shows

Janesh Kapoor

Abstract

This paper seeks to explore how commercials and reality shows which dominate the world of the television and social media permeate our sensibilities and psyches to construe a virtual existential space characterized by values and beliefs divorced from the social and cultural bearings which traditionally formed the mooring of our lives, beliefs and goals. These commercials and reality shows subtly and unobtrusively promote the interests of the multinational companies while making us bereft of any real, life-sustaining values. These would gradually force us into passive exclusion of sorts if we fail to conform to the virtual standards of progress and beauty proffered by the commercials and the reality shows.

Key Terms: Virtual society, dystopia, passive exclusion, commercials, reality shows

This paper shall build upon the phenomenon of passive social exclusion as it is perpetuated through the advertising industry and the television. The commercials and television shows perpetuate a very subtle and pervasive form of social exclusion – passive social exclusion – which is as alarming and potentially fatal for our society as the active form of social exclusion with vested political, cultural and capitalistic interest. The commercials and television shows are, by virtue of their content and the manner in which they are structured, gradually but emphatically leading us away from the reality of our social situation and our cultural and historical roots. The result can be not only utter disillusionment with our identity and the state of our being, but a sick dystopia.

One of the viable definitions of social exclusion by K. Duffy asserts that it partakes of the inability to “participate effectively in economic, social, political and cultural life, [and] alienation and distance from the mainstream society”¹. Indeed, Duffy’s definition is an apt one in the sense that it catalogues all the factors crucial to describing and

negotiating the concept. However, these essential categories of social empowerment may be cleverly manipulated to effect and strengthen the process of exclusion with the apparent beneficiaries becoming their gullible and unsuspecting victims. As Amartya Sen observes, "Social exclusion can indeed arise in a variety of ways, and it is important to recognize the versatility of the idea and its reach".² He further writes, ". . . [a] potentially useful distinction is that between active and passive exclusion. . . . When, . . . the deprivation comes about through social processes in which there is no deliberate attempt to exclude, the exclusion can be seen as a passive kind".³ Although Sen is writing in the context of poverty, hunger and unemployment, the idea of passive exclusion is equally well-founded with regards to the socially established groups as the victims do not even realize that they might be the victims of a very complex socio-cultural, psychological and political process of exclusion through their commoditization as the puppets of mainstream cultural-economic-political complex. Let me start with the examples of commercials as the tools of social exclusion. An advertisement marketing a fairness crème is being floated over the Television these days. The climax of the advertisement makes use of the chess board and the visual highlights the black pawn being ousted by a white pawn with the tag line 'BLACK IS OUT, WHITE IS IN!' Now, this might appear to be an apparently harmless visual with the only objective of marketing a beauty product with the promise of enhancing the skin tone of the users and make them look beautiful. After all, what is wrong if somebody wants to look beautiful? (And what is so wrong about it, if such beauty is only cosmetic beauty?). The 'wrong' inherent in this and other advertisements becomes perceptible only when we deconstruct a cluster of such commercials and try to decipher the inherent structure and import of these ingeniously constructed and subtly manipulated visuals. I would like to cite a few more examples before dwelling upon the theory and the bearing power of advertisements upon our individual and social existence.

As the first case in point, when the Coca Cola was reintroduced in India in the mid-1980s, a commercial was filmed and continuously screened in the cinema halls and Doordarshan (The Indian Television), which brought together many film stars, sportsmen and pop stars of the times in a party situation, sipping Coca Cola. I was a young university student at that point of time and had this lurking feeling inside me

that if I want to be accepted as a modern youth, I must also sip Coke like my role models from films and sports in the advertisement.

As the second case in point, a commercial pertaining to a laptop computer caught my attention. The visual captured the scene of a crowded state transport Bus in some part of rural India with a 'white' (British/American) passenger tortured by the body stench and uncivilized mannerisms exhibited by the ugly Indian passengers on the bus. Then suddenly one of these 'ugly' Indians draws out a laptop of a particular brand from a dirty bundle of his belongings. And lo! A miracle happens! All differences between him and the white passenger melt into the blue. The white passenger also possesses a laptop of the same brand. As such, 'black' and 'white', 'ugly' and 'beautiful' can now interact on a level playing field.

The third example is drawn from an advertisement by a State Government from a North Indian state (incidentally, the advertisement is quite old and is not being circulated at present; however, this does not obliterate the signification which is sought to be highlighted) about the education of the girl child. The scene is the interior of a rural household. The mother is trying to rekindle the smoking 'chullah' as she has to cook food. Her daughter comes running to her with the plea that she too wants to go to school like her brother. The mother chides her saying: "What will you gain by going to school? Help me to kindle the 'chullah' and learn to bake 'chappatis'. This is more important for you to learn." The little girl, rebuked by her mother, begins to sob. The noise of a tractor is heard outside. It is the father returning from the fields. The girl runs up to him, complaining: "Father! Father!" I want to go to school like my brother, but mother says 'no'. The father promptly replies, "Your mother is a fool. She doesn't know anything. I'll send you to school". This household quip is followed by an authoritative, urban voice in the background listing the various schemes launched by the State Government for the education of the girl child.

Before conceptualizing about the politics involved in the manner in which commercials are structured, it will be useful to understand the psychology operating behind such commercials. Some background information is therefore in order. J. Burckhardt is of the view that History is "the break with nature caused by the awakening of the

consciousness”⁴. From the 19th through the 20th to the twenty first century, consequent upon the tremendous advancements in science and technology and the rise of a new class rooted in industry and commerce, the break with nature and the dawn of consciousness was coupled with the desire of this new class to consciously alter the reality of human existence. In the post-war era of global economy, capitalism is viewed not only in economic terms, but as a ‘regime of accumulation’ which, in the words of A. Lipietz, comprises of “Institutional forms, procedures and habits which either coerce or persuade private agents to conform to its schemas”.⁵ The commercials and the media, especially the television in our own context, turn out to be potent tools to persuade people to subscribe to things which are not natural to their background and environment.

At the psychological level, the commercials cited above or any commercial for that matter, do not appeal to the conscious mind, but to the subliminal layer of our mind. Etymologically, subliminal carries the meaning of ‘without awareness’. The subliminal can therefore exist and affect our mind without conscious awareness of what is happening to us or around us. And from the standpoint of how these commercials are scripted, every text also has a potential sub text, which coupled with the subliminal message of a commercial, has very serious implications. Thus, ‘whiteness’ as a virtue and a value has invaded our psyches so potently and unobtrusively that not being ‘fair’ has continued to be a social stigma, an indelible curse, for innumerable women. Now, the subliminal promise offered by the advertisement about ‘the’ fairness product orchestrated with the carefully embedded sub text in ‘BLACK IS OUT, WHITE IS IN!’ imparts a never before strength and conviction to this age old parameter of social exclusion with the urban population, especially young girls in cities and townships, who might afford to purchase ‘the’ product(s) ‘fairly’ priced in the bid to become acceptable.

The second commercial posits technology represented by a branded laptop computer as a liberating and equitable experience. It transforms technology into a veritable god with the inherent ability to transform our lives in a charismatic way. However, technology can touch our lives only selectively is borne out by the sub text of the commercial itself: to be liberated by technology you have to opt for technology first. The other Indians who do not have the particular laptop will be perpetually doomed to be ugly, dirty and abominable breed of people unless and until they too can possess one. This is the encoded language of social exclusion which is bound up with the logic

of consumerism. The logic is singular in its approach – who is (is not) to be co-opted into the hegemony of a superior or an elite group and at what cost?

