



**National Seminar  
On**

**Anthropological Perspectives on Environment,  
Development, Public Policy and Health**

**(Under UGC-SAP III, DRS II)**

**27-28 February, 2015**



**Souvenir and Book of Abstract**

**Organized by  
Department of Anthropology  
University of Delhi  
Delhi-110007**

**Venue:** Seminar Hall, Department of Anthropology, University of Delhi, Delhi-110007

**Sponsored by:** University Grants Commission (UGC),  
University of Delhi,  
Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS Bhopal),  
Indian Council of Medical Research (ICMR)

**National Seminar**  
**on**  
**Anthropological Perspectives on Environment,**  
**Development, Public Policy and Health**  
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**27<sup>th</sup>-28<sup>th</sup> February, 2015**

**Organizing Committee**

**Patron:**

Padam Shri Prof. Dr. Dinesh Singh, Vice Chancellor, University of Delhi, Delhi-  
110007

**Chairperson:**

Prof. Dr. V. K. Srivastava, Head and Coordinator, UGC-SAP III, DRS II, Department  
of Anthropology, University of Delhi, Delhi-110007

**Organizing Secretaries:**

Prof. Dr. A. K. Kapoor, Deputy Coordinator, UGC-SAP III, DRS II  
Prof. Dr. Subhadra Channa

**Joint Secretaries:**

Dr. R. P. Mitra  
Dr. Meenal Dhall  
Dr. Kennedy Singh

**Members:**

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Prof. Dr. S. L. Malik  
Prof. Dr. P. C. Joshi  
Prof. Dr. Satwanti Kapoor  
Prof. Dr. M. P. Sachdeva  
Prof. Dr. V. Raghavendra Rao  
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Dr. Shivani Chandel  
Dr. Vipin Gupta  
Dr. N. Kiranmala Devi  
Mr. C. Mahajan  
Dr. Mitashree Srivastava

**Sub-Committee Members**

Dr. Mary Grace Tungdim	Ms. IndraniSen
Dr. Suman Verma	Ms. Chetali Tandon
Dr. Vijeta Choudhary	Ms. Kiran Singh
Ms. Deepali Verma	Ms. Supriya Singh
Ms. Heemanshu Aurora	Ms. Khushbu Kumari
Ms. Monika Saini	Ms. Naila Ansari
Ms. Sangeeta Dey	Ms. Shalini Singh
Mr. Vineet Kumar Verma	Ms. Ankita Mehta
Ms. Indelah Khan	Ms. Tabitha
Ms. Chitra Kadam	Ms. Gangaina

17 February 2015



## THE INDIAN ANTHROPOLOGICAL SOCIETY

OFFICE : FLAT NO. 2A, P-17D, ASHUTOSH CHAUDHURY AVENUE, KOLKATA-700 019  
E-mail : indanthsoc@gmail.com

### Message

I am genuinely happy to learn that the Department of Anthropology, University of Delhi will be organizing a National Seminar on “Anthropological Perspectives on Environment, Development, Public Policy and Health” under UGC SAP-III DRS II Programme during 27-28 February 2015.

As anthropologists we can very well imagine the value of the chosen theme of the seminar in both theoretical and applied perspectives in contemporary times.

I am sure the seminar will evoke immense interest among the anthropologists in India to participate and deliberate on their research findings in order to be able to academically contribute for furthering the cause of anthropology in India.

I find the seminar to be additionally encouraging since 6 memorial Best Paper Awards have been instituted on this occasion to pay homage to 6 stalwarts of the Anthropology Department of the University of Delhi who served the Department since its inception to 2012. It is a fact that all 6 of them contributed immensely for the growth of the discipline of anthropology in one hand, and that of the Department on the other, and its growth continues unabated through the zeal and academic abilities of the contemporary faculty and students.

On behalf of the Indian Anthropological Society, the oldest professional body of the anthropologists in India, I congratulate the Department of Anthropology, Delhi University and the Organizing Secretary of this National Seminar for organizing this academic event.

I wish the seminar a grand success.

Prof. RajatKanti Das  
President  
The Indian Anthropological Society  
Kolkata



## Indian Anthropological Association

Department of Anthropology, University of Delhi, Delhi-110007

Registered in Delhi in 1971, under Act XXI 1860

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### Message

It's a matter of great privilege that the Department of Anthropology is organizing a National Conference under Special Assistance Program on *Anthropology of Environment, Development, Public Policy and Health* which are topics of crucial importance in national life of contemporary India.

This is very timely and well thought out academic event as it is trying to address the pressing problems of humanity. The theme of conference is very vital and I am thankful to the organizers for focusing on intersectionality of these dimensions. The conference is particularly interesting because the themes incorporate all branches of anthropology, a value which many of our colleagues are committed to.

Indian Anthropological Association has always engaged with the issues of policy and development practices, health and environmental challenges with regard to marginal and excluded groups. Indian Anthropological Association also brings out a journal, *Indian Anthropologist* for past 40 years reflecting everyday life of marginal communities in a theoretically informed manner. I hope this conference will bring out critical reflections and creative sharing on the themes leading to broader understanding of the emerging complexities of the world.

On behalf of the Indian Anthropological Association, I thank the organizers of conference and especially Prof. A K Kapoor for his meticulous planning and encouraging initiatives in holding this conference. I sincerely wish the deliberations in the seminar will definitely ignite the younger minds.

Prof. S M Patnaik

President

Indian Anthropological Association

Department of Anthropology, University of Delhi

Chair, IUAES Commission: *Anthropology of Public Policy & Development Practice*

Member, Organizing Committee, World Council of Anthropological Associations

## Message

I am delighted to know that the Department of Anthropology, University of Delhi is organizing a National seminar on 'Anthropology perspective on Environment, Development, Public Policy and Health'.

As far as my opinion is concerned anthropologists are successfully analyzing the various prospects on environment, development, public policies and in health as the holistic development is necessary to sort out their problems which will help in molding schemes/planning for the development in contrast with their cultural dimensions by innovative ideas, methods and techniques. Such academic interactions will be immensely fruitful by providing meaningful recommendations and strategies not only to bridge the gaps but also to achieve development in totality.

I would like to congratulate the organizing secretary and the member of organizing committee for their initiatives and efforts in National Seminar on such a theme.

I express my sincere best wishes for the success of the seminar.

Prof. A.N. Sharma  
Head, Department of Anthropology &  
Dean, School of Applied Sciences  
Dr. H. S. Gour Vishwavidyalaya  
Sagar (M.P.)



**DEPARTMENT OF HUMAN GENETICS**  
**Guru Nanak Dev University,**  
**Amritsar-143005, India**

(Established by the State Legislature Act No. 21 of 1969)

**Dr. A. J. S. Bhanwer**

*Professor*

*Coordinator, DRS SAP II*

*Dean, Faculty of Life Sciences*

*President Elect, Indian Society of Human Genetics*

No.:

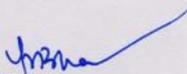
Dated: 16/02/2015

**Message**

It is a great pleasure to know that Department of Anthropology, University of Delhi is going to organize a National seminar on ***Anthropological Perspectives on Environment, Development, Public Policy and Health*** on 27<sup>th</sup> and 28<sup>th</sup> February, 2015.

The topic is extremely relevant in the modern context where the role of environment is getting a bigger role to play in most of the complex diseases. In the coming years, as India will be having a largest number of individuals afflicted with various complex diseases like Type 2 Diabetes, various cardiovascular diseases etc, so we need to focus our attention on this issue and develop a national policy on such diseases. I am sure the scholarly deliberations in this seminar will be of immense use to healthcare policy makers and public at large.

I wish this seminar a grand success.

  
AJS Bhanwer



Professor Satwanti Kapoor  
UGC Career Awardee  
M.Sc.,Ph.D., Post-Doc. (Glasgow & Loughborough Univ., UK)

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DEPARTMENT OF ANTHROPOLOGY  
UNIVERSITY OF DELHI  
DELHI- 110 007  
(INDIA)

### Message

It gives me immense pleasure in extending our heartfelt felicitations to the organisers of National Seminar on “Anthropological Perspectives on Environment, Development, Public Policy and Health” being held at Department of Anthropology, University of Delhi on 27<sup>th</sup> - 28<sup>th</sup> February, 2015. In view of the interdisciplinary approach in the field of Anthropology, it is most appropriate, well thought and timely chosen topic for the seminar for which organisers must be congratulate.

Indian Society for Human Ecology (ISHE) is an international, non-profit organization incorporated in 1989. It aims at disseminating knowledge and spreading ecological awareness, organizing lectures, seminars and conferences also to undertake and promote research activities that can help in promoting man environment relationship. It also provides consultancy to the developmental agencies and NGOs, publishes research and popular articles. Society is associated in publishing the Journal of Human Ecology since 1990. It has gained international reputation and recognition. From time to time special volumes edited by renowned scientists have also been published.

I convey our best wishes for the meaningful deliberations during the two day seminar.

A handwritten signature in blue ink that reads 'Satwanti'.

Satwanti Kapoor  
Secretary  
Indian Society for Human Ecology

**Prof. Vinay Kumar Srivastava**  
Head & Coordinator, UGC-SAP III, DRS II  
Department of Anthropology,  
University of Delhi

I am pleased to bring to your kind notice that our Department is organizing a 'two-days' seminar on 27 and 28 February 2015. The Delhi Department has always played a key role in charting out the agenda of teaching and research in anthropology. As is well known, it is the biggest department in our country, providing teaching and research competence in a number of specializations in anthropology. After completing their training, our students, who hail from different parts of the country, have branched out to take care of, and in some cases, establish, anthropology departments in different Indian universities. Doing anthropology in Delhi is altogether a different experience, for we nurture each branch and sub-branch of anthropology caringly, thus making our contribution to the holistic tradition and spirit of anthropology.

Against the backdrop of this training, our students are able to meticulously combine the impacts of different variables that condition human life and their society. Because of this multi-method and multi-variable approach of anthropology, looking at the relation of biological and cultural aspects, what our endowment is and what we have been able to create, we have unfailingly enriched other disciplines in natural, biological, social and cultural sciences and studies. This seminar will bear a testimony to these ideas.

The Deputy Coordinator of SAP, Professor Anup Kumar Kapoor, has untiringly worked to make this seminar a huge success and go down the lanes of history as one of the path-breaking efforts. As you will note, by instituting awards for best papers to be presented in this seminar, which is solely Professor Kapoor's idea, this is a maiden attempt to give recognition to the teaching members of the Department who have passed away, and remember them affectionately for building it up and training us. We pay them our greatest homage and respect, and assure them that we shall pass on the tradition they have laid down to the posterity unswervingly, An institution that forgets its debts to the founders and past members will fail to grow the roots that keep it sturdy and ever-going. It is the sense of history, our failings and achievements, our constraints and inner strength, and their careful auditing over time, so to say, that drives us forward, and we stand before you with commitment and confidence.

I wish all success to the seminar. I am thankful to the outstation participants who have taken time out from their engaging schedules, especially in the seminar and workshop months of February and March' to attend it, and I wish them pleasant stay in Delhi.

### **From the Desk of the Deputy Coordinator**

On behalf of the organizing committee, it given us immense pleasure to welcome all the distinguished delegates to the National Seminar on “Anthropological Perspectives on Environment, Development, Public Policy and Health” from 27<sup>th</sup> to 28<sup>th</sup> February, 2015 being held at the Seminar Hall of the Department of Anthropology, University of Delhi, Delhi.

We have made Special efforts to invite scholars from all over the country, representing different sub-disciplines and disciplines who will debate and deliberate on emerging key issues relating to the environment, health, public policy, development and biological dynamics pertaining to Indian population.

It is anticipated that the outcome of this national seminar will not only update our professional knowledge and expertise in the field of environment, health and public policy but will also help in devising need based rural and tribal people oriented strategic plan of development action. The planners, policy makers, programme managers of the country may be benefited from the outcome of the National Seminar. For the first time we have instituted six memorial awards in the name of teachers of the department who contributed a lot in anthropology. These awards are expressions of our sincere gratitude for them.

We consider a Seminar as a Academic plate form where scientists, academicians and young minds meet together and share their views for future planning of the discipline and a vision is formed. This vision is to be lighted by the future generation of Anthropologists where deep rooted introspection is needed.

Prof. A. K. Kapoor

## **From the Desk of Joint Secretaries**

Environment, Health and Development are the critical areas of concern for humanity and future prosperity of humanity in days to come. In our quest for growth and development, the questions of equity, balance, health and environment have come to play an important role in context of its sustainability. Anthropology, as an empirical discipline has a key role to play in analyzing the dynamic interactions between them and how they impact each other. Environment and health themselves have emerged as an important areas of concern for development and they are no longer seen in conflict. Any development sans them, can no longer be called as development. As we embark on a trajectory of high economic growth how to achieve a balance between them is a major concern in contemporary India. With the impressive progress we have made the concern of malnutrition and under nutrition in tribal areas and many health problems remained an important concern for anthropology and anthropological researches. So are the cases of displacement and destruction of habitats in rural and especially tribal areas.

The present seminar is an attempt to understand some of these knotty issues and link it up with the area public policy. It has been felt that many of the problems in contemporary India have emerged due to faulty public policy formulation and their implementation. India is vast country with wide cultural and biological diversity of the population. No public policy will be successful if it fails to take in account this diversity of cultures and populations. Anthropologists have traditionally shied away from policy issues. But lately it has been felt that anthropology needs to engage itself with the public policy debate if it really wants to make a dent. Moreover anthropology with its vast experience of empirical research are far better suited to public policy issues than any other discipline. The present seminar is being organized to critically examine some of these issues and how anthropology can address them successfully. We are trying to strike a balance between very learned and experienced anthropologists and the energetic and bubbly students, who have come from all parts of India to discuss their ideas in this seminar. We hope after two days of deliberations we will be wiser and little closer in understanding of these issues. Wish you all a very happy stay and successful engagement in the seminar.

Dr. R. P. Mitra, Dr. Meenal Dhall and Dr. Kennedy K. Singh

## ABOUT THE DEPARTMENT

In 1947, the Department of Anthropology was founded in the Faculty of Science at the University of Delhi, with Dr. P.C. Biswas (M.Sc., Calcutta, Ph.D Berlin) as its Head. It was the second anthropological institute in the country. His other colleague was Mrs. Hilda Raj. In 1949, Dr. Freda Mookerjee joined the faculty of the department. Then followed J.D. Mehra, Inder P. Singh and S.C. Tiwari. Abhimanyu Sharma joined the department in 1956, followed by R.D. Sanwal and A.K. Mitra. When B.Sc. (Honours) course was introduced in 1962, S.K. Basu and Rameshwar Singh were taken as the member of the teaching faculty. They were followed by P.K. Datta, Raghbir Singh, J.S. Bhandari, D.K. Bhattacharya, P.K. Seth, I.S. Marwah, H.K. Kumbnani, Swadesh Seth, P.K. Chattopadhyaya, M.K. Bhasin, A.K. Kala and Surinder Nath. Many teachers joined the Department from time to time as it expanded its teaching and research activities, viz. P.K. Ghosh, S.L. Malik, V.C. Channa, V.K. Srivastava, A.K. Kapoor, M.P. Sachdeva, Satwanti Kapoor, R.S. Mann, Subhadra Channa, P.R. Mondal, Indrani Chattopadhyaya, S.M. Patnaik, Gautam K. Kshtriya, Manoj Kumar Singh, K.N. Saraswathy, P.C. Joshi, R.P. Mitra, B. Murry, Avitoli G. Zhimo, V. R. Rao, Meenal Dhall, Vipin Gupta, Shivani Chandel, N.Kiran Mala Devi, M.Kennedy Singh, C.Mahajan and Mitashree Srivastava. In 1968, one year Post-Graduate Certificate Course in Forensic Science was started by the Department. The Department was headed by Prof. P.C. Biswas till 1968 and he laid a sound foundation of an integrated discipline. He was succeeded by Professor Inder P.Singh (1968-79, 81-84), Professor J. D. Mehra (1979-81), Professor S.C.Tiwari (1984-87), who expanded its scope and developed various laboratories and branches of anthropology. They were followed by Professor Raghbir Singh(1987-90), Professor J.S. Bhandari (1990-93), Professor D.K. Bhattacharya(1993-96), Professor R.S.Mann (1996), Professor P.K.Seth (1996-99), Professor M.K. Bhasin (1999-2002), Professor A.K. Kala (2002-2004), Professor Surinder Nath (2004-2007), Professor P.K. Ghosh (2007-2010), and Professor S.L. Malik (2010-2013). Now the Department is headed by Professor Vinay Kumar Srivastava (2014) to give new focus on the teaching and research in the Anthropology.

The Department started in 1947 in two rooms in the old building of the Department of Zoology, and shifted to the new building of the Arts Faculty in 1949, and later came to occupy its present building- the erstwhile Prince's Pavilion facing Mughal Garden in 1966. Laboratories and lecture halls were added to meet the needs of the growing discipline. From a humble beginning of two rooms today it has 12 laboratories (general and specialized), lecture halls, teacher's rooms, library, and an ethnographic museum. The Museum when it was located in the Arts Faculty building had the distinction of having the visit and blessings of our beloved Prime Minister Pandit Jawaharlal Lal Nehru who regularly donated ethnographic specimen and cultural objects from his personal collection throughout his tenure. This tradition was

continued by his distinguished daughter, Prime Minister Indira Gandhi. In its present location, Prince Charles, Prince of Wales, visited the museum in 1980. The Department which in 1947 had a faculty of two members has now 25 members and a number of research associates, DST women scientists, research fellows and scholars which include JRF, SRF and Inspire fellows.

The Department had the privilege of a large number of visiting faculties over the years which helped its development as one of the foremost centers of anthropological teaching and research in the world. Some of them were Professor F. Vogel (Heidelberg, Germany), Professor Napoleon Wolanski (Warsaw, Poland), Professor H. Walter (Bremen, Germany), Professor W.W. Howells (Harvard, U.S.A). Professor P.T. Baker (Pennsylvania, U.S.A), Professor R. Kirk (Canberra, Australia). Professor J.M. Tanner (London, U.K.). Professor D.G. Mandelbaum (California, U.S.A), Professor Jim Shaffear (Ohio, U.S.A) and Dr. John van Willigen (Kentucky, U.S.A), Professor C. Beall (U.S.A), Professor P.R.M. Jones (U.K.) Professor Chie Nakane (Japan), Professors Stanley and Ruth Freud (U.S.A), Professor M. Mead (U.S.A), Professor G.A. Harrison (U.K.), Professor R.M. Malina (U.S.A), Professor Parizkora (Czechoslovakia), Professor J.V.G A. Durnin (Scotland), Professor Furer-Haimendrof (Germany) and many more.

The students of the Department are engaged in teaching and research in various disciplines of Anthropology and allied sciences in various universities and institutions of India and abroad. One can find at least one, if not more, in every department of Anthropology in India. Others are engaged in Central and provincial state services, Forensic Laboratories or in multinationals or entrepreneurs.

The Department has been actively engaged in teaching and research in all branches of Anthropology. It has been producing Ph.D. and M.Phil. dissertation consistently all these years. So far it has awarded approximately 264 Ph.D. degrees and 130 M.Phil. Its faculty members, research scientists, associates, fellows and scholars have been working on research projects funded by different governmental, national and international agencies.

Professor P.C. Biswas, Dr. Abhimanyu Sharma, Professor P.K. Datta, Professor J.S. Bhandari, Professor R.S. Mann and Dr. V.C. Channa were our faculty, are no more with us but their contribution in building up this department cannot be forgotten.

## **The Faculty**

The Department has a distinguished faculty with many honors to their credit. A large number of faculty members have been recipients of various national and international fellowships, honors and awards such as Humboldt Fellowship, Tropical Medicine Commonwealth Fellowship, Fulbright Fellowship, Charles Wallace Fellowship and

Erasmus Mundus Fellowship, UGC Career Award and Research Award, Vidhya Ratan Award, Life Time Education Achievement Award, S.C. Roy Memorial Gold Medal (Asiatic Society), Dr. Panchanan Mitra Memorial Lecture Award, Elected Presidents of Anthropological and Behavioral Sciences in Indian Science Congress Association (four teachers of the Department).

The Department has numerous laurels to its name and has carved its own niche in the world of anthropology. Several branches of anthropology have been exclusively designed and taught to the students by our faculties, which are yet not taught in any other department of anthropology in India. The Department has well equipped and functioning laboratories and the teachers ensure that the syllabus covers the latest developments in the discipline. Our Alumni has distinguished itself and many occupy positions of relevance in institutions such as UNESCO, World Bank, WWF, WHO, Microsoft, BBC, UNDP, Action Aid, etc. The Department has produced two Vice-Chancellors, Professor S.L. Malik (Gorakhpur University) and Professor A.K.Kapoor (Jiwaji University).

**Some of the important information provided by the teachers is as follows:**

1. (i) Prof. Vinay Kumar Srivastava  
Position: Professor
- (ii) Area of Specialization: Social Anthropology
- (iii) Number of Ph.D. Guided till date: 20
- (iv) Field Area (s) (If any): Rajasthan
- (v) No. of Books Published till date: 10
- (vi) No. of Papers Published:  
National: 20 International: 10
- (vii) No of Research Projects Completed: 1
- (viii) No. of Conferences/Seminars/Workshops attended:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (ix) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:  
Srivastava , V K. "Are children individuals?" *The Oriental Anthropologist*, 2014: 14 (2): 149-67.

Srivastava, V K. " On classification: A method. In Ishwar Modi (ed.), Gender, Identity and Multiple Marginalities. Essays in Honour of Professor Yogendra Singh. Rawat Publishers." 2015: 141-54.

Srivastava, V K. " On sanitation: a memory ethnography. ." *Social Change*,, 2014: 44 (2): 275-90.

Srivastava, V K. "On lifestyle and wellness. In Deepak Kumar Behera (ed.), Contemporary Society." *Tribal India*, 2014: 9:3-17.

Srivastava, V K. "Remembered city, lived-in city: Delhi as I experienced, Delhi of my Conscious." *Anthropos*, 2014: 108:577-88.

Srivastava, V K. "Reminiscing fieldwork and writing up culture: An account of producing the doctoral dissertation. In Kumar Ravi Priya and Ajit Kumar Dalal (eds.). Qualitative Research on Illness, Wellbeing and Self-Growth, Contemporary Indian Perspectives." *Routledge, Taylor & Francis Group*, 2015: 74-101.

(x) Awards/Achievements (If Any): \_\_\_\_\_

2. Prof. P.K. Ghosh: Information Not Provided.

3. Prof. S.L. Malik: Information Not Provided.

4. (i) Prof. Anup Kumar Kapoor  
Position: Professor

(ii) Area of Specialization: Human Population Biology, Health Anthropology, Biological Gerontology, Forensic Anthropology, Anthropology of NGO'S, Cultural Biology, Tribal and Himalayan Studies and Human Rights.

(iii) Number of Ph.D. Guided till date: 21

(iv) Field Area (s): Delhi, Uttar Pradesh, Nepal, Haryana, West Bengal, Himachal Pradesh, Rajasthan, Gujarat, Andaman & Nicobar, Orissa, Daman & Diu, Goa, Kerala, Madhya Pradesh, Maharashtra, Karnataka.

(v) No. of Books Published till date: 15

(vi) No. of Papers Published:  
National: 195 International: 51

(vii) No of Research Projects Completed: 15  
Name of Funding Agencies: ICMR, UGC, University of Delhi, ICSSR,



Man Of The Year Award (26th Jan, 2009) by Gwalior Vikas Samiti, Gwalior (M.P.), (Top Ten of the year of Gwalior).

Dr. Pan Chanan Mitra Memorial Lecture Award (2013) of Asiatic Society, Kolkata (20<sup>th</sup>, August, 2014).

Elected Sectional President of Anthropological and Behavioural Sciences, 102<sup>nd</sup> Indian Science Congress (2014-2015), Mumbai.

(xi) Visiting Fellows:

University of Toledo, Toledo, USA, 1999.

North Bengal University, Distt. Darjeeling (W.B.), 2007.

S.V. University, Tirupati (A.P.) 2007; 2012.

West Bengal State University, West Bengal, 2012.

Pondicherry Central University, Puducherry, March, 2013.

Manipur University, Imphal, April, 2013.

5. (i) Prof. P. C. Joshi

Position: Professor

(ii) Area of Specialization: Medical Anthropology; Anthropology and Disasters;

Himalayan Anthropology; Research Methodology.

(iii) Number of Ph.D. Guided till date: 22

(iv) Field Area (s) (If any): Himalayan Communities; Muslims.

(v) No. of Books Published till date: 5

(vi) No. of Papers Published:

National: 100

International: 50

(vii) No of Research Projects Completed: 5

Name of Funding Agencies: European Union, Brussels, Belgium; International Recovery Programme, Kobe, Japan; Indian Council of Social Science Research, New Delhi; World Health Organization, SEARO, New Delhi.

Year of Funding 2003; 2005; 2007, 2012

(viii) No. of Conferences/Seminars/Workshops attended:

National: 60

International: 10

(ix) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:

P.C. Joshi, S. Kaushal, B.S. Aribam, P. Khattri, O. D'Oust, M. Marx and D. Guha- Sapir. 2011. Recurrent floods and prevalence of diarrhea among under five children: Observations from Bahraich district, Uttar Pradesh, India. *Global Health Action*, 4: 6335 – DOI: 10.3402/gha.v4i0.6355.

Ganguli, NK, Arora, NK, Chandy, SJ, Fairuze, MN, Gill, JPS, Gupta, U, Hossain, S, Joglekar, S, Joshi, PC, Kakkar, M, Kotwani, A, Thomas, K, Wattal, C, Easton, A and Laxminarayan, R. 2011. Rationalizing Antibiotic use to limit antibiotic resistance in India. *Indian Journal of Medical Research*, 134:281-294.

Wind, TR, Joshi, PC, Kleber, RJ and Kamproe, IH. 2013. The Impact of resurrent disasters on mental health: A Study on seasonal floods in Northern India. *Prehospital and Disaster Medicine*. 28,3: 1-7.

Wind, TR, Joshi, PC, Kleber, RJ and Komproe, IH. 2014. The effect of Post-disaster Context on the Assessment of Individual Mental Health Scores. *American Journal of Orthopsychiatry*. 84, 2: 134-141.

Krishnakumari, P, Joshi, PC, M. C. Arun Kumar and M. Meghachandra Singh. 2014. Women's Perception of Reproductive Illness in Manipur, India. *Journal of Anthropology*. Article ID 321480, 9 pages (<http://dx.doi.org/10.1155/2014/321480>)

6. Prof. Subhadra Channa: Information Not provided.
  
7.
  - (i) Prof. Satwanti Kapoor  
Position: Professor
  
  - (ii) Area of Specialization: Human growth and development, Tribal studies, Public health, Nutrition, Physiological Anthropology, Kinanthropometry and ergonomics, Human Ecology
  
  - (iii) Number of Ph.D. Guided till date: 18
  
  - (iv) Field Area (s) (If any): Delhi, Himachal Pradesh, Rajasthan, Haryana, Gujarat
  
  - (v) No. of Books Published till date: 04: Special edited volume 01
  
  - (vi) No. of Papers Published: National & International: 136
  
  - (vii) No of Research Projects Completed: 11  
Name of Funding Agencies & Year of Funding: ICMR (2001-2004; 2011-

2014), UGC  
(2008-2010), DST (2009-2013), University of Delhi (R&D; 2008-2014)

(viii) No. of Conferences/Seminars/Workshops attended:  
National & International: 52

(ix) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:

2014 Bhasin Perna, Kapoor Satwanti. Pregnancy Complications and Calculated Cardiovascular Risk in Urban Women: Do We Envisage an Association? Journal of Urban Health. 91(1):162-175.

2013 Development of obesity over four decades among North Indian females. Satwanti Kapoor, Rashmi Sinha, Kajri Tandon, Shilpi Gupta, Perna Bhasin, Deepali Verma, Meenal Dhall. Euras J Anthropol 4 (1): 16-22

2012 Sex-dependent effects of the UCP 1 -3826 A/G polymorphism on obesity and blood pressure. Meenal Dhall, Madan Mohan Chaturvedi, Umesh Rai, Satwanti Kapoor. Ethnicity and disease, 22; 181-184.

2012 Skinfolds as prognosticators of nutritional status among adult undernourished males of india. Satwanti Kapoor, Deepali Verma, Perna Bhasin, Meenal Dhall, Shaila Bhardwaj, Anup Kumar Kapoor. International journal of sociology and Anthropology 4(9): 257-265.

2012 Shilpi Gupta and Satwanti Kapoor. Genetic and environmental influences on blood pressure in Aggarwal Baniya population. Journal of Biosocial Science, 45(1):1-11.

(x) Awards/Achievements (If Any):

Rear Adm. M.S. Malhotra Award 1983. For the 2nd Best Scientific Publication entitled "Body Composition in relation to high altitude acclimatization" ISI Golden Jubilee International Conference on Human Genetics and Adaptation Vol. 2 Feb. 1982. (In: Human Genetics and Adaptation. Ed. A Basu & K.C. Malhotra, Vol.2. pp. 70-80).

University Grants Commission Career Award, 1994-1997. To work on "The Process of Ageing in Structural and Functional variables in different Environmental conditions in rural Haryana and Himachal Pradesh."

8. Prof. M. P. Sachdeva: Information Not provided.

10. (i) Prof. Soumendra Mohan Patnaik  
Position: Professor
- (ii) Area of Specialization: Globalization, Development and Tourism Studies,  
Indigenous Knowledge, Tribal Studies, Ethnography
- (iii) Number of Ph.D. guided till date: 7 awarded, 5 in progress
- (iv) Field Area(s): South Asia, India, North-East India, and Central India
- (v) Number of Papers Published: 35  
National: 21 International: 14
- (vi) Number of Research Projects Completed: 11

“Globalization and Cultural Identities: A comparative study of Tribes of Central and North-East India” funded by ICSSR in 2013-15

An Assessment of “Local Governance in Scheduled Areas in Orissa” sponsored by Concern World Wide and CYSD in Feb, 2009.

An Evaluation of Downward Accountability in Rural Sri Lanka. A project by Action Aid International Sri Lanka in June-July, 2008.

An Evaluation of Building Community Resistance to Disaster in Nepal: A joint project by DIPECHO and Action Aid International in Nepal June-July, 2007.

An Assesment of Microplanning Processes in Tribal Development in Bastar, district, Chattisgarh, India, UNDP, New Delhi & Samarthan Centre for Development Support Raipur, November, 2006.

An Evaluation of Disaster Management Initiatives in Post Tsunami situations with special reference to Family dynamics in Srilanka, Action Aid International, Colombo, July, 2006.

Sustainable Tourism Development in Nagaland, sponsored by UNDP, New Delhi and World Tourism Organisation(WTO), Madrid, Spain 2003-2004.

Community Norms of Sexual Behaviour : A Preliminary Study of the Tribes of Jharkhand, Chhattisgarh & Uttaranchal sponsored by DFID and Sexual Health Resource Centre, New Delhi, 2002.

Cultural Continuity and Change among the Tribes of Arunachal Pradesh sponsored by Department of Culture, Ministry of HRD, Govt.

of India, New Delhi 2000.

Chilika: The Lake and its Cosmology sponsored by Indira Gandhi National Centre for the Arts, New Delhi, 1997.

Role of NGOs in Tribal Development of Orissa.Sponsored by Ministry of Welfare, Govt. of India, 1995.