The third commercial which is apparently a testimony to the welfare scheme of a progressive state government makes no attempt to conceal the patriarchal and hegemonic structure of society. The father (male) is superior to the female (mother) and the urban is superior to rural. The structure of the commercial does not leave any scope to space to question or doubt this hierarchical arrangement as visual after visual sinks into the subliminal layer of our consciousness. Thus, the socio-political and economic system inherent in the commercials affects and pervades not only upon individuals but also the socio-administrative institutions.

The above analysis of the commercials in question makes it aptly clear how the society becomes passive victims of the process of exclusion. There is only one option available – if we do not choose to condescend to the existing structure, we will soon become outcasts of sorts. The process of passive exclusion is not limited to commercials alone. It has impinged upon our social, cultural and national symbols also in attempting to subvert them. The market is deciding how we would celebrate our national and religious festivals; it decides how we wish our dear ones on birthdays and anniversaries and so on. However, the forces of the market do not stop here. The market rather seeks to control and direct our very identity, which is worse than social exclusion on the basis of caste, creed or gender. Mahsweta Devi's contention in her story "Douloti", for instance, that the dalits and the tribals do not recognize India as their nation, nor does freedom has any meaning for them is well founded. Her story(ies) are incontestable statements of social and political exclusion of these people. However, the market is working subtly but certainly to erase the very notion of a national identity to make all of us feel like social destitute.

The serialization of the Mahabharata and the Ramayana and later their cartoon-ization has a grim and a crucial dimension often overlooked. I remember when these great Indian epics were serialized over the television, this was touted as a great enterprise to educate the masses about them and also to uphold and preserve them. I did not agree with my teacher who persuaded me to think otherwise. But now, having watched these serialized versions again and again over different channels, I am

convinced that he was not wrong. Each scene is framed by advertisements at both ends. These commercials, as argued above, with their strong sub text and appeal to the subliminal stay longer and more pervasively with us than any of the climactic scenes from the epic itself. I tried to find out from many of my own students the name of the Kaurava brother who dragged Draupadi to the court during the 'cheer-haran' scene. I found to my utter dismay that while they could remember the colour of Draupadi's saree, they did not know the name of the Kaurava brother in question.

So much about our knowledge of the epics which delineate the social, cultural and moral dilemmas that are central to the determination of the value system of our social set up. But what bothers me is the palimpsest involved in such representations. Milan Kundera, the famous Czech writer once observed: "The first step in liquidating a people . . . is to erase its memory. Destroy its books, its culture, and its history. Before long the nation will begin to forget what it is and what it was. The world will forget even faster".⁶ The metamorphosis of our cultural epic heroes into cartoon characters has more serious implications. The elderly people might still be able to negotiate this phenomenon in a relatively reasonable manner with the quality of their faith in the epics sustained by years of witnessing Ram Leelas and Krishna Leelas on the public stage. However, the adolescent mind easily catalogues the cartoon incarnations of our epic heroes with the likes of Tom and Jerry or the magical gadget operating toons like Doraemon.

The elite urban and the economically sound semi-urban/rural population are fast becoming passive victims of the politics of market economy which is driving them away from their social and cultural roots and turning them into gullible consumers of serialized social fad operas promoted by commercials which pop up at intervals of less than five minutes, constantly invading our psyches with the inevitability of the products being advertised. Thus, we become inadvertent citizens of a consumer universe in which our status is no more than zombies upon whom products are thrust after ascribing us needs which we might not even feel if left to ourselves.

It is not surprising that 'Brands' tend to become our identity. We are vicariously being fed with things we do not require. The Reality Shows alienate us from the reality of our

existence by offering ascribed values like the ascribed needs created by commercials. In addition to be beautiful, smart and intelligent, it is equally imperative to be abusive, scheming and scandalous to be able to emerge victorious in Reality shows like 'Big Boss'. Youngsters and children selected to participate in dance and music based reality shows not only have to suffer humiliation at the hands of 'superior' judges, but they also get initiated into an alien culture of cut-throat competition in order to succeed. And the irony is that while the losers in a competition are relegated to the background without even a whim about their moral or psychological condition, even the winners become immortal only for a few seconds on the silver screen. A report about Reality Shows in 'The Times of India' has a lot to reveal. To quote at length from the report: A drama queen host shoots off vulgar, sexually explicit questions at a contestant on her show. On another show, young men are made to slide over the oiled bodies of white women as a "task". And the latest indignity meted out to a contestant was to administer him an enema when his partner failed to answer a GK question. The bizarre world of Indian reality shows seems to be hitting new nadirs with every passing season, the very recent 'AIB Roast' being the latest howler in the row. It's a deterioration that has caused some serious concern to onlookers but reality show producers are unapologetic, maintaining that they are not showing anything objectionable.

What's more, even contestants play along in this clearly TRP-garnering game. A former contestant points out that reality shows are sure-fire launch pads for a career in soaps, and participants are willing to do just about anything for this. Any wonder then that the vulgarity on Indian television continues unabated?⁷ After reading this report, I was reminded of a character from a novel *Ek Chhithda Sukh* (1979) by the late Hindi novelist, Nirmal Verma, a young girl who comes to India from London because she wants to explore this legendary country, only to find that India is a 'theatre' and chooses to stick to real theatre. Whatever the relative merit of this cursory observation, I want to return to the basic premise of my note at this juncture – that the commercials and the TV shows are passively drawing us away from our social, cultural, emotional and even economic reality and construing a virtual society for us without any real moorings. Whether it is the commercials, the serialized-fictionalized representation of our social reality – and, Oops! I should have mentioned the urban

middle class reality, as it is this class in particular which is the unsuspecting victim of all this – we are being led into an ethereal, hyper world where everything is in a state of postmodern fluidity, a world of ‘Pastiche’⁸, without any relevance, meaning, significance and legitimacy. This is a world of evanescent moods and feelings, of individuality, privatized sensibility and success being the only morality. The reality of this world is spectator-ial and even bizarre, marked as it is by appearances, trendiness and gift-wrapping.

While the social exclusion and inclusion are issues of fundamental importance for any society, particularly, a democratic society, and empowerment of the hitherto marginalized category of people is being sought by special action groups and democratic institutions, the market economy with its grip on the Third World has initiated a convoluted process of exclusion through apparent inclusion. Under the processes of Market Economy with the commercials as its *modus operandi*, availability of clean drinking water is not the norm of a healthy, civilized society, but the desire and the capacity to gulp soft drinks to quench your thirst. It is not the ability to be ‘yourself’ which is the parameter of your worth as an individual and a member of a society, but looking ‘sexy’ by conforming to the standards set by branded beauty, clothing and styling products. It is not important to think what you think and feel what you feel, but to think, act and behave like your role-model from a television or a Reality show. You are then included as the worthy member of an elite, ethereal society only to be excluded from your actual socio-cultural roots.

Indeed, this a form of passive social exclusion against which there is no active support either from the political system or social activist groups. This form of exclusion acts like a hook worm in the intestines which surreptitiously entangles a part of our society and is very difficult to eradicate from the system. The initial feeling of subscribing to this market culture may be a euphoric one, but it is like eating food our body metabolism is not trained to absorb and digest. As such, the end point is most likely to be an unhealthy state of affairs in which we are able to neither digest nor secrete the things we are being fed with.

This brings me to the concluding part of my note about the unapparent outcome of this form of passive social exclusion. In a story by Mahasweta Devi, which she

translated into English as “Madhu: A Fairy Tale”⁹, the administrative agencies try to feed certain tribals who are on the verge of extinction due to hunger with the food that they do not eat. When the tribals refuse to eat the food which does not suit them because of its systemic inadequacy, one of them is sedated, removed to the hospital and is injected with vitamins and other minerals. As a result of this forced food supplementation, the tribal metamorphoses into a monster feeding on every kind of ‘machinery’ that comes his way. A fairy tale, the effort to create a virtual utopia for the tribals gets distorted into a dystopia. This story is a potential warning about our fate as well if the utopian ideals proffered by the commercials and television shows are allowed to subvert our social identity in the manner that it is covertly attempting to accomplish.

Notes and References

¹Duffy, K.(1995). “Social Exclusion and Human Dignity in Europe”. Quoted in “Social exclusion and political engagement Research report -- November 2005. London: The Electoral Commission, 2.

² Sen, Amartya. (2000). *Social Exclusion: Concept, Application, and Scrutiny*. Manila: Asian, 9.

³ibid., 14.

⁴Burckhardt, J., *Reflections on History* (1959). London: S. Allen & Unwin. 31.

⁵Lipietz, A(1987). *Mirages and Miracles*. London: Verso, 112.

⁶Kundera, Milan. (1981). *The Book of Laughter and Forgetting*. Trans. Michael Henry Heim. Harmondsworth: Penguin, 159.

⁷ “Nothing is too Vulgar”, Report on Indian Reality Shows, The Times of India, 15 April, 2012.

⁸Pastiche means imitation, satire, lampoon or parody. The culture of pastiche may be viewed as the de-culturation resulting from the parodist representation of our cultural reality on the television.

⁹Devi, Mahasweta. “Madhu: A Fairy Tale”. Trans. Mahasweta Devi in Pankaj K.Singh Ed. (2003). *The Politics of Literary Theory and Representation*. New Delhi: Manohar, 97-110.

Globalization and Translation: Co-Relatives in the Modern Equation of Communication

Dipali Sharma Bhandari

Associate Professor (English)
Govt. College Poanta Sahib (H.P.)

“The fact that tens of thousands of different, mutually incomprehensible languages have been or are being spoken on our small planet is a graphic expression of the deeper lying enigma of human individuality” (19) says George Steiner. The fact that there exist so many languages indicates the presence of an equally large number of language barriers blocking or limiting the understanding between these languages: Semantic differences, structure and phonetics of the language systems, history of the languages and most important of all, the cultural difference in the regions where these languages are spoken. Understanding barriers bar communication between languages. Quite naturally then, if any kind of communication is to take place, a synapse has to be created between the source language and the target language. The working of this synapse is very much like dialysis through a semi- permeable membrane where the membrane permits the passage of select molecules. Here the synapse allows for the transfer of sense and meaning from the source language to the target language. This synapse does not dissolve the existent barriers: it simply creates an opening in the wall of the block so that a channelled flow of ideas from one language to the other becomes possible in order that all languages and cultures benefit from the literary and scientific wealth of each other.

Broadly speaking, translating is finding expressions in another language preserving the semantic and stylistic equivalence, matching grammatical structures and cultural contexts. Put simply, translation can be considered as the replacement of the elements of the source text with the cultural contexts and grammatical and semantic conventions of the target language so as to transfer the impact of the source text on the mind of a reader who , being unilingual, has no way of deciphering it in the original form. As A. H. Smith puts it, “to translate is to change into another language, retaining as much of the sense as possible” (vii).

We all learn to speak at least one language which we hear around us as we grow up. Because of this common ability, we tend to take the possession of language for granted. If we ask a layman what language is, the answer would probably be that language is what we use for

communication; or that it is made up of words that refer to things; or that it is made up of sentences that convey meaning.

According to linguists our ancestors have used speech as a means of communication for as long as 500,000 to a million years ago. They spoke for many years before they experimented with making permanent marks or scratches (which stood for language) on clay tablets, bits of wood or stones or skins of animals; or in other words, used written language.

Language is a type of patterned human behaviour -- a way in which human beings interact. The first thing we notice about these relationships is that they are systematic. It is a highly organized system in which each unit plays an important part. The language system functions through sounds, words, and structures integrated into one organic whole. There will be no communication if only one of the elements of language, i.e., sounds, words or structures is put to use.

Communication is the transfer of meaning from one human mind to another. It serves as the vehicle of thought and also an indispensable tool in the development of human civilization. It links people together and enables them to learn from each other.

Language makes it possible for human beings to progress and develop independently. Language, however, is a social phenomenon, as it is a skill acquired through contact with society. It has to be learnt anew by each person and each person has to devise his own way of using it. Language is in a state of continuous flux. Old words lapse and new ones are introduced, grammatical conventions change, "the spectrum of permissible expression as against which is taboo shifts" (Steiner¹⁸). Language changes as rapidly and in as many a multiple ways as human experience itself.

Language thus emerges as a system of sounds related to a system of meanings. Language is also a system of symbols (words) and it functions most effectively when the symbols used are known to both the speaker and the listener or conversely, to the writer and the reader. These symbols too have a two-fold aspect- sound and meaning. For communication, it is necessary that there should be a meaning attached to the collective sounds constituting a symbol, which may be random. Two points thus emerge, (a) language is a system for organizing sounds, making words, arranging words, deciphering meaning and finally a system of visual symbols for writing (b) language is dynamic and not static.

Translation exists because men speak different languages. The main purpose of translation which dates back to the beginnings of the literature is to translate the world's great books, the universal works in which the human spirit is enshrined and lives: poetry, drama, fiction, religion, philosophy, history, the seminal works of psychology, sociology and politics and of individual and social behaviour. These works, where the universal outweighs the cultural, are essential reads for all regardless of their nationality or culture.

The discussions about the difficulties, inadequacies, impossibilities, splendours, miseries, treacheries, artificialities and complexities of translations are generally restricted to the field of authoritative, philosophical and literary texts. However, the millennial question regarding translation is 'why'? For what reason, on what grounds, for what purpose is a translation required?

Translated works are 'a key to further knowledge' (Pope 9) which opens a 'treasure-vault of knowledge' (Pope 9) from other languages for the enrichment of a reader who would not have been able to understand and enjoy them otherwise. Translation thus is a window on the world for the curious reader: it brings the wealth of other languages within easy access. Translation contributes to understanding and peace between the nations, groups and individuals; transmits knowledge and mediates between the cultures on the basis of common humanity. There are about three thousand languages in the world and nearly 7 billion individuals live on this planet. Either the linguistic competence which will allow each one to understand the language of the other must be built up or translation services be improved and widened to include several major languages. With the boundaries being obliterated due to globalization, translation services and industry are expanding in leaps and bounds.

Sadly, translation as an area of study has never received the attention it deserves. For centuries, laymen and scholars alike have considered translation as a process of mechanical replacement of words in one language with words in another language. Shorn thus of its creative and emotive aspects, translation seems the simple process of substitution of word units. This very simplicity is the root of complications attending to the task of translation. From the initial stand point of "Traduttore, Traditore" translation has slowly emerged as the global means of communication. Translation, today, is one of the most significant channels through which inter-literary voice finds expression. A good translation takes us a long way and this is why translation is generating interest as an area of study as also a rapidly developing industry.