- (vii) Number of conferences/workshops/seminars attended:  
International Conferences 19 (Abroad) 15 (In India): Total 34  
Invited Lectures: 28 Key Note Speaker: 12

- (viii) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:

2014 Consuming Culture : the Politics of Aesthetics in Nagaland Cultural Tourism in India's North East, In Raminder Kaur et.al (eds) ASA volume on *Arts and Aesthetics in a Globalising World*

2013 Ethical Debate in Development Discourse in India, *Development Anthropology*, Journal of German Association for Development Anthropology (AGEE), March Issue.

2012 *Culture, Identity and Development: An account of Team Ethnography among the Bhil of Jhabua*.Jaipur : Rawat Publications

2011 Who Is Healthy Among the Korwa ? Liminality in the Experiential Health of the Displaced Korwa of Central India.(co-author). *Medical Anthropology Quarterly*, Journal of American Anthropological Association, 25(1) : 85-102

2010 Micro-Level Development Practices Among the Tribes of Baster *Social Action*, 60 : 385-399

- (ix) Academic Distinctions and Achievements:

President, Indian Anthropological Association, Department of Anthropology, University of Delhi, Delhi

Chair, Scientific Commission on Anthropology of Public Policy and Governance: International Union of Anthropological and Ethnological Sciences

Member, Organizing Committee, World Council of Anthropological Association (WCAA)

Member, International Task Force on Ethics, WCAA

Member, International Task Force on Advocacy and Outreach,  
WCAA

Founding Member, Anthropology without Borders, Brazil

Director, Publication Board, Ethnographic and Folk Culture Society,  
Luck now.

Chairman, Governing Board, Lakshmi Bai College, University of  
Delhi

Chairperson, International Students House for Women, University of  
Delhi

Hon. Treasurer, Saheed Rajguru College of Applied Sciences for  
Women,  
University of Delhi.

11. (i) Dr. Gautam Kumar Kshatriya  
Position: Professor
- (ii) Area of Specialization: Human Population Genetics, Evolutionary  
Genetics, Molecular Anthropology, Genetic Epidemiology, Tribal Health,  
Molecular Anthropology
- (iii) Number of Ph.D. Guided till date: 10
- (iv) Field Area (s) (If any): Gujarat, Odisha, Rajasthan, Bengal, Himachal  
Pradesh, Chhattisgarh etc.
- (v) No. of Books Published till date: 3
- (vi) No. of Papers Published:  
National: 65 International: 37
- (vii) No of Research Projects Completed: 3  
Name of Funding Agencies: ICMR, DBT  
Year of Funding: 2000, 2007, 2010
- (viii) No. of Conferences/Seminars/Workshops attended:  
National: 15 International: \_\_\_\_\_
- (ix) Mention Five Best Papers Published in the last five years with the  
name of the journal, volume, year:

Kshatriya, G.K., Aggarwal, A., Khurana, P., Italia, Y. (2011) Genomic congruence of Indo-European speaking tribes of western India with the Dravidian-speaking populations of southern India: A study of 20 autosomal DNA markers. *Annals of Human Biology* 38 (5): 583-591.

Aastha Aggarwal, A., Khurana, P., Mitra, S., Raicha, B., Saraswathy, K.N., Italia, Y.M., Kshatriya, G.K. (2013) Distribution of beta-globin haplotypes among the tribes of southern Gujarat, India. *Gene*, 521: 287- 292

Ricardo M. Cerda-Flores, Roxana A. Rivera-Prieto, Benito Pereyra-Alferez, Ana L. Calderón-Garcidueñas, Hugo A. Barrera-Saldaña, Hugo L. Gallardo-Blanco, Rocío Ortiz-López, Yolanda Flores-Peña, Velia M. Cárdenas-Villarreal, Fernando Rivas, Andrés Figueroa, Gautam Kshatriya (2013) Genetic structure of Mexican Mestizos with type 2 diabetes mellitus based on three STR loci. *Gene*, 525: 41- 46

Khurana P., Aggarwal A., Mitra S., Italia Y.M., Saraswathy K.N., Chandrasekar A. and Kshatriya G.K. (2014) Y chromosome haplogroup distribution in Indo-European speaking tribes of Gujarat, Western India. *PloS ONE* 9(3): e90414.

(x) Awards/Achievements (If Any):

University Medal for standing first in order of merit in M.Sc. Anthropology (1975)

CSIR JRF and SRF

National Fellowship to study Abroad (USA)

Post Doc. Fellow GSBS, Health Science Center, , Houston, Texas

Delivered Key note Address in P. C. Mahalanobis centenary celebrations at ISI, Kolkata

Served as Senior Researcher in various World Bank Projects

Currently Collaborating in Research and Academic activities with University of Coahuila, Mexico

Visiting Fellow under UGC-CAS in Department of Anthropology, Panjab University, Chandigarh

Distinguished Visiting Professor to School of Nursing, University of Coahuila, Mexico

Actively involved in Diploma Course in Nursing Genetics at School of Nursing, University of Coahuila, Mexico

Serving as member on the Editorial Board of Various Journals

### **ASSOCIATE PROFESSOR**

12. Dr. P. R. Mondal: Information Not Provided.
13. Dr. Indrani Chattopadhyaya: Information Not Provided.

### **ASSISTANT PROFESSOR**

14. (i) Dr. Manoj Kumar Singh  
Position: Assistant Professor
- (ii) Area of Specialization: Archaeological Anthropology
- (iii) Number of Ph.D. Guided till date: 06 (3 awarded)
- (iv) Field Area (s) (If any): Paleolithic Archaeology
- (v) No. of Books Published till date: 02
- (vi) No. of Papers Published:  
National: 20 International: 03
- (vii) No. of Research Projects Completed: 07  
Name of Funding Agencies: Delhi University (R and D)  
Year of Funding: 2008-2014
- (viii) No. of Conferences/Seminars/Workshops attended:  
National: 28 International: 09
- (ix) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:  
  
Singh, Manoj Kumar 2013. Classification of Prehistoric Tool Types and Their Techniques. *Resonance* 1 (2) : 61-73  
  
Singh, Manoj Kumar 2013. Human Evolution: A Review. *Indian Journal of Physical Anthropology and Human Genetics* 32 (1):163-172.  
  
Singh, Manoj Kumar and Tiasunep 2013. A Cumulative Case for full

Humanness of Homo neanderthalensis. *Indian Journal of Physical Anthropology and Human Genetics* 32 (1): 39-46.

Singh, Manoj Kumar; T. Sunep, D. K. Bhattacharya, K.T. Reddy and Pankaj Srivastava 2013. Excavation of Kondapeta I, Prakasam District, Andhra Pradesh: A Preliminary Report. *Puratattva* 43:100-116

Singh, Manoj Kumar and T. Sunep 2014. How then Anthropologist should look at Indian Palaeolithic archaeological record. *The Indian Journal of Anthropology* 2(1): 59-72.

(x) Awards/Achievements (If Any):

Awarded ISCA Young Scientist Award by The Indian Science Congress Association, Lucknow, 2002

Representative of Asia for the *International Union of Prehistoric and Protohistoric sciences*, at Lisbon from 4-9 September, 2006.

Council Member of *World Archaeological Congress* and junior representative of Southern Asia for 7<sup>th</sup> World Archaeological Congress, which will be held in Amman, Jordan, from January 13-18, 2013.

Unanimously elected *Sectional Recorder* in the section of Anthropological and Behavioral sciences, of Indian Science Congress Association for the session 100<sup>th</sup> and 101<sup>st</sup> for two terms 2013 and 2014.

Elected as one of the Council Member of *World Archaeological Congress* and senior representative of Southern Asia, during the 7<sup>th</sup> World Archaeological Congress in Amman, Jordan, from January 13-18, 2013.

15. Dr. K.N. Saraswathy: Information Not Provided.

16. Dr. R.P. Mitra: Information Not Provided.

17. Dr. B. Murry: Information Not Provided.

18. (i) Dr. Avitoli G. Zhimo  
Position: Assistant Professor



- (v) No. of Books Published till date: 01
- (vi) No. of Papers Published:  
National: 03 International: 15
- (vii) No. of Research Projects Completed: 02  
Name of Funding Agencies: University of Delhi  
Year of Funding: 2013-14
- (viii) No. of Conferences/Seminars/Workshops attended:  
National: 27 International: 09
- (ix) Mention Five Best Papers Published in the last five years with the name of the journal, volume, year:

2014 Body Mass Index Relates to Blood Pressure Among Adults. Suman Dua, Monika Bhuker, Pankhuri Sharma, Meenal Dhall, and Satwanti Kapoor. N Am J Med Sci. Feb 2014; 6(2): 89–95.

2013 Development of obesity over four decades among North Indian females. Satwanti Kapoor, Rashmi Sinha, Kajri Tandon, Shilpi Gupta, Prerna Bhasin, Deepali Verma, Meenal Dhall. Euras J Anthropol 4 (1): 16-22.

2012 Sex-dependent effects of the UCP 1 -3826 A/G polymorphism on obesity and blood pressure. Meenal Dhall, Madan Mohan Chaturvedi, Umesh Rai, Satwanti Kapoor. Ethnicity and disease, 22; 181-184.

2012 Skinfolds as prognosticators of nutritional status among adult undernourished males of india. Satwanti Kapoor, Deepali Verma, Prerna Bhasin, Meenal Dhall, Shaila Bhardwaj, Anup Kumar Kapoor. International journal of sociology and Anthropology 4(9): 257-265.

2012 Differential response of skinfold sites to body composition change with aging. Satwanti Kapoor, Prerna Bhasin, Deepali Verma, Meenal Dhall, Renu Tyagi, A K Kapoor. International journal of body composition research. 10 (2):39-46.

- (x) Awards/Achievements (If Any):

Second best presentation in Bangalore Boston Nutrition Collaborative in International Course in Nutrition Research Methods, 20th to 31st, 2014 at St. John's Research Institute, Bangalore, India.

Best paper in the National seminar on 'The Human Mystique: Contemporary Discourses' 2012

Training on molecular and immunological techniques, LIONEX, Braunschweig, Germany from 3 July 2011-24 June 2011

Best poster award in Indian Science Congress 2011

Gold Medalist in B.Sc Hons. Anthropology, Delhi University (2006)

Secure II<sup>nd</sup> Position in M.Sc. Anthropology, Delhi University (2008)

Secure II<sup>nd</sup> Position in National Forensic Science Quiz Competition (2008)

Gold Medal from DAV for securing I<sup>st</sup> position in Delhi University 2004, 2006 & 2007

20. Dr. Shivani Chandel: Information Not Provided.
21. 21. Dr. Vipin Gupta: Information not provided.
22. 22. Dr. Naorem KiranMala Devi: Information not provided.
23. Dr. Moirangthem Kennedy Singh: Information Not Provided
24. Mr. Chakraverti Mahajan: Information not provided.
25. (i) Dr. Mitashree Srivastava  
Position: Assistant Professor
- (ii) Area of Specialization: The study of religion emphasizing on narrative and discourse analysis in relationship to constructions of religious identities in South Asian globalizing contexts with special focus on finding out the significance of transnationalization in shaping up experiences and interpretations of what constitutes "authentic" Buddhist identity in 21st Century South Asia
- (iii) Number of Ph.D. Guided till date: ———
- (iv) Field Areas (If any): ———
- (v) No. of Books Published till date: 1

- (vi) No. of Papers Published:  
National: 4 International: \_\_\_\_\_
- (vii) No of Research Projects Completed: 1  
Name of Funding Agencies: Research Council, University of Delhi,  
Delhi-07.  
Year of Funding: 2013-2014
- (viii) No. of Conferences/Seminars/Workshops attended:  
National: 4 International: \_\_\_\_\_
- (ix) Mention Five Best Papers Published in the last five years with the  
name of the journal, volume, year:  
Srivastava, Mitashree. 2010. Buddhism and Modernity: A Case Study  
of International Pilgrims and Tourists of Bodh Gaya .*The Oriental  
Anthropologist-A BI-Annual International journal Of the Science of  
Man*10: 93-103. Delhi: Serials Publications.
- Srivastava, Mitashree. 2011 .Lingaanupat ka Samajshastriya Paksh.  
*Radha Kamal Mukkherjee Chintan Parampara*2: 85-87 .Bareilly, U.P  
.Samaj Vigyan Vikas Sansthan.
- Srivastava, A.R.N.and Srivastava, Mitashree.2012.Levi Strauss Ka  
Vivah Vinimay Siddhanta.,*Radha Kamal Mukkherji –  
ChintanParampara* 1 : 6-12. Bareilly U.P: Samaj Vigyan Vikas  
Sansthan.
- Srivastava, Mitashree 2012. Revisiting Anthropology of the Family and  
Household. *The Oriental Anthropologist-A Bi-Annual International  
Journal of the Science of Man* 12: 135-40 .Delhi .Serials Publications
- (x) Awards/Achievements: (If Any)  
Certificate of Merit from University of Allahabad for securing first  
position in M.Sc Anthropology 2007.
- UGC Junior Research Fellowship Award December 2011

Our Faculty has also visited various Universities, institutes and organizations in connection with academic and professional activities. The name of the faculty and countries visited by them are given below:

<b>Faculty</b>	<b>Countries Visited</b>
<b>1. Prof. Vinay K. Srivastava</b>	U.K, France, Vietnam and Malaysia.
<b>2. Prof. P. K. Ghosh</b>	_____
<b>3. Prof. S. L. Malik</b>	Germany, U.K., U.S.A, Poland, Hungary and Denmark.
<b>4. Prof. A.K. Kapoor</b>	U.K., U.S.A, Canada, Germany, Austria, Holland, Belgium, Italy, Switzerland, France, Thailand, Singapore, Hong Kong, Philippines and Indonesia.
<b>5. Prof. P.C. Joshi</b>	Germany, U.K., Belgium, Portugal, Poland, France, Thailand, Indonesia, Vietnam, S. Korea, Philippines, Nepal, Malaysia, Hong Kong, and Netherland.
<b>6. Prof. Subhadra Channa</b>	U.K., Ireland, U.S.A, France, Germany, Italy, Spain, S. Africa, E. Africa, Japan, China, Cambodia and Australia.
<b>7. Prof. Satwanti Kapoor</b>	England, Scotland, Germany, France, U.S.A, Switzerland, Finland and Austria.
<b>8. Prof. M.P. Sachdeva</b>	_____
<b>9. Prof. V. Raghavendra Rao</b>	_____
<b>10. Prof. S. M. Patnaik</b>	U.K., Ireland, U.S.A, Taiwan, Japan, Australia, Singapore, Sri Lanka, Nepal, Malaysia, Sweden, Norway, Finland, and Denmark.
<b>11. Prof. G.K. Kshatriya</b>	U.S.A, Canada, Mexico, London and Zagreb (Croatia).
<b>12. Dr. P.R. Mondal</b>	_____
<b>13. Dr. Indrani Chattopadhyaya</b>	U.K. and U.S.A.
<b>14. Dr. Manoj Kumar Singh</b>	U.S.A, Australia, Jordan, Ireland, France, Italy, Spain, Portugal and Germany.
<b>15. Dr. K.N. Saraswathy</b>	U.S.A, Germany and Canada.
<b>16. Dr. R.P. Mitra</b>	_____

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<b>17. Dr. B. Murry</b>	Italy and U.K.
<b>18. Dr. Avitoli G. Zhimo</b>	_____
<b>19. Dr. Meenal Dhall</b>	Germany, France, Sweden, Austria.
<b>20. Dr. Shivani Chandel</b>	_____
<b>21. Vipin Gupta</b>	U. K.
<b>22. Dr. Naorem Kiran Mala Devi</b>	_____
<b>23. Dr. Moirangthem Kennedy Singh</b>	_____
<b>24. Sh. Chakraverti Mahajan</b>	_____
<b>25. Dr. Mitashree Srivastava</b>	_____

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## **OFFICE STAFF**

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<b>Name</b>	<b>Designation</b>
Mrs. Kiran Narang	Section Officer
Mr. Salim Ahmed	Assistant
Ms. Savita Rani	J.A.C.T.
Ms. Hema Madan	J.A.C.T.

### **LAB,& TECH. STAFF.**

Sh. Bhim Singh	T.O.
Sh. R.N. Gairola	T.A. (Museum)
Sh. Raj Mohan	T.A.
Sh. R.P.Singh	Lab. Assistant
Sh. Subhash Chander	Lab. Assistant
Sh. J.S. Rawat	Lab. Assistant
Sh. B.C. Pandey	Lab. Assistant
Sh. V.K. Sharma	Lab. Assistant
Sh. Prithavi Raj Meena	Lab. Assistant
Sh. D.K. Sharma	Lab. Assistant
Sh. Manwar Singh	Lab. Attendant
Sh. Anand Ku. Singh	Lab. Attendant
Sh. Jai Bhagwan Singh	Lab. Attendant
Sh. Parmod Kumar	Lab. Attendant
Sh. Hoshiyar Singh	Lab. Attendant
Sh. Kaushal Bhardwaj	Lab. Attendant

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## COURSES OFFERED BY THE DEPARTMENT

S.No.	Name of the Course	Duration	Eligibility Criteria
1.	B. Sc. (Honours) Anthropology	3 years	10+2 with Biology with Science 60% aggregate
2.	M.Sc. Anthropology	2 years	<p>B.Sc. (Hons.) Anthropology from Delhi University or B.Sc. (Hons.) Anthropology/B.A. (Hons.) Anthropology Examination of any other University recognized as equivalent thereto with 50% or above marks in aggregate or B. Sc (Gen.) from Delhi University or an Examination recognized as equivalent thereto with 60% or above marks in the aggregate and 60% or above marks in the subject concerned.</p> <p>Entrance Test for admission is conducted to fill up 50% seats of the total intake on the basis of merit in the Entrance Test. Remaining 50% seats will be filled up on the basis of merit based on marks obtained by the candidates in the B.Sc. (Hons.) Course Examination from Delhi University only (not through Entrance Test).</p>
3.	M. Phil.	1 year Regular 2 year Part - time	M.Sc./M.A. in Anthropology or allied subjects with 55% marks.
4.	Ph. D.	Minimum 2 Years	M.Sc./M.A. in Anthropology or M. Phil. Anthropology
5.	One Year Certificate Course in Forensic Science	1 year	B.Sc. degree of Delhi University or of any other University which is recognized as equivalent to B.Sc. of Delhi University. Admission by interview.
6.	M. Sc. Forensic Science	2 years	Going to start from the Academic Session 2015.

## **HIGHLIGHTS OF THE RESEARCH ASSOCIATES, DST WOMEN SCIENTISTS AND RESEARCH SCHOLARS OF THE DEPARTMENT**

All the Research Scholars of the Department were asked to provide the following information but few of them responded which are as follows:

1.
  - (i) Name: Sangeeta Dey
  - (ii) Sex: Female
  - (iii) Date of Ph.D. Registration: (September, 2014)
  - (iv) Specialization: Forensic anthropology
  - (v) Fellowship: DU-DST project
  - (vi) Duration of Fellowship: 3 months
  - (vii) Field area (if any): Udaipur, Rajasthan
  - (viii) Name of the journal only with year where your paper has been published for the last four years only: International journal of Advanced Research (2015)
  - (ix) Any award/ achievements/ Patent you got in the last five years: First Rank Holder in M.Sc. Anthropology.
  - (x) Number of paper published for the last five years International: 1
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years: National: 2
  
2.
  - (i) Name: Kiran Singh
  - (ii) Sex: Female
  - (iii) Date of M. Phil /Ph.D. Registration (M/Year): M.Phil. 4 .Sept. 2013
  - (iv) Specialization (If any): Socio-Cultural Dynamics & Body Mass Index among Tuberculosis Patients of Delhi, Social Anthropology, Dermatoglyphics, Data Analysis.
  - (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): (i) Worked as a Project Fellow for 1 year in Project Linoex GmbH, Germany Nov. 2013-Oct. 2014 (ii) DU-DST project
  - (vi) Duration of Fellowship/Scholarship: 3 months
  - (vii) Field Area (If any): New Delhi
  - (viii) Name of the journal only with year where your paper has been published for the last four years only.
  - (ix) Any award/ achievements/ Patent you got in the last five years: Topper in M. Phil (2013-2014).
  - (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years: National: 3
  
3.
  - (i) Name: Rajkumari Nonibala Devi
  - (ii) Sex: Female
  - (iii) Date of M. Phil / Ph.D. Registration (M/Year) Ph.D: (10/2010)
  - (iv) Specialization (If any): Social Anthropology

- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): ICSSR (2012-2014)
- (vi) Duration of Fellowship/Scholarship: 2 years
- (vii) Field Area (If any): Manipur
- (viii) Name of the journal only with year where your paper has been published for the last four years only: European Academic Research Journal, World Focus
- (ix) Any award/ achievements/ Patent you got in the last five years: Best paper In National Seminar organized by DU
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: 2
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 7 International: 1
4. (i) Name: Naorem Ambravati Devi
- (ii) Sex: Female
- (iii) Date of Ph.D. Registration (M/Year): December 2009
- (iv) Specialization (If any): Prehistoric Archaeology
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-RGNF-SRF
- (vi) Duration of Fellowship/Scholarship: 5 Years
- (vii) Field Area (If any): Manipur
- (viii) Name of the journal only with year where your paper has been published for the last four years ~~only~~:—
- (ix) Any award/ achievements/ Patent you got in the last five years:
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 9 International: 1
5. (i) Name: Dr. Suman Dua
- (ii) Sex: Female
- (iii) Date of M. Phil/Ph.D. Registration: NA
- (iv) Specialization: Physiological Anthropology
- (v) Fellowship: P.D.F/U.G.C
- (vi) Duration of Fellowship: 5 years
- (vii) Field area (if any): Midnapur, (W. Bengal), Sirmaur District (H.P.), Delhi.
- (viii) Name of the journal only with year where your paper has been published for the last four years only: North American Journal of Medical sciences, February (2014), International Journal of Science and Research, December, 2014.
- (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_

- (x) Number of paper published for the last five years International: 2
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 7 International: 1
6. (i) Name: Shalini Kumari Singh  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): 20<sup>th</sup> September, 2013  
(iv) Specialization (If any): Demography  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): JRF  
(vi) Duration of Fellowship/Scholarship: Valid since 21<sup>st</sup> April  
(vii) Field Area (If any): Jharkhand  
(viii) Name of the journal only with year where your paper has been published for the last four years only: Asian Academic Research Journal of Social Science & Humanities.  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: 1  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 2 International: \_\_\_\_\_
7. (i) Name: Garima Thakuria  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year) -28 June, 2012  
(iv) Specialization (If any): Prehistoric /Archaeological Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): JRF - Indian Council of Historical Research (ICHR), New Delhi  
(vi) Duration of Fellowship/Scholarship: Two years (15.02.2013 to 15.02.2015)  
(vii) Field Area (If any): Assam and North East India  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years. 6th position in M. Sc. from Gauhati University, First division in Reprography course from National Archives of India, New Delhi  
(x) Number of paper published for the last five years:  
National: 1 International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 8 International: 1
8. (i) Name: Monika Saini  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): 17<sup>th</sup> October 2012

- (iv) Specialization (If any): Forensic Anthropology
  - (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC JRF
  - (vi) Duration of Fellowship/Scholarship: Five years
  - (vii) Field Area (If any): Amarkantak (Madhya Pradesh) Jaipur, Daman and Diu, Nagpur, Dharwad, Bangalore (Karnataka)
  - (viii) Name of the journal only with year where your paper has been published for the last four years only:  
International Journal of Medical Research and Health Sciences, 2015  
Everyman's Science, 2014  
International Journal of Humanities and Social Sciences, 2014  
International Research Journal of Life Sciences, 2013  
Global Journal of Biology, Agriculture and Health Sciences, 2013
  - (ix) Any award/ achievements/ Patent you got in the last five years: Young Scientist Award, Anthropological and Behavioral Sciences, Indian Science Congress, 3-7 January, 2015, Mumbai University, Mumbai.
  - (x) Number of paper published for the last five years:  
National: 1 International: 4
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 6 International: \_\_\_\_\_
9. (i) Name: Saakshi Joshi
- (ii) Sex: Female
- (iii) Date of M. Phil /Ph.D. Registration (M/Year): 06/2012
- (iv) Specialization (If any): \_\_\_\_\_
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): Fulbright – Nehru doctoral research fellowship 2014-15; UGC-JRF (2012-14; cleared exam in November 2011)
- (vi) Duration of Fellowship/Scholarship: Fulbright – Nehru (9 month grant period in 2014-15 starting Sept 2014); UGC-JRF (June 2012- June 2014)
- (vii) Field Area (If any): Uttarakhand (India); Kentucky (USA)
- (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
- (ix) Any award/ achievements/ Patent you got in the last five years:
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: 3
10. (i) Name: Sweta Tiwari
- (ii) Sex: Female
- (iii) Date of Ph.D. Registration (M/Year): 23<sup>rd</sup> September 2013
- (iv) Specialization (If any): Social Anthropology
- (v) Fellowship/scholarship/or any other grant available to the scholar (give

details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC NET-JRF (DEC 2012)

- (vi) Duration of Fellowship/Scholarship: 2 years from 23<sup>rd</sup> September 2103
- (vii) Field Area (If any): Banaras/ Varanasi
- (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
- (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 1 International: \_\_\_\_\_
11. (i) Name: Vineet Kumar Verma
- (ii) Sex: Male
- (iii) Date of M. Phil /Ph.D. Registration (M/Year): Ph.D (September, 2014)
- (iv) Specialization (If any): Physical Anthropology: Growth and Development, Public Health, Neuroanthropology, Demography and Bio - cultural Anthropology
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details):  
Funding Agency, JRF/SRF/RA/PDF/any other): UGC –JRF (Dec 2011)
- (vi) Duration of Fellowship/Scholarship: 2 yr.
- (vii) Field Area (If any): Delhi, Uttar Pradesh, Punjab, Uttarakhand.
- (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
- (ix) Any award/ achievements/ Patent you got in the last five years: UGC - JRF, Topper in M.Phil Anthropology (2014)
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 6 International: 1
12. (i) Name: Richa Rohatgi
- (ii) Sex: Female
- (iii) Date of M. Phil /Ph.D. Registration (M/Year): Ph. D- Sept.2013
- (iv) Specialization (If any): Forensic Anthropology
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF  
Duration of Fellowship/Scholarship: Five years
- (vi) Field Area (If any): Delhi
- (vii) Name of the journal only with year where your paper has been published for the last four years only: IJTRA, IJERMT, ELSEVIER, JOHR
- (viii) Any award/ achievements/ Patent you got in the last five years: M.Sc.

- Silver Medal, Amity University, 2009, UGC-NET-JRF
- (ix) Number of paper published for the last five years:  
(x) National: 2 International: 4  
(xi) (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 8 International: 2
13. (i) Name: Deepti Aggarwal  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration: 28. 10. 2010  
(iv) Specialization: Anthropology.  
(v) Fellowship: UGC-SRF  
(vi) Duration of Fellowship: 3  
(vii) Field area (if any): Delhi  
(viii) Name of the journal only with year where your paper has been published for the last four years only: IJSRP (2013), IJSAR (2013)  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years International: 2  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 2
14. (i) Name: Shumayla  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): September 13, 2013  
(iv) Specialization: Women Health, Maternal and Child Health, Consanguinity  
(v) Fellowship/scholarship: UGC-JRF  
(vi) Duration of Fellowship/Scholarship: 4 Years  
(vii) Field Area: North India  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award: Best Poster Presentation Award in ISC 2015  
(x) Number of Workshop/Conference/ Seminar/ attended for the last five years:  
National: 7 International: 1
15. (i) Name: Kanupriya Tandon  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): 15<sup>th</sup> May 2014  
(iv) Specialization (If any): Art in Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): \_\_\_\_\_  
(vi) Duration of Fellowship/Scholarship: \_\_\_\_\_  
(vii) Field Area (If any): \_\_\_\_\_  
(viii) Name of the journal only with year where your paper has been published for the last four years only.- August, 2011 BOLD, quarterly journal of the

International Institute on Aging, United Nations - Malta

- (ix) Any award/ achievements/ Patent you got in the last five years.
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: 1
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
16. (i) Name: Khushbu kumari  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): M.Phil (10-9-2013)  
(iv) Specialization (If any): Forensic Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-  
Funding Agency, JRF/SRF/RA/PDF/any other): UGC-Non-Net Fellowship  
(vi) Duration of Fellowship/Scholarship: 1 and half years  
(vii) Field Area (If any): Delhi (North, West and South)  
(viii) Name of the journal only with year where your paper has been published for the last four years ~~only~~: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: \_\_\_\_\_
17. (i) Name: Chitra Kadam  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 27 October 2010  
(iv) Specialization (If any): Development, Sustainability, Capacity Building  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-SRF  
(vi) Duration of Fellowship/Scholarship: Four and half years (27/10/2010-26/4/2015)  
(vii) Field Area (If any): Madhya Pradesh (Sehore District)  
(viii) Name of the journal only with year where your paper has been published for the last four years only:  
2013- Journal of Indian Anthropology Society  
2012- Eastern Anthropologist  
(ix) Any award/ achievements/ Patent you got in the last five years:  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 3 International: 1

18. (i) Name: Chatali Tandon  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 16<sup>th</sup> October 2012  
(iv) Specialization (If any): Folk Culture, Globalization, Culture studies  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF/SRF  
(vi) Duration of Fellowship/Scholarship: 5 years  
(vii) Field Area (If any): North India, Punjab  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: 2
19. (i) Name: Ankita Mehta  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 18<sup>th</sup> September 2014  
(iv) Specialization (If any): Labour studies, migration, gender, disapora  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF/SRF  
(vi) Duration of Fellowship/Scholarship: 5 year  
(vii) Field Area (If any): Delhi and India  
(viii) Name of the journal only with year where your paper has been published for the last four years only: Indian Anthropologist, 2014  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: 1 International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: 2
20. (i) Name: Singlai Thouman  
(ii) Sex: Male  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 1<sup>st</sup> October 2013  
(iv) Specialization (If any): Social Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): SRF under RGNF  
(vi) Duration of Fellowship/Scholarship: 3 years  
(vii) Field Area (If any): Manipur  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:

- National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 7 International: \_\_\_\_\_
21. (i) Name: Himanshu Sharma  
(ii) Sex: Male  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 4<sup>th</sup> September, 2013  
(iv) Specialization (If any): Forensic Science  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC- Non-net  
(vi) Duration of Fellowship/Scholarship: 1.5 years  
(vii) Field Area (If any): Dermatoglyphics  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 1 International: \_\_\_\_\_
22. (i) Name: Joginder Singh  
(ii) Sex: Male  
(iii) (iii) Date of M. Phil /Ph.D. Registration (M/Year): 15<sup>th</sup> Feb., 2013  
(iv) Specialization (If any): Forensic Science  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC- SRF  
(vi) Duration of Fellowship/Scholarship: 5 years  
(vii) Field Area (If any): Forensic Documents  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 3 International: \_\_\_\_\_
23. (i) Name: Astha Sachdeva  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 18<sup>th</sup> Oct, 2012  
(iv) Specialization (If any): Forensic science  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC- non-net  
(vi) Duration of Fellowship/Scholarship: 5 years  
(vii) Field Area (If any): Biometrics

- (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
- (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_
- (x) Number of paper published for the last five years  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 3 International: \_\_\_\_\_
24. (i) Name: Neha Tiwari  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 6/09/2012  
(iv) Specialization (If any): Developmental Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other). Non-net  
(vi) Duration of Fellowship/Scholarship: 1 and 6 months  
(vii) Field Area (If any): Social anthropology  
(viii) Name of the journal only with year where your paper has been published for the last four years ~~only~~: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
25. (i) Name: Himanshu Gautam  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 6/9/2012  
(iv) Specialization (If any): Women studies, Medical Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): Non-net  
(vi) Duration of Fellowship/Scholarship: 1 year and 6 months  
(vii) Field Area (If any): Social Anthropology  
(viii) Name of the journal only with year where your paper has been published for the last four years ~~only~~: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: Got 2<sup>nd</sup> no rank in University, in B.Sc (2) year and in B.Sc (3) year  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
26. (i) Name: Kitoholi v Zhimo  
(ii) Sex: female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): 05.09.2012