After the World War II, translators started to organize and formed an international organization, The International Federation of Translators (FIT), with support from UNESCO in 1953. Throughout the world, the translator's occupation has been transformed since the foundation of FIT. Other landmarks in this direction have been the promulgation of the Translator's Charter at Dubrovnik in 1963 and the UNESCO recommendations of 1976 in Nairobi. The Translator's charter grants translation the status of a distinct and autonomous profession. This mirrors the changing position of the translator from an amateur to a professional. Translation, once considered a poor substitute for bilingualism is today acknowledged as an essential means of communication worldwide. In 2011, FIT and AILA held their 19th and 16th triennial congresses respectively. Moscow, Paris Geneva, Ottawa, Leipzig, Saarbrücken, Mons, Århus, Hong Kong, Tunis, Barcelona, Georgetown, Monterrey, Amsterdam and Tel Aviv have become recognized as the hubs of translation activity. Translation has expanded on nearly all levels—practitioners, languages, subject matter covered, organization of the activity, and quantity of translations and show no signs of slackening its pace yet.

In this age of globalization, the world is constantly shrinking and cross-cultural communication has become an unavoidable necessity. With international relationships being redefined, the scope of translation goes well beyond mere literary translation.

Translation, the most thriving literary activity today has contributed enormously towards the unification of the world .it deserves credit for integrating the populace universally: better than any religion, philosophy or metaphysics. Literature is a matter of human emotion and its delights cannot and should not be restricted by social, cultural or geographical boundaries. The community has not yet reached out to explore the possibility of a world literature or the world emotion. The emotion is universal whereas the language is regional. Ideally, language should be as universal as the emotion itself, but physical constraints make the realization of this ideal impossible. Translation as an agent of homogenization of emotions tries to attain this universalization to a considerable extent. The importance of translation as an effective means of communication on the global scene is thus established beyond doubt.

References

Ed. A. H. Smith, *Aspects of translation*, London: Secker and Warburg, 1958.

George Steiner, *After Babel: Aspects of Language and Translation*, Oxford University Press, 1973.

Maurice Pope, *The Story of Decipherment: From Egyptian Hieroglyphic to Linear B*, London: Thames and Hudson, 1975.

Peter Newmark, *About Translation*, Clevedon: Multilingual Matters, 1991.

Chemicals in Everyday Life and Their impact

Rita Chandel

Assistant Professor
Department of Chemistry
G. C. Sanjauli, Shimla, HP

Abstract

Chemicals are found everywhere in this world. Everything is made up of chemicals. In our everyday life various chemicals are being used in various forms. Many of the changes we observe in the world around us are caused by the chemical reactions. There are thousands of chemicals which we use in our daily life. These chemicals are useful as well as harmful to us. We use chemicals like acetic acid and sodium chloride in our kitchen. These are the examples of useful chemicals. On the other hand, pesticides and house cleaners are harmful household products. Air fresheners, oven cleaners, mothballs and nonstick cook wares may be hazardous. Triclosan and parabens used in cosmetics can be carcinogenic. Formaldehyde in hair smoothening products can cause allergies. Phthalates found in plastic containers prove endocrine disrupting chemicals. In a world of “going green” natural alternatives of chemicals can be used.

Introduction

Chemicals are considered as a great advantage for the welfare of mankind. These are very essential in our daily life. Chemicals exist in each and every sphere of our life and have become the most important for us. Chemical industries have a great impact on medical science,

technology, food and cosmetic sciences and many more. These are being used in each and every product from food to medicines and from agriculture to cosmetics. Chemicals help us to grow and preserve food and keep ourselves clean. Without chemicals we can not think about development and world would be a lot less advanced than it is today.

Despite of millions of advantages chemicals also have many disadvantages. Their long-term use may be harmful to mankind and environment. Children are extremely vulnerable to harmful chemicals as they are in the early stages of physical and mental development. Toxic chemicals can be found in air, water and soil. The cleaning and disinfecting products are washed from houses into the groundwater, streams, rivers and soil. These are also flushed into water from industrial discharge. Chemicals are used in household cleaning products, food wrappings, pesticides, insecticides and cosmetics. The prolonged contact of chemicals can seriously affect the health of humans, wildlife and aquatic life everywhere. Colourings and stabilizers in dishwasher detergents and washing products can cause various allergies and affect the whole eco-system. Metals like lead, mercury and cadmium are toxic and may be carcinogenic.

Objective

The objective of this paper is to make the reader familiar with some of the chemicals which we use in our day to day life.

Acetic Acid (Vinegar), CH_3COOH

- Acetic acid is a weak acid but pure acid is corrosive. Biologically, acetic acid is an important metabolic intermediate, and it occurs naturally in body fluids and in plant juices.
- It has been prepared on an industrial scale by oxidation of ethanol.
- It is used as preservative and various household cleaning agent. It is widely used as solvent for paints, and lacquers and also in the printing materials.

- Inhalation of excessive vapours of acetic acid can cause dizziness and suffocation. The toxic amounts of it may cause skin, eyes, nose and throat allergies and blisters. It is harmful for central nervous system and circulatory system.



Calcium Carbonate (Chalk, Marble), CaCO_3

- Calcium carbonate is a very important compound of calcium which is prepared from calcium oxide.
- It is used as blackboard chalk and in tooth paste. It is medicinally used as a calcium supplement or as an antacid, but excessive consumption can be hazardous. It is also obtained as natural product as a part of hen's eggs.

Calcium Hydroxide (Slaked Lime), $\text{Ca}(\text{OH})_2$

- Calcium hydroxide is a weakly basic compound which is prepared by slaking of lime. It is used in white washing, in the manufacture of bleaching powder, cement and mortar. It is also used as cavity liner and bases, root canal sealer and repair of perforations.

Calcium Oxy-chloride (Bleaching Powder), CaOCl_2

- It is prepared by the action of chlorine on the slaked lime.

- It is mainly used for the bleaching purposes. It is used as a disinfectant and germicide, especially for sterilizing water. It is also used to make wool shrink proof.
- The adverse effects of it include the changes in the pH balance of blood, blurry vision, and skin and hair damage.

Calcium Sulphate (Plaster of Paris), $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$

- It is obtained by heating gypsum at 120-degree Celsius.
- It is used for setting of broken bones by plastering over broken limbs. It is also used for making blackboards, chalks, toys and moulds.

Copper Sulphate (Blue Vitriol or Blue Stone), $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

- Copper sulphate is a blue coloured compound which is prepared by the action of H_2SO_4 on Cu metal.
- It is used as herbicide, fungicide, pesticide, analytic agent, in organic synthesis and for dyeing.



Ferrous Sulphate (Green Vitriol), FeSO_4

- A beautiful green coloured compound which is formed by the action of H_2SO_4 on iron.
- It is used for the treatment of iron deficiency and as colorant.



Magnesium Hydroxide (Milk of Magnesia), $\text{Mg}(\text{OH})_2$

- Magnesium hydroxide a very important laboratory reagent is prepared by the action of boiling water on magnesium.
- It is used as an antacid and as laxative. Earlier it was used as a home remedy for the treatment of acidity and constipation.

MOTH BALLS- Naphthalene (C_{10}H_6) and Dichloro benzene ($\text{C}_6\text{H}_4\text{Cl}_2$)

- Naphthalene is a white volatile polycyclic compound with a strong odor.
- Both naphthalene and 1,4-dichloro benzene (PDB i.e. para dichloro benzene) are used as insecticide. But due to flammability of naphthalene dichloro benzene is used as the main ingredient. When these two are mixed, they react to produce a liquid which causes damage to the items being preserved. Both undergo sublimation and produce toxic gas, which kills moths.
- Naphthalene and PDB are highly toxic when ingested and can cause serious illness and even sometimes may prove fatal.