- (iv) Specialization (If any): Gender, Environment, Medical Anthropology
  - (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF
  - (vi) Duration of Fellowship/Scholarship: 2 years
  - (vii) Field Area (If any): Social Anthropology
  - (viii) Name of the journal only with year where your paper has been published for the last four years only: European Academic journal, 2014
  - (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_
  - (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
27. (i) Name: Nilisha Vashist
- (ii) Sex: Female
- (iii) Date of M. Phil Registration (M/Year): September 2012
- (iv) Specialization (If any): Medical and psychological Anthropology, Gender Studies
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF
- (vi) Duration of Fellowship/Scholarship: September 2012-2014
- (vii) Field Area (If any): Social- Cultural Anthropology
- (viii) Name of the journal only with year where your paper has been published for the last four years only:  
The eastern anthropologist (2012, 2014)  
Journal of exclusion studies (2013)
- (ix) Any award/ achievements/ Patent you got in the last five years:  
University Gold Medal
- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: \_\_\_\_\_ International: 2
28. (i) Name: Divya Mishra
- (ii) Sex: Female
- (iii) Date of M. Phil /Ph.D. Registration (M/Year): 19/09/2014
- (iv) Specialization (If any): Certificate course in forensic science
- (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-JRF
- (vi) Duration of Fellowship/Scholarship: 5 years
- (vii) Field Area (If any): Anthropology
- (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
- (ix) Any award/ achievements/ Patent you got in the last five years. –  
Academic topper during graduation (1<sup>st</sup> year)

- (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
- (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 2 International: 1
29. (i) Name: Gunjan Arora  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): JUNE 2012  
(iv) Specialization (If any): Social Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): ICMR JRF  
(vi) Duration of Fellowship/Scholarship: 5 Years  
(vii) Field Area (If any): New Delhi  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years:  
Got certificate for attending authors workshop on “Understanding the Books and Journal Article Publishing Process organised by Central Library, University of Delhi and Elsevier ,South Asia on 22<sup>nd</sup> September 2014 at University of Delhi.  
Got certificate for attending a Workshop on Information Literacy and Competency organised by Delhi University Libraray System on 4-5th December 2014  
Got distinction certificate in ICSSR sponsored 10 days Research Methodology Course for Doctoral Students organised by Department of Anthropology, University of Delhi from 17-26 February 2014.  
(x) Number of paper published for the last five years: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years: 20
30. (i) Name: Zinat Ara Ahmed  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year) M.Phil: 06/10/2013  
(iv) Specialization (If any): Physical Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): JRF MANF  
(vi) Duration of Fellowship/Scholarship: 2 Years  
(vii) Field Area (If any): Assam  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: \_\_\_\_\_

31. (i) Name: Naila Ansari  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): Ph.D. (January 2015)  
(iv) Specialization (If any): Bio-cultural Anthropology, Demography  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC - JRF  
(vi) Duration of Fellowship/Scholarship: 2 year  
(vii) Field Area (If any): Uttar Pradesh, Uttarakhand  
(viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: 1
32. (i) Name: Deepali verma  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): 03/2011  
(iv) Specialization (If any): Communicable and non-communicable diseases, physical activity and nutrition, reproductive health  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC-SRF  
(vi) Duration of Fellowship/Scholarship: 3 years 10 months (03/2011-01/2014)  
(vii) Field Area (If any): Delhi  
(viii) Name of the journal only with year where your paper has been published for the last four years only:  
Indian Journal of Applied Research, 2014  
Journal of Anthropology, 2014 & 2012  
Anthropological Review, 2013  
Anthropologist, 2013  
Euras J Anthropol, 2012  
International Journal of Tropical Disease & Health, 2012  
International journal of body composition research, 2012  
International journal of sociology and Anthropology, 2012  
(ix) Any award/ achievements/ Patent you got in the last five years:  
Awarded best paper in National seminar "The Human Mystique: Contemporary Discourses" organized by Department of Anthropology, University of Delhi during 9-10th February, 2012.  
(x) Number of paper published for the last five years:  
National: 1 International: 9  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 12 International: 4

33. (i) Name: Anu Bhawana  
(ii) Sex: Female  
(iii) Date of M. Phil /Ph.D. Registration (M/Year): June, 2010  
(iv) Specialization (If any): Social Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): ICMR- SRF  
(vi) Duration of Fellowship/Scholarship: 4 Years  
(vii) Field Area (If any): Delhi: NCR  
(viii) Name of the journal only with year where your paper has been published for the last four years only:  
International Journal of Multidisciplinary Research, 2013.  
Journal of Humanities and Social Sciences, 2013.  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
Number of paper published for the last five years:  
(x) National: 1 International: 1  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 18 International: 2
34. (i) Name: Supriya Singh  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): June 2012  
(iv) Specialization (If any): Social Anthropology  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC JRF Non-Net  
(vi) Duration of Fellowship/Scholarship: 3 years  
(vii) Field Area (If any): Delhi/NCR  
(viii) Name of the journal only with year where your paper has been published for the last four years only: Solutions (2010)  
(ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_  
(x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: 3  
(xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 11 International: 4
35. (i) Name: Rikimoni Rajkumari  
(ii) Sex: Female  
(iii) Date of Ph.D. Registration (M/Year): September 2013  
(iv) Specialization (If any): Physical Anthropology (Demography and Nutrition)  
(v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC JRF  
(vi) Duration of Fellowship/Scholarship: One year three months (continuing)

- (vii) Field Area (If any): Majuli Island, Jorhat District, Assam, India.
  - (viii) Name of the journal only with year where your paper has been published for the last four years only: \_\_\_\_\_
  - (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_
  - (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 5 International: \_\_\_\_\_
36. (i) Name: Dibyajyoti Das
- (ii) Sex: Male
  - (iii) Date of Ph.D. Registration (M/Year): September 2013
  - (iv) Specialization (If any): Social Anthropology
  - (v) Fellowship/scholarship/or any other grant available to the scholar (give details-Funding Agency, JRF/SRF/RA/PDF/any other): UGC Non Net.
  - (vi) Duration of Fellowship/Scholarship: One year four months (continuing)
  - (vii) Field Area (If any): Tinsukia District, Assam, India.
  - (viii) Name of the journal only with year where your paper has been published for the last four years ~~only~~: \_\_\_\_\_
  - (ix) Any award/ achievements/ Patent you got in the last five years: \_\_\_\_\_
  - (x) Number of paper published for the last five years:  
National: \_\_\_\_\_ International: \_\_\_\_\_
  - (xi) Number of Workshop /Conference/ Seminar/ attended for the last five years:  
National: 4 International: 1

## FACILITIES AVAILABLE IN THE DEPARTMENT

### I. LABORATORIES

The department has a number of laboratories for physical/biological anthropology and social Anthropology.

#### 1. Anthropometry Laboratory

Anthropometry laboratory is concerned with measurements on living and skeletonized humans.

##### A) *Craniometry and Osteometry Laboratory*

Measurements conducted on bones and skulls are respectively part of osteology and craniometry.

##### B) *Somatometry and Somatoscopy Laboratory*

Somatometry and Somatoscopy is concerned with body measurements and morphological observations.

#### 2. The Human and Development Lab focuses on the biological aspects of growth and development and its relationship with the environment. Body composition and other aspects of health related to them are thrust areas of this branch.

#### 3. For the past many years the **Physiological Anthropology Laboratory, Obesity Research Unit, Kinanthropometry and Ergonomics**, have been an integral part of Department of Anthropology. This Laboratory has made momentous contributions to understanding various aspects of human health like nutritional status, assessing obesity levels both general and regional, sports anthropology, metabolic syndrome and gerontology. Research on Operational designing and ergonomics has also been undertaken by research scholars.

Physiological Anthropology Laboratory is dedicated to teaching and research. The mission is to provide students with hands-on training in the practical skills of Physiological Anthropology specially in assessing cardiovascular, haematological and respiratory functions. The Physiological Anthropology Laboratory has been trying to integrate the physiological aspect of human health by using physiological, anthropometry and molecular techniques.

This laboratory has produced many scholars including 8 Post doc (6 completed, 2 currently under guidance), 24 doctorate (18 awarded, 5 pursuing), 7 M.Phil (5 awarded, 2 pursuing).

Further, the research focuses on wide range of areas highlighting the applicability of knowledge to the relevant health problems due to lifestyle risk factors among urban, rural and tribal population. This laboratory is engaged in a wide range of research areas including human adaptation, growth and development, physical activity, communicable and non-communicable disease, reproductive and child health, epidemiology and public health.

The laboratory is very well equipped with instruments required for physiological and molecular research activities. This lab has Power Lab, BIOPAC, TLC, Treadmill, Segmental body composition analyser, thermal cyler etc which are specialised techniques for measurement of lung functions, cardio vascular, physical fitness and body composition. Over the past few years it has become an epitome of research centre, in human physiological research. It also has begun to use molecular and epidemiological methods in order to study lifestyle health complications from a population specific perspective. It will help to make a stronger picture of role of genetics and environment in public health.

In the past, this lab has produced many efficacious and bright research scholars who are currently working as a faculty in different universities. The researchers from this lab are also placed in various Research organisations and non-government organisations such as MAMTA Health Institute for Mother and Child, Sardar Patel Institute of Economic and Social Research, Ahmedabad, Vimarsh etc.

Many scholars during their research availed fellowships to explore foreign universities including Common Wealth Fellowship for Post-doctoral work, Glasgow University, Doctoral research work from the Institute of Applied Health Sciences, University of Aberdeen, and advanced studies in Public health from Kings College London.

### **Research Scholars and topics**

<b>Research Scholars</b>	<b>Designations</b>	<b>Topics</b>
Ms. Prerna Bhasin	MPH candidate in Kings College London	Reproductive determinants of child growth rate: Rural- Urban dynamics (Thesis Submitted)
Ms. Deepali Verma	UGC- Senior Research Fellow	Identifying children at risk of type 2 diabetes
Ms. Heemanshu Aurora	DST Inspire- Senior Research Fellow	Tuberculosis diabetes and central obesity: An anthropological perspective
Ms. Imkongtenla Pongen	UGC- Junior Research Fellow	Non communicable disease and life style risk factors among Ao Nagas of Nagaland
Ms. Shumayla	UGC- Junior Research Fellow	Reproductive health profile of Muslim women in North India

### Research Associates

Dr. Mary Grace, DST Women scientist: Effects of Tuberculosis treatment on haemoglobin levels and nutritional status among patients in Delhi: A follow up study

Dr. Suman Dua, UGC PDF Fellow: Prevalence of Obesity among 6-9 years old children from affluent families of Delhi to investigate associated health risk factors

### On Going Projects

S. No	Topic	Year	Funding agency	Amount	Status	Principal Investigator
1.	Consanguinity, non communicable disease and reproductive health of women. R&D University of Delhi	2014-2015	R& D, University of Delhi	Rs. 3,00,000/-	On going	Prof. Satwanti Kapoor
2.	Association of genetic variants with symptoms of metabolic syndrome among urban and rural population groups	2014-2017	DU DST Purse Grant Phase II	Rs. 3100000/-	On going	Prof. Satwanti Kapoor (PI) and Dr. Meenal Dhall (Co PI)
3.	Impact of stress on life style disease among adult population of Delhi	2014-15	R& D, University of Delhi	Rs. 3,00,000/-	On going	Dr. Meenal Dhall
4.	Health related quality of life and cardio metabolic markers among adults of North India	2014-15	UGC Start up grant	Rs. 6,00,000/-	On going	Dr. Meenal Dhall
5.	Quality of life with metabolic syndrome and its associated genetic markers among North Indian adults	2015-2018	DST Start up grant for Young Scientists	Recommended		Dr. Meenal Dhall

### 4. Forensic Anthropology and Serology Laboratory

Over the last few decades the subject of Anthropology has evolved from a mere descriptive phase to analytical phase and further to interpretative phase. In this process many disciplines have modified their approaches in order to cope up with

newer methodology. An applied discipline of Physical Anthropology is Forensic Anthropology. Forensic Anthropology is concerned with the application of anthropological knowledge and techniques in legal context. When mutilated and amputated limbs or parts of the body are found in natural hazards or in crime scene, personal identification becomes an essential issue and hence identification of commingled mutilated remains is a challenge to forensic experts. A forensic examiner has continuously used anthropometry in forensic investigation to determine biological profile of deceased such as age, sex, ethnicity, stature. And according to them, Stature Estimation is one of the important parameter to identify individuals and is most widely used in forensic examination along with age, sex and ethnicity when dismembered remains are involved. And thus, there is a need of studies on estimation of stature from different parameters of body to establish partial identity of individuals which can help in narrowing down the pool of possible victim matches.

Various studies pertaining to such concerns are conducted in forensic anthropology lab. Forensic anthropology lab basically encourages studies which lead to personal identification of individuals or criminals as it is the main stay of forensic investigation. Personal identification can be done through sex, age, stature, race, fingerprints, tattoos, scars, Handwritings, deformities, external peculiarities – moles, warts. Now a days Biometric technologies are becoming the foundation of an extensive array of highly secure identification and personal verification solutions. As the level of security breaches and transaction fraud increases, the need for highly secure identification and personal verification technologies is becoming apparent. It carries significant importance for national or international security. Biometrics is being used in many locations to enhance the security and convenience of the society. Many companies are also implementing biometric technologies to secure areas, maintain time records, and enhance user convenience.

Extensive array of studies conducted in forensic anthropology. Some of the studies are going on determination of ethnicity from hand prints, nose length, ear biometrics, etc.

Handwriting identification and recognition research unit (HIRRU) in Forensic Anthropology Laboratory of the Department of Anthropology is continuously working in the field of document examination. Growing out of research on forensic document examination, handwriting identification and handwriting variation, this research unit is also emerging with recent advancements such as handwriting pattern recognition.

Handwriting has been proven to be a very useful tool for personal identification and confirmation. A handwritten document reveals an enormous wealth of

information like age, gender, education level, mood and handedness. Writer identification based on handwriting is a revolutionary application of crime suspect detection in the field of forensic science. It works on the first foremost principle of variability in handwriting. The presences of unique and individual characteristics in the handwriting of individuals make the writer identification possible. Each person's handwriting has some unique features which can be used for personal identification. There are many discriminating elements in writing that have potential value in writing identification like Arrangement, Margin, Slant or Slope, Spacing, Letter Formations, Embellishments, Connections, Commencements and Terminations etc.

Handwriting identification and recognition research unit is also working on ethnicity identification from handwriting patterns. A particular type of individuals associated with specific ethnicity share almost alike neuromuscular functions because of their similar physical and mental traits which are the product of common heredity and environmental set-up. Therefore a certain degree of commonness exists in the handwriting features of the people of same ethnic group. These similarities in handwriting features differ from ethnicity to ethnicity.

In recent years a new area of potential document examination has developed around computer. HIRRU is also employing different algorithms and image processing software for analysing the content of document and recognizing handwriting patterns in more attractive way. These systems provide a scientific basis, formalize human expert-based approaches and validate conventional methodology of document examination.

The Laboratory also deals with identification of different blood groups and other genetical markers. The Lab also provide services to the university employees and students to identify their blood groups.

**5. The Biochemical and Molecular Anthropology Laboratory** of the department has made significant contributions in the areas of genome diversity and disease association studies. Concerning genome diversity studies, the laboratory has made immense contribution in understanding the peopling of India by studying various autosomal and mitochondrial markers. The Biochemical and Molecular anthropology laboratory also focuses in dissecting the various etiological factors pertaining to various complex disorders.

#### **6. Dermatoglyphic Laboratory**

This laboratory is concerned with the identification and classification of dermal patterns, the subject which is technically called dermatoglyphics. Its various branches are those dealing with: Finger, palm and sole prints and their study.

### **Forensic Dermatoglyphics:**

The forensic dermatoglyphics laboratory is dedicated to explore and study the various untapped fingerprint characteristics and its application in forensic investigations. The group also focuses on the population variability with regard to the dermatoglyphics. Novel as well as standard software's have been developed for such studies. The group is further working on dermatoglyphic patterns and measurements for ethnicity variability and other anthropo-forensic investigations. Apart from dermatoglyphics, the chemical development of fingerprints has been undertaken using novel small particle reagent techniques. Fingerprints from the surfaces of food items such as fruits have been successfully attempted using SPR. Fingerprints exposed to extreme conditions namely explosion, arson, fired cartridge cases, soil burial, snow burial and immersion in drainage water have been successfully done. In future ventures, it is aimed to study the fingerprint development on oily surfaces and study of important fingerprint features such as PII, AFRC and TRC at national and international level with respect to sex identification and population variability.

### **7. Lab of Neuroanthropology and Cognitive science**

Neuroanthropology explores how new findings in the brain sciences help us understand the interactive effects of culture and biology on human development and behavior. It has been regarded as being dependent on and cultural neurosciences has been argued that it has the potential to make a number of distinctive contributions. Studies of culturally based phenomenon within neuroscientific frameworks represent one of the most dynamic tendencies in contemporary cognitive sciences. They have provided the foundations of social neuroscience which comprise studies on brain, correlates on social condition, abilities and disabilities and have contributed to the consolidation of evolutionary science as a multi-disciplinary epistemological field.

It is to be mentioned here that there has been no study reported so far on the patterns of neurodynamics among ethnic groups at global level. Under the lab of Neuroanthropology, two studies in Indian context, have been carried on Bania of Delhi, and the study concluded that thinking pattern is remained mostly same till the age of 31 years among both the genders. This study also documented that there is little differences between men's and women's feelings and expressive behavior and gender linked cultural beliefs about emotion and mostly neutral emotions till middle age.

Another research study is presently been carried out on Neuroanthropological dimension and correlation with the environment and culture using psychological variables like thinking power, dreams, emotional intelligence, creativity, decision making, memory test, social anxiety, cognition test. Neurodevelopmental disabilities (NDDs) study has been initiated in various ethnic groups of India.

## **8. Laboratory of Fashion Anthropology**

Fashion anthropology is a new emerging and formatting field that focuses on how fashion translates culture values into tangible experiences. It combines the deep understanding of people and culture to signify information about the group identity, religious identity values, economic aspect, social setup and norms of the particular society. Under the lab of Fashion anthropology; researchers presently working on Indian context to understand the concept of fashion and new trends among young generation, who are being fashion conscious, struggle between the values and desire for fashion; it suggests that now-a-days people of all age are considering the modest dress as their prime choice.

## **9. Visual Anthropology Laboratory**

- Professor S M Patnaik
- Dr Avitoli Zhimo

A Visual Anthropology Laboratory has been established to capture the ethnographic nuances around important social service issues concerning everyday life of local communities. The laboratory aspires to become the epicenter of documentation projection and advocacy of anthropological insight at a national platform. Arguing that visual representation is one shade closer to reality in comparison to the conventional ethnography, the presence of Visual Laboratory helps in recording and analyzing history in a visual perspective as well as documenting visual imageries of present day life. The visual medium is becoming an important genre for unfolding policy initiatives and programmes by development planners and administrators. Visual text and visual archives provide the necessary disciplinary in this direction for policy planning and governance.

## **10. Development Impact Laboratory**

- Professor S M patnaik
- Dr Avitoli zhima

The Development Impact Laboratory (DIL) is an innovative research forum to investigate the impact of development projects. Most of the development projects today are collaborative ventures between state, non-governmental organizations (NGOs) and industry partners focusing upon modern use of science and technology. The Lab relies on the social science perspectives in facilitating the role of science and technology in prioritizing development as their research agenda.

The Lab is working towards the application of anthropological insight for meeting the challenges of development needs in the global south. The problems of public health and illness, sanitation and hygiene, drinking water and nutrition, maternal

and child care, poverty and employment are topics that required sustained attentions of ethnographers.

The Lab interested in taking up project for short term and long term assessment and evaluation of development projects. The Post Graduate students are being encouraged to engage in internship work related to developmental issues. The Lab also looks forward to organize training programs for development specialists, administrators and policy makers.

### **11. Tourism and Culture Laboratory**

With growing importance of tourism in the era of globalization, anthropological interest in the phenomena has not only remained theoretically informed but also extended to the shaping of tourism policy in different Indian states attracting international tourist .The laboratory is designed to create anthropologically informed tourism products which are not only culturally sensitive but also promote income generation among local communities. The students come up with different models of tourism depending on the area in question such as culture or ethnic tourism, eco-tourism, adventure tourism, heritage or archaeological tourism and rural or village tourism. Research scholars work on highly sophisticated digitized techniques to recreate touristic spaces in a laboratory situation where experimental tourism gets connected to knowledge tourism. The laboratory proposes to carry out cutting edge research linking the ideas of aura and authenticity in creative industry to economics and aesthetics. Consumption of culture for tourism industry, designing the local museums, developing culture of hospitality among local communities by ensuring their participation in the processes are some of the areas on which the students are reflecting on.

### **12. Prehistoric Anthropology**

Prehistoric Anthropology is a field of research that encompasses all of the pre-urban societies of the world, which by definition have no written records to provide direct accounts by observers and participants. It therefore has a distinctive set of procedures for analyzing material remains in order to reconstruct their ecological settings, materials procurement and subsistence practices, everyday life, social organizations, and patterning of symbolic codes in such extinct societies. One of largest assemblage of the stone tools lies with the department.

## **II. COMPUTER AND VISUAL FACILITIES**

Computer facilities are available in the department (apart from the central computer facilities of the University) to handle enormous data that is generated during anthropological investigations. Adequate audio-visual aids are available for conducting field work and for anthropological teaching.

### **III. MUSEUM**

Museum is an inalienable part of the department of the anthropology. It is essential to teaching of almost all branches of anthropology. The museum at the Department of Anthropology, Delhi University, is one of the best anthropology museums in the country. It has the finest collections of artifacts and specimens, and has been greatly enriched because of the patronage of the late Prime Minister, Pandit Jawaharlal Nehru, who donated a number of objects to it.

It consists of a large number of material cultural objects associated with different economic and social types, such as hunting and food-gathering, fishing, horticulture, animal-breeding, farming and agriculture. Musical instruments from different societies are also kept in the Museum. So are the models of different types of habitation from Indian tribes. Dresses and ornaments, and weapons, constitute a separate section in the Museum. The paper on cultural ecology in B.Sc. (Hons.) final year is taught with special reference to the ethnographic Museum.

For the teaching of Prehistoric archaeology, the museum has a rich collection of stone and bone implements. This collection is from different geological timescales, beginning from the Paleolithic to the Bronze Age. Each year there is an addition to this collection, because the students of B.Sc. (Hons.) second year go for their field study tour to an archaeological site from where they collect tools which are eventually deposited in the Museum.

The museum also had a handsome collection of the casts of fossil man. Stuffed great apes are also kept, so are the bones of the primates. All these are used for physical anthropological work.

### **III. LIBRARY**

The department has a well-equipped library covering a wide variety of anthropology books. Rare anthropological monographs and books are special features of the library.

## SIX MEMORIAL AWARDS

Department of Anthropology, University of Delhi and organizing secretary of the seminar instituted six memorial awards in the name of the teachers who served the department from 1947-2013 which are as follows:

### 1. 1<sup>st</sup>Prof. P.C. Biswas Memorial Best paper award 2014

Prof. Prafulla Chandra Biswas, is one of the prominent names among the founders of anthropology. He studied Anthropology at Calcutta University and was awarded a prestigious Von Humboldt Fellowship to conduct research in Germany. He worked under the celebrated Professor Eugen Fischer. He started his early career at Calcutta University, Anthropology Department for nearly ten years. In 1947 he came to the University of Delhi and was given the responsibility of opening the Anthropology Department. Since then for 21 long years Prof. Biswas never paused in his untiring effort to establish the subject and its importance in the University and also in the various Government and Non-Government establishment. He was elected the sectional president of the Anthropology & Archaeology session of Indian Science Congress in 1961. Prof. Biswas represented India in a number of International Congress. His enthusiasm and commitment for the subject resulted in producing a large number of internationally well-known students from the Department of Anthropology, University of Delhi. Many departments of anthropology in North Indian Universities could be opened because of his encouragement and guidance.

### 2. 1<sup>st</sup>Prof. P.K. Dutta Memorial Best Paper Award-2014

Prof. P. K. Dutta was a prominent name among the founding generation of Physical Anthropologist of India. After obtaining M.Sc. degree in anthropology from the University of Delhi in 1956, he went to Germany to pursue advanced research on cellular biology as a recipient of prestigious Humboldt Fellowship. He started his academic career from Sagar University and then returned to Delhi to teach in Department of Anthropology, University of Delhi. His research focused on Planter dermatoglyphics and he developed sophisticated method for taking and analyzing sole prints. He was instrumental in setting up of various physical anthropology laboratories when Prof. Fogal visited the department. His pioneering work in cellular biology has given impetus to establishment of human cytogenetics and molecular anthropology. He was a popular teacher and a thorough researcher. He was one of the best Heads, Department ever had. When he returned to India after successfully completing a visiting assignment abroad to take up the responsibility of the office of the Head, he suffered a massive heart attack in the airport and passed away leaving a rich academic tradition in cellular anthropology.

### **3. 1<sup>st</sup>Dr. A. Sharma Memorial Best Paper Award-2014**

Dr. A. Sharma did his graduation in Physics and M.Sc. in Anthropology. He served the Anthropological Survey of India knew German and had translated the original sources where anthropometric techniques were discussed. He joined the Department as a Lecturer on 26 July 1955. On 20 July 1968, became a Reader. In January 1974, he incorporated the visual method in his teaching. Prof. Sharma did not confine him to the biological aspects as one would have imagined, since he was a physical anthropologist. In his teaching, he incorporated the element of time, in the form of evolution in biology, and history in the study of culture. He was scholarly in everything he did; whether it was a paper on Kachin kin terms or on hand prints. Dr. Sharma was innovative in the research topics he sometimes advised his students to pursue. For instance, he advised one of his female doctoral students to study the growth of mammary glands among women. On 25 September 1978, his mortal remains were consigned to flames.

### **4. 1<sup>st</sup>Prof. J.S. Bhandari Memorial Best Paper Award-2014**

Prof. Jagmohan Singh Bhandari served as a teacher in the Department of Anthropology, University of Delhi, for nearly four decades. After completing masters' degree in anthropology from University of Lucknow under the stewardship of Prof. D. N. Majumdar he joined the Department of Anthropology, University of Delhi in the year 1963. He was highly dedicated towards fieldwork and conducted several fieldworks with students for many years. He had done extensive work in Garhwal and his mastery of the ethnography of this region was well known. He had personal research interest for tribal group of North east India and he conducted studies of Mishing tribe of Assam. His work on the kinship system of the Mishing and their society was later published in the form of a book. He was editor of two of the most well-known journals in social anthropology i.e. *The Eastern Anthropologist*, published by the Ethnographic and Folk Society, Lucknow and *The Indian Anthropologist*, the journal of the Indian Anthropological Association, Delhi. He served as the President of the Indian Anthropological Association apart from being the member of many distinguished bodies and panels. At the time of his sudden demise in June 2001, he has left behind a rich academic tradition in terms of significant publications on Indian tribes especially from the north east of India and a group of dedicated doctoral students whom he shaped to face the challenges of Indian anthropology.

### **5. 1<sup>st</sup>Prof. R.S. Mann Memorial Best Paper Award-2014**

Prof. Rann Singh Mann was born on 15<sup>th</sup> November. 1936 in a village in Delhi. All his elementary education was in Delhi. At the under graduate level he chose to study in the physical science stream. All through this and also for a while at post graduate level, he played volley ball for the University of Delhi. Finally he became

the captain of the University team and represented Delhi University at several inter University competitions. Being sensitized in village life, Rann Singh Mann found it easy to shift to social anthropology for M.Sc., which he completed in 1960. Almost within years of passing M.Sc., Prof. Mann was appointed as an Instructor in the Tribal Orientation and study centre in Udaipur. Here he came in regular contact with tribal group of Rajasthan and Gujarat. His romance with his roots, however, brought him back to his village in order to organize, plan and execute field work for his Ph.D. thesis. In 1973 he was awarded Ph.D on the topic 'Social Structure and Social change in a Delhi Village', by University of Delhi. Very soon he was selected for the post of superintending anthropologist at the Anthropological Survey of India (ASI). This again brought him back to Udaipur where ASI had a regional station. Thus, having seen the Bhil, Bhilala, Mina, Garasia and Saharia tribes through time gave him the necessary insights into issues of social change leading to the publication of many meaningful papers on the subject. In the subsequent years, social change became one of his favourite perspective for studying tribes and multi caste villages. He got posted in various regional centers of ASI and at almost each of these centers he brought out book volumes of great value. Prof. Mann has published seven books. Most of his books till now are taken as the only reliable accounts of the contemporary status of tribes in remote areas. Of these the Ladakhi Nature-Man-Spirit-Complex and the Bay Islanders are worth mentioning. His research papers deal with such diverse topics as tribal polyandry, awareness and attitude of minas and social barriers to nutrition among Indian tribes. His complete involvement in and passion for the subject soon saw him elevated to the position of Director at ASI. This was at the time when the survey had undertaken a mammoth Project of bringing out a compendium of people of India in several volumes. Data were being collected by scholars from all corners of India and the head office had the almost impossible task of compiling them in a meaningful pattern. It was shortly after this that he took a premature retirement from ASI and came to Delhi and joined his Alma Mater the Department of Anthropology, Delhi University as a Professor. His rich experience in field and his continuous involvement in publishing in the past made him a very successful teacher. He took up to teaching many challenging paper for the specializing batches. He also successfully guided a number of Ph.D. thesis during this short period of service in the Department of Anthropology at Delhi University before he retired in 2002. He remained academically active and addressed research seminars and also helped ASI in advisory capacity until the year of his death. On 1<sup>st</sup> September 2013, he expired after a brief illness. Prof. Mann was a fun loving person who otherwise very serious in his work. He was a voracious reader and an excellent speaker. With his demise, social anthropology in India has lost a very important scholar of all India experience.