Dichloro methane (Freon), CF_2Cl_2

- It is a non- toxic, non- inflammable, non- corrosive and highly stable even at high temperatures and pressures.

- It is widely used as refrigerant (cooling agent). It is also used in air conditioners.
- When freons are released into the atmosphere they act as greenhouse gases. Freons also release free chlorine which acts as a catalyst for the destruction of stratospheric ozone.
- Excessive inhalation of freons may affect the lungs.

Hydrogen Peroxide, H₂O₂

- Hydrogen peroxide is a colourless liquid with a bitter taste.
- It is main ingredient of mouthwash, hair color, liquid cleaners and toilet cleaners. It is also used as rocket propellant and a ripening agent.
- Eye irritation, nausea, vomiting and bleaching of skin and hair are the side effects of exposure to hydrogen peroxide.

Sodium Chloride (Table Salt), NaCl

- It is made up of the elements, sodium and chlorine.
- It is obtained from seawater as a mixture of Na₂SO₄, CaSO₄.
- It is used as a food supplement, also used as a method of food preservation.



Sodium Hydroxide (Caustic soda, Drano, Easy off), NaOH

- It is a white deliquescent solid and is a highly corrosive alkali which is widely available as white pellets.

- It is used as drain cleaning product under the name Drano. The name easy off is given to it as it is used for unblocking toilets. It is also used in the manufacturing of soaps, paper, rayon and mercerized cotton.

Sodium Bicarbonate (Baking Powder) NaHCO_3

- Sodium bicarbonate is a salt composed of sodium ions and bicarbonate ions.
- It is used in the manufacturing of baking powder and aerated water and is used for the neutralization of stomach acidity.

Sodium Carbonate (Washing Soda), NaCO_3

- Sodium carbonate is a very important laboratory reagent and is mainly used as a cleaning agent for domestic purposes.
- It is used as water softener and for controlling the pH of water. It is also used in the manufacture of soap, paper and glass.

Polyvinylchloride (PVC)

- PVC is a hard-horny material prepared from vinyl chloride.
- It is used in the manufacture of hand bags, cutting clothes, rain coats, toys and in artificial flooring. It is also used as a good insulating material in wires and other electrical goods.
- Exposure to more than permissible levels can affect the central nervous system and cause dizziness and headaches.



Polytetrafluoroethylene (PTFE, Teflon), $(-F_2C-CF_2-)_n$

- It is very tough material and is resistant towards heat, action of chemicals like acids and bases. It is a bad conductor of electricity.
- Teflon is used for coating articles and cookware to make them non sticky and nonstick utensils.
- It is also used for making gaskets, valves and seals.
- When heated above 300-degree Celsius the coatings of Teflon can start breaking and release toxic fumes into air. This produces a temporary flu known as polymer fume fever.



Silicon Dioxide (Sand, Quartz), SiO_2

- It is prepared by the hydrolysis of silicon tetrachloride with water and heating the hydrated oxide formed.
- It is mainly used as building sand and in ornaments. Silica is also used in the production of glass for windows, drinking glasses, and beverage bottles. The majority of optical fibers for telecommunication are also made from silica. It is a primary raw material for many ceramics such as earthenware, stoneware, and porcelain.

Zinc Sulphate (White Vitriol), ZnSO_4

- Zinc sulphate is a white crystalline compound which is prepared in the laboratory by the action of CuSO_4 on zinc metal.
- It is used as preservative, in medicine, to supply zinc in animal feeds, fertilizers and in agricultural sprays.

Conclusion

We live in a world of chemicals and they have become very important part of our life. No doubt some chemicals have harmful effects also. They should be used carefully and direct exposure to them should be avoided. Their negative effects can be prevented by replacement with less toxic and natural products. The reduced use of cleaning and personal care products is one of the best preventive measures.

Chemicals are a significant contributor to our economies. Sound chemical management across the lifecycle of a chemical from extraction or production to disposal is essential to avoid risks to human health and the environment.

रूपलाल भार्मा

सह-प्राध्यापक संस्कृत

राजकीय महाविद्यालय संजौली

इस धरा पर मानव सभ्यता के प्रथम यक्षु उन्मीलन के साथ ही अनेक संस्कृतियों का जन्म हुआ और कुछ समय तक अपनी चमक दिखला कर लुप्त भी हो गई। जिस की नींव दृढ़ थी, वह संस्कृति काल के अनेक थपेड़े सहन करने के बाद भी आज पूरी दृढ़ता से खड़ी है, वह है भारतीय संस्कृति। भारतीय संस्कृति का अभिन्न अंग है—सामाजिक समरसता

सामान्यतया समाज भाब्द का अर्थ स्त्री और पुरुष का समूह लिया जाता है परन्तु समाज भाब्द का वास्तविक अर्थ कुछ और ही है। समाज भाब्द की व्युत्पत्ति सम् और आ उपसर्ग पूर्वक अज् धातु से अच् प्रत्यय करने पर सिद्ध होती है। इस तरह समाज भाब्द का अर्थ होता है—एक साथ मिलकर चलना। जब भिन्न—भिन्न मनुश्य सामूहिक आदर्श से प्रभावित होकर उसे पाने के लिए आगे बढ़ते हैं तभी वह समाज कहलाता है। सामाजिक प्रगति का अर्थ होता है—एक साथ चलते हुए आपसी एकता को दृढ़ करना।

संस्कृत में रचे गए वेद वि"व के प्राचीनतम ग्रन्थ होने से उस में स्वस्थ समाज के निर्माण के लिए महत्त्वपूर्ण संकेत मिलते हैं। समाज के निर्माण की प्रथम कड़ी है—मनुश्य। स्वस्थ समाज के लिए आव"यक है—प्रत्येक मनुश्य में स्वस्थ विचारों का आविर्भाव। चूंकि समाज स्त्री पुरुषों के सम्बन्धों से आगे बढ़ता है और सम्बन्धों में पवित्रता समाज के लिए सर्वप्रथम अपेक्षित है—

मनुर्भव जनया दैव्यं जनम् (ऋ.10.53.6) अर्थात् सर्वप्रथम तू स्वयं मनुश्य बन तत्प"चात् दिव्य गुण युक्त सन्तानों को जन्म दे। मनुश्य तभी बन सकता है, जब उस में प"भुभाव का समावे"न हो। संस्कृत ही मनुश्य को प"भुभाव से मुक्त रख सकती है क्योंकि संस्कृत भाब्द का अर्थ ही है परिष्कृत, भुद्ध और संस्कारित तो संस्कृत का पठन—पाठन करने वालों मनुश्य में कैसे प"भुभाव आ सकता है। समाज को सही पथ पर चलने के लिए आव"यक है—आदर्श और व्यक्तित्व। भारतीय संस्कृति में आदर्श समाज और मनुश्य बनने के योग्य सम्पूर्ण घटक विद्यमान है। सामाजिक चेतना का बीज एक साथ चलने और एक साथ चिन्तन करने में है और इसका मूल वेद के इस मन्त्र में है—

संगच्छध्वं संवदध्वं सं वो मनांसि जानताम् ।

देवा भागं यथा पूर्वे सञ्जानाना उपासते ॥

जहाँ ऐसे मन्त्र या भाव नहीं है वहाँ कोई आदर्श समाज नहीं बन सकता और जहाँ आदर्श नहीं वहाँ मनुष्य लक्ष्य विहीन हो जाता है। समाज के प्रमुख स्तम्भ स्त्री और पुरुष हैं। उन से परिवार, अनेक परिवारों से गाँव, गाँव से नगर, नगरों से देश और अनेक देशों से यह विश्व बनता है। भारतीय संस्कृति अपने परायों में भेद करना ही नहीं जानती। इस में सम्पूर्ण विश्व को एक परिवार माना गया है। 'वसुधैव कुटुम्बकम्' वाली भावना की इस संस्कृति में सब के सुख की कामना की गई है—

सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।

भारतीय संस्कृति सदैव संस्कृत पर आश्रित है। अतः स्वस्थ समाज के निर्माण में यह सन्देश सदैव स्मरणीय रहेगा—

'कृण्वन्तो विश्वमार्यम्' अर्थात् हम सम्पूर्ण विश्व को आर्य अर्थात् श्रेष्ठ बनाएं। इसीलिए सहस्राब्दियों से सम्पूर्ण विश्व के लोग यहाँ आते रहे और यहाँ से सुसंस्कार और संस्कृति की शिक्षा ग्रहण करके निज निज देशों में जाकर उसका प्रचार—प्रसार करते रहे—

एतद्देशं प्रसूतस्य सकाशादग्रजन्मनः ।

स्वं स्वं चरित्रं शिक्षेरन् पृथिव्यां सर्वमानवाः ।

यही चरित्र निर्माण स्वस्थ समाज की प्रथम सीढ़ी है। भारतीय मनीशियों ने मानव जीवन के सम्यक् संचालन के लिए चार सूत्रीय व्यवस्था की योजना की थी, इसे चार स्वाभाविक अवस्थाओं में बांटा गया—ब्रह्मचर्य, गृहस्थ, वानप्रस्थ और सन्यास। इन में से ब्रह्मचर्य आश्रम समाज निर्माण का आधार था। इस में जैसी शिक्षा ग्रहण की जाती थी उसी का भविष्य में वैसा प्रभाव पड़ता था। इसलिए गुरुकुल में बच्चों में ऐसे संस्कार डाले जाते थे जो उस के भविष्य को संवारने के साथ साथ स्वस्थ समाज के निर्माण में भी सहायक होते थे।

वर्तमान में सभी को शिक्षा उपलब्ध करवाई जा रही है। तकनीकी और दूसरी हर तरह की शिक्षा का विस्तार किया जा रहा है। परन्तु चरित्र निर्माण पर जोर न होने से इस प्रकार की शिक्षा ने पाश्चात्य देशों की तरह हमारे देश में निरंकुश समाज को जन्म दिया है। आचारहीनता अशिष्टता, मर्यादा का निर्वाह न करने से समाज नैतिकपतन की ओर जा रहा है। भौतिक सुख साधनों के पीछे भागने से स्वार्थ प्रवृत्ति आज मनुष्य में घर कर गई है। आध्यात्मिकता के परित्याग के कारण मनुष्य

और प'तु में कोई अन्तर नहीं रह गया है। धर्म (कर्त्तव्य) मनुश्य को प'तु से पृथक् करता है। कर्त्तव्य में दूसरों के अधिकारों की सुरक्षा प्रमुख होती है। यही मनुश्य भूल चुका है। अपने अधिकारों अर्थात् स्वार्थ के प्रति तो वह जागरुक है और कर्त्तव्य (स्वार्थत्याग) के प्रति वह उदासीन है। स्वस्थ समाज के लिए आव'यक होता है— व्यष्टि अर्थात् व्यक्ति की उन्नति से समष्टि अर्थात् समाज की उन्नति। सम्पूर्ण समाज की उन्नति का यह मन्त्र मननीय है—

आ ब्रह्मन् बाह्मणो ब्रह्मवर्चसी जायतामाराश्ट्रे राजन्यो भूरइशव्यो अतिव्याधी
महारथो जायताम्। दोग्धी धेनुर्वोढाऽनड्वाना'तुसप्तिः पुरन्धिर्योशा जिशु
रथेश्ठाः सभेयोयुवास्य यजमानस्य वीरो जायताम्।

समाज के प्रत्येक वर्ग के लिए उदात्त भावों से भरी ये प्रार्थना कितनी उदार है। स्वस्थ समाज के लिए प्रत्येक मनुश्य के विचारों का भुद्ध होना आव'यक है। इस के लिए यजुर्वेद का िव संकल्प सूक्त वि'ीश रूप से मननीय है, जो निरन्तर मन को कल्याणकारी संकल्प वाला बनने की प्रेरणा देता है। इसका नित्य पाठ करने से मनुश्य भुद्ध विचार सम्पन्न हो जाता है। इस के साथ अथर्ववेद का यह मन्त्र सभी के प्रति मैत्री भावना से ओतप्रोत कर देता है—

अभयं मित्रादभयममित्रादभयं ज्ञातादभयं पुरोयः।

अभयं नक्तमभयं दिवा नः सर्वाआ'ता मम मित्रं भवन्तु।।

इस प्रकार संस्कृत साहित्य स्वस्थ समाज निर्माण के उद्घरणों से भरा पड़ा है। संस्कृत के विना हम सभ्य समाज की कल्पना भी नहीं कर सकते।

ORGANIC BEEKEEPING IN HIMACHAL PRADESH:EMERGING SCENARIO,FUTURE CHALLENGES AND STRATEGIES

Minakshi Sharma

Associate Professor in Zoology

Centre of Excellence GDC Sanjauli

Abstract

Beekeeping is one of the integral components of mountain farming systems that offers specific advantages for developing sustainable agriculture. Beekeeping as an exclusive non-land based income generating tiny industrial sector is fast emerging an important component of present day strategies for integrated rural development and off-farm employment for sustainable livelihoods. Moreover beekeeping does not compete with other farming systems for resources. Though the beekeeping in this state has a long history with traditional management practices, the scientific methods of management is poorly understood by the beekeepers. Beekeeping with *Apis cerana* has been practicing in Himachal by using traditional methods from time immemorial. The present paper provides information on present status of beekeeping, honeybee species, potentialities for honey production for sustainable livelihoods in Himachal. The paper suggests that Himachal has tremendous scope for commercial beekeeping and use of bee for pollination of diversity agricultural crops and wild flora. Also, the paper emphasizes on the constraints for beekeeping development and strategies for organic honey production in Himachal Pradesh.

Key words Beekeeping, Sustainable, Pollination, Agri -horticultural crops

Introduction

Apiculture (Latin “apis” = bee) is the science of keeping and managing practice of *Apis* bees. It is a forest and agro-based industry, which is beyond the ordinary realms of industry, in the sense that the humans derive benefits from interaction between two living things like plants and bees without affecting adversely both. Plants, including many crops, prosper and the bees flourish sheltered by humans, giving honey and different other products like beeswax, propolis, bee pollen, bee venom and royal jelly, other by-products of beekeeping. Beeswax is used in carpentry, production of candles and cosmetics. Propolis is a substance made by bees from plant resin. It is used for cosmetics, medicine and food. Royal jelly is a special nutrient combination, prepared by worker bees. Feeding a female larva with more royal jelly transforms it into a queen, who attains maturity earlier; whereas the other female larvae fed with minimum of royal jelly develop into workers taking more number of days to reach adulthood. The queen has a longer lifespan of 2-3 years whereas the workers hardly last beyond a month.