## 6. 1<sup>st</sup>Dr. V.C. Channa Memorial Best Paper Award-2014

Dr. Vardesh Chander Channa an anthropologist with ever new ideas and indomitable spirit, a great teacher and a very fine, sensitive and refined human being. While many have been his students at the post-graduate level, there have been few at the research level which provides an opportunity to interact with and learn closely from the teacher. Dr. Channa belonged to an affluence family of Delhi, completed schooling from Mayo College, Ajmer and graduation from St Stephens College, University of Delhi. He joined the Department of Anthropology as post-graduate student-specialized in social anthropology and registered for Ph.D. under the supervision of Professor P.C. Biswas (the founder of this Department). He did not venture out of the discipline and the Department there after. Despite an exceptionally long and arduous struggle of eight years which entailed a few disappointments and situations of humiliation he secured a permanent teaching position in the Department. Expectedly, he began working on a book-length manuscript, 'Howto Change People'. His insights came both from his rich anthropological reading and his own brush with life which was rather rough for a long period of time. Channa, however, did not give up ever and made the most of his tryst with life. That was essentially him! Anyway, the manuscript on how to change people never went to press for reasons that I do not know but what I sense is that he was far to passionate about the theme and kept revising and adding on to it off and on. It remained an unfinished agenda. Channa is better known, among others, for his three seminal writings- The first is the book: Caste: Identity and Continuity published by B R Publishing Corporation in 1979. This was a revised version of his Ph.D. dissertation titled, 'Caste Identity and Distinctiveness in a Metropolis with special reference to Marriage and Dowry: The Case of Aggarwals in the walled city of Delhi'. He carried out intensive fieldwork in old Delhi between April 1971 and 1973 in the course of which he interviewed 100 individuals, collected life histories and narratives with an urge to understand how Aggrawals construe their collective identity and how individuals negotiate their personal identities in the wide fabric of the community on the one hand and society at large on the other. The second seminar writing is the book, Hinduism: A Cultural Profile of the Gods, Goddesses, Rituals, Romance and fables in today's Hinduism published in 1984 by National Publishing House. The third seminar writing is paper titled, ' Law, Custom, and Crime against Women: The Problem of Dowry Death in India'. This paper was born out of a collaborative study between V. C. Channa and John Van Willigen- Professor of Anthropology and Behavioural Science, Kentucky University who visited the Department as a Fulbright fellow in 1987. In fact, he re-visited his data on the Aggarwals from the perspective of Psychological Anthropology. The result was a paper titled, 'Conflict and Emotions: The case of a Trading Caste of Delhi' published in the *Indian Anthropologist* in 1999 in its volume 29. He wrote another paper again for the

*Indian Anthropologist* which was published 1998, volume 28 titled, 'Twenty years of change in Ideal Individual: The Case of Hindi speaking Aggarwals of Delhi'. He published another paper with roots in Psychological Anthropology titled, 'Contexts of a Myth: A Comparison of Structural and psychoanalytic Analysis' jointly with Yun-Hee Choi in the *Indian Anthropologist*, volume 36 in 2006. This paper analyzed a Shiva myth from the east Godavari region by relating certain world-views, emic categories of thought, and symbols of worship with the working of the unconscious mind.

## PROGRAMME SCHEDULE

Friday, 27<sup>th</sup> February 2015

- Registration:** 8:30 a.m. – 9:20 a.m.
- Inauguration:** 9:30 a.m. – 10:30 a.m.
- Welcome Address :** Prof. A. K. Kapoor  
Deputy Coordinator and Organizing Secretary
- Chairperson:** Prof. Vinay Kumar Srivastava  
Head and Coordinator, UGC-SAP III, DSA II
- Guests of Honour:** 1. Prof. C. G. Hussain Khan,  
Dharwad University, Karnataka.  
2. Prof. S. Jibon Kumar Singh  
Manipur University, Imphal.
- Chief Guest:** Prof. Deepak Behera  
Vice Chancellor, Behrampur University, Odisha.
- Vote of Thanks:** Dr. R. P. Mitra

**Tea: 10:30 a.m. – 10:45 a.m.**

**(Sponsored By Indian Anthropological Association, Delhi)**

### ACADEMIC SESSION I (Seminar Hall)

**Time: 10:45 a.m. – 1:30 p.m.**

**Session Theme:** Current Issues in Environment, Climate Change and Public Health

**Chair:** Prof. A. K. Sinha, Chandigarh

**Rapporteur:** Ms. Chetali Tandon

**Keynote Lectures (15 minutes each):**

1. Prof. M. P. Sachdeva, Delhi
2. Dr. Subir Biswas, Kolkata

### 1<sup>st</sup> Prof. P.C. Biswas Memorial Best Paper Award-2014 Presentations

Abstract No.	Topic	Name of the Author
1.	Conventional and Computational Feature in Handwriting Examination	Monika Saini
2.	Understanding Disease-Culture-Society Complex: An Anthropological Model of Leprosy in Indian Context	Subhendu Kumar Acharya

**Note: After the Memorial Best Paper Award Presentations, each Session will be divided into two parallel sessions A and B for presentations.**

**Session I A (Seminar Hall)****Chair:** Prof. C. G. Hussain Khan, Dharwad**Rapporteur:** Ms. Shumayla**Presentations**

3.	Pristine Stream, Incessant stream: Religious Environmental Movement to Save River Ganga in India	Nutan Maurya
4.	Environmental changes and its impact on health: A study on the Jaunsaris of Uttarakhand	Prakash Tripathi
5	Differential Status of Prevalence and Risks of Cardiovascular Diseases among The Tribes of Odisha And Gujarat	Subhendu K Acharya and Gautam K Kshatriya
6.	Recent Findings in Population Genetics and the Aryan Problems	Ritu Chowdhary
7	Mapping Grounded Actions and Climate Change: A case study of Tea Growers in Assam	Sadaf Javed
8	Migration as a Cultural Cross Road of Identity, Behaviour and Lifestyle: An Anthropological study of the Migrant Wage Laborers in Delhi.	Anu Bhawana
9	Nutritional Status among Two Rural Caste Populations of Assam	Jyoti Hazarika and S. Sengupta

**Session I B (Room No. 34)****Chair:** Prof. Gautam K. Kshatriya, Delhi**Rapporteur:** Ms. Shalini Singh**Presentations**

10	Association of Lung Functions with Various Anthropometric Measurements among Macchi Adult Males and Females of Daman	Anjali Kumari
11	Health and Nutritional status of Tribal Women in Odisha	Sabita Acharya and Abhijeeta Das
12	Levels of Surface Water Pollution Caused By Industries in Punjab	Tejinder Kaur , K.D. Sharma and A. K. Sinha
13	Man-Nature-Spirit Complex: A Case Study of the Jagannath Temples	Rukshana Zaman
14.	Anthropological Insights into National Mental Health policy: Arguing for the case of Religious Healing.	Nilisha Vashist
15.	Iodine Status and prevalence of Goiter in School going Children of rural Harayana: A pilot study from Panchkula district.	Neeru, R. K. Pathak & J. S. Sehrawat
16.	Neolithic Culture of Middle Ganga Plain: A Recent Perspective on the Origins of Pottery and Agriculture.	Kulbhushan Mishra

**Lunch: 1:30 p.m. – 2:00 p.m.**

**ACADEMIC SESSION II (Seminar Hall)**

**Time: 2:00 p.m. – 4:00 p.m.**

**Session Theme:** Bio-Social Development & Public Policies for Health: An Anthropological Perspective

**Chair:** Prof. Barun Mukhopadhyay, Kolkata

**Rapporteur:** Ms. Chitra Kadam

**Keynote Lectures (15 minutes each):**

1. Prof. Abhik Ghosh, Chandigarh
2. Dr. Rashmi Sinha, Delhi

**1<sup>st</sup> Prof. P.K. Dutta Memorial Best Paper Award-2014 Presentations**

17.	Forensic Variability of Identification Marks among Indian Population	Vijeta Choudhary
18.	Neuroanthropological Role in Human Development and Behavior	Indelah Khan
19.	Factors affecting fertility among the Lamkang Tribe of Chandel District, Manipur	Gangaina Kameih

**Session II A (Seminar Hall)**

**Chair:** Prof. S. R. Mondal, Kolkata

**Rapporteur:** Ms. Sangeeta Dey

**Presentations**

20.	Disability and Public Policies: A comparative case study of India and South Korea.	Ansar Alam
21.	Zoo-therapy, Spiritual Healing and Medical Pluralism: A Sumi Naga Perspective	Kitoholi v Zhimo
22.	Traditional Knowledge and Curative measures: A Case Study in a village in Tinsukia District of Assam	Ranjumoni Hazarika
23.	Floods and Its Impacts on Human Habitation: A Case Study in Dhakuakhana Sub-Division of Lakhimpur District, Assam	Chusmita Konwar
24.	Ethnographies of Mining: Indigenous People, Extractive Resources and Global Energy Future	Rajanikant Pandey
25.	Being special to special ones: A case study on disability and adoption.	Mitashree Srivastava
26.	Man Elephant Conflicts in Jharkhand	Seema Mamta Minz

**Session II B (Room No. 34)**

**Chair:** Prof. Kanchan Roy

**Rapporteur:** Ms. Indelah Khan

**Presentations**

27.	Telemedicine and Health Information Technologies: Its Potentials and Impact in Health Delivery System in Indian Context	Avanee Khatri and A. K. Sinha
28.	A Comparative Study of Challenges Faced by Mall Owners in Tri-city Chandigarh	Ramandeep Sodhi, A.K. Sinha and Rita Kant
29.	Ecologically Sensitive Areas: a Green nod dying-off in India; its impact on Biosphere, Human Livelihood and strategies to Uphold it.	Rashmi Srivastava
30.	From <i>Aranya</i> to <i>Grama</i> : Some Aspects of Villages Relocated from Tiger Reserves	Ujjal Kumar Sarma
31.	Child Labourers and Education.	Dikshita Rathore
32.	Ageing in Institutional and Non-institutional settings: Anthropological Insights.	Renu Tyagi

**Tea: 4:00 p.m. – 4:15 p.m.**

**ACADEMIC SESSION III (Seminar Hall)**

**Time: 4:15 p.m. – 6:30 p.m.**

**Session Theme:** Health, Tribe and Future Planning

**Chair:** Prof. Subhadra Channa, Delhi

**Rapporteur:** Ms. Tabitha

**Keynote Lectures (15 minutes each):**

1. Dr. Avitoli Zhimo, Delhi
2. Dr. Priyanka Khurana, Sagar

**1<sup>st</sup> Dr. A. Sharma Memorial Best Paper Award-2014 Presentations**

33.	Respiratory Illness and Occupational Exposure: An Anthro-Medical Analysis	Ajeet Jaiswal
34.	A study of differential fertility among Santals of Jharkhand	Shalini Kumari
35.	A study of menstrual attitude among Muslim women of Delhi, India	Shumayla

**Session III A (Seminar Hall)****Chair:** Prof. S. Jibon Kumar Singh, Imphal**Rapporteur:** Ms. Gangaina**Presentations**

36.	Traditional Medicinal Knowledge and Faith Healing Practices for Health Care: A Study Among the Meetei Healers of Thoubal District, Manipur	Asem Tomba Meetei
37.	Politics of Constitutional Identity in North-East India'	Lamthang Haokip
38.	A Qualitative Study on Health Seeking Behavior among the Lepcha Tribes of Dzongu, North Sikkim	Tshering Lepcha
39.	Indigenous knowledge and health care practices among the Mishings of Majuli, Assam.	Rikmoni Rajkumari
40.	Development Programmes and Rural Tribal Women in Manipur	Mary Panmei
41.	Ethnography of Entomophagy in North Eastern India: A study at Kakching, Manipur, India	Mayanglambam Ojit Kumar Singh

**Session III B (Room No. 34)****Chair:** Prof. P. C. Joshi, Delhi**Rapporteur:** Ms. Ankita Mehta**Presentations**

42.	Current issues in public health of migrated tribal women in urban Tamilnadu, India	Santhi, A, Malik, S.L
43.	Health Care Practices of the Mother and Child Among a Scheduled Tribe of Assam, India, in a Rural Context	Arifur Zaman & Nabanita Dey
44.	The Development of Formal Education System Among KonyakNagas of Longwa Village	Darbita Dutta
45.	Dimension of Sunni Muslim Women's Autonomy and Their Influence on the Quality of Maternal Health in Allahabad, Uttar Pradesh	Naila Ansari
46.	Menarchael Age And Its Association With The Physiological Changes Among Adult Bhil Females Of Udaipur ,Rajasthan.	Kshetrimayum Surmala Devi
47.	Vulnerabilities, Encounters and Emerging Identities of Bharias, A PTG Community of Madhya Pradesh.	R.P Mitra
48.	Women work & Changing in Technology of Fishing Communities.	Kiran Singh

**Tea: 6:30 p.m. -6:45 p.m.****Cultural Programme 6:45-7:45 p.m. (Room No. 34)****Dinner: 8:00 p.m.-9:00 p.m. (Departmental Lawn)**

### ACADEMIC SESSION IV (Seminar Hall)

Saturday, 28<sup>th</sup> February 2015

Time: 9:30a.m. – 11:30 a.m.

**Session Theme:** Women and Health: Social and Biological Dimensions

**Chair:** Prof. A. N. Sharma, Sagar

**Rapporteur:** Ms. Heemanshu Aurora

**Keynote Lectures (15 minutes each):**

1. Prof. S. R. Mondal, Kolkata
2. Prof. Barun Mukhopadyay, Kolkata

#### 1<sup>st</sup> Prof. J.S. Bhandari Memorial Best Paper Award-2014 Presentations

49.	Local Metaphors of Sexual Liaison: Exploring of the Dynamics of Communication pertaining to HIV/AIDS	Indrani Mukherjee
50.	Can India by-pass Northeast: The Imperative Obligations	Singlai Thouman
51.	A Demographic study on the population structure and socio-economic status of Bhils population of Udaipur District, Rajasthan	Divya Mishra

#### Session IV A (Seminar Hall)

**Chair:** Dr. Subho Roy, Kolkata

**Rapporteur:** Ms. Kiran Singh

#### Presentations

52.	Factor Associated with Maternal Health Practices and Caste Level Barriers to Adequate Use of Reproductive Health Services in Eastern Uttar Pradesh	Vineet Kumar Verma
53.	Medical Pluralism among the Tharus of Nepal	Bamdev Subedi
54.	Gender, Body And Health Complex- A Study of Body, Social Space and Health Care among The Working Women of Delhi	Gunjan Arora
55.	Child Rearing Practices among the Rabhas of Udaipur Village, District Gopalaram Assam.	Mondira Boruah
56.	Factors affecting fertility among Musahars in Madhubani district, Bihar	RichaPriya and Gautam K. Kshatriya

#### Session IV B (Room No. 34)

**Chair:** Prof. Abhik Ghosh, Chandigarh

**Rapporteur:** Ms. Richa Rohatgi

#### Presentations

57.	Critical Analysis of reproductive health services in India	Ankita Gera
58.	Traditional Knowledge and Cosmology in understanding the dyadic Relationship of Nature and Culture: A study on Kullu valley of Himachal Pradesh.	Sonia Kaushal
59.	A study of bone mineral density during the menopause transition among Rural Yadav women of Kanpur (UP)	Monika Thakur, K. D. Sharma, A.K Sinha
60.	Invisible link between culture and women Reproductive health: A case study of Bhuiyan tribe of odisha.	Mamata Dash
61.	Nutritional Status among School going Boys & Girls aged 5 – 18 years of Sagar, Madhya Pradesh.	Rachna Thakur & Rajesh K. Gautam

Tea: 11:30a.m. – 11:45 a.m.

**ACADEMIC SESSION V (Seminar Hall)**

**Time: 11:45 a.m. – 1:30 p.m.**

**Session Theme:** Sustainable Development and Issues and Challenges in Human Development

**Chair:** Prof. R. K. Pathak, Chandigarh

**Rapporteur:** Ms. Supriya Singh

**Keynote Lectures (15 minutes each):**

3. Prof. Nilika Mehrotra, JNU, Delhi

4. Dr. Subho Roy, Kolkata

**1<sup>st</sup> Prof. R.S. Mann Memorial Best Paper Award-2014 Presentation**

62.	Handwriting Characteristics Assessment for Diagnosis of Developmental Disorders: A Case Control Study of ADHD among North Indian population	Jasmine Kaur Dhall
63.	Novel SPR Compositions for Development of Latent Fingerprints on Wet Non-Porous Surfaces	Richa Rohatgi
64.	Corporate Social Responsibility in the Development Arena, A Reflection on HIV Initiative over a decade	Indrani Mukherjee

**Session V A (Seminar Hall)**

**Chair:** Dr. Subir Biswas, Kolkata

**Rapporteur:** Mr. Rajnikant Pandey

**Presentations**

65.	Political Ecology of Water: A Case of Water Scarcity in Village Chanwara, Rajasthan	Kalyani Sahal
66.	Corporate Social Responsibility and Human Development, The Case of Apollonian Rubber at Delhi Transport Nagar	Indrani Mukherjee
67.	Impact of flood and change in livelihood: a study of the Mising community ofTinsukia district of Assam, India.	Dibyajoti Das
68.	A study of the Built Environment of a resettlement colony in Delhi	Md. Ali Azam & Sana Azmi
69.	On the Sustainability of Traditional Knowledge and its Practices: An Insider's View.	Ngao Thohrii
70.	Global Discourse on Indigenous Knowledge: Drawing Inferences For Tribal Medicine In India	Nemthianngai Guite
71.	Livelihood Change of Two Village Communities of a Flood Prone Area: A Cultural Ecological Perspective	Mondira Boruah

**Session V B (Room No. 34)**

**Chair:** Prof. M. P. Sachdeva, Delhi

**Rapporteur:** Ms. Indrani Sen

**Presentations**

72.	Rural Migrant Labour in Delhi: An Anthropological Study of Changes in Livelihood	Ankita Mehta
73.	Sustaining the Development: Role of Capacity Building Initiatives	Chitra Kadam
74.	Juangs, Forest and Livelihood: An Anthropological Perspective	Sampriti Panda
75.	An Inquiry into Ship Breaking Industry in Gujarat and the Environmental and Occupational Health of migrant workers from Bihar and Uttar Pradesh	Gopal Krishna
76.	Gender, Gender Relations and the Environment: An Anthropological Study of Sumi Community	Kitoholi Zhimo
77.	Anthropological Understanding of Sikh theology: With special reference to sustainable development and environment	Chatali Tandon
78.	Examining the Groundwater Conundrum through the Energy-Water-Food nexus approach	Supriya Singh
79.	Environmental Priorities and Sustainable Development: A Case of Jharkhand in Eastern India	Anirudh Prasad

**Lunch: 1:30 p.m. -2:00 p.m.**

**ACADEMIC SESSION VI (Seminar Hall)**

**Time: 2:00 p.m. – 3:30 p.m.**

**Session Theme:** Forensic Dynamics, Epidemiology and Archaeological Understanding in India

**Chair:** Dr. Rashmi Sinha, Delhi

**Rapporteur:** Dr. Suman Dua

**Keynote Lectures (15 minutes each):**

1. Dr. Manoj Kumar Singh, Delhi
2. Dr. Meenal Dhall, Delhi

**1<sup>st</sup> Dr. V.C. Channa Memorial Best Paper Award-2014 Presentations**

80.	Tuberculosis, malnutrition and Socio-demographic characteristics: A case - control study.	Heemanshu Aurora
81.	An Anthropological Perspective on 'Public' as a Concept in Policy and Parlance in India.	Rachna Atri Saksena
82.	Maternal Subjectivities- Changing Priorities and Constrained Choices	Gunjan Arora

**Session VI A (Seminar Hall)****Chair:** Prof. V. R. Rao, Delhi**Rapporteur:** Ms. Deepali Verma**Presentations**

83.	Color Blindness Among the Panikas and Gonds Of Madhya Pradesh	Tabitha Panmei
84.	Forensic Examination through Hand Outlines	Sangeeta Dey
85.	Contextualizing Health and Well-Being of Meo-Muslim Women in Rural Mewat (Haryana)	Bindiya Narang
86.	Understanding Images: An Ethno-Archaeological Study of Prehistoric Rock Paintings from Central India	Indrani Chattopadhyaya
87.	Ecogenetic revelations of Paraoxonase 1 enzyme in population genetics studies: A Review	Siuli Mitra and Gautam K. Kshatriya

**Session VI B (Room No. 34)****Chair:** Prof. Sabita Acharya, Odisha**Rapporteur:** Dr. Vijeta Choudhary**Presentations**

88.	Epidemiology of obesity and health implication	N. K. Mungreiphy
89.	Environment, Gender and Education Study in Rural Bihar	Khushbu Kumari
90.	Genomic polymorphism among the four tribal population groups of Odisha.	Hemlata Dewangan, Gautam K. Kshatriya and K. Thangaraj
91.	Physical Growth Profile among the Gond & Korku Tribal Boys of Betul District, Madhya Pradesh	Pragya Dubey & K. K. N. Sharma
92.	Environment and Reproductive Health: Evidence from currently-married women of Delhi	Jaspreet Kaur
93.	Non Formal Education and Children living at Street.	Sarika Negi
94.	The future of anthropology in India : A summing up	Abhik Ghosh
95.	A review of biometric identification based on Hand Vein Patterns	Kiran Singh
96.	Nutritional status of the Baigas, Gonds and oraons Achanakmar-Amarkantak Biosphere Reserve: comparative study.	Ramesh Sahani
97.	Development of Socially Excluded Groups through Collective Action: A Study in the Context of <i>Swarnrekha Pani Panchayat</i> among the <i>Mundas</i> of <i>Idalbera Village</i> in Jharkhand	Sudeep Kumar and Anirudh Prasad

## **VALEDICTORY FUNCTION**

**Time: 3:30 p.m. – 4:30 p.m.**

### **Report on the summary of the Seminar: Ms. Supriya Singh**

- Chairperson:** Prof. Vinay Kumar Srivastava  
Head and Coordinator, UGC-SAP III, DRS II
- Co-Chairperson:** Prof. S. M. Patnaik  
University of Delhi, Delhi
- Guests of Honour:** 1. Prof. R. C. Kuhad,  
University of Delhi, South Campus  
2. Prof. K. D. Sharma, Chandigarh  
3. Prof. Kanchan Roy, Ranchi
- Special Guest:** Prof. Satwanti Kapoor, Proctor,  
University of Delhi, Delhi

### **Declaration of Six Memorial Best Paper Awards-2014**

- Chief Guest:** Prof. A. J. S. Bhanwar  
President, Indian Society of Human Genetics,  
Amritsar
- Vote of Thanks:** Dr. Meenal Dhall

**Tea: 4:30 p.m. onwards**

# **ABSTRACTS**

## **Keynote Lectures**

### **Genomic Landscape of Indian Populations**

**M. P. Sachdeva**

Department of Anthropology, University of Delhi, Delhi-110007

Understanding population structure is one of the primary objectives of biological anthropology. Earlier attempts to understand the peopling of Indian subcontinent were conducted using a wide range of biological parameters: morphological, anthropometric, blood groups, proteins, enzymes, and genetic variants that had helped in constructing phylogenetic affiliations to a reasonable extent. After the advent of genomic revolution, anthropological interest in explaining Indian population diversity is being revisited and has helped in testing novel hypotheses related to migrations in and around Indian subcontinent. This talk will be a cumulative update of latest findings based on genome-wide datasets in the light of previous discoveries.

### **Ethical Perspective on Public Health Research**

**Subir Biswas**

Department of Anthropology, West Bengal State University, Kolkata

Anthropologists when conducted public health research his/her responsibilities are manifold. These are his/ her relationship with research participants, with colleagues and institution, with own and host governments, with society and funding agency and so on. The submission of protocol to Institutional ethics committee as well as safety and other reporting including follow up activities are also important in respect of public health research. They have also a responsibility to keep the research participants informed about progress of research time to time in a simple, non-technical language. There are some other issues in respect of researcher's responsibility to research participants like protecting participants, honouring trust, compensation, confidentiality and anonymity, anticipating harms and so on. The responsibility to wider society is also important on public health research, where individual's inconvenience may ignore for wider gain. Therefore, research on public health should be carried out only when it is more beneficial than inconvenience, participants should understand the benefit and harm; and results can contribute better for public health. It can conclude by saying that anthropological research on public health should be used to solve human health problems and future health development.

## **Personal, Usufruct, Group and Community Knowledge Systems: Tribal Health Culture, Forests and Modernity in Jharkhand**

**Abhik Ghosh**

Department of Anthropology, Panjab University, Chandigarh

Tribal use of medical systems has always been contingent on the different knowledge systems that each person accesses. This has also been dependent on the availability of various raw materials that are required. Further, the local flow of stakeholders to various kinds of medical systems, as well as their accessibility guides the use of this kind of local health practices. Munda knowledge has been seen to be divided into four different kinds. Personal knowledge is collected, used, known and disseminated through individuals only. Usufruct knowledge is the knowledge which is often 'borrowed' from an undefinable or definable other for use. Group knowledge is known and maintained by smaller groups within the community. Community knowledge is shared as knowledge-at-hand of the community. The very everyday nature of this knowledge is different from the relative rarity of usufruct knowledge within the community. It is in this context that the canvas of the sacrosanct 'cultural', 'personal' or 'community' knowledge operates in situations where modernity and its counterparts interact with the Munda world. The sacred world of the forests also imposes its own rules of use of certain kinds of knowledge. It is important to note that cultural issues implement changes in the way use is made of the knowledge as well as the number of people this knowledge becomes a part of. These issues will be discussed using field studies conducted among the Mundas, a tribal group of Jharkhand which stays closely associated with forests. The anthropological nature of such differential management of knowledge systems and the politics that emerge from such issues would also be discussed.

### **Role of Anthropology in Combating the Global Epidemic – Obesity**

**Rashmi Sinha**

Discipline of Anthropology, Indira Gandhi National Open University, New Delhi

Obesity is increasing at an upsetting rate all over the world. Obesity-related diseases arise from fat accumulation within the body, and a high rate of this accumulation may not allow enough time for the individual to negotiate with the toxicity of adipose tissue mass. Obesity is rather new in human evolutionary history. Worldwide, across the past six decades social, economic, and technological changes have altered patterns of life almost everywhere. The rising epidemic of

obesity symbolizes a huge public health burden with economic and societal consequences of major significance. The trends in obesity designate that the primary cause of the global obesity crisis lies in environmental and behavioral changes. Anthropology with its holistic nature and ability to merge multiple paradigms holds an imperative position for the study of obesity, its impact on multiple levels and its historical and global causes. Anthropologists' biocultural perspectives are ideally located to offer the cross-cultural ethnographic insights needed for understanding the unique culture histories of obesity and hunger around the world, and to place these in a context that is culturally relevant and meaningful. Emphasis should be laid on intricacies of the inter-relationships between diet, physical activity, and a host of possible perplexing factors that result in obesity and its related metabolic disturbances. It is of enormous significance to identify the potential risk group and put into action the preventing strategies for arresting the menace.

**Legal pluralism and its implications for emerging political order in Nagaland:  
Insights from ethnography**

**Avitoli G. Zhimo**

Department of Anthropology, University of Delhi, Delhi-110007

The present paper seeks to critique the legal pluralism in the state of Nagaland. Customary rules existed prior to the emergence of nation state. With the emergence of the modern state, many of the customary rules continued to be followed and recognized while others ceased to exist. Those which continued came to acquire a further sanction in as much as, prior to the origin of state they were enforced by public opinion alone. Later on they came to be enforced by the agency of the state through its political authority with the advent of the newer political organization and institution. They were nevertheless unwritten but were known opinions of the community regarding right and wrong. Any study of customary law will thus include almost the entire range of social behaviour of the community under study. What is really embodied in any study of customary laws are the basic attitudes of the people and their world views. The rules and customs are only expressions of these basic orientations. The paper seeks to address the emergence of the state of Nagaland as the site for unfolding of its indigenous system of governance of maintaining law and order. It examines how politically autonomous and territorial distinct tribal groups negotiated with one another giving rise to legal and political system at an inter-tribal level leading to state formation. It will also examine the efficacy of available legal system in resolving everyday disputes both critical and mundane. The articulation of various legal systems and their implications for different sections of society cutting across the boundaries of gender, class and ethnicity will be elucidated. Finally the

paper will highlight the inherent tensions between these legal systems to convey the idea about its future.

### **Genetics of People of India: Implication and Future Strategies**

**Priyanka Khurana**

Department of Anthropology, School of Applied Science, Dr. Harisingh Gour University, Sagar, M.P.

Indian population constituting one sixth of the world population is characterized by high level of population sub-structuring. The People of India is subdivided in to diverse groups not only by their geographical boundaries but also by linguistic and ethnic affiliation. This structure of Indian population is the outcome of evolutionary antiquity of Indian population as well as exposure to the subsequent waves of migration from central Asia, west Asia and southern China that has resulted in a rich tapestry of socio-cultural, linguistic and biological diversity. Above all, these groups of variable size extant in India have strict social rule pertaining to mating. Majority of the groups practice endogamy, making mating boundaries impermeable for the other groups. Further, India provides a large patient pool with the majority being drug naive. According to WHO report, congenital and hereditary genetic diseases are becoming a significant health burden in India. Hence, genetic studies keeping in view the population structure, endogamy and increasing incidence of genetic disorders among Indian population, are needed for providing adequate and effective cure, information, testing and counselling services. Several independent research attempts have been taken and undergoing to provide data on the prevalence of genetic disorders among Indian population however, their practical usage and organization as an easy to access and operating unit is still pending. Such tasks are of immense importance as diverse mutations related to different disease presented in desperate populations of India may not only provide guidance to future studies seeking to examine the nature and extent of correlation between the genotype and disease as well as can provide a framework for designing future epidemiological studies to identify populations with differential response to a given drug or a class of drugs, that is potentially useful in pharmacogenomics and personalized medicine.

### **Minority Groups and Public Policy in India: Some Observations on Muslim Minority of West Bengal**

**Sekh Rahim Mondal**

Centre for Himalayan Studies, University of North Bengal, Darjeeling, West Bengal

Minority issues occupied a crucial position in academic discourse in contemporary times. Social and political transformation around the world have led to various policy measures by the state for disadvantaged communities and minorities for equality among different groups in a multi-cultural social set up. Now everywhere in the world

there is a demand for equality of treatment among various groups living a state? As a matter of fact, disadvantaged and minority groups rising voice for state and governmental interventions on their behalf for the sake of social justice. Most government are responding positively to their demands and framing inclusive policies for equality and development. Democratic and multi-cultural India is known for framing its protective discrimination policies and affirmative action's for its disadvantaged groups like STs, SCs and OBCs. But India's policy of affirmative action's are not perfectly matched with the demands and aspirations of the minorities. There is a wide spread notion that unless the nation-state become sensitive to the concern of the minority problems, the strategies of inclusive developmental policies have little chance to get success. The most crucial issue in this respect is the ways and means through which minority problems are included in public policies to resolve and address the issue of equality and social justice. Religious pluralism is an important ingredient in India. Almost all major religious groups are living in this country. Yet, unfortunately there is a rampant inequality among the socio-religious groups of the country. Moreover, some religious minorities often perceived as "Lesser Indians" and that has attracted the attention of anthropological and sociological enquiry in a holistic manner. The present deliberation is a modest attempt to highlight the minority questions of India, particularly of West Bengal, with special reference to their problems and public policies of the state to address them. Special emphasis shall be given in this deliberation to highlight the public policies and their implementation issues to address the situation of the Muslim community of West Bengal, as a principal minority of this State. This deliberation is based on research experience of the author in the field of Muslim studies in India for about three decades.

### **Human Health in the Coastal Environment: Some Observations among the Fishermen Community of West Bengal and Odisha**

**Barun Mukhopadhyay**

Biological Anthropology Unit, Indian Statistical Institute, Kolkata

Human health is an important measure of human adaptability in diverse environmental niches. And health is a dynamic equilibrium outcome of which is dependent on several components of environment and particular biological endowment. Furthermore, health is also conceived as a state of physical, mental and social wellbeing rather than only a measurement concerning presence or absence of disease or illness. However, epidemiological approach to understand the etiology and spread of diseases in human communities inhabiting diverse environments has been one of the important areas of investigation. Anthropologists have long been interested to study several domains of health of the human communities residing in a variety of physical environments in the perspectives of both adaptive capability in specific environments and public health challenges. Needless to say, the coastal environment

can be considered to be one of the important niches for human survival confronting myriad stresses that need timely scientific evaluation. Under this backdrop, a project on the fishing community inhabiting coastal area of the Bay of Bengal in West Bengal and Odisha was undertaken by the Indian Statistical Institute in 2006-07 to evaluate their strategy for Bio-Cultural survival. The present study reports some aspects of health, nutrition and disease of the study community. The study demonstrates that the community in question is exposed to adversities in health and nutrition profiles. Evidence suggests that loss of primary occupation and economic marginalization leading to poverty could be probable reason for such health adversities. Finally, some corrective measures have been suggested that may help changing the existing health and wellbeing scenario for the community.

### **The Question of Sustainability in Development policy and Disability Rights Debates in India**

**Nilika Mehrotra**

Centre for the Study of Social Systems, Jawaharlal Nehru University, New Delhi, India

This paper attempts to explore the notion of sustainability in development policies in evolving disability rights debates through the lens of disability in India. By locating disability in state policy debates on one hand and the disability rights movements on the other, one is able to discern how disability has moved from 'welfare' subject to the question of 'empowerment' followed by the 'rights' discourses in recent times. The debate around the so-called percolation of 'western' ideas and the 'mismatch' with local specificities emerge in interesting ways. The question of community vs. the state is another debate. Drawing comparisons with women's movements and other movements of the marginalized in the developing countries context gives a useful trajectory to map disabled people's engagements with the state on development and sustainability issues. Diversities and intersectionalities impinging on the way disability is sought to be construed in a developing countries open myriad complex ways through which unequal structural and institutional arrangements and cultural issues shape the way in which disability is experienced and acted for and against. The notion of sustainability when understood in relation to disability in social policy largely centres on the issues of access to infrastructure, education, employment and health care. Whereas 'dignity, identity and rights' issues are raised more often in the disability rights movements. Invoking of class is palpable here. What is the meaning of sustainability here? How it needs to be conceptualized and what are the challenges of working with such concepts in a complex scenario are some of the questions explored in this paper.

## **Anthropological Approaches to Maternal and Reproductive Health**

**Subho Roy**

Department of Anthropology, University of Calcutta, Calcutta

It is now well established that human reproductive physiology as we see today, is a product of natural selection. This implies that human reproduction is responsive to ecological context in one hand and behavioural ecological context on the other. Scientists who are working in this field are in search of questions like why humans have menopause, unlike apes? Why our gestation period is longer than other non-human primates? Similarly, people across the world live in different ecological setting and adopt specific behavior for their survival and reproduction. Thus, the reproductive characteristics of the people living in different ecological set ups and also of the same people at different time points remain different. Scholars researching in this area seek to understanding why menstruation is inhibited in some women (e.g., athletes and dancers)? Whether age of the primagravida mother is still a risk factor for maternal health and birth outcome? Can the level of physical activity influence the probability of getting pregnant? Or can social stress have an impact on female fecundity? Do all women around the world have the same hormone levels? And does this variation in hormonal level get translated into different fertility rates? Or why some women reach menopause early and others at a late stage? Society and culture do have an important role in shaping the reproductive health of a community. For example, gender role, division of labour, power relationship might determine the reproductive health of community members. Questions are being asked why society do not encourage the use of condom among males and simultaneously do not discourage males from practicing promiscuity? Or how inter-spousal communication becomes important in determining the family size? Or how analytical deciphering of cultural symbols and world view become important in understanding the reproductive health of community members and their management strategies. Research in the area of reproductive health has been going on for a long period of time. At the moment we have an appreciable documentation of such research in anthropological literature, including those from India. However, most of these endeavours remained restricted in finding out the variation in reproductive health outcomes across different communities. The time has come to look beyond variation and understand how biological, ecological and socio-cultural context interact and guide reproductive functions and health.

## **Ramapuram: A New Upper Palaeolithic site of India**

**Manoj Kumar Singh**

Department of Anthropology, University of Delhi, Delhi-110007

The transition between Middle Palaeolithic culture to Upper Palaeolithic culture is very difficult to understand in Indian Prehistory, because we do not have any sites which give an information about the continue occupation of the prehistoric man. The Ramapuram is a new site, which has been discovered in the month of December 2014, specifies the transition between Middle to Upper Palaeolithic culture. First time in the history of Anthropology, I discovered the Toba ash with the Middle Palaeolithic tools near the site, which has been dated 74,000 B.P. This paper reports the discovery of the new Upper Palaeolithic site in India.

## **Stress and Unhealthy Life Style: An Anthropological perspective**

**Meenal Dhall**

Department of Anthropology, University of Delhi, Delhi-110007

Lifestyle diseases are the consequences of choices people make in their life. They are mostly common in developed nations where people are inclined towards eating unhealthy foods, having a sedentary lifestyle and unhealthy habits like smoking and drinking alcohol. Common lifestyle diseases include obesity, blood pressure, heart disease, cancer, Alzheimer's disease, asthma, chronic liver disease, diabetes, stroke and osteoporosis. The risk of developing these diseases depends on a lot of factors including the type of work, work environment, physical activity and susceptibility to stress. Other contributing factors include poor posture, kind of foods eat and poor sleeping habits. These lifestyle diseases can be prevented by making simple changes in daily routine and following a healthier way of living. Few basic changes include quit smoking, avoiding alcohol, having a balanced diet that includes fresh vegetables and fruits, regular physical activity and leading a stress-free life.

## **A Prolegomenon to Anthropology in Public Policy**

**Soumendra Mohan Patnaik**

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This paper seeks to examine the role of anthropology in public policy with special reference to governance of indigenous communities in India from colonial to contemporary times. The relationship among anthropology, public policy and governance is rather skewed. The national discourses on use, location and

implications of anthropological knowledge has undergone several shifts as it has been shuttling between several government departments like ministry of Home Affairs, Tourism, Human Resources and Culture signifying ambiguities in the minds of policy makers about its application. With globalization and the increasing role of international organizations, anthropology has re-entered the debates in significant ways especially with regard to development concerns. Based on my research in different parts of India both with government and civil society organizations, I critically look at the ways development practices are shaped by anthropology and anthropologists and how and why anthropology's contribution remains invisible. The paper critiques the ways in which anthropologists as consultant or advisors work in an interdisciplinary team, interact and mutually inform each other in everyday practice. This paper heavily draws on my field experiences in different parts of Sri Lanka, Nepal and North Eastern States of India especially Nagaland.

## **1. Conventional and Computational Features in Handwriting Examination**

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Handwriting examination has been around for more than a century. The field of handwriting examination has become more diverse and requires authenticity or validation in many areas of examination which involves determination of authorship, fraud detection and personal identification. Forensic document examination branch is continuously facing challenges due to the availability of revolutionary computer methods. The conventional or traditional features used in document examination are prone to fatigue and human error owing to non-validation. Computational approaches of the handwriting examination formalize the conventional methods by means of precisely stated algorithms. This paper efforts to give a comparative account of conventional and computational features used in handwriting examination. Observable differences were seen in selected handwriting characteristics between conventional and computational methods.

## **2. Understanding Disease-Culture-Society Complex: An Anthropological Model of Leprosy in Indian Context**

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The complex interaction between biology, human culture and society plays a central role in health and disease conditions. Anthropology as a discipline is known for its holistic approach which broadly considers this triangular complex to explain various human phenomena. The present paper taking leprosy as an example disease state, tries to explain how an anthropological approach has immense potential to understand and address human health and diseases.

## **3. Pristine Stream, Incessant stream: Religious Environmental Movement to Save River Ganga in India**

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The issue dealt in this proposed paper is located in the offered theme—Sustainable Development and Environment. In last three decades several scholarly works have been produced which have shown that religions has ample possibility to contribute in mitigation of environmental challenges This eco-centric religious approach accounts for their cultural success for thousands of years and believe to give rise to new understanding of human-nature relationship in changed scenario. In this paper I have attempted to explore and examine the environmental movement organize by religious

leaders for protection and conservation of River Ganga at Prayag (Allahabad, UP, India) to understand how far religious environmentalism can contribute to preservation and conservation of natural resources in general and water in particular. The leading environmentalists of Prayag are neither social activists nor scientists but religious gurus. They organize demonstrations and processions. They appeal for boycott of ritual bathing and they go to the extent of threatening to commit mass suicide during the festivals. They blame government agencies for their inaction. They file lawsuits against the government. In this way, throughout *mela* period they create a pressure on government officials to release more and more water in river and to maintain a clean and incessant stream.

#### **4. Environmental changes and its impact on health: A study on the Jaunsaris of Uttarakhand**

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Health is a state of balance, the dynamic equilibrium between an organism and its environment. Environment, directly or indirectly, plays very important role in determining the health of the organisms, including human. On the one hand it determines the epidemiology of the regions and on the other hand it provides ecosystem services to overcome various health problems. Human health is largely determined by the interaction of the biological endowment of the population and cultural adaptation of the society. The ecological concept of good health concerns harmony and compatibility of the organisms and the environment. In the last few decades, the managerial objective of maximum utilization of resources at minimum cost resulted in high level of air, water and soil pollution. These changes, including, stratospheric ozone depletion, biodiversity loss, worldwide land degradation; freshwater depletion; and the global dissemination of persistent organic pollutants have great consequences to the sustainability of ecological systems, food production, human economic activities and population health. The present paper intended to answer the questions of impact of changing environmental conditions on health of the Jaunsari tribe and their perception about the change and its impact on their health.

#### **5. Differential Status of Prevalence and Risks of Cardiovascular Diseases among the Tribes of Odisha and Gujarat**

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Increasing risk of cardiovascular diseases (CVD) was an urban and rural society phenomenon until recent time. But tribal communities of India have been observed

with increasing risks of hypertension even along with under nutrition. But the triple burden of malnutrition, obesity along with hypertension like CVD risks, a typical characteristic of developing countries, has never been explored in the Indian tribal groups. So, it is necessary to estimate the status of such risks in these population groups in changing Indian developmental scenario. The present cross sectional study was conducted among 1434 numbers of male and female tribal participants from six tribes in Odisha and Gujarat such as Santal, Bhumij, Bathudi, Dhudia, Kukna and Chaudhari. Selected obesity and metabolic indicators implicative of CVD risks were measured. Comparisons were made among the tribes from the two selected states. The results though show a high rate of CVD risks among the tribes of both the states, a very different pattern came out with prevalence of high rate of undernutrition and hypertension among the tribes of Odisha along with obesity at moderate condition; prevalence of high obesity risks along with hypertension, with a moderate undernutrition condition among tribes of Gujarat. The present study giving a new dimension to the tribal health research in India explains that the increasing risks of CVD among Indian tribes exhibit very different epidemiological patterns which need to be addressed with specific health policy.

## **6. Recent Findings in Population Genetics and the Aryan Problems**

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Four recent studies in population genetics are analyzed together along with other data to form the migratory picture of India to untangle the Aryan problem. 40,000 years ago a group of Palaeolithic descent with haplogroup L of Y-chromosome was located in the Indus valley; nearly 16,000 years ago another migratory group arrived via the Deccan plateau. The regions which are denoted as *Aryavarta* in Hindu mythology are the places where the second group continued to live even after the decline of the Indus valley civilization; this group also moved eastwards back to north and central India and even back to their roots in south India. Haplogroup L population left for cooler climes to the northeast, northwest, and to the Western Ghats. The Indus valley civilization was founded during a relatively cooler period of 3000 years preceding Minoan warming. Along the northwest and western migration routes of the first population, the second population too travelled up to the western boundaries of the Indus valley civilization; both, an ancient kind of non-resident Indians must have picked up new skills, flora, fauna and cultures from their western neighbours; Therefore, ironwork and horse breeding must have been such imports brought in by those enterprising non-resident Indians or the Aryans of those days.

## **7. Mapping Grounded Actions and Climate Change: a case study of Tea Growers in Assam**

**Sadaf Javed**

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Livelihood vulnerability linked to climate change has compelled people and communities in India to embrace a range of adaptation strategies. This paper intends to discuss the challenges faced by tea growers in the state of Assam with regard to their coping and adaptation strategies in dealing with recurring seasonal variability and extreme weather events. Tea or *Camellia Sinensis* is a large and extensive industry in Assam that spans a huge spectrum of economic and social differences from large plantation owners to small subsistence growers. Studying the implications of climate change hence, as I will argue, will require being attentive as much to mapping the implications of changing weather and rainfall patterns as it will also require us to understand how social and economic differences determine adaptation and coping strategies. This study while drawing upon my recent ethnographic field work involving detailed interviews amongst different tea grower in Assam will also discuss several government initiatives with regard to the Tea Industry. This paper will argue that the internal economic and social heterogeneity amongst tea growers in terms of land ownership patterns and relative resource capacity militates against any simple search for homogenous attitudes/perceptions/responses to local weather impacts. In effect, I will argue that policy initiatives to craft adaptation strategies and coping mechanisms with regard to climate change must be attentive to social and economic differences.

## **8. Migration as a Cultural Cross Road of Identity, Behaviour and Lifestyle: An Anthropological study of the Migrant Wage Laborers in Delhi.**

**Anu Bhawana**

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Migration occurs at a variety of scale and one of the most significant patterns of migration is from rural to urban, where people shift in the search of livelihood and a better quality of life. Delhi being the capital of India provides an ideal example of glamour and glitz where people from the marginalized economic section of society arrives from distant places and have to face new challenges. Health being the primary indicator of the quality of life, it is the first to be effected as a result of this demographic shift. People do myriad kinds of work to earn a living; from manufacturing food products, plastic, wood and paper, electronic and metal products to working in offices, rickshaws pulling, transporting goods, and selling consumer

products at different places, construction labourers, etc. But, due to lack of awareness of the hazards and risks associated with these activities, they unfortunately put their health to risk every day. This study is aimed at understanding the paradigm of socio-economic status of these daily wage laborers and the dynamics involved with their socio-cultural transition as a result of migration.

## **9. Nutritional Status among Two Rural Caste Populations of Assam**

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The present study focuses the nutritional status among the adult females of two rural caste population of Lakhimpur District, Assam. A total of 311 (Kaibarta = 211 and Koch = 100) adult women belonging to 18-65 years of age were selected for purpose. Four anthropometric measurements were taken from each subject which includes height, weight, waist circumference, hip circumference and two derived variables – Body Mass Index (BMI) and Waist Hip Ratio (WHR) to evaluate the nutritional status of the subjects. Based on BMI, Chronic Energy Deficiency (CED) and obesity was measured among the population. The study demonstrated that Kaibarta females were found to be more undernourished than Koch population. The Koch females are taller and heavier than their Kaibarta counterparts and overall obesity among them is conspicuous by their absence, while only one obese female is recorded among the Koch females. The incidence of under nutrition cases although frequently met with; however, the risk of overweight and obesity is also emerging with the improvement in socio-economic condition and increasing urbanization. Consequently, the double burden of under and over nutrition exerts considerable impact on the economy and health system in the populations under study. Therefore, urgent attention from appropriate authorities is required to overcome this nutritional problem.

## **10. Association of Lung Functions with Various Anthropometric Measurements among Macchi Adult Males and Females of Daman**

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Lung volumes contain prognostic potencies of pulmonary function in general populations (Schunemann et al, 2000). In clinical applications, forced expiratory volume in one second (FEV<sub>1.0</sub>) and forced vital capacity (FVC) are usually expressed as percent predicted values. It is well known that in addition to gender, age and height, there are several factors influencing lung functions. Aim of the present study

was to find the correlation between anthropometric variables and dynamic lung functions among Macchi males and females of Daman. In order to study the various anthropometric measurements and dynamic lung functions, a cross-sectional study was conducted on 52 males and 112 females belonging to the Macchi community of Varkund village, Daman. Keeping the aim of study in mind, proforma was prepared to collect the general information, anthropometric as well as physiological parameters after taking consent from each subject. The data collected on these parameters was analyzed statistically by using mean, standard deviation, t-test. Coefficient of correlation for the variables was calculated to determine the probable association of dynamic lung functions with anthropometric variables. Mean values of most of the anthropometric and dynamic lung functions were higher among males when compared with females. Lung functions showed that fewer percentage of individual was in risk category on the basis of FER, most of them were found to have normal FER. Chest circumference showed direct relationship with the lung volumes. Larger the chest circumference, the better was the lung functions. Anthropometric variables like stature and sitting height showed positive correlation with all the lung volumes except FER among males while stature showed statistically significant positive correlation with FEV<sub>1.0</sub> and FVC among females. The sitting height showed significant positive correlation with FVC and CE among females. Body weight showed positive correlation with all the lung volumes except FER among males while it showed positive correlation with all the lung volumes among females. The present study showed that various anthropometric variables were significantly correlated with the dynamic lung functions among adult macchi males and females of Daman.

## **11. Health and Nutritional Status of Tribal Women in Odisha**

**Sabita Acharya and Abhijeeta Das**

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The present paper is based on munda tribal women, those are living in forested zone as indigenous people specifically defined as “a politically underprivileged group, who share a similar ethnic identity different from the majority people, and who have been an ethnic entity in the locality before the present culture or society came into existence”. It is essential to assess their health and nutritional status because the Munda women do hard work and play an important role in the socio-economic sphere as well as in livelihood patterns. The Physical condition of the body in those respects influenced by the diet and the levels of nutrients in the body and the ability of those levels to maintain normal metabolic integrity is considered as nutritional status. In this connection the present study is carried out in Shyamakhunta block of Mayurbhanja district, to assess the nutritional status of 428 married women from four sample

villages, particularly between age group 15-49, general adequacy is assessed by measuring weight and height; the result is commonly expressed as the body mass index, the ratio of weight (kg) to height<sup>2</sup> (m). Status with respect to individual food pattern has measured to determine the nutritional status of munda women for specific metabolic responses. The objectives of the study are framed as (1) to examine whether there exists any difference in the nutritional status of the tribal women: due to the level of income of their family. (2) To examine whether there exists any difference in the health and nutritional status of the tribal women: due to the level of education, i.e., illiterate and literate. (3) To highlight the interrelationship among the food habits of the tribals in the study area, the availability of food and the food consumption pattern with the health and nutritional status of their children. (4) Further, the study aims at examining and to get an insight of the traditional belief system regarding various types of disease occurred in the area.

## **12.Levels of Surface Water Pollution Caused by Industries in Punjab**

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The discharged effluents into water resources are a risk to human health. The disposal of untreated municipal, industrial and agricultural waste waters into water resources has degraded the quality of surface waters in different parts of the world. Extensive irrigation of agricultural lands as well as the drinking water supplies is mainly based on canal water / surface water. In Punjab state, growing population and expanding economic activities exert increasing demands on water for varied needs - domestic, industrial, agricultural etc. On the other hand, quality of water resources is getting degraded with increasing urbanization and industrialisation. Aims and Objectives: To explore the extent of presence of various heavy metals in surface water / ground water and agricultural products. Research Methodology: The study is based on both primary and secondary data. The primary data was collected from three villages of the Ludhiana District, Punjab. The water samples were analyzed using the energy dispersive x-ray fluorescence (EDXRF). These samples were analyzed without any chemical pre-treatment. Results and Conclusion: The results reveal that groundwater system in the vicinity of the Budha Nullah seems to be polluted by anthropogenic sources. Hand pump water has not been found a safe source of drinking water as it taps into shallow aquifers having many heavy metals in very higher concentrations. The untreated industrial effluents including dyes from tanning, nickel and chrome plating units are discharged into Buddha Nullah which pollutes the Sutlej river. The increased influx of heavy metals into water resources also result in their transportation into plants and animals. Consequently they are accumulated in dangerous quantities in different plant parts and thus result in additional serious health hazard to animals and plants.

### **13. Man-Nature-Spirit Complex: A Case Study of the Jagannath Temple**

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The concept of man-nature-spirit complex in anthropology was first put forward by L.P. Vidyarthi in his study of the Malers of Bihar. The complex is perceived in the understanding of human beings relationship to environment and how the environment determines human beings culture and spiritual activities. Through this paper I would like to present human beings close interaction with nature and how this has helped not only in building the cultural environment but at the same time maintain a balance in the ecosystem. While presenting the case study of the Jagannath Temple the paper would trace the origin of the worship of Lord Jagannath as a tribal deity (log of wood) by the Saravas on the Blue Hill to its consecration in the temple of Jagannath built by King Indradyumna in Puri. This paper attempts to understand how the unique half-finished wooden sculpture of Lord Jagannath has been able to preserve the forest of trees known as *Jaganata*. The environmental issues that are proving hazardous to the Jagannath temple in the present era due to human activities in the name of development will also be addressed herein. This paper is based on my anthropological fieldwork and empirical studies conducted by other anthropologists.

### **14. Anthropological insights into National Mental Health Policy: Arguing for the case of religious healing**

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The National Mental Health Bill was put to table in the Parliament last year and the mental health policy is set for a major overhaul. The draft bill, with its heavy emphasis on streamlining and up scaling psychiatric resources (and to some extent AYUSH) completely overlooks an important cultural milieu. While it is widely agreed upon that religious healing in temples, dargahs and churches constitutes the largest share in mental health-seeking, both in rural and urban areas, this finds a mention nowhere in the policy. Many clauses in the recent draft can at best miss out on or at worst criminalize different activities related to such a ritual healing of the mind. An objective pursuit to uncritically impose western diagnostic criteria on Indian population in the name of ‘culture-free science’ has dangerous implications, especially in a resource strapped nation like ours. This paper reviews some of the longstanding and recent debates in psychiatry on the aspect of nosological cultural validity and links them with the current inputs framing the mental health policy to argue against the structural blindness shown to religious healing of mental illness. It also discusses possible discourses on the probability/ improbability of a synergistic association between religious healing and psychiatry.

## **15. Iodine status and prevalence of Goitre in school going children of rural Haryana: A pilot study from Panchkula district**

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Iodine deficiency disorder (IDD) is one of the preventable major public health problems in India. It has been always thought that goitre was only found in the Himalayan goitre belt. Recent surveys outside the conventional goitre belt have identified iodine deficiency in other parts of India. The present study was conducted from March 2014 to May 2014 in school children attending 8 schools of Pinjore Block, Panchkula District of Haryana. The objectives of present study are, (i) to assess the prevalence of goitre among school-going children in the age group of 6-15 years, (ii) to find the relationship of goiter prevalence with the salt intake and urinary iodine excretion, and (iii) to unfold the iodine nutritional status of the study population. The clinical examination of all the 1400 children of the selected schools was done to detect and grade goitre. Urine and salt samples were collected from sub-samples (n = 400) to estimate the urinary iodine excretion level and iodine content in the salt respectively. The goitre prevalence in the study population was found to be 0.125%. Urinary iodine excretion (UIE) level of  $\geq 100$  mcg / l was found in 361 children (90.25%) and  $< 100$  mcg/ l in 39 children (9.75%). Estimation of iodine content of the salt samples revealed that 363 (90.75%) consumed adequately iodized salt ( $> 15$ ppm) and 37 (9.25%) consumed inadequately iodized salt ( $< 15$ ppm). Pinjore block was not an endemic area for goitre and there was no biochemical iodine deficiency in this population due to effective implementation of Universal Iodization Programme (UIP). It is reasonable to conclude that by achieving the universal iodization of salt, IDD can be successfully eliminated from the community.

## **16. Neolithic Culture of Middle Ganga Plain: A Recent Perspective on the Origins of Pottery and Agriculture**

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The Gangetic plain has a significant position in the history and archaeology of India as it has been the nerve centre of cultural and religious upheavals. Middle Ganga plain, occupying central position in the Indo-Gangetic plain exhibits a wide range of alluvial geomorphic features. It extends from Ganga -Yamuna confluence in the west, Rajmahal hills (Bihar Bengal border) in the east, the Himalayas in the north and Vindhyas in the south. It includes modern eastern Uttar Pradesh and plains of Bihar. In recent years rapid efforts have been made to understand the Neolithic archaeology of this region. Being a potential zone for early food production in northern South Asia, this region has a great diversity of cultural material dating from prehistoric times. The Neolithic culture of this region is represented by domesticated variety of plants with the presence of cord-impressed pottery and marked by a rich variety of

ceramic industry which includes ordinary Red ware, Burnished ware, Rusticated ware, Black and Red ware. Considering the presence of wild and domesticated varieties of rice species with cord-marked pottery at Lahuradeva and other sites in 6<sup>th</sup> - 7<sup>th</sup> millennium BC and the existence of other cultivated crops with developed agricultural practices in subsequent phases, it is logical to examine the role of this region in the origin and development of pottery and agriculture. A fresh approach with new archaeological data is adapted and applied in order to understand the relevance of Middle Ganga plain to origins of pottery making and agricultural practices in South Asia. The study will be based on available archaeological and palaeo-botanical evidences.

## **17. Forensic Variability of Identification Marks among Indian Population**

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Forensic experts may provide support to investigations concerning living individuals such as a mix-up of children in a hospital nursery, identification of persons involved in immigration problems or human trafficking, robbers, burglars or thieves recorded by surveillance cameras or occasional witnesses, etc. Present study have been carried out in four different regions of India to study the forensic variability of identification marks i.e. moles, scars, tattoo, birth marks, deformities and dimple with their location on different sites of the body, shape, size, and colour as tool for anthropo-forensic purpose. From the study, it can be said that there is variability of identification marks i.e. moles, scar, tattoo marks, birthmarks and dimple among population groups of Delhi, Jaipur, Daman & Diu and Nagpur. Moles have been found maximum and frequent as identification marks in all the groups. All the identification marks differ in their shape, size, colour and location. Further, education plays an important role in changing the psychological perception. With higher education, changes in psychological perception have been observed. Education has a strong effect on psychological perception. On an informative note, no study has been carried out to see the variation, location, psychological perception and familial study (about moles) of identification marks in India as well as in world. So, there is a dearth of literature to support the study but it gives a base line scenario for further research in future. Also this study unlocks an economic and convenient method for the identification in anthropo-forensic and legal world.

## **18. Neuroanthropological role in Human development and behaviour**

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Neuroanthropology is defined as an interdisciplinary field which explores how new findings in the brain sciences help us understand the interactive effects of environment, culture and biology on human development and behaviour. It is intended to embrace all dimensions of human neural activity, including emotion,

perception, cognition and motor control. The present research attempts to study neuro-anthropological variations among both the genders using psychological variables and linking them to environmental and cultural factors that have an impact on the human neuro-cognitive dimensions and behavior pattern.

### **19. Factors Affecting Fertility among the Lamkang Tribe of Chandel District, Manipur**

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Present study investigates factors affecting the fertility of Lamkang on the basis of household survey collected from 10 villages of Chandel District (Manipur), interviewing 200 ever married women. The findings indicate that the age group of 15-59 years, comprising of the population at peak productive ages, constitutes 64.39% of Lamkang population. The sex ratio of 1105 reveals the preponderance of females over males. Biological and social factors like age at menarche, age at marriage, age at first conception, women's education are influencing the number of conception and live birth whereas education of husband and type of family are influencing the live birth only.

### **20. Disability and Public Policies: A Comparative Case Study of India and South Korea.**

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The field of anthropology has made significant contribution to the understanding of disability. Theories from social anthropology and its subfields such as medical anthropology have broadened public and academic discourse on disability. Anthropologically disability is not simply lodged in the body but created by the social and material condition that disables the full participation of those considered atypical. What counts as an impairment in different socio-cultural settings is also highly variable. This paper will explore the brief history and approaches of anthropology to the study of disability and will also discuss the comparison of National Policy of South Korea for persons with disability with the India's Rights of Persons with Disabilities Bill, 2014. The paper is based on primary data collected during my seven days stay in South Korea as part of "Incheon Strategy to Make the Right Real", an initiative taken by the Ministry of Health and Welfare of South Korea and during a fieldwork for the project on "Problems faced by differently abled students of north campus, University of Delhi.

## **21. Zoo-therapy, Spiritual Healing and Medical Pluralism: A Sumi Naga Perspective**

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Nagaland is a home to many tribal communities of which Sumi Naga emerge as one major tribe and dominantly inhabit Dimapur and Zunheboto district, the present study been conducted in Satakha, a small administrative block under Zunheboto district. With their unique culture and tradition, the Sumi community exhibits an interesting picture of indigenous healthcare systems transmitted through the generation over the centuries. The present study seeks to explore the healing practices, existing beliefs and associated nosologies of their healthcare systems in the contemporary times. In the present era of modern medicine and health technology, an attempt is also made to unearth ethno medicine system and religious healing practices of Sumi community, and explore their medical pluralism in the face of global forces and markets. Focus is given on Zoo-therapy, spiritual healing that exist alongside Biomedicine and Indian System of Medicine to understand the overlapping healthcare of Sumi medical system.

## **22. Traditional Knowledge and Curative Measures: A Case Study in a Village in Tinsukia District of Assam**

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Health and diseases are two terms whose origin is basically biological. But certain socio-cultural traits like beliefs, religion, philosophy, socio economic condition also to certain determine people's attitude towards health and illness. Diseases and death are universal experiences of human beings in every society. Every society has a theory of diseases and provides an efficacious for the treatment. The medical treatment prevalent in a society is a combination of traditions, beliefs, techniques, environmental and ecological adaptation etc. This system is an integral part of the culture of the society. In this paper an attempt is being made to study the health care system prevalent among the Deoris of Sonapur Deori Gaon , Philobari in Tinsukia District of Assam. It includes both magico religious and herbal remedies for treatment of various diseases and illness. These indigenous sources of health care are also referred as folk medicine. These indigenous medicines are governed by tradition that has been developed through time in the perspective of age-long experiences of the people. The principle of this medicine is based on the solution of the problems in the perspective of the interaction of man, nature and environment.

## **23. Floods and Its Impacts on Human Habitation: A Case Study in Dhakuakhana Sub-Division of Lakhimpur District, Assam**

**Chusmita Konwar**

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Water related problems are often described as natural disasters; turn out to be social disasters as well. Human society faced a lots of water related problem due to shortage and abundance in water. The abundant water which in turn causes the natural disaster called as flood. Assam is situated at the easternmost part of India. Assam is one of the worst sufferers of flood due to River Brahmaputra and its tributaries. Every year Assam experiences a huge amount of losses due to devastating flood caused by the river Brahmaputra. Flood hazards affect all aspects of the land, lives, and livelihoods of communities living in the region to a significant degree. Both floods and flash floods leave people homeless and displaced, destroy crops, damage public property, and damage development infrastructure. Victims who become destitute suffer from trauma and shock. Thousands of hectares of fertile land in hundreds of villages with crops, settlements, and infrastructure have been lost to the river due to frequent shifting in the river course and erosion of river banks. Sand casting has one of the worst hazards because it results in degradation of thousands of acres of farm land and wetlands due to deposition of debris, mainly coarse sand particles, by flood waters. The communities living in these areas have developed mechanisms over time that have become ingrained in their lifestyles and traditions – for example, housing, agriculture, livestock rearing, food storage, and weather and flood predictions – and these help them to cope with and adapt to the immediate and long-term impacts of such hazards. Impacts of flood are more in few places like Dhemaji, North Lakhimpur, Majuli (the biggest River Island), and few places of Barak valley in Assam. The problem of flood is very old in Assam and the solution is very much difficult due to complex and devastating nature of the River Brahmaputra. Here in this paper a humble attempt has been made to examine the impact of flood on human habitation and also try to understand human's mode of adjustment and mitigation in the flood affected areas of Dhakuakhana sub-division of Lakhimpur District, Assam.

## **24. Ethnographies of Mining: Indigenous People, Extractive Resources and Global Energy Future**

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In the present time of rapid resource depletion and uncertain global energy future, the natural resources have become not only important economically and politically but socially too. The extractive resources like minerals, oils and gases are, more than

ever, being discussed in media, academics and various public forums. It has created awareness and socially informed connections for local people to engage proactively with their natural resources and its sustainable future. The local indigenous communities have come forward and voiced their concern to encounter the challenges of global capitalism to the local ecology and economy. Cultural anthropologists too have prominently taken initiatives to interrogate and engage with the complexity of new synthesis emerging in different part of the world. Three major ethnographies on mining (Kirsch, Welker, Golub) have been published in year 2014 by cultural anthropologists. However, the ethnographic writing on mining is not new and there is strong tradition of anthropological works which have dealt with it in the past as well. The present paper attempts to review the major ethnographic writing on mining to trace the genealogy of anthropological engagement with mining. The paper intends to analyze the topical and theoretical shifts in new ethnographic writings and aims to understand the methodological advantages of ethnographically engaging and advocating for the ‘emergent complexities’ of indigenous rights, resource politics and global energy future.