History of beekeeping in India: The history of scientific beekeeping in India is not too old though it was known in India since ages and its references are made in ancient Vedic scripts. The scientific principles to Indian traditional beekeeping were started to be applied at the end of

nineteenth century. The first attempts in India to keep *Apis cerana* F. bees in movable frame hives to enhance mobility were made in 1880 in Bengal and in 1883-84 in Punjab and Kullu Valley but with little success. In South India, Rev. Newton started beekeeping training and trained a number of rural folks during 1911-17 and also devised a hive for *A. cerana* now named after him (Newton hive) for Indian climatic conditions. Beekeeping work in earnest was taken up in Travancore in 1917 and in Mysore in 1925. The recommendation of Royal Commission on Agriculture (1928) for developing cottage industries gave a boost to beekeeping in rural India. Beekeeping work afterwards in real earnest was taken up in Madras in 1931, in the Punjab in 1933, in Coorg (Karnataka) in 1934 and UP in 1938. In 1938-39, Beekeepers of India founded All India Beekeepers Association. Afterwards, Indian Council of Agricultural Research (ICAR) established the first Beekeeping Research Station in the Punjab in 1945 and 6 years later at Coimbatore in Tamil Nadu. Since 1950, ICAR has been funding various research projects on beekeeping. In 1980, ICAR started All India Coordinated Project (AICP) on Honey Bees Research and Training which at present has 8 centres throughout the country with administrative centre at Haryana Agricultural University Campus at Hisar in Haryana state. The modern beekeeping in Himachal Pradesh was introduced only in the year 1934 in Kullu Valley and in 1936 in Kangra valley. Only *Apis cerana* the Indian honey bee was reared in the state until the year 1961 when *Apis mellifera* from Italy was introduced in the state at bee research station Nagrota in Kangra. Prior to April, 1971 there were only 1250 colonies managed in modern bee hives in whole of Himachal Pradesh. After the transfer of the scheme to horticulture Department in 1971 the progress of beekeeping has increased manifold.

Diversity of honeybees The Super family Apoidea is divided into two main subgroups: Spheciformes (Wasps), and Apiformes (Bees). Bees are distinguished from wasps by: a) the presence of branched, often plumose, hairs, and b) the hind basitarsi, which are broader than the succeeding tarsal segments. The proboscis is in general longer than that of most sphecoid wasps. Michener's (2007) report shows 17, 533 species of bees worldwide, grouped under 443 genera and seven families. Of these, 633 species in 60 genera and six families were reported from India (Gupta, 2003). The dominant honey producing bees belong to the genus *Apis*, under the family Apidae. *Apis* is represented by five species in India, of which four are native species viz. a) *Apis dorsata* (rock bee or giant bee), b) *Apis cerana* (Indian bee), c) *Apis florea* (little bee) and d) *Apis andreniformis*. *Apis mellifera* (European bee) is an introduced species.

- a) ***Apis dorsata dorsata*** (Kan: Kadujenu, Hej-jenu) *Apis dorsata* is commonly referred to as the "Rock bee," or "Giant honey bee" owing to its large body size. It has three subspecies in India viz *Apis dorsata dorsata*, *Apis dorsata laboriosa* and *Apis dorsata bighami*. *A. d. laboriosa*, the giant Himalayan honey bee, is confined to the high altitudes (range 2,500 and 4,000 m) in the northern region.
- b) ***Apis cerana***, the Indian bee is medium sized, yellowish brown and comparatively quiet in nature. The radial cell of the forewing on the basal portion and apical portions have lengths 1.2 mm and 1.8 mm respectively. The length of labial palp is 1.8 mm. The bee colonies are associated with dry, shadowy and dark places viz. holes of old trees or dead trees, earthen pots, sunshade of buildings etc.; occasionally it also occurs in holes in the earth or in termite mounds. These bees are very suitable for apiculture as they can be reared on movable frames. A colony produces 5 -15 kg honey/year. The honey is considered superior compared to other honey sources. These bees are good gatherers of honey and pollen. While collecting

honey and pollen they also pollinate the plant. *Apis cerana* is easier to domesticate as it is non-nomadic unlike

- c) *Apis florea* (Kan: Kolu-Jenu) Commonly called as Dwarf Bee or Little Bee, the quantity of honey collected is less and mostly consumed by the bees themselves. The combs are single and similar to that of *Apis dorsata* in structure. The average body length and height are 6 mm and 3 mm respectively. It has white stripes on the brown abdomen. In the drones (males), the “thumb” of the bifurcated basal-tarsus of the hind leg is much longer. *A. florea* usually constructs its hive on small branches from the tree trunk or in bamboo groves, forming colonies encircling the branches. Kutch area of Gujarat is a major producer of honey from it (Soman and Chawda, 1996). Habits and distribution: More known as crop pollinator than a honey producer, *A. florea* often migrates between plains and adjacent low hills, depending on seasonal variations in forage availability. The species generally occurs in warmer climate of Oman, Iran, Saudi Arabia, Pakistan, India, Sri Lanka, Indonesia, Thailand and Africa (Ruttner, 1988, Hepburn et al., 2005). *Apis florea* on *Impatiens* sp. *A. florea* colony on the twigs of *Terminalia* sp.
- d) *Apis mellifera* *Apis mellifera*, native to Africa, Europe and the Middle East, was introduced into India in late 70's or early 80's, first into Punjab, Haryana and Himachal Pradesh and later into South Indian states. Larger in size compared to *A. cerana*, it builds larger multiple combs having greater honey storage capacity than its Indian counterpart. Fecundity, brood rearing and colony build up are also much higher/ faster in this species (Atwal and Sharma 1968, Hamaed and Adhlakha, 1973; Rana and Goyal, 1994)

Importance of honey bees in pollination of fruits plants needs no emphases. It is an established fact that the value of increased fruit harvests as a result of honey bee pollination is 14 to 20 times more than the value of honey obtained directly from the bee colonies. The horticulture department helps the farmers by arranging bee colonies for pollination to the orchardists at nominal rent. According to the modest estimates about 2,00,000 bee colonies are needed for appropriate pollination for the bearing orchards in the state. In view of the importance of honey bees in the successful pollination of fruit plants and the production of valuable honey and the bees wax, the department of Horticulture H.P. is taking up this scheme on priority basis and is making head way progress. At present the department has 32 beekeeping demonstration apiaries at various suitable places in the state. The bee colonies are migrated to the other states by the beekeepers particularly during winters due to scarcity of bee flora to the colonies at that time in the State. As a matter of fact *Apis mellifera* performance in Himachal Pradesh has been so encouraging that at present nearly 1500 unemployed educated youths have taken to *Apis mellifera* beekeeping as full time profession and are maintaining nearly 80000 bee colonies as against 4200 bee colonies in the year 1981-82. These bee colonies are capable of producing about 1600 M.T. of honey annually as against 3 M.T. during 1981-82.

Beekeeping and honey potentials: India has rich and varied vegetation. There are 45,000 species of plants and shrubs, which comprise seven percent of the world's flora. All the four species of honey bees - *Apis cerana*, *Apis mellifera*, *Apis florea*, *Apis dorsata* found in Indian subcontinent and the major portion of honey comes from the wildbee, *Apis dorsata*. The *Apis mellifera* beekeeping is concentrated mainly in states like Punjab, Jammu & Kashmir, Himachal Pradesh, Haryana, Uttar Pradesh, Bihar and West Bengal. India is basically an agricultural country and copious amount of plant resources available for commercial beekeeping and quality honey production. Bee keeping in Himachal Pradesh is not only important for the

growth of honey production but also for the biological and economic role played by the bees. The state is one of the biggest producers of fruits in the country with nearly 2.5 lakh hectares of land under fruit cultivation. Keeping in mind the productivity of fruits in the state, the process of pollination by bees become very important. The state government has started the "Mukhya Mantri Madhu Vikas Yojna" to encourage beekeeping. Under this scheme, assistance is being provided to Himachali farmers. The scheme is focussed on developing small apiaries, popularisation of honey and other bee products. Under the scheme, assistance is being provided for the keeping of bee colonies with a maximum of 50 colonies. Each beekeeper will be given 80 per cent (Rs 1,600) of the cost (Rs 2,000 per bee colony) for 50 bee colonies per beneficiary. There is a similar scheme for bee hives. In addition, under the Horticulture Mission there is a provision for providing 50 per cent subsidy on the production of bee colonies to the beekeepers by which Rs 5 lakh is being provided. The fruit producing areas of Kangra, Chamba, Kullu, Mandi, Sirmour and Shimla in Himachal Pradesh are catering to the growing demand, transforming the state's rural economy and giving locals a popular vocation in bee-keeping.