## **25. Being Special to Special Ones: A Case Study on Disability and Adoption.**

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Anthropology is the holistic study of man .Its affinity towards human ingenuity provides it an enterprising nature and helps it to embrace in its arena those fields of enquiry which demand a logical and an empathetic mode of investigation. Disability is one such field with which Anthropology associates itself. Anthropologists working in this field work hard to recognize the differences in the creative potential of the “self”and “others”where the others constitute the so called disabled. The present research is a work in this direction and rests on the belief that the human potential especially that of children can be discovered and nurtured only when they receive a desirable environment of a home and a proper parental guardianship. The present study aims to look into anthropological perspectives of policy issues related to disability and adoption in the urban metro space of the national capital of India. The objectives of the research include finding out the various interpretations which the term “Disability” finds in various public policies and in peoples mind, enquiring about the roles which public policies play in promotion of adoption of the disabled children, and finding out the social mindset of the people towards disability and adoption is revealed by these public policies. Findings reveal that the term disability has various connotations, each having some socio-cultural context which anthropology tries to unveil and analyse. The ministry of women and child welfare has laid down sufficient guidelines and procedural requirements to be followed by both the homes and orphanages acting as adopting centres and also for the prospective adoptive parents. On one hand where the policies give importance to requirements of the children, it does seem to be biased towards the society’s conservative notions

about PAPs and good parenting etc. It seems that right time has come for us that these policies need to be reconsidered restructured else many special children may not achieve the lives they deserve.

## **26. Man Elephant Conflicts in Jharkhand**

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“Jharkhand” means ‘lands of forest’ the name which has been given to this state for its “Saal Forest”. However most of the forest areas have been cleared for mining and other developments. At present about 39% of forest areas are preserved, which is providing shelter for wild animals chiefly, elephants. Presence of elephant in Jharkhand is historic. In recent years, elephants are disturbing the settlement areas of the state. Man Animal conflicts of Jharkhand Khunti, Hazaribagh, Palamu, Gumla, Simdega and Chaibasa districts have a major challenge for people who are living in those areas. It is also a major administrative issue for the Jharkhand forest department. After the joint forest management movement conducted by West Bengal and Jharkhand Government, forest covering areas in both the states increased. Consequently the rates of man elephant conflicts have enhanced and problems related with such conflicts have also become worse. In every ten days reports of such conflicts flash in headlines of the daily news papers. Through this paper I would like to throw lights on causes, challenges and present condition of man elephant conflicts in Jharkhand state. How the change in the settlement pattern causing hazardous situation for both animal and man. I would also like to highlight the problems of the tribal people, who are the most affected population out of this conflict.

## **27. Telemedicine and Health Information Technologies: Its Potentials and Impact in Health Delivery System in Indian Context**

**Avanee Khatri and A.K. Sinha**

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Health is the topmost agenda in nation’s development goals. With the world going digital, health delivery is all set for a paradigm shift in the coming years. There is a distinct unfulfilled need to create new delivery models for providing affordable and prompt healthcare services to an ever-increasing world population. Augmentation of the traditional clinic and hospital-based model of healthcare with models that incorporate new technologies is the need of the hour and future also. The deployment of information and communication technologies (ICTs) for improving the reach and penetration of healthcare services, in the form of telemedicine and mobile health (m-health) services is a potential solution to mitigate strains faced by healthcare system in

India, with its vast population, of which 70% are poor and often live in difficult to reach and inhospitable terrain, along with inadequate health care network. Core drivers of health demand such as patient demography changes, health awareness, shortage of workforce, increasing demand supply gap, limited penetration, and uneven distribution of market power in healthcare sector, all acting in concert are increasing the pressure to change healthcare service delivery models. The focus, therefore, has shifted to advanced information and communication technology (ICT) application as an enabler of safe, efficient, well-coordinated and integrated health service delivery processes. The present paper focuses on the potentials and pitfalls for telemedicine and health information technologies in an Indian scenario, also the potential barriers and requirements from the perspective of doctors, rural-urban population are looked upon critically.

## **28. A Comparative Study of Challenges Faced by Mall Owners in Tri-city Chandigarh**

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Retail is the second largest sector in the Indian Economy after agriculture accounting for 10% of GDP and providing employment to 7% of the population of the country. These figures notwithstanding retail in India had been going on “unorganised” for several decades. Retail places like Connaught Place in New Delhi and the Sector 17 Plaza in Chandigarh were few and far between till some years ago. Being one of the fastest growing economy in the world and having a huge potential for growth of organised retail, private players like Raymond’s, Bata, DCM and Bombay Dyeing stepped into organised retailing. This led to the emergence of new retail format. With the new young Indian consumer emerging with larger capacity to spend and with eagerness to look flattering in ready to wear clothing, the retail format began to witness a sea-change. Initially few market places that could provide space and ambience to accommodate the tenants eager to serve the ‘new Indian consumer’ started to mushroom. The situation was ripe for the surfacing of shopping malls in India. Consequently from three malls in 1999 in India, the country had a total of 172 operational malls in 2010 offering 52.2 million square feet of mall space. The country is likely to have a total of 750 operational malls providing 350 million sq.ft. of mall space by year 2015. But the question is, “is it all that rosy for the mall owners?” Objectives: The present study aims to compare the status of popular Malls of Tricity, Chandigarh, for their showroom space, customer footfall, rent/ lease figures, retail sales and staff employed by them. Research Design: The data generation for this research work was made with the help of Qualitative and Quantitative methods. The researcher conducted personal in-depth interviews of store managers employed in retail stores. Purposive sampling and convenient sampling methods were used to carry out this research work. The universe for study comprised of the shopping malls situated in urban Chandigarh and Mohali (Panjab). The sample size consisted of 50

store managers/ retailers. Conclusion: The present study which aimed to study the challenges faced by the mall owners in Tri-city Chandigarh found that the major difficulties faced by the Mall owners are: declining retention of tenants due to rising rents giving rise to unoccupied showroom space, dwindling customer footfall resulting in falling of retail sales, downsized staff, lack of matching international standards and unplanned positioning of the malls. Consequently steps need to be taken by the owners to design survival strategies.

### **29. Ecologically Sensitive Areas: a Green nod dying-off in India; its impact on Biosphere, Human Livelihood and strategies to Uphold it**

**Rashmi Srivastava**

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An Ecologically Sensitive Areas (ESAs) is a type of label for an area which requires special protection or shield due to its wildlife, historical or landscape significance. These areas are of immense importance from ecological and economical point of view, but are also susceptible to mild alterations and therefore they are very fragile zones which prerequisite careful supervision. Some of the widely known ESAs which are discussed in detail, here are, Himalayas, Matheran, Numaligarh, Pulicat Bird Sanctuary, Western Ghats, Mount Abu, Mahabaleshwar-Panchgani, Aravalli etc. An eco-fragile zone has to be enunciated in order to provide inviolability to the protected areas. Therefore, they are needed to be protected and conserved. In this background, the Indian Board for Wildlife in its XXI meeting held on 21st January 2002 had adopted a 'Wildlife Conservation Strategy-2002' in which one of the action point envisaged was to notify lands falling within 10 km. of the boundaries of National Parks and Sanctuaries as Eco-fragile zones under the Environment (Protection) Act, 1986.<sup>1</sup> However, these fragile areas are gradually depleting due to environmental strained conditions which are anthropogenic in origin. Its loss would be ruinous to several sensitive species, not only affecting their numbers but their diversity too. This would, indirectly affect the ecosystem of the biosphere, of which human species are inbuilt. This paper expresses a view on the impact of the demolition of eco- sensitive zones and strategic policies to deal with it.

### **30. From Aranya to Grama: Some Aspects of Villages Relocated from Tiger Reserves**

**Ujjal Kumar Sarma**

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The origin of the *grama-aranya* dichotomy can perhaps be traced back to the Neolithic Age, when many human cultures made the transition from a lifestyle of

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hunting-gathering to one of agriculture and village settlements. Along with sweeping changes in the social structure and political order, it is perhaps now that people started differentiating between settlements and the 'other' spaces. In ancient Indian texts, the *grama* is the settlement and is therefore orderly, regimented, unsurprising, and the setting of what came to be called civilization. The *aranya*, on the other hand is the forest, disorderly, unfamiliar and opposite of *grama*. The 'unknown' is therefore, feared and perceived to be inhabited by predators and strange beings, distinctively different from those living in the *grama*. Similar dichotomy such as *sanskriti-prakriti* has also been constructed and validated. Thapar (2007) talks about a gradual self-consciousness and a distancing from the forest, especially in the culture of high literacy, with the life of the forest people being projected as antithetical to civilization. However, *prakriti* in recent times has obtained a new identity; it is being constructed as friendly, tameable and something that can render certain functions for *sanskriti*. In the altered setting, the right to access the rechristened space has also undergone change. It has also become possible to redefine spaces with human activities and spaces without human activities, for 'common good', though it may be argued that this does not take into account the close relationship of the forest dwellers with the forests. After much deliberations and hard work, the National Tiger Conservation Authority (NTCA) came up with detailed guidelines for relocation of forest dwellers who are willing to move out of the Critical Tiger Habitat (CTH) of various tiger reserves. The guidelines have tried to accommodate the concerns of the Forest Rights Act (FRA) too. However, the rural context for the newly relocated people has been fashioned too promptly, and with a few preconceived notions too. For the oustees there is a shift in the context- from the 'rural' of *aranya* to the 'rural' of *gram*. There are new demands on them such as to be member of the 'rural' of *sanskriti*, including performing elaborate rituals, giving up MFP collection, increased dependency on agriculture, enhanced participation in a monetized economy etc. The paper will discuss some aspects of villages relocated from tiger reserves, based on my experience as a member of the Village Relocation Monitoring Committee constituted by the NTCA, Government of India.

### **31. Child Labourers and Education**

**Dikshita Rathod**

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A number of policy initiatives and programmes have been undertaken in this country over the last decade with the basic objective of dealing with the problem of the rapidly increasing number of child workers. The formulation of a new National Child Labour Policy, the enactment of the Child Labour (Prohibition and Regulation) Act 1986, the setting up of a Task Force on child labour, the adoption of the Convention on the Rights of

the Child and soon have all formed a part of this process. Corresponding initiatives were taken in the related area of education where a New Education policy was formulated which incorporated a separate component for working children. According to a 2008 study by ILO, among the most important factors driving children to harmful labour is the lack of availability and quality of schooling. The 2008 ILO study suggests that illiteracy resulting from a child going to work, rather than a quality primary and secondary school, limits the child's ability to get a basic educational grounding which would in normal situations enable them to acquire skills and to improve their prospects for a decent adult working life. Based on field work conducted on the streets of South Delhi, the paper broadly focuses on the importance of Non formal Education in providing a convenient framework of education for the working children, so that it can facilitate the academic aspiration of the child labourers who combine school and work. The study largely confirms the conventional perception that child labour harms children's ability to enter and survive in the school system, and makes it more difficult for children to derive educational benefit from schooling once in the system. The paper highlights the role of Non Government Organisations in achieving the goal of imparting education to child labourers through creating an informal set up as a policy initiatives. Data collected from the ground have informed in arriving at a critical understanding of the existing policy measures.

### **32. Ageing in Institutional and Non Institutional settings: Anthropological Insights**

**Renu Tyagi**

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A dynamic shift in the share of older Indians in view of changing family structure, intergenerational relations and severely limited old-age income support brings with it a variety of social, economic and health care issues. Migration of younger generation, age related decline in physical and physiological functioning, lack of proper care within the family, insufficient housing, and feeling of loneliness, poses some psychological challenges which could be responsible for elderly moving to old age homes. Elderly constitutes a heterogeneous group. The biological changes with age show variability among senior citizens staying in the family and those staying in old age homes. The present study was conducted to study and compare the anthropometric dimension of biological ageing among the elderly living in two different environmental setups i.e. old age homes and family set up. The anthropometric measurement and physiological functions including height, weight, heart rate, blood pressure, lung functions and grip strength were measured in 457 elderly ranging in age from 60-85 years. This included 175 elderly from old age homes (referred as institutionalized senior citizens) and 282 elderly living within the family set up (referred as non-institutionalized senior citizens). Body mass index (BMI), Waist hip ratio (WHR) and grand mean thickness (GMT) were calculated

statistically. Nutritional status was assessed using the WHO (1995) guidelines. Mean, standard deviation, 't-test' and correlation were calculated. Significant differences were found for weight, BMI, GMT, Cardio-respiratory functions, Grip strength and nutritional status between institutionalized and non-institutionalized senior citizens. The percentage of overweight/obesity was found to be relatively higher among non-institutionalized senior citizens, both males and females as compared to their institutionalized counterparts. The biological dimensions of ageing among institutionalized and non-institutionalized senior citizens were found to be significantly influenced by the environmental set up.

### **33. Respiratory Illness and Occupational Exposure: An Anthro-Medical Analysis.**

**Ajeet Jaiswal**

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This study investigates the respiratory health profile of weaving workers in South India, aiming to develop workers' awareness and public attention, and to ensure a proper implementation of health and safety measures. Forced vital capacity was measured by peak expiratory flow rate instrument among 195 subjects. The personal history, the occupational history, and the state of health were also determined using a standard questionnaire. The subjects who had a considerably low peak expiratory flow rate ( $< 290$  liters/min), and had symptoms of chronic respiratory illness, underwent X-ray examination. A statistically significant low peak expiratory flow rate was identified among 53.33 percent of workers. Among them, 44.10 percent had symptoms of cough with or without phlegm; 5.64 percent had a history of chronic bronchitis and/or asthma, and 3.59 percent experienced chest tightness or breathlessness. This study showed a high degree ( $p < .001$ ) of respiratory-related illness symptoms present among the workers in the blow/card rooms and the workers in the spinning section. Irrespective of variation of age as well as work pattern, non-smokers were less likely to be affected. Whether workers were occupationally exposed to other incidences was also investigated. The results of these investigations are presented and the findings discussed in light of other studies carried among similar occupational groups, it seems from the study that exposure to Textile dust has effect on respiratory function rather than body morphology of the textile workers.

### **34. A study of differential fertility among Santals of Jharkhand**

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The key elements behind the constant change in population, particularly in the tribal communities of developing country like India where the growth is so rapid (1.54% per year), is the level and pattern of fertility that solely contributes to the size, structure and growth of population. The study of tribal fertility is important as it is imbued with many aspects of economic and social milieu. The sample size comprises of 500 ever married Santal women from Purbi Singhbhum district of the state Jharkhand in the age range of 15 to 49 years. This paper seeks to examine the various fertility measures viz, Crude Birth Rate, Age Specific Fertility Rates, Total Fertility Rate, Gross Reproductive Rate and General Fertility Rate. It also highlights about the conception wait and the factors affecting it among the Santal women. The conceptions wait decreases with increasing educational level and increases with current age of women. The findings of Bivariate Analysis indicated that independent variable that showed strongest effect on the dependent variable, total number of Conceptions is the Current Age of Women with odds 4.2 whereas the independent variable, educational attainment among women showed significant effect on dependent variable, conception wait with odds 1.9.

### **35. A study of menstrual attitude among Muslim women of Delhi, India**

**Shumayla**

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The menstruation has always been the concern of many myths, mysteries and traditional tales. Due to social and cultural influences concept of “menstruation” has been tabooed which appears to be a barrier in understanding the concept of menstruation correctly. The present study was carried to know the beliefs about and attitude toward menstruation in Delhi Muslim women. The study includes 103 women, who have experienced the phenomenon of menstruation. Modified version of Menstrual Attitude Questionnaire adapted for Indian population was used to assess the women attitude towards menstruation. Other basic socio-demographic information was collected with the help of self-prepared performa. Using factor analysis 6 domains of menstrual attitude with eigenvalues more than 1 were identified. It was found that younger aged women consider menstruation as bothersome, debilitating and at the same time a natural event, while middle aged women denied of any effect because of menstruation and elderly women consider menstruation as a private matter.

### **36. Traditional Medicinal Knowledge and FaithHealing Practices for Health Care: A Study among the Meetei Healers ofThoubal District, Manipur**

**Asem Tomba Meetei**

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There is a pressing need for a systematic codification of Community Health Care Knowledge and its depleting bio-resources in developing countries like India. The reasons behind these imperative factors are owing to the aging of the healers, anthropogenic activities and bio-piracy respectively. The undocumented epistemological health care knowledge of the traditional medicinal healers can be saved through a systematic documentation. The reality in rural Indian society is that apart from accessing to biomedicine and AYUSH, many of them also seek their health care resort from Indigenous Traditional Medicinal Healers and Faith Healers or Religious Healers. This clearly indicates the need to preserve Traditional Medicinal Knowledge and our bio-diversity, which can save millions of life. In this regard, in our modern time, ideas and knowledge are considered as an integral part of trade relations. Indigenous communities in third world countries face the problems of livelihoods and survival because of the Western Intellectual Property Rights regimes. In this context, anthropologists and sociologists also have a pivotal role to protect the indigenous knowledge of biological resources and intellectual property rights of the indigenous communities. The most burning issue is that knowledge can be patented, which has serious implications for access to health, agricultural practices and other health related fields.

### **37. Politics of Constitutional Identity in North-East India**

#### **Laminthang Haokip**

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Since the advent of British colonialism in the present day North-East India, there are recurring mistrust and disagreement among different communities in the region. This irreconcilable situation continues to plague different communities of the region till today. In Manipur, this situation of mistrust and disagreement among different communities started since the British colonised the then independent kingdom aftermath the Anglo-Manipuri War in 1891. Despite having unique customs and traditions called 'primordial identity markers' of their own to identify them from the others, the struggle for recognition as a separate identity under the constitution of India by different groups in the state is on the rise. Most of them appear to wish beyond 'primordial identity markers' for their group identification because these markers do not seem enough to secure or protect their distinct identity from the others. As such, this paper is an attempt to establish the reasons why and how most of the communities felt the need for separate recognition of their identities? The paper will also explore the socio-political motivation which comes-in-between such recognition.

### **38. A Qualitative Study on Health Seeking Behavior among the Lepcha Tribes of Dzungu, North Sikkim**

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To study the Health Seeking Behavior of Lepcha Tribe. The concepts related to health, illness and well being varies from individual to individual and community to community in their respective geographical areas. In the study area, their day-to-day activities, culture, costume, religious practice, and environmental factor, all contribute to their health. It is their belief and perception that the causes of illness and disease arise due to the disturbance to the nature, deities, and ancestral spirits. There are various other factors, which causes illness and the occurrences of diseases. The Lepcha tribes mainly believe in supernatural powers and worship the souls or the spirits of their ancestors. They believe and perceive that the spirit of ancestors in every culture, play a significant role in ensuring good health, safety, protection and wealth of the family. When these ancestral spirits are not well respected and adored, they always cause problems to the family members and the community. The main finding shows that the health seeking behavior of Lepchas are first they seek treatment from the traditional faith healer or the Lamas, parallel they use home remedies and medicinal herbs. The treatment seeking from the allopathic or the modern medicine consider as a secondary basis.

### **39. Indigenous knowledge and health care practices among the Mishings of Majuli, Assam.**

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Today we all are aware that the western medical system is developing very fast but still people are not giving up the traditional health care practices. The use of plants and animals as a source of medicine is as old as humanity is. Unlike many other tribes in India the tribes of northeast India are use to unique traditional knowledge systems with their diverse flora and fauna. The state of Assam is very rich in plant biodiversity and the people here also have a very rich traditional knowledge based on plant resources. The Mishing tribe of Assam also has traditional health care practices like the other tribes of the north eastern part of India, as their livelihood system is traditionally dependent on forest resources. This paper will examine how the Mishing tribe is grounded in their indigenous knowledge and will also explore the traditional health care practices among the tribe.

#### **40. Development Programmes and Rural Tribal Women in Manipur**

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Whether it is in tribal or the non-tribal societies, women especially confined to the rural areas still fall behind from various development opportunities. This is clearly seen in educational opportunities, employment, socio-economic and political freedom, rights and privileges, health status, etc. Additionally, the growing societal norms and values continue to blot women world unabated. In short, women world-view is limited. It is obvious that, women are the least involved group in the process of development and transformation as compared to men. This is evident among the tribal women of rural areas in particular. Generally, the wide range of efforts for the mobilization of women and operation for their awareness are obscure and unsuccessful too. Despite the constraints and short coming, several development programmes were continue to introduced by various agencies in Manipur to improve the position of women in the family as well as in the society. Today, women in the rural areas are found to involve in current development trends and this brought them outside the home and exposure to different ideas. The paper attempts to seek on how rural tribal women's participation in development activities affects their status and lifestyles.

#### **41. Ethnography of Entomophagy in North Eastern India: a study at Kakching, Manipur India**

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The unfounded aversion to insects as food source and culture by some no longer stands in the way of attempts, through advocacy, research and extensions to increase the contribution that insects hold to human nutrition, health, livelihood and environment. However many of us still lose sight of valuable traditional knowledge and practices. There is a tendency to think of traditional habits and customs as out-dated or primitive. Yet, experience across numerous fields has highlighted the value and benefits to be gained from combining customary knowledge and approaches with modern science and understanding. Such is the case with edible forest and agro ecosystem or flooded field insects. The consumption of insects as food is referred to as Entomophagy. It is practiced in many countries around the world but predominantly in parts of Asia, Africa and Latin America. Insects supplement the diets of billions of people and have always been a part of important human diets. However, it is only recently that entomophagy has captured the attention of many including the global institution like FAO (Food and Agricultural Organisation). Insects will be treated wrongly if we imagine them to be foods for the poor or as emergency foods. Insects have been found to be so closely associated with food and

feed security, provisioning of livelihood opportunities, environmental security, health, and sustainable development besides being mutually related with the culture and futures of many societies and nations. Because of being a distinctive part of the Indo-Burma biodiversity hotspot Manipur enjoys a very rich and fascinating diversity of insect fauna. The present paper tries to share the uses of various insects as food in one of the small towns of Imphal valley which is not devoid of declining species diversity resulting from anthropogenic alterations of the environment.

#### **42. Current Issues in Public Health of Migrated Tribal Women in Urban Tamilnadu, India**

**A. Santhi and S. L. Malik**

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Tribal populations generally have poor health outcomes, often because of a healthcare delivery system that does not cater to their needs. A combination of factors such as geographic isolation, low economic status, different societal attitudes, traditional beliefs and healthcare providers inadequacy have led to tribal populations throughout India often being denied access to health services. This study seeks to highlight some key issues related to migrated tribal women health thereby improving the awareness of both the women tribes and the health service providers on issues pertaining to tribal women health and health service delivery. It revealed how tribal women are doing in key areas of health and where the major disparity in the health exists. Migrated women tribes of Tamilnadu might have negative health consequences due to physical and psychosocial strains experienced by them in their newer environment. Access to health services to migrated women tribes should be improved by relaxing structural barriers in health systems, which they have experienced multiple psychosocial stresses. Both at central and state level disease prevention interventions, risk perception of major diseases, possibility of healthy behaviors should be given higher priority to migrated women tribes. Targeted interventions in disease prevention, control and surveillance, broader social interventions and inclusion of tribal women in various government programmes may bring positive health benefits.

#### **43. Health Care Practices of the Mother and Child among a Scheduled Tribe of Assam, India, in a Rural Context**

**Arifur Zaman & Nabanita Dey**

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Health is the most important aspect for mother and new born child. Although it is equally important at any stage of life, yet during the time of pregnancy and after the birth of the new born child, it needs urgent attention than others because of its tender

resistance power. The health status of mother and children, proper physical and mental development and general well being are very much dependent on health care practices of the same. Since time immemorial mother and child health care practices has been a matter of fact in most of the human societies of the world. They are the sufferers of most of the diseases and ailments. Many of these can be prevented by little awareness and effort such as safe drinking water, personal as well as environmental cleanliness and utilization of available health services. In every society there are some indigenous ways of healing as well as cope with the same. The Deoris are also one of the indigenous tribal groups of Assam, India, who has their own pristine way of dealing with the diseases and ailments of the same which is still continuing along with the advent of modern health care system. In this paper a humble attempt has been made to examine the continuity and change of the health care system related with the mother and children of the Deoris of Chamaguri Village, district Sivsagar, Assam.

#### **44. The Development of formal education system among Konyak Nagas of Longwa Village**

**Drabita Dutta**

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The formal education system was the new development in the village called Longwa in Nagaland. It was introduced in the area with the arrival of Christian missionaries. The main purpose of this study was to find out the changes in traditional education system i.e. Morung (Youth dormitory teaching system) into formal education system and their linkages to religious institutions, and the impact of both traditional and formal education upon the villagers. Besides, it was also aimed to find out the gender perspectives in the formal education system. Data were collected on the basis of qualitative methods and using unstructured interview, participant observation, case study etc. as research techniques. More emphasis was given to the structural functional approach while analyzing data. After studying the research data, it has been found that the formal education system is not up to the level of expectation. But the educated youth of the village are involved in many developmental works for the village education and other fields. The areas of concern however are the high rate of drop-outs, absence a high school within the village premises. Apart that Govt. schemes and policies for education are not yet arrived in the area. The need of the hour therefore is that the Govt. and local people should take the greater responsibility to streamline the education system to creating fine brains and bring necessary development in this area.

#### **45. Dimension of Sunni Muslim Women's Autonomy and their Influence on the Quality of Maternal Health in Allahabad, Uttar Pradesh**

**Naila Ansari**

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A study has focused on dimension of Sunni Muslim women's autonomy and the influence on the quality of maternal and health care utilization in Allahabad, Uttar Pradesh through directly examined the sampled Muslim women of distinct Marriage patterns among including newly married couple, Long duration couple, Divorcee & first marriage and Divorcee & divorce marriage. Woman mainly considered in study is between 18 to 45 years of age. This paper examines the patterns and determinants of maternal health care utilization across sampled area of Allahabad. In this paper show utilization of maternal health care services is not up to satisfactory level in Uttar Pradesh. Utilization of maternal health care services is not only associated with a range of reproductive, socio-economic, cultural and program factors but also with state and type of health service. The interstate differences in utilization could be partly due to variations in the implementation of maternal health care program as well as differences in availability and accessibility between the states. In the case of antenatal care, there was no significant rural-urban gap. The findings of this study provide insights for planning and implementing appropriate maternal health service delivery programs in order to improve the health and well-being of both mother and child. There is a general consensus that the use of maternal health care services reduces maternal and child mortality and improves the reproductive health of women. Mental illness stigma continues to be a major barrier for individuals with mental illness. In this paper, researcher define constructs that comprise stigma e.g., attitudes, stereotypes, prejudice, discrimination, discuss the harmful effects e.g., label avoidance, public stigma, self-stigma and present factors that may influence them conceal ability. In order to better understand maternal health in Muslim community, study focus on present study on the complex relationships among gender, class, and health status among Muslims.

#### **46. Menarchael Age and Its association with the Physiological Changes among Adult Bhil Females of Udaipur, Rajasthan**

**Kshetrimayum Surmala Devi**

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Menarche is the symbolic start of womanhood. It serves as an intermediate health outcome that affects the women's wellbeing at later stages of life. The objective of the present study was to find the association of menarchael age and physiological changes among Bhil females of Udaipur, Rajasthan. 110 females of the age group 18-50 years

were taken for the study. Their blood pressure and anthropometric measurements such as height, body-weight, minimum waist circumference and maximum hip circumference were measured to calculate body mass index (BMI) and waist-hip ratio (WHR). Based on the median of the data, arranged with respect to age at menarche, three groups were categorized. Cross tabulation of age at menarche with BMI, WHR and Blood Pressure showed that majority of the females having age at menarche less than 15 years of age were found to be under normal category.

#### **47. Vulnerabilities, Encounters and Emerging Identities of Bharias, a PTG Community of Madhya Pradesh**

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The paper examines the changing identities of Bharias, one of the 'PTG' communities of Madhya Pradesh. Bharias live in a place called Patalkot at Tamia Block in the Chhindwara district of the state. The place is shaped like a bowl or a huge hole formed because of depression of the earth's surface. Its maximum depth, reaches down up to 1600 meters from the surface, and it is stretched across an area of 70 sq. kilometers. The tall Satpura ranges and thick forest surrounds the area, thereby making it nearly inaccessible to the outsiders. This place is home to Bharias, who have been staying here for many generations. The enclosed environment and self sufficient life style (with all their needs being met from their immediate environment), gave rise to a unique social organization and way of living, very different from the outside world. It created a gap and a hiatus between the world view of the Bharias and the outsiders. All these started changing few decades back with the emergence of a township called Tamia, from the early eighties. With the township came market and the Bharias were gradually drawn and forced to become part of this economy, bringing about rapid changes in their culture. Slowly Bharias were drawn to the allurements of civilization forces, promising a better quality of life. Their world opened up to market goods and commodities. Bharias are left today chasing a mirage, losing out in the process, their autonomy and ending up as a 'sore' appendage to the town. The paper looks at some of these encounters of Bharias with the others and its impact upon the Bharia community.

#### **48. Women work and Changing in technology of Fishing Communities**

**KiranSingh**

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On the introduction of the mechanized boats the pattern in fishing changes earlier fisher only captures butter fish and mackerel. But on the introduction of Mechanized

boats now they are capturing shark fish and prawns. There is the village in Kerala shown the major transformation in regarded to the technology of fishing, fish preservation and composition of catch. Women also have gone in major changes in their status in general and attitude because of the technology. The success in the market has reinforced more egalitarian gender relations within fishing households, as well affecting their class mobility, catholic fisherwomen of Goa in contrast to their Hindu counterparts have made an economically successful transitions from barefoot, head loader peddlers in the villages to market entrepreneurs, working in small cooperatives groups.

#### **49. Local Metaphors of Sexual Liaison: Exploring of the Dynamics of Communication pertaining to HIV/AIDS**

**Indrani Mukherjee**

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Developmental Programmes, more often than not, remain top heavy in their initiative, not only because of a disjuncture between the programme planners and the local community, but also because the local community has its own social logic of understanding the broader social phenomena. This paper tries to elucidate both the significance of an anthropological insight and the need for sensitisation, of the community as well as the programme planners, towards a continuous analysis of the social process of developmental initiatives. It draws from an ethnographic understanding of the truckers as a community, through a study of Delhi Transport Nagar as an ethnographic site. The focus remains on the social interpretation of healthcare programme communication and their implication with reference to STI and HIV/AIDS. It seeks to highlight the social adaptation of health care information to suit ones social situation, which gives rise to the need for a more regularly informed feedback system within the programme implementation to take into consideration the social interpretation of messages propagated by the development programmes themselves.

#### **50. Can India by-Pass Northeast: The Imperative Obligations**

**Singlai Thouman**

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India is an old civilization of sun worshipers. It has, therefore, always been looking east' says S.D. Muni. The *Rising India* today, resets her foreign policy and awakes to answer the calling of the east to once again rejuvenate the old ties with the sunrise countries of the east especially with the 'Asian Tigers' through her 'soft power' strategy with the concept of 'Greater India' in her odyssey to the east. The former

Prime Minister of India Manmahon Singh has termed Look East Policy a Strategic Shift in India's Foreign Policy. The Non-Alignment policy of India has now cost her of isolation from developed nations for many decades leading to poor growth of her GDP. Moreover, lately she has realized that her impressive command in South East Asia will be a magic formula for gaining a coveted P 5 STATUS-a world elite society in the UN Security Council and in global market. India is only few steps behindhand in realizing this dream. However, India needs to do a little homework at home with respect to Northeast India, as this region is the Gate-way to South East Asia. This paper will address the Geo-strategic importance of Northeast India and talk about the imperative obligations at the gate. It will also give the assessment of whether the Look East Policy really benefits the people at the grass-root level, and finally take a discourse on how India performs her political somersaults in this region.

### **51. A Demographic Study on the Population Structure and Socio-Economic Status of Bhils population of Udaipur District, Rajasthan.**

**Divya Mishra <sup>1</sup>**

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This paper is aimed to have an insight in the prevailing condition of employment and education in tribal population of Bhil community in Udaipur District, Rajasthan. Relevant data was collected by interviewing 100 ever-married females by modified and pre-tested demographic schedule. Total population of the present study comprised of 480 individuals from 97 household. Sex-ratio was found to be 920. But the age specific sex ratio is showing a very different picture of population structure. Literacy rate (primary level or above) of the population is very low i.e 59.38 % for male and 31.49% for female and over all literacy rate is 45.44% which is significantly lower than literacy rate of country as well as Rajasthan. Poverty level in the population is also very high (88.69% household having annual income less than 30,000) due to miserable employment opportunities which in turn attributes to the abysmally loweducation level.

### **52. Factor Associated with Maternal Health Practices and Caste Level Barriers to Adequate Use of Reproductive Health Services in Eastern Uttar Pradesh**

**Vineet Kumar Verma**

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Maternal and child health services (MCH) are essentially promotive and preventive. The health of the mother and child constitutes a major part of the community health, particularly in the developing countries. Maternal and child health have seen a

spectrum of changes, according to the need of the community. Hence, in the present study, an attempt has been made to assess the Maternal & Child Health (MCH) practices, utilization reproductive services among Rajput and Sonar in a rural area of eastern U.P. The study subjects comprised of mothers of reproductive ages (15-45). A house-to-house survey was carried out in Bhatpar Rani in Deoria district of Uttar Pradesh to study the utilization and satisfaction from the MCH services provided by the Government and private hospitals. In all 986 women of age 15-45 were selected for the study. The information was collected by structured schedule through personal interview. The poor reproductive health services utilization among Rajput and Sonar is a major concern. Improving healthcare accessibility will be key in encouraging women to attend care. The study addresses key maternal and health indicators, including the extent to which mothers receive medical care during pregnancy and at delivery, immunization coverage, and the prevalence and treatment of diarrheal disease. This study uses an ecological approach to assess area development and demographics that have direct or indirect effects on the relative likelihood of married women having a reproductive health check up in sampled area. The findings also suggest that the status of women has a significant influence on whether or not they have reproductive health checkups. The findings presented relate to fertility levels, childbearing intentions, family planning, infant and child mortality, and maternal and child health and nutrition. The use of private hospital for delivery increased with education. Younger women (age <20 years) used equally both the Government and private hospitals. Overall Government hospital was preferred over private. The study also found that key maternal and child health indicators, including antenatal care coverage, medical assistance at delivery, infant and child survival, and immunization coverage among children, have improved but not up to satisfied level. The further satisfaction in services may be increased by encouraging community participation.

### **53. Medical Pluralism among the Tharus of Nepal**

**Bamdev Subedi**

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Medical pluralism, the co-existence and use of multiple systems of medicine, has been recognized as a universal phenomenon. The paper looks into the indigenous healing practices of Tharus, an ethnic group/ ST found across Indo-Nepal border, in the context of medical pluralism in Nepal. Main methods of study was on the spot observation of healing episodes followed by interview with the healers and the patients. The study affirms that there are mainly three types healing practices: Shamanism, Herbalism and Midwifery; practiced mainly by three types of healers: *Guruwas*, *Baidawas* and *Surenyas* who follow mainly three different methods of healing: Mantra, Medicine and Massage (3Ms). The valuable knowledge of mantras, local herbal wealth and long-established midwifery and massage techniques are the most important features of the Tharu healing practices. These practices coexist along with other systems of medicines which can be classified broadly into four categories: Biomedicine, codified indigenous medicines, folk or non-codified indigenous system

and home remedies. They also utilize these therapeutic options based on the kind and condition of the illness. The general pattern of resort follows home remedies to healers/ health practitioners to hospitals.

#### **54. Gender, Body and Health Complex- A Study of Body, Social Space and Health Care among the Working Women of Delhi**

**Gunjan Arora**

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The vast and versatile scholarship on gender and health have focussed on defining sex and gender, understanding feminine and masculine and differences in female and male health. The studies are either based on social construction or on the medical knowledge. But in the present postmodern era the new pressing issues like control of fertility, abortion rights, surrogacy sexual harassment, aging and body image, prostitution and trafficking it becomes imperative to bring the 'body' into focus. Body represents the encoded social meanings and is an image of the society. It is important to understand how are bodies organised and experienced in social space. The female body particularly has been of great interest to scholars from various disciplines because the position of women in a society reflects the society itself. The female body is thus an image of the society and it becomes vital to study what it means to be a woman or live within the female body. There are attempts to focus on the socialisation of the female to understand gender and gendered roles but the basic question as to how women actually pattern these ideas in and through their bodies as well as how bodies themselves become a focus for negotiating cultures, space and identities. Is body synonym for self or person? Is it correct to objectify bodies as things devoid of intentionality and subjectivity? Coming to the health issues among females, the biological body and the social body together explain fully the health concerns of women going through different life cycle changes. This brings us to the three important coordinates i.e. gender-body-health complex where these three interrelated parts are intersecting. How gender affects the bodily practices in social space and how sometimes the constrained choices about health affect the body.

#### **55. Child Rearing Practices among the Rabhas of Udaipur village, district Goalpara Assam.**

**Mondira Boruah**

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Children are considered as the most valuable asset of the nation, they are the future citizen and the nation builders. To be a good citizen an individual requires inculcating good personality and habits that depends on its foundation period childhood. Hence

development of a nation always reflects how its children's are being cared and brought up. A family where the child belongs to is the basic unit of the society. Each and every family has to follow certain norms and rules of the particular society to get recognition and identity. In other words every society has its traditionally and culturally practiced norms and upbringing of its children. home being the primary institute of child rearing, the term child rearing may be considered as the upbringing of children in a family with all interactions among parents, interests, beliefs, care taking and training behavior to make their children the acceptable member of the society. The present study is concern about the child rearing practices among the Pati Rabhas of Goalpara district of Assam. The study is observed in total 90 households of the village Udaipur. The main objectives of the study is to find out the process of child rearing practices, and health and hygiene of the children .The study will focus on the relationship between the family and the child, the process of socialization, the basic disciplines, practices and process of child rearing, health and hygiene practices related to child and the home remedies etc. The study is based on the primary and secondary data, case study, survey schedule and in-depth interviews are the methods used in the study for collecting the primary data.

#### **56. Factors affecting fertility among Musahars in Madhubani district, Bihar**

**Richa Priya and Gautam K. Kshatriya**

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Since India contains one sixth of humanity, the future of its population is clearly of great interest. In India, although births are declining high fertility is deep rooted. It is widely recognized that human fertility, responsible for biological replacement in a society is a complicated process governed not only by biological factors but also greatly influenced by demographic, socio-economic and cultural factors. This paper is an attempt to examine the demographic, socio-economic and cultural factors affecting fertility among Musahars of Bihar. The data were collected from 500 households on ever-married women in the age group 15-49 years. In Musahars, the number of children ever born is high. The mean number of children ever born (CEB) among married Musahar women of reproductive age and among women aged 40-49 were 4 and 6 children, respectively. Regression analysis revealed that age of woman, age at first marriage, perceived ideal number of children, desired number of sons, use of family planning methods and experience of child death were the most important variables that explained the variance in fertility. Despite the legal restrictions against marrying at a young age, early marriage is common in this community. Therefore, programs should focus on creating awareness of the marriage law and the disadvantage of early marriage and large family size and advantages of small family size and family planning. The relation between fertility and child mortality experienced by mothers was found to be strong and positive in the study. Programs

that focus on reduction of infant and child mortality could also be considered, which would also help to reduce fertility. In short, it can be concluded that programs should aim to reduce fertility by focusing on all these identified predictors so that fertility as well as infant and maternal mortality and morbidity can be decreased and the overall well being of the family maintained and enhanced.

## **57. Critical Analysis of Reproductive Health Services in India**

**Ankita Gera**

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Women's Health is a multifaceted issue intervening with inequalities persisting in the society related to gender stereotypes, access to resources, inequality, discrimination, female mortality, declining sex ratio and poor delivery systems. Gender norms and values, and resulting behaviours, are negatively affecting health. Household work can be exhausting and debilitating especially if it is done with inadequate resources and combined with pregnancy and subsistence agriculture. Serious gender gaps remain in health outcomes such as mortality and morbidity rates and life expectancy. High fertility rates and low mean age at marriage has a debilitating impact on health of girls and women. Diseases like anaemia, stemming from nutritional deficiency, HIV/AIDS and issues pertaining to mental health of women. This paper utilizing the existing data through secondary sources from government and Non-Government Organizations, International Organizations, Research journals have analysed the status of reproductive health critically and describe the situation of the maternal and reproductive health of women in India. The study also highlights some prior recommendations in the existing policy related to maternal and reproductive health.

## **58. Traditional Knowledge and Cosmology in understanding the dyadic Relationship of Nature and Culture: A study on Kullu valley of Himachal Pradesh.**

**Sonia Kaushal**

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People in traditional societies often act as guardians through their traditional knowledge. This traditional knowledge and belief system are used to maintain a symbiotic relationship between man and nature has sacred origin. The local knowledge is being promoted in a universal way and also become the integral part of traditional people's cosmology. In traditional societies, there are specialists with the understanding of organising principle of nature and culture. These specialists channelize their said understanding to maintain harmony and equilibrium between nature and culture, this world and other world. The said knowledge of the traditional

specialists have the potentialities in rejuvenating the man and environment relationship to deal the contemporary crises like global climate change, sharp increase in natural disasters, overpopulation and exhaustion of natural resources. This paper basically tries to explore the role traditional knowledge of Himalayan communities in managing and preserving their local environment. The Vashisht village of Kullu valley (H.P.) represents a state of homeostasis of culture, society and environment which is being disturbed by rapid modernisation, economic development and social change. The on-going conflict presented through case studies, between the village deity and villagers simply indicates the social concern regarding ecosystemic changes and restoration of these changes with regular interval through specialist intervention. The moral of this paper has taken into consideration the contemporary concept of deep ecology which argues that only the environmental philosophy can help us in connecting the nexus of new and old environment preservation approaches.

**59. A study of bone mineral density during the menopause transition among Rural Yadav women of Kanpur (UP)**

**Monika Thakur, K. D Sharma and A.K Sinha**

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Menopause is the natural biological experience which marks the aging process. Bone loss is one of the consequences of menopause which increased the incidence of morbidity and mortality. The magnitude of bone loss among menopausal women has been investigated across various cultures. Researchers have studied bone loss with respect to the different stages of menopause. Objective: This study was designed to assess the incidence osteoporosis/osteopenia and age related changes in bone mineral density among 35-55 years aged Rural Yadav women of Kanpur Nagar (UP). Research Methodology: The bone density has been evaluated by using a DEXA scan on heel of 144 women residing in the rural area of Kanpur Nagar (UP). Conclusion: It was found that the percentage frequency of osteoporosis in pre-, peri- and post-menopausal were 28%, 42% and 65%, respectively while osteopenia was found in 64% premenopausal, 48% perimenopausal and 26% postmenopausal women.

**60. Invisible link between Culture and Women's Reproductive Health: A case study of Bhuiyan Tribe of Odisha**

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Health is one of the major areas of concern for human life not only for its own individual existence but also for the effective sustenance of the race and society. Its

unequivocal importance is reflected throughout the ages starting from Geeta, the holy text of Hindus, to 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> agenda of Millennium Development Goals. In its simplest connotation health means a sound body with required capability to do any work. Among many definitions of health the most elaborate and widely accepted one is given by WHO like “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. This definition hits upon the fact that health is not a standalone concept, rather embraces and influenced by many other aspects like social, cultural, behavioral etc. And culture has an unquestionable control over the differential behavior of men and women, sometimes making them, particularly women victim of such biases. All cultures have systems of health beliefs to explain what causes illness, how it can be cured or treated, and who should be involved in the process. Each of these group has distinct cultural beliefs and customs. Health in general and reproductive health of women in particular is encapsulated by a number of socio-cultural traits and behaviour. Each community and society has its own way of handling the reproductive health issues. Cultural beliefs, practices and restrictions linked to pregnancy and delivery affects women’s reproductive health as well as the health of the child. These practices still differ in tribal communities who are comparatively less exposed to mainstream life. Even if they are not very much familiar with the concept of gender, even if some of these communities practice cauvade, still women are entrusted with child rearing responsibility which affects their postnatal health. One such community is Pauri bhuiyan who are believed to be one of the aboriginal tribes inhabiting the Keonjhar district of Odisha. This article spells out the impact of cultural practices on the women’s health among Pauri Bhuiyans of Keonjhar District. This article also highlights some of the cultural traits like language as one of the barriers for the Bhuiyans in availing the health care services.

### **61. Nutritional status among school going boys and girls aged 5-18 years of Sagar, Madhya Pradesh**

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The present cross-sectional study assesses the prevalence of undernutrition among school-going children of Sagar MP. A total of 612 children (312 girls and 300 boys) in the age group of 5–18 years were measured. Height-for-age, weight-for-age and body mass index for age were used to evaluate their nutritional status and compared with the NCHS and WHO reference data. There were wide variations in stunting, underweight and undernourished among the children. In the present investigation z-score (Height-for-age, weight-for-age and body mass index for age) and composite index of anthropometric failure were also computed. This study attempts to compare nutritional status among boys and girls and it was found that nutritional status of boys

is better than girls. It was found that the girls were heavier than boys, except 14 years of age. After 15 years of age boys are heavier than girls. Similarly girls are longer than boys with 2 to 5 cm up to 13 years of age. The mean BMI of boys is higher to girl upto 10 year of age, after that the trend is reversed and the mean BMI of girls is higher than boys. Boys are more stunted than girls while girls are more under weight and under nourished than boys. As per Composite index of anthropometric failure girls are more undernourished (10.6%) than boys (10%).

## **62. Handwriting Characteristics Assessment for Diagnosis of Developmental Disorders: A Case Control Study of ADHD among North Indian population**

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Handwriting execution is considered as an automatic motor activity. It is one of the earliest biometric parameter employed for identification purpose. This relies on the automatic execution in genuine handwritings in contrast to the forged writings. Applicability of handwriting characteristics for forensic and forensic-anthropological investigations is well established. However, the application of handwriting characteristics as a diagnostic tool for developmental disabilities exhibits untapped potential. Execution of handwriting is controlled by the anatomical and neural parameters. The relationship between cranial capacity and hand morphology is well known. The present study focuses on the use and reliability of fundamental handwriting features to study the developmental disabilities among North Indians. Significant difference ( $p < 0.001$ ) was found in the selected handwriting characteristics between cases and controls. Interestingly, the natural variation study presented highly varied master patterns in selected outliers.

## **63. Novel SPR Compositions for Development of Latent Fingerprints on Wet Non-Porous Surfaces**

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Small particle reagent (SPR) is a widely used method for developing latent fingerprints on non-porous wet surfaces. SPR based on zinc carbonate hydroxide monohydrate,  $ZnCO_3 \cdot 2Zn(OH)_2 \cdot H_2O$  – also called basic zinc carbonate – has been formulated. The two other ingredients of the formulation are crystal violet and basic fuchsin dyes along with a commercial liquid detergent. The novel compositions develop clear, sharp and detailed fingerprints on non-porous items, after these were immersed separately in water for variable periods of time. The ability of the present formulations to detect weak and faint chance prints not only enhances its utility, but

also its potentiality in forensic case work investigations. The raw materials used to prepare the SPR are cost-effective and non-hazardous.

#### **64. Corporate Social Responsibility in the Development Arena, A Reflection on HIV Initiative over a decade**

**Indrani Mukherjee**

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India is a country confronted with a number of social issues, and the 'issue' that takes priority/preference is not necessarily dictated by the severity of the issue itself, but rather by the national and international social-political and intellectual environment. Business houses do not work in isolation and are equally affected and influential in the prioritizing of these issues. Building Public Sector capacity and overcoming systemic obstacles is an overwhelming task for a concern like HIV/AIDS which is a long term challenge. Corporates can contribute significantly to the sustained fight against HIV/AIDS, with financial and logistical support. The current socio-political awareness has motivated a number of corporates to actively participate in CSR ventures. Public-private partnerships are being established to promote focused collaborative initiatives towards various causes. Keeping this in mind the research paper seeks to explore the social influence of an initiative by a Corporate, which has exhibited active participation in its involvement in the fight against HIV/AIDS.

#### **65. Political Ecology of Water: A Case of Water Scarcity in Village Chanwara, Rajasthan**

**Kalyani Sahal**

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This paper is based on the ethnographic study conducted at two sites namely Khetri Nagar (site of mining project named Khetri Copper Complex KCC, a Public Sector Undertaking) and nearby village Chanwara (site of water resourcing unit for KCC) in Jhunjhunu district of Rajasthan during the course of my M. Phil. Unlike most of the development studies which focus on displacement and rehabilitation, this study is concerned with the ramifications of development due to over-utilization of the natural resource (i.e. water of river Kantli) as the water resourcing unit of KCC in village Chanwara has been providing water for mining and township at Khetri Nagar from nearly last four decades. This study explores the issue of the contested ownership of river water between the villagers and mining officials. It focuses on issue of commodification of water in the hope of better management of water. The data for the present study was collected through fieldwork involving participant observation and

conducting interviews with the villagers, mining officials and NGO workers to include multiple narratives in the study.

### **66. Corporate Social Responsibility and Human Development, the Case of Apollonian Rubber at Delhi Transport Nagar**

**Indrani Mukherjee**

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Corporate Social Responsibility and HIV, both multi-pronged and multi-cultural in character, hold critical importance in contemporary social science research. It has urgent calling for local attention and awareness on one hand and worldwide consideration and initiative on the other. The practice of anthropology assumes significance as in-depth anthropological knowledge can help create a bridge between the culture of people, the business groups and the broader policy design. The appropriateness of anthropology as a discipline, in terms of its theoretical and methodological specialisation can be used to understand the intersections between Corporate Social Responsibility (CSR) and HIV with reference to policy design, programme strategy, community of engagement and human development. Delhi Transport Nagar, as a commercial centre and a transshipment hub, provides a unique social space for the amalgamation of floating, migrant and nomadic population of both urban and rural import. Different social groups belonging to different and overlapping social spheres come together and form specific identities which perpetuate themselves overtime. The research paper tries to understand these social identities. It focuses on how various social groups come together in their association with a CSR initiative for HIV, based within the geographical-social space that helps establish their identity.

### **67. Impact of flood and change in livelihood: a study of the Mising community of Tinsukia district of Assam, India.**

**Dibyajyoti Das**

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The ecosystem concept is very powerful in anthropological research. In this paper I would analyze how a climatic disequilibrium ecology brings in change in subsistence and settlement pattern among the Mising community of Tinsukia district of Assam, India. The community under study is dependent on agriculture and their economy is basically agrarian but due to annual floods and soil erosion by the river Brahmaputra the economy of the community is affected to its extreme. It is important to take note of their survival strategies and to study how they opt for other sources of income to cope in the situation of disaster. In this short paper an attempt has been made to

examine how the Mising community of Tinsukia district of Assam in India display considerable resilience by changing their livelihood to quickly recover and regain their economic equilibrium. I have tried to study the relationship between humans and their natural environment as environmental evidence frequently presents different challenges to them.

### **68. A study of the Built Environment of a resettlement colony in Delhi.**

**Md. Ali Azam & Sana Azmi**

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Rehabilitation and Resettlement (R&R) is a multi-dimensional issue having complex linkages with health, gender, livelihood and even governance facets. To ensure that no people are disadvantaged in the process of development projects and to avoid or minimize the effect of resettlement a well-designed R&R policy should include the opportunities to improve quality of life by developing the built environment. The built environment which is a material, spatial and cultural product of human labour that combines physical elements and energy in forms for living, working and playing. This study utilizing quantitative and qualitative data aims to capture the life situations of people in relation to the built environment of the community. Secondary data from government and Non-Government Organizations, Observation checklist, Interview guidelines and Participatory Rural Appraisal (PRA) techniques have been employed to understand and describe the situation of the resettlement colony's built environment and life of people. The study also highlight some suggestion to influence policies to address some issues of people living in resettlement colonies of Delhi. The area studied here is Madanpur Khadar (MPK) a resettlement colony (since 1999-2000) situated in South Delhi. The community is heterogeneous and also severely fragmented. General level of education and skill level is low. Displacement and poor road/transportation connectivity, insufficient infrastructure has adversely affected scope for better living situation and hindrances in access to basic needs like health services.

### **69. On the Sustainability of Traditional Knowledge and its Practices: An Insider's View.**

**Ngao Thohrii**

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The need to preserve and document various 'ways of knowing' of the local communities have risen in recent years after realization that such knowledge and wisdom allowed them to sustain in their specific natural surroundings thorough out

history. Traditional knowledge refers to non-formal knowledge system accumulated over a period of time by means of keen observations, trials and errors. It is constructed by empirical observation, by experience passed down orally from one generation to another. For years, traditional knowledge system had been ignored by the scientific community. It took the centre stage only after the great debates on the drastic climatic changes observed globally. Appreciation and acknowledgement of traditional knowledge is born out of the fact that the local communities manage their resources efficiently keeping ecological balance. They are way ahead in sustaining their ecosystem than their modern counterparts. The focus of this paper is to answer the question of why traditional knowledge practices are sustainable. The paper is divided into two sections - first section summarises some of the traditional food knowledge and health practices of the Poumai *Naga* community of Manipur; the second part demonstrates their knowledge about resource management and the changes observed over a period of time.

## **70. Global Discourse on Indigenous Knowledge: Drawing Inferences for Tribal Medicine in India**

**Nemthianngai Guite**

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Indigenous Medicine plays a crucial role in health-care and also serves the health needs of a vast majority of people in developing countries. Access to “modern” health care services and medicine may be limited in developing countries and especially in the remote areas where the indigenous people are residing. For them their indigenous medicine and the substances existing within their reach becomes the only affordable treatment available. It is important to recognize here that indigenous medicine is treated as part of indigenous knowledge and that is why the whole issue of ownership and rights over the knowledge arose under the new laws and policy implemented in the 1990’s. Many reports, studies, articles and books have discussed and deliberated upon the issues related to indigenous people of the developed countries, especially on their rights over their own knowledge and resources. Drawing inferences from their literature, this paper incorporates thematic review of the brief background of the conflict over traditional knowledge, the aspirations of the Indigenous people to have a say and rights over their own indigenous knowledge; and private ownership of resources as propagated under Trade Related Aspects of Intellectual Property Rights (TRIPS), and how it conflicts with state ownership of resources under the Convention on Biological Diversity (CBD).

## **71. Livelihood Change of Two Village Communities of a Flood Prone Area: A Cultural Ecological Perspective.**

**Mondira Boruah**

Department of Anthropology, Dibrugarh University, Assam

Cultural ecology studies the relationship among the population, culture and environment. It is a process of adaptation of people to their environment. People try to live in a given ecological set up with their knowledge of productive culture. People try to use the outmost knowledge of culture and technology to excess and process those available natural resources to adapt to an ecological situation. Julian Steward studied about the Shoshone of Great Basin and provided the concept of cultural ecology. The present study is going to discuss about the changes of livelihood patterns due to chronic flood of a flood prone area. The life of the people of flood prone areas is needed to be studied, because it is necessary to understand the problems, prospects and attitudes of those people who are living year after year in those chronic flood prone areas. The people living in those areas are facing a distressful situation of displacement by flood, sometimes twice, thrice or more than that in one calendar year. The study is conducted in two flood prone villages namely Chamarajan and Ujoni Kekuri in Dhemaji district. The study is based on both the primary and secondary data. The methods used to collect the primary data are case study, survey schedule and in-depth interviews etc. The secondary data are collected from the various documents, journals, newspaper etc.

## **72. Rural Migrant Labour in Delhi: An Anthropological Study of Changes in Livelihood**

**Ankita Mehta**

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Changes in the climate have a bearing on the availability of natural resources essential for the livelihood in the region. In addition to this, social, economic and political factors can lead to migration or conflict or both. Further vulnerability of livelihood is also associated with non climatic factors like unequal land distribution, market, trade barriers, crime etc. The migration and movement of people is an elemental part of livelihood strategies in any region. Non viability of traditional and non-traditional livelihoods is another cause of migration. Seasonal and circular migrations are some of the traditional adaptation strategies to climate variability in the region that offers opportunities for trade and income. Moreover, with the increase in climate-related disasters – such as floods and drought – are resulting in more permanent migration over time. Urbanization (caused by rural-urban migratory flows) is also a defining trend in the region. A fieldwork was conducted in the labour colony and construction

site of University of Delhi to explore the relationship of migrant workers with the traditional and cultural space, values and practices and also with each other. The study tries to reflect upon livelihood changes and its impact on the people.

### **73. Sustaining the Development: Role of Capacity Building Initiatives**

**Chitra Kadam**

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Sustainability of development initiatives has incessantly been a contentious issue and a stock of major debates among the fraternity of sociologists and anthropologists. Addressing the issue of sustainability, the present paper deliberates on the role of capacity building initiatives in achieving sustainable results among rural communities by emphasizing on community mobilization, capacity building of local community organizations and strengthening leadership of women, youth and children. Capacity building significantly nurtures the agency of people and hone their leadership qualities as a result of which local leaders are produced that are better prepared to carry the flag of development further even after the development interventions are withdrawn. The paper critically examines the sustainability of development carried out by Samarthan NGO through capacity building initiatives in two villages of Sehore district of Madhya Pradesh. Placing greater importance to the participatory approach, Samarthan works directly through the Panchayat representatives, strengthens the local capacities of rural communities and forms local community groups that act as catalyst in the development process. Drawing comparisons among the two villages the main argument revolves around the ownership and institutionalization of development programs to elucidate how capacity building initiatives produced sustainable and replicable results in one village while in the other they conked out due to lack of ownership and institutionalization.

### **74. Juangs, Forest and Livelihood: An Anthropological Perspective**

**Sampriti Panda**

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The relationship between tribes and forests has been symbiotic and inseparable. For many of the tribes, forest is home, forest is livelihood, and forest is the means and an end in itself. Because of very strong and close attachment with forest, tribal communities have been denoted, with various Indian words like 'vanvasi' (inhabitants of forests), 'vanyajati' (forest communities), 'pahari' (hill dwellers) and as such. These tribal communities also earn their livelihood from the forest as well as they are dependent and related to forest through various aspects. Forest has been always a major source of food, timber, fuel wood, medicines and other necessities of everyday

life for tribes. The paper focuses on the relationship between forest and tribe with reference to a Primitive Vulnerable Tribal Group of Juang located in the Keonjhar district of Odisha. It tries to look at the various livelihood strategies used by Juang and the effect on development on them. The data include collection of primary data from field work among the Juang conducted in the Keonjhar district of Odisha.

### **75. An Inquiry into Ship Breaking Industry in Gujarat and the Environmental and Occupational Health of Migrant Workers from Bihar and Uttar Pradesh**

**Gopal Krishna**

Editor of hazardous, Industries, technologies and corporate crimes

The global shipping industry is dependent on the developing countries like India to dispose of their retired deep-sea ships through the process of ship breaking.<sup>2</sup> The illegal shipment of hazardous waste "from industrialized countries is being shipped to less developed countries under the listed intention of recycling and reclamation," is a serious problem.<sup>3</sup> According to World Customs Organisations' Green Customs Initiative, national and international crime syndicates earn 20-30 billion US dollars annually from hazardous wastes dumping, smuggling proscribed hazardous materials.<sup>4</sup> More than 90 per cent of ship breaking in the world is taking place in India, Bangladesh, Pakistan, China and Turkey. In an attempt to escape exorbitant decontamination cost of end-of-life ships in the developed countries, the global shipping companies in collaboration with international recycling industry and foreign, national and state governments have been transferring harm to South Asian beaches at least since 1980s. The silence about occupational and environmental health risks to migrant workers associated with ship breaking gives an impression that there is industrial peace in the industry owing to a cordial relation between the workers and the ship breakers. This impression is deceptive. Since, 1983 till 2013, more than 6000 end-of-life ships have been dismantled in India on Alang beach alone. This paper provides the profile of the end-of-life ship breaking industry and the migrant workers in India.

### **76. Gender, Gender Relations and the Environment: an Anthropological Study of Sumi Community**

**Kitoholi Zhimo**

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Women have been participatory stalwart of conservation for centuries without much recognition and appreciation in natural resources and environmental management. They are known to exist in close proximity with nature and possess inherent indigenous knowledge about the earth systems thereby contributing to the sustainable management of the resources, yet they continue to suffer the brunt of environment degradation at the expense of Gender disparity. Had they been given equal opportunity and control over the natural resources the world would have achieved greater if not, complete sustainable development. In this milieu, the present work seeks to explore the role and contribution of women in sustainable development within the patriarchal framework of Sumi community. For this purpose the fieldwork for the present study was conducted in Khukiye-Lukhai village; 6-7 km away from its administrative block, Satakha under Zunheboto district Nagaland. Are women the key to Sustainable Development? What are the contributions of women in the environmental management? What are those Gender constraints that hamper the process of Sustainable Development? Or is Gender parity the “missing link” of Sustainable Development? An attempt is therefore made in the present work to unearth these queries based on the qualitative research study conducted with special focus on women engaged in Organic farming, Vermiculture/Vermicompost, and Indigenous based Knowledge Systems in resource management.

### **77. Anthropological Understanding of Sikh theology: With special reference to sustainable Development and environment**

**Chatali Tandon**

Not only in India but around the world, religious beliefs do influence all aspects of human life from social, cultural, political, economic, and environmental. Religious faiths not only help humans to cope up in times of crisis but also lay code of conduct for them and the way humans should treat nature. Every religion teaches and prescribes guidelines and discourses on the wellbeing of the humans, environment and sustainable development in blatant or subtle ways. All religious faiths have an idiosyncratic history and therefore every faith explains its own exceptional connection with nature. All these religious teachings/discourses on environment and sustainable development are very insightful and they result in strong commitments from the individuals of those respective faiths resulting in social change in any civil society. Many religions from Buddhism, Christianity, Islam, Jainism, Confucianism, Judaism, and Daoism have their peculiar understanding of ecology and development. This paper focuses on one such religion/faith: Sikhism and its understanding of the

relationship between human and nature with special reference to sustainable development and environment. This work discusses the ecological values imparted in the Sikh religion and the current anthropological relevance of those values. Apart from the Sikh theology itself, the paper will also examine the role of Sikh theology in recent ecological developments, endeavors, contributions and responses of Sikhs dealing with sustainable development and environment issues in present day world.