Honey production and export

There are over 85,000 families in Himachal Pradesh engaged in beekeeping and the state produces 1600 tonnes of honey annually. The state is becoming the biggest producer of Himalayan honey. Under the bee keeping programme, 530.64 MT of honey has been produced upto 31.12.2013 in the State. "Himachal Pradesh, owing to its varied agro-climate, has a great variety of bee forage sources that provide the basis for development of beekeeping industry in the state. The production of honey has already increased to 1,600 MTs against 700 MTs in 2005-2006. Some of the private bee-keepers have started exporting honey to the UK, Maldives and Kuwait, owing to increasing demand for pure bee-honey. The state government helps small entrepreneurs, providing incentives and marketing facilities. Himachal Pradesh will become biggest producer of Himalayan honey. In Kangra alone, 30,000 farmers are engaged in bee-keeping, producing 1,200 MT honey annually for the last few years. Blessed with immense flora and fauna, Himachal's quality of honey is of very high grade.

There are a number of country specifications for honey testing- European union standards, United States FDA, SASO (Saudi Arabian standards organization), codex / BIS, FSSAI (The Food Safety and Standards Authority of India, Ministry of Health & Family Welfare, Government of India (FSSAI). Out of all, EU specifications are the most extensive and detailed —accepted to be the highest industry standard. In June 2010, the EU banned Indian honey due to a lack of traceability regarding origin, adulteration, and contamination by heavy metals and antibiotics. The US has not banned Indian honey, but there is strong suspicion that a considerable portion of imports from India are of Chinese origin. From 2001-2011, US imports of Indian honey increased from 20 MTs to 26,837 MTs. The European Economic Commission (EEC) has lifted the ban on import of Indian honey, with effect from November 1, 2011. In India, production of honey is very low compared to China — the highest producer — which exports 80,000 tonnes annually compared to India's 7,000 tonnes. Its consumption is also very low in India. Honey production in the country is only about 27,000 tonnes a year. It is estimated that 9,000 of honey is produced from six bee colonies. According to a survey, there is Rs 1,500 crore world market for health foods and India's share is stated to be negligible. In the world market the demand for honey is around one million tonnes. There is an immense possibility for India to

increase its export share from 7,000 tonnes to three lakh tonnes if more people invest in bee colonies. Quality testing facilities are also not easily available to beekeepers and packers in India. The European Union will not import honey from countries where the use of pesticides is not regulated and where samples are not specifically tested for insecticidal residues. Some honey importing countries also insist on a certificate to the effect that the honey has been procure from disease-free colonies. However, there is no arrangement for diseases surveillance. Honey is often stored in undesirable and inappropriate containers which deteriorate the quality. Above all, the processing of honey has to be of high standards so that quality deterioration is minimal. Imports from China and Argentina, the two large exporters, are now being avoided due to the poor quality of honey and many counties are turning towards new exporters like India. Europe, the USA and Japan are the major honey importers. India needs to build the confidence of world buyers. The price, supply, purity and service are the major determinants in the honey industry. The sale price of honey by beekeepers in India varies from Rs 25 to Rs 45 per kg whereas in countries like the USA, Argentina and Brazil, the price varies from Rs 55 to Rs 80 a kg. the beekeepers are thus getting a lesser price for their produce in India as compared to other countries.

Future Prospectsof Honey industry in the state can well become a major foreign exchange earner if international standards are met. Beekeeping is an age-old tradition in India but it is considered a no-investment profit giving venture in most areas. Of late it has been recognised that it has the potential to develop as a prime agri-horticultural and forest-based industry. Honey production is a lucrative business and it generates employment. The informal sector is providing up to 70% of the honey & bees wax market in India. 3 Indian honey has a good export market. With the use of modern collection, storage, beekeeping equipment,honey processing plants and bottling technologies the potential export market can be tapped. The problem is one of quality honey production. From a buyer's point of view, quality honey is essential. But HP, is lacking on that front. There is a need to look specifically at how to promote quality production and develop an export market. Indian honey offers tremendous export potential. For tapping its potential, there is need to chalk out suitable export strategy. Some of the points which merit attention of the policy makers in this respect include:

- 1) Application of advanced technology for collection, and processing of honey
- 2)Adhering strictly to the quality standards including health regulations laid down by international market.
- 3) Recognition of bee keeping as agro-industry
- 4) Priority allocation and concessions to be made applicable for material needed for beekeeping, like wood for bee boxes, sugar for supplementing feeds to bees and medicines for bees' diseases
- 5) Campaigning abroad about quality of our honey
- 6) Developing an efficient export marketing network to optimise the production and exports

Timely implementation of the above steps is likely to pave the way for a quantum jump in the export of honey from the country in the coming years.

Need for certification Certifications are an indicator that the honey manufacturing company is competent and this has been established through a third party analysis, done professionally, using the most recent and up to date technologies, procedures and equipments. Himachal is becoming an increasingly important supplier of high quality, mild honey with versatility .

Scope of Diversification in Beekeeping: There is further vast potential and scope from diversification in apiculture i.e. besides honey; it offers scope for production and marketing of other bee products like pollen, propolis, royal jelly, bee's wax and bee venom. Besides, sale of bee packages and rearing and sale of pedigree queen bees offers a tremendous scope. According to a recent estimate, based on the current price status of inputs, an apiary unit of 100 colonies put under diversification plan can earn a profit of Rs. 3, 19,150 per year. Demand of honey bees for crop pollination is also increasing in some parts of the country. This profession offers a great scope in generating employment besides a good livelihood. Apart from direct employment to the beekeepers, there would be need for good artisans, hive manufactures, apicultural equipment and machinery manufactures, transport system for irrigation of colonies, traders, product quality experts, packers, sellers, raw material dealers etc. and allied industries. The value addition technologies of CFTRI and CBRTI have already started helping beekeepers in harvesting rich dividends. This industry has, so far, remained unexplored and offers tremendous scope.

Conclusion An assessment of potential and present status of beekeeping in HP indicates that there is indeed an enormous scope for organic beekeeping in HP. In view of the high nourishing qualities of honey and increasing global demand bee keeping has great potential, especially in a biodiversity rich state like Himachal, to create more rural livelihoods. At the same time bee keeping in larger scale can enormously benefit agricultural productivity through pollination services, a valuation seldom ever thought of by economists in this state. Scores of flowering plants in the wild also depend on bees for their pollination services. Possible strategies for this could be exploration and evaluation of different ecotypes of *A. cerana*, survey of honey plant resources, migratory bee keeping practices, check indiscriminate use of biocides, to check quality of honey and beeswax, value addition to honey and its by products and better apicultural research and training programmes.