### **78. Examining the Groundwater Conundrum through the Energy-Water-Food nexus approach**

**Supriya Singh**

Department of Anthropology, University of Delhi, Delhi-110007

The story of groundwater management in India is reflective of the ills plaguing the environment and development dialogue. It gives a very good perspective on why the nation and its people landed up in an ever bleak situation today vis-a-vis our natural resources. Today, groundwater management has become a highly strategic issue, if it was not so earlier. This paper looks at the challenges facing the water sector by using the 'nexus' approach. Water is the lifeblood of ecosystems but once it is subjected to formalize management, it is frequently represented as a stand-alone resource system. Deprived of its social, ecological and even spatial relations, water becomes a tradable commodity albeit one that is shared – spatially, sectorally and socially. By the virtue of its undeniable importance, connecting water to energy and food systems makes the problematique even more pronounced. In order to effectively manage groundwater one has to get the energy-water-food nexus right. Even if one were to go just by the conflicts around water, without a doubt the socio-political aspects of water have emerged as equally important, if not more, than the technical aspects of water and other resource management. This paper looks at the social, political and technical constructions of groundwater and how these in effect dictate the political-economy of the resource.

### **79. Environmental Priorities and Sustainable Development: A Case of Jharkhand in Eastern India**

**Anirudh Prasad**

Xavier Institute of Social Service (XISS), Ranchi

Today the whole world, particularly the developing countries, face a near-crisis situation, both economic and environmental. Policy makers find it difficult to formulate programmes that would work under the present situation of escalating population on the one hand and diminishing resources on the other. The objective of the present address is to identify priority areas and the way corrective action could

lead to sustainability in development. This has to be done in relation to our particular socio-cultural and economic milieu. Historically we have been serious minded about environment and the basic philosophy has been one of harmony with nature as against western concept of conflict with nature. We followed the latter during the last 200 years or so. This address is aimed at provoking a thought process, discussion and a public debate on the subject, rather than talk about it with an air of finality. Keeping the foregoing points in view, the population stabilization; integrated land use planning; healthy cropland and grassland; woodland and re-vegetation of marginal lands; conservation of biological diversity; control of pollution in water and of air; development of non-polluting renewable energy systems; recycling of water and residues; ecologically compatible human settlement including slum improvements, environmental education and awareness at all levels, etc. are the environmental problems facing Jharkhand where priority action is needed and if solved could as well lead to sustainable development.

#### **80. Tuberculosis, malnutrition and Socio-demographic characteristics: A case-control study**

**Heemanshu Aurora**

Department of Anthropology, University of Delhi-110007

Tuberculosis is one of the killer diseases of great antiquity especially in developing countries and so contributes significantly to health instability and economic loss. The aim of the study was identify nutritional status and socio-demographic factors for the development of tuberculosis (TB) among 100 cases and 100 controls. Cases were defined as subjects who were diagnosed as suffering from TB and taking regular medicines. Controls were apparently healthy subjects who had never suffered from tuberculosis. The age group of the study cohort was 18-50 years. All TB patients included here were enrolled in various DOTS centres of North Delhi. The structured questionnaire was used to collect information on basic demographic data. Anthropometric measurements like stature, and body weight, waist circumference, mid upper arm circumference (MUAC) were taken for the study. Body mass index (BMI), widely used as a practical measure of nutritional status was computed. The percentage of malnutrition based on body mass index ( $BMI < 18.5 \text{ kg/m}^2$ ) was 53% among subjects suffering from TB and 20% from non-TB subjects. The prevalence of Undernutrition based on mid upper arm circumference ( $MUAC < 22.0 \text{ cm}$ ) was found to be 53% for TB patients but 12% in the healthy controls. The socio-demographic variables studied include sex, education, employment status, profession, family type, income, family history of TB. A statistically significant differences were found in age group, education status, profession and income among TB patients and healthy controls. Patients with active tuberculosis present with malnutrition, as evidenced by the lower anthropometric indices, may be attributed to the acute phase response

(APR) and increased metabolism and anorexia seen in these patients. Even though evidence from this study suggests the presence of malnutrition in active tuberculosis cases, it is still unclear whether the disease precipitates malnutrition or malnutrition leads to the disease.

### **81. An Anthropological Perspective on 'Public' as a concept in Policy and Parlance in India**

**Rachna Atri Saksena**

Department of Anthropology, University of Delhi, Delhi.

The paper is a perspective on the concept of 'Public' with reference to common property rights, public-private partnership (PPP) and public interest with specific reference to policy on forest Rights Act, Land Acquisition Act and Relief and Rehabilitation policies of the government. The paper explores how as a category, what is deemed as 'public' is fluid and is an ambiguous category, the meaning of which changes with the context and is derived from a fragile set of social conventions. In conventional parlance, what is not private is considered as public and therefore is in common domain. However, what is the basis of understanding of 'Public' in policy. The paper looks at various concepts such as Public purpose, Public property, public debate, public domain, public servant and public interest, in each of these there is a specific reading and mechanism for operationalizing of the term 'public'. The paper tries to capture the various understandings of what is "public" as multiple strand category and how it is problematic to view it as a homogenous category for policy. The paper explores India's policy processes to see what kind of institutional space it offer to citizens whose lives and livelihoods are directly affected by these policies.

### **82. Maternal Subjectivities - Changing Priorities and Constrained Choices**

**Gunjan Arora**

Department of Anthropology, University of Delhi

The earlier studies on mothering and motherhood primarily focussed on the quality of mothering and its effects on the child. The ideology of intensive mothering and full time care for the child was also challenged by the feminists. Today's scholarship concentrates more on the motherhood experiences. With more women now working outside the domestic sphere there are new kinds of challenges women face and newer accommodations and adjustments are made accordingly. It becomes imperative to emphasise on the maternal subjectivities. It has grown to be more interdisciplinary study. The issues of maternal well-being, maternal satisfaction, distress and guilt and other emotions affect the overall health of the mother and the child too. It is necessary to have an embodied understanding of this maternal subjectivity. This paper focusses

on the narratives of few working women who were interviewed for the doctoral work. Interviewing these women brought out certain commonalities in their motherhood experiences and subjectivities irrespective of the age, class and socio cultural background.

### **83. Color Blindness among the Panikas and Gonds Of Madhya Pradesh**

**Tabitha Panmei**

Department of Anthropology, University of Delhi, Delhi-110007

In the present study an attempt is made to know the incidence of red–green color blindness among the Panikas and Gonds of the Amarkantak block and surrounding areas, Madhya Pradesh. In total, 212 individuals were studied of which 106 are of Panikas (Male=66 and Female=40) and 106 were Gonds (Male=56, Female=50) and. Here the studied populations, incidence of color blindness was found to be male only not a single female is color blind. A total of 212 of Panikas and Gonds 4.7% were found to be color blind by medium percentage compared with other population in India. Of which, the Panikas, 5 male (1.88 %) were found among Gonds, 3 male (2.71%) were found to be color blind. The study observed data is not exactly in conformity to the expected one (with respect to the selection relation hypothesis), which may be due to the fluctuation. Had there been larger body data and an appropriate sampling design, it might have smoothened the effect of fluctuations.

### **84. Forensic Examination through hand outlines**

**Sangeeta Dey**

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Stature estimation is central dogma in Anthro – forensic examinations. It aids in Personal identification of individuals. The purpose of this paper is to study hand outlines as an evidence to predict stature. The study was carried out at Udaipur district, Rajasthan. Samples were collected from males and females of tribe Bhil – a schedule tribe within age group ranged from 18 – 60 years This study examines measurements taken from 204 adult subjects (91 male; 113 female). Various anthropometric measurements were used. (Stature, Right & Left Hand Length, Right & Left Hand Breadth, Right & Left Hand length from outlines, Right & Left Hand Breadth from outlines). Statistical analysis revealed that sex differences were found to be significant for all measurements at  $p < 0.01$  by Student's t-test. Pearson's correlation was found to be statistically significant between stature and all the variables for both males and females. Linear regression equations were calculated with a standard error of estimate (SEE) ranged from  $\pm 4.71$  cm to  $\pm 5.32$  cm for males and from  $\pm 4.61$  cm to  $\pm 5.80$  cm for females. In terms of outlines SEE ranged from  $\pm 4.80$  cm to  $\pm 5.32$  cm for males and from  $\pm 4.84$  cm to  $\pm 5.80$  cm among females. It is evident from the study that measurements taken from hand outlines can better predict

stature with a minimum error of estimate difference 0.52 among Bhil males and 0.96 among females. Thus, it was concluded that stature can be determined successfully using hand outline as a parameter. This will give a new perspective and dimension in the field of forensic anthropology by which the stature can be predicted. It was suggested that more studies are needed in this direction for future perspective.

### **85. Contextualizing Health and Well Being of Meo-Muslim Women in Rural Mewat (Haryana)**

**Bindiya Narang**

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It has been widely acknowledged in the literature on public health care that the dynamics of gender and health require an understanding of disparate determinants situated in physical environment and socio economic circumstances of people. The foregoing paper is steered towards understanding such myriad challenges to health and well-being, as perceived by the rural Meo-Muslim women in Mewat, a backward district in the state of Haryana. The secondary information reflected that the study setting, with predominant Meo- Muslim population, has fragile geographic endowments, dearth of infrastructural facilities, precarious livelihoods, an appalling state of human capital and a derelict health scenario. The study based on inductive approach, utilized focus group discussions, participatory exercises, observation and dialogue with key informants as primary modes of data collection. This methodology enabled obtaining situated knowledge based on the respondents' subjective viewpoints regarding awareness of their milieu, general resource base of the community, health problems faced, utilization of health care services etc. It was evident that Meo women had limited opportunities for a decent lifestyle and healthy, fulfilling lives. They were found to be shouldering immense responsibilities catering to home, family, farm and livestock. The cultural hierarchies and a lower social status in the patriarchal set up had further put them to disadvantage. It was also observed that their productive economic work was not regarded worthy of any serious attention. Lack of access to government health services, incidence of reproductive diseases, and absence of birth control, restricted health seeking and prevalence of traditional healers were particularly apparent. The study concluded that gender specific vulnerabilities need to be levelled up for a genuine achievement of health equity.

### **86. Understanding Images: An Ethno-Archaeological Study of Prehistoric Rock Paintings from Central India**

**Indrani Chattopadhyaya**

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Ethno-archaeology is an approach that helps us in understanding the relationship between material culture as a whole in a society and its transformation in archaeological records. In this paper I intend to focus on the importance of ethnographic study for meaningful interpretation of archaeology by studying prehistoric rock paintings from central India. In art there is a language of things, of relationships, of patterns that could not be translated into words. As we study the painting traditions of local tribal populations we gradually understand their beliefs, values, customs, traditions, and social relations among the tribes as well as with contemporary people. Thus by taking archaeological sources into account it is possible to document and explain changes over a long period of time. Ethno-archaeological research provides a broad analogical support to archaeology. My focus in this paper is on finding the universals in archaeological facts. I intend to do this by combining ethnographic study of art traditions with prehistoric rock paintings for understanding human behaviour in the past.

### **87. Ecogenetic revelations of Paraoxonase 1 enzyme in population genetic studies: a Review**

**Siuli Mitra and Gautam K. Kshatriya**

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Ecogenetics aim at studying the genetics underlying differential reactions to chemicals in the environment. Genetic modifications due to exposure to foreign substances like toxins due to occupational exposure, dietary constituents, drugs etc. majorly constitute areas studied in the scope of ecogenetics. One of the enzymes that have been at the center-stage of ecogenetic studies is the Paraoxonase 1 (PON1) enzyme. It is one of the oldest enzymes present since life originated. The presence of an active PON1 enzyme in lower organisms proves that the enzyme's presence predates human origins. It also had a different native activity and not paraoxonase or arylesterase activities that presumably occurred only later in evolution. The enzyme is also characterized by promiscuity in its specificity towards substrates. These features account for the existence of enzyme isoforms of PON1 and their relevance in xenobiotic metabolism has made PON1 an interesting area of research. Previous studies have assessed PON1 variation in different human populations by evaluating them for activity, genetic variation or PON1 status (constituted by gene variations and activity). The variations have been studied in lieu of their toxicological and pharmacological properties and effects on human health. Sensitivity to chronic exposure of chemicals with the organophosphate moiety like pesticides (chlorpyrifos, malathion, parathion) and nerve gases (soman, sarin) is determined by the PON1 catalytic efficiency and abundance. The ethnic variations in PON1 status and gene frequencies are, hence, keys to understand the differential sensitivity among different groups of populations to chronic exposure of OP compounds. We examined selected

populations of India for genetic variations of PON1. Findings show an interesting conglomeration of populations having different *PON1* gene frequencies that will be important in assessing OP exposure risk among them. Also, the underlying cause of the systemic variation has not been determined. So, a review of previous research was done to find patterns of genetic variation at key loci of *PON1* gene to comprehend the extent of differentiation at these loci. The paper aims at outlining the various aspects of PON1 research with special emphasis on the outcomes of toxicogenetic and pharmacogenetic approaches and the leads they provide for conducting population genetic studies. Deciphering the cause of PON1 variation will improve environment risk assessment exercises that help frame public health initiatives.

## **88. Epidemiology of Obesity and Health Implications**

**N.K. Mungreiphy**

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The fundamental role of epidemiology is to improve the health of populations. Epidemiology is concerned with distribution and determinants of health-related states or events in populations, and the application of this study to the prevention and control of health problems. Obesity and associated health problems have become a major epidemiologic challenge faced by healthcare professional globally. Numerous comorbid conditions have been associated with obesity, which includes hypertension, diabetes, hypercholesterolemia, cancer etc. In India, tribes are believed to have lower incidence of non-communicable diseases. But gradually, with changing socioeconomic environment, the scenario has been shifting. In the process of economic development, the burden of obesity and cardio-metabolic disease has also been increasing. Epidemiological study among the Tangkhul Nagas, showed the prevalence of overweight/obesity in females to be 27.1% while in males, it was 17.6%. Hypertension was highly prevalent with higher percentage among males (37%) than females (20.8%). There were 10.7% prediabetic and 2.5% diabetic male participants. Among females, 7.6% were prediabetic while 2.9% were diabetic. Urbanization, improvement in socioeconomic status and sedentary lifestyle were found to be significant risk factors for development of overweight/obesity, which in turn was causal factor for the non-communicable diseases prevalent in the community.

## **89. Environment, Gender and Education Study in Rural Bihar**

**Khushbu Kumari**

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Bihar is located in the eastern region of India, bordering Nepal in the North, West Bengal in the east, Uttar Pradesh in the West, and Jharkhand in the South (gloriousbihar.com). With a population of almost 104 million, Bihar is the country's

third most populous state (2004-2005). My research work is based on High literature review work on Bihar and some observational study in rural area of Bihar. Field area is mostly high schools and rural village located near in Aurangabad district of Bihar. Environment of Bihar mostly persons are dependent on agriculture and Livestock in rural areas, houses is soil made and food mostly prepare on soil made stove and use cow dung and wood use in fire in households, dependence on cooking fuels that cause indoor-air pollution. The sex ratio 921 women per 1000 males (census 2001). But the gender discrimination is displayed there after even by literate parents. For example while 63.7 percent of the literate parents would like their sons to be at least a graduate, for the daughters, the figure is again much lower at 38.5 percent ( status elementary education in Bihar) .Bihar reported the lowest female literacy rates out of all the states and union territories in India. In case of desired level of education for their children, discussed earlier, the parents had shown considerable gender discrimination in favour of their sons. The average educational level of women in Bihar was lower than that of men, which was itself very low in comparison to other states in the country. The enrolment of children, however, does not necessarily mean their regular attendance in schools. Based on schools records, it was found that the average attendance in a day of enrolment. the attendance of the students is very irregular and their learning achievements are also low and girls break of study in mid because mostly parents not effort high level of education and some girls are married in mid study line and in-laws family are rare supporting for girls education after marriage.

## **90. Genomic Polymorphism among the Four Tribal Population Groups of Odisha**

**Hemlata Dewangan<sup>1</sup>, Gautam K. Kshatriya<sup>1</sup> and K.Thangaraj<sup>2</sup>**

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Autosomal markers are distributed throughout all chromosomes and represent accumulated inheritance from all our ancestors .They can be used as important marker for the study of genetic diversity and human evolution. Present study was carried out among the four tribal populations of Odisha namely,Bhumij, Bathudi , Mahali and Ho. A total of 234 blood samples from these four tribes were collected. The collected blood samples were analyzed and the PCR products were directly sequenced at the Centre for Cellular and Microbiology, Hyderabad. Polymorphism was determined in SLC24A5, EPHX1, LCT, and MYBPC-3 *genes*. The results are discussed in the light of available studies from the Indian populations.

## **91. Physical Growth Profile among the Gond & Korku Tribal Boys of Betul District, Madhya Pradesh**

## **Pragya Dubey and K.K.N. Sharma**

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Growth is a dynamics of human life. It is a progressive increase in the size of a child or its part. Growth and development are used as synonymous terms, but in fact, growth is different from development. Growth refers to an increase in size, height, weight, length, etc. which can be measured. On the other hand, development implies change in shape, form or structure resulting in improved working or functioning which implies certain qualitative change leading to maturity. Studies on human physical growth remain as an important aspect for physical anthropologists for understanding the health status of any community. Tribals are important segments of the Indian population structure and health status of most of the tribals is still unsatisfactory. Therefore, it is necessary to have information of the growth profile for their betterment through various programmes and policies. The present study has been carried out on 332 Korku and 376 Gond boys (aged 6-18 years) followed by cross-sectional method. The measurements were taken such as height, body weight, sitting height, head circumference, arm circumference, calf circumference, chest circumference, biceps, triceps & calf skinfolds. Required statistical methods have been used for the analysis and comparison of physical growth pattern between them. The findings will be discussed.

### **92. Environment and Reproductive Health: Evidence from currently-married women of Delhi**

**Jaspreet Kaur**

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The impact of environment on human health has long been established in various fields of study. With the increasing population size the load on natural resources has also increased, leading to its rapid deterioration. This has adversely affected the human health with bizarre outcomes, in the form of declining longevity, and disturbed fertility rates. The present paper reports the findings from Delhi. The data was collected from across three strata, urban, rural, and slums of Delhi, interviewing currently-married women aged 15-49 years through a survey-method. A total of 1178 women were interviewed to gather data on their reproductive health in general and RTI/STI in particular. It was found that 32.9% of women reported having menstrual problems, and 29.3% reported having RTI. The results also showed that women living in slums were 1.6 times, and women living in rural area were 1.5 times more at risk of having RTI as compared to urban women. The risk of having menstrual problems was 2.4 times among slum and 1.2 times among rural women when compared with urban women. The results clearly shows that environment has a degrading effect on the reproductive health status of a women.

### **93. Non Formal Education and Children living at Street**

**Sarika Negi**

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Over a period of time a significant growth in number and expansion of programs related to children and their development has been observed. The right based approach is forming the baseline for inclusion activities which are adopted by the Indian government from the international conventions and treaties. There are 85,084 children living in NCT Delhi who are out of school as pointed out in NSSO draft report belonging to 6-13 age group and around 5.79% of children living in slums were out of school. The data, incorporated in this paper is an excerpt of first hand fieldwork conducted in one of the suburb of Delhi. This paper examines situation of children living at street in a non-formal Education set up and the issues emerging as settled in the midst of this place itself. It focuses on the role of agency in establishing such a school at street and enveloping concept of education having admixture of child labour, poverty, drug abuse and mainstreaming. It is an attempt to focus on the situations in the local, bringing out issues addressed many times but, with some more perspectives added. The children are either living with their families or alone, without their families. In the process, I will discuss about dynamics involved in formation of discourse and practices of a school for these children and how previously addressed issues are enacting here.

### **94. The Futures of Anthropology in India: A Summing Up**

**Abhik Ghosh**

Department of Anthropology, Panjab University, Chandigarh

In this brief space it would be impossible to get any kind of detail into what might possibly be the future of Anthropology in India. However, I give here some brief outline of personal views on possible futures. In the first instance, there is likely to be a range of possible anthropologies, rather than a single definition of the subject. Given its immense range and scope, others have often divided up Anthropological knowledge into sections that suit them and have used only parts of this knowledge for research as well as for teaching. Given this trend, we shall have both ‘splitters’ and ‘lumpers’ in Anthropology – that is, there would be those who would thrive on their specialisations and others who would make connecting links with them and attempt to join them. In other words, there would be both a specific and general evolution in Anthropology (after Sahlins). In the second instance, Anthropological techniques are likely to be poached by other disciplines, for their own survival. This includes theoretical approaches, methodological refinements and other developing ideas that

are found to be useful to them. Mostly, such 'borrowings' are unlikely to be acknowledged as a part of Anthropology. Such a process had already begun by the eighties in India and has increased ever since. Third, Anthropology is likely to burgeon and encroach into many more areas and fields as its practitioners find new ways of using and expressing its ideas. This will have many new adherents and stakeholders than were present earlier. This will increase its areas of influence and simultaneously also make itself more diffuse. Even at present, arcane knowledge is known to be present without limits among anthropologists. This is why many government secret agencies use the cover of an anthropologist while spying or researching suspect areas. Others whose knowledge areas need to be hidden also use Anthropology as a cover. Fourth, Anthropological ethnographic knowledge will decrease. This will be replaced in a large way by specific knowledge that will aid in dissertations, reports or research papers. This will thus decrease basic backgrounds of cultures but will increase specificity of knowledge on issues that are funded better or which give better impact factors. The process has already begun. Fifth, there is likely to be a far more intricate connection of Anthropologists with industry and business. This is seen from the fact that businesses in many parts of the world, including Google, Microsoft, Intel, Adidas, Boeing, Nokia, among others are doing a lot of Research and Development work with the help of Anthropologists. A recent business journal from India has also claimed that this would be a very big, lucrative and the next forefront of Anthropological work. The role of museums in Anthropology will remain about the same as before, which is negligible. Heritage will be much talked about but unless politicised is unlikely to be a general area for good funding. The interest of students in studying to know will decrease, being replaced by usable knowledge or knowledge which may be encashed for points, jobs, funding or even for increasing job security. Finally, ethics in Anthropology will take a beating with much fudging of data, of illegal collections and even infarctions of local knowledge and IPR being a part of the scenario. Dealing with people, this will cause even more problems and shady dealings with companies that employ, those who fund and those who ask for reports from Anthropologists. An overall ombudsman of Anthropologists and a strict code of ethics like the ones followed by the American Anthropological Association is a necessity in such a scenario. Also a universal ethics for Anthropology may be in doubt when two different kinds of Anthropology can clash with each other.

## **95. A Review of Biometric identification based on Hand Veins pattern**

**Kiran Singh**

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Since it's has been proven that fingerprints are unique identity for individual and it cannot be changed or damaged for whole life. In similarly Vein of the individual is

also unique which cannot be changed and also it is very safe because it's protected inside of skin it will not be affected by the race, skin discoloration. Researchers have determined that human body vascular pattern is unique to specific individual. Biometrics have played a very important role in today's era for safety purposes. It's possible to compare the pattern of a hand. New emerging topics of research in biometric technologies published in several articles to prove that human hand vein is highly sufficient to prove personal identifications. Conclusion: As long as our hand vein patterns are clear we can choose a device to penetrate our hand vein and capture its image for the means of biometric personal identification. As for security breaches and transaction frauds are increasing day by day through networking, malicious phishing, so there is a need for higher secure identification and personal verification technologies should emphasize more on hand vein patterns.

## **96. Nutritional status of the Baigas, Gonds and Oraons of Achanakmar-Amarkantak Biosphere Reserve: A comparative study**

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The Achanakmar-Amarkantak Biosphere Reserve is one of the less developed and least disturbed areas in Chhattisgarh and Madhya Pradesh. The topography of this area ranges from high mountains to shallow valleys and plains. It is very rich in flora and fauna. A number of plant species is found with medicinal potentialities and harvested for sale by the people. The people are relying on the forest for their different needs. The biosphere has a surface area of 383551 hectares and core area is only 55150 hectares. Twenty-seven tribal and non-tribal communities inhabit in 418 villages. There are 22 villages coming under the core zone of the biosphere. The total population of the area belonging to 27 communities is 436128 (census 2001) and the main occupation is agriculture, non-timber forest products produce, besides some handicrafts. People's health and nutrition indirectly also influence the status of biosphere, i.e. if they are healthy and nutritionally well off, then pressure on biosphere will be less and reverse of this is also one of the possibilities. The Baigas, Gonds and Oraons are the important tribal groups inhabiting the core zone of this Biosphere. The Gonds and Baigas had comparatively older history of presence in these areas, whereas Oraons are the recent migrants. The Baigas economy is mainly based on forest gathering and earning of wages as a labourer, whereas Gonds are mostly relying on agriculture and Oraons are also practicing agriculture and wage labour. In this present study an attempt is made to see the differences of Nutritional status among them.

## **97. Development of Socially Excluded Groups through Collective Action: A Study in the Context of *Swarnrekha Pani Panchayat* among the *Mundas* of *Idalbera* Village in Jharkhand**

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The three sectors – Government, Corporates, and NGOs – of the society have been fully involved in the development and survival of the poor and socially excluded groups (tribals and dalits) through various social welfare programmes since our country's independence. These sectors try to put in as many schemes under social safety net for their material well-being as is possible under their budget. However, several studies on the impact of developmental programmes have revealed that the poor groups who have hand to mouth survival generally have the desire about these schemes to continue. Since it involves no effort on their part or any involvement in the entire process; as soon as the flow of money stops, the fruits of earlier expenditure sublimates in thin air and they are reduced to the same state in which they were before the implementation of these schemes. Ultimately, for the wellbeing of the marginalized groups and their development, active participation of the people through collective action seems to be a viable option. In this backdrop, the present study is intended to examine the structure, function and management of a water user group – Swarnrekha Pani Panchayat in Idalbera - one of the tribal villages of Jamshedpur district in Jharkhand. The study also attempts to analyze the newly generated institutional framework in terms of its sustainability and self-reliance through collective action for social transformation. The study is based on ethnographic approach using standard fieldwork research technique like observations, in-depth interviews, case studies and focused group discussions among the experimental (25 members of Pani Panchayat) and controlled (25 non-members) groups of the study area. The study reveals that there has been a significant change in the quality of life of the water user group members in the study area. However, despite a strong sense of identity and social bond there are tendencies to evade individual responsibilities governing the collectiveness. It may be concluded that such newly formed institutions need stimulation to strengthen collective action approach for bringing transformation among these backward groups.

## **98. Current Status and Future Strategies to break the Inter-generational cycle of Adolescent Anaemia**

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Iron deficiency anaemia (IDA) poses a serious threat to the health of some vulnerable targets like adolescent girls. There is high prevalence of anaemia among adolescent girls and women of reproductive age. Their iron requirements increase dramatically due to changes in lean body mass, total blood volume and the onset of menstruation which enhance chances of anaemia in them. It may stake their survival, growth and development of their future generation i.e., children. Dietary diversification and improvement, food fortification with iron and other essential micronutrients (vitamins and minerals) and regular consumption of Iron-Folic Acid (IFA) supplements is the three-fold global strategy to combat anaemia in young adolescent girls. In view of India's socio- economic scenario, it is very difficult for large segments of the

population to consume a diversified iron-rich diet Therefore, the regular consumption of IFA supplements is essential for prevention of iron deficiency and anaemia in adolescent girls. Currently, in many states of India, the Adolescent Girls Anaemia Control Program (AGACP) being implemented to reduce the prevalence and severity of anaemia in school-going adolescent girls using schools as the delivery channel. For out-of-school adolescent girls, the community *anganwadi* centres of ICDS Program are proposed to be used as the delivery platform for supplementing Weekly Iron and Folic Acid (WIFS) program which comprises of 100mg of elemental iron and 500ug of folic acid 52 weeks a year, bi-annual deworming prophylaxis (400ug of Albendazole) with a gap of six months for the prevention of helminthes infestation, information, counseling and support to adolescent girls on how to improve their diets, especially iron intake, how to prevent anaemia and how to minimize the potential undesirable effects of WIFS and deworming. The lack of awareness, coordination among organizations, shortage of resources and manpower, inadequate and irregular supplies, lack of proper orientation and training to the functionaries, poor monitoring and supervision and absence of nutrition education etc., are major constraints for successful implementation of such programs aimed at alleviating the danger of iron deficiency anaemia. Focused efforts are needed to combat adolescent anemia, especially in girls. Present status and future strategies to combat anaemia in adolescent girls will be presented in this oral presentation.

### **99. Age at Menarche and Body Size among Kabui Girls of Imphal, Manipur, India**

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The aim of this study was to represent the trend of early menarche and to assess the association of age at menarche with anthropometric profiles of Kabui Girls of Imphal Manipur. A cross sectional survey was conducted with 300 girls aged 10 to 18 yrs, recruited in the month of October, 2014. Six anthropometric measurements were taken on each participant. The mean age at Menarche of Kabui girls as computed by status quo method was  $12.66 \pm 1.34$  years. Subjects self-reported their ages at menarche. The Post menarcheal girls were taller and heavier than Pre menarcheal ones. Post menarcheal girls also showed higher body mass index (BMI), and greater waist circumference than Pre menarcheal ones. Significant differences were represented according to the age at menarche in terms of BMI, waist circumference, waist hip ratio and as well as height and weight. In conclusion, girls who matured early were taller and heavier in early adolescence than those who mature later.

### **100. Prevalence of Low Birth Weight among the Meiteis of Manipur**

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Birth weights have been observed to vary among people of different ethnic background and genetic properties. Low birthweight (LBW) has been defined by the World Health Organization as weight at birth of less than 2,500 grams (WHO & UNICEF, 2004), which may be caused by preterm birth (before 37 weeks of gestation) or restricted foetal (intrauterine) growth (Kramer, 1987). It is already established that low birth weight is closely associated with foetal and neonatal mortality and morbidity, inhibited growth and cognitive development, and chronic diseases later in life (WHO, 1992). Although low birth weight is not a direct measure of infant morbidity, it is frequently used as a marker for poor health at birth because it is a leading risk factor for infant mortality and for subsequent morbidity among surviving infants. The present cross-sectional retrospective study aims to examine the prevalence of low birth weight among the Meiteis of Manipur. The prevalence of low birthweight of the neonate's comprises 4.5%, while 92.5% of the neonates birthweight is between 2.5 kg to 4 kg. Neonates weighing 4.1 kg and above constitute only 3%. LBW is more frequent among male (6.25%) than the female (2.88%) neonates. All the LBW male neonates (6.25%) were born by normal delivery. It is pertinent to mentioned here that the incidence of C.S delivery is absolute among those weighing 4.1kg and above male babies. In north east India (as per the report of NFHS 3, 2005-2006), LBW ranges from a low of 7.6% in Mizoram to 27.3% in Tripura, through 10.3% in Sikkim, Nagaland (11%), Manipur (13.1%), Arunachal Pradesh (14.1%), Meghalaya (18%), Assam (19.4%). However, in the present study the incidence of LBW in Manipur is only 4.5% which is comparatively low and it shows comparatively better health status of the newly born babies in this part of India.

### **101. Socio-Economic Analysis of Bharia Tribes, Pachmarhi, Madhya Pradesh**

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In the present world everyone is revolving around rapid industrialization, urbanization and overall development. In this mad race we have seriously neglected our indigenous tribal population. Our tribal population suffers from non-availability of basic facilities of food, clothing and shelter. At many places their original habitat has been destroyed and they have been forced to live in absolute misery. In this paper we have done a socio-economic analysis of tribal's living in Nalanda Tola village in Pachmarhi, Madhya Pradesh. They not only lack in basic facilities but are still highly dependent on forests for their different requirements. Government initiatives in promoting their development have not been very successful. In many instances they are forced to relocate themselves due to various government projects. They have a limited access to forests and other means of employment are also highly restricted which has consequently resulted in migration of these people to different locations. They are highly dependent on small jobs associated with tourism in this area as Pachmarhi, is a popular hill station of central India. But, these jobs are highly seasonal in nature. The

data collected through primary surveys throws light on many other problems being faced by the tribal population of this village. Such issues need to be highlighted and address properly as soon as possible before they loose their identity of being an integral part of our nation.