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Journal of Innovation for Inclusive Development
ISSN 2456-4478

www.ipcollege.ac.in
www.jiid.in

Environmental Education:
Jack of All Trades, Saviour of the World

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The atmospheric carbon dioxide concentration in January 2018 reached 407.79 ppm (NASA, 2018), after crossing the 400 ppm mark in 2013. The carbon dioxide levels are consistently increasing each year and breaking previous year records. At the very least, this should have rung alarm bells in nations around the world. However, on 26 January 2018, China released an official Arctic policy white paper for developing shipping lanes due to the melting ice because of global warming (Reuters, 2018). In 2017, 16 significant weather and climate disaster events took place in the United States which led to an estimated loss of $305 billion and 362 human lives (NOAA, 2018). Despite this, on 1 June 2017, the President of the United States announced the withdrawal of his country from the UN-led Paris Climate Agreement of 2015. The scientific community is now in consensus on how our use of fossil fuel has accelerated global warming. However, efforts for transitioning from coal to clean economy are too little too late, in both developing and developed countries. Millions of years ago, Earth was a hot boiling planet and the emergence and subsequent submergence of organic matter removed carbon dioxide from the atmosphere and sequestered it deep in the Earth's lithosphere. Our society has been removing this 'fossil fuel' from inside the Earth and releasing it back into the atmosphere since the last 200 years. Clearly, the resultant warming of the planet is not as obvious as it should be, to policy makers and to people at large.

Simultaneously, the scale and pace of economic development today is having an adverse impact on the environment. Unplanned development, based purely on the principle of profit, has degraded natural resources and is destroying functional ecosystems. Societal development is following a similar path and instead of inculcating environmental harmony, a highly consumptive lifestyle has become the norm. Awareness on population control has become a thing of the past and we have now trained ourselves to appreciate population as an asset. Consequently, rising human population has led to the transformation of natural landscapes into human settlements thereby decreasing wilderness areas significantly. This has resulted in anthropogenic erosion of biodiversity -- so much so that it has triggered the sixth mass extinction on the planet (Ceballos et al., 2017). Poaching of wildlife and man-wildlife conflict in the ecological corridors have indeed shrunk habitats and are resulting in rapid loss of wildlife. The Asiatic Cheetah became locally extinct from India in 1952. Only three Northern White Rhinoceros remain in the world (IUCN, 2018a). And only about 500 Asiatic lions are left in the wild today, all of them restricted to a single population in Gir National Park in the Indian state of Gujarat (IUCN, 2018b). It needs mention here that in order to avoid 'all eggs in the same basket' catastrophe, a new habitat has been created for the Asiatic lions in a state neighbouring to Gujarat. However, the principle of focusing on profit and profit alone has ensured that the Gujarat State Government, which benefits greatly from lion tourism, has refused to give away even a single pair of healthy lions for relocation (Burton, 2011).

The United Nations marked 2005-2014 as the Decade for Education for Sustainable Development. The focus was to integrate the balance between environment and development in our education system for creating a more sustainable future. However, considering the rate and scale of environmental degradation today (and the response of the political leadership - or the lack thereof), there is a dual need of both integrating sustainability in all disciplines and of better establishing the discipline of Environmental Studies (ES) at all levels. This is because we not only need to protect existing environment and natural resources but also need to reclaim and restore

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degraded ecosystems and re-strategize our developmental policies – all of which requires an in-depth understanding of the working of the global, regional and local environment. The change must begin from our schools where we continue to encourage only three streams of academic discourse, Science, Social Science and Commerce. A fourth, multidisciplinary stream of Environmental Studies is wanting and must bring together disciplines having direct relevance for understanding and managing the environment. Higher education institutions (HEIs), some of which provide postgraduate (University) training in ES but have almost negligible ES programs at the undergraduate (College) level, also need to play a proactive role. The introduction of ES at the College level would go a long way in developing adequate human resource for managing and mitigating the ongoing environmental crisis and for sustainable protection of 'our common environment.'

The adoption and implementation of ES in HEIs is not without challenges. An important barrier to its implementation is the now diminishing belief that multidisciplinary programs like Environmental Studies may dilute specialization. And that the products of such programs will become the proverbial jack of all trades. Such archaic beliefs are more prevalent in developing countries where the education system is either stagnant or undergoing a slow and steady change. For example, with the introduction of the Choice Based Credit System in India recently, there has been greater appreciation of pursuing trans-disciplinary courses. However, since environmental education does draw from different disciplines in order to protect, conserve and manage the natural resources of the planet, the 'jack of all trades' remark indeed warrants investigation. A preliminary analysis suggests that it is not the subject but its implementation that has been a challenge. Often, ES is simply taught by introducing the students to a little bit of everything. This shallow understanding of multidisciplinary teaching needs to improve, with time intensive interventions and well-developed leadership skills. Further, it is equally important to induct suitable learners in ES programs, since the complications of multidisciplinarity and complexities of trans-disciplinarity are not everybody's cup of tea. Thus, everything - from the process of selecting faculty to the process of admitting students needs careful attention for the successful implementation of environment education.

Effective ES programs are needed at all levels of education today in order to mitigate and adapt to the ongoing environmental crisis. This is also an essential pre-requisite if we are serious about achieving the UN-Sustainable Development Goals in time. The environmental crisis is real and has already arrived. Replacement of traditional farming practices with chemicals based agriculture since the 1970s is now having deleterious impacts in the countryside. Unplanned urbanisation is making our cities shut down schools due to air pollution. In such a scenario, environmental education may or may not be the jack of all trades, however, it is certainly an essential requirement for saving the world. Implementing adequate ES programs in HEIs should thus become a priority focus of nations around the world.

References

Burton, A. 2011. Lion of India. Frontiers in Ecology and the Environment, 9 (6): 364-364.

Ceballos, G., Ehrlich, P.R., & Dirzo, R. 2017. Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. Proceedings of the National Academy of Sciences. 114 (30): E6089-E6096.

IUCN. 2018a. *Ceratotherium simum* ssp. *cottoni* URL: http://www.iucnredlist.org/details/4183/0 (Accessed on 20/02/2018).

IUCN. 2018b. *Panthera leo* ssp. *persica* URL: http://www.iucnredlist.org/details/15952/0 (Accessed on 20/02/2018).

NASA. 2018. Carbon Dioxide. URL: https://climate.nasa.gov/vital-signs/carbon-dioxide (Accessed on 20/02/2018).

NOAA. 2018. U.S. Billion-Dollar Weather and Climate Disasters URL: https://www.ncdc.noaa.gov/billions (Accessed on 20/02/2018).

Reuters. 2018. China unveils vision for 'Polar Silk Road' across Arctic. URL: https://in.reuters.com/article/china-arctic/china-unveils-vision-for-polar-silk-road-across-arctic-idINKBN1FF0JY (Accessed on 20/02/2018).

Sustainable Offering Practices Through Stakeholders Engagement

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Abstract: Sustainable development is achieved by satisfying the current ends without shrinking the existing means which can serve as needs for the society in the future. It has become global motive and responsibility of present community to utilize resources in an optimum way with minimum environmental damage. The objective of this paper is to study theoretical framework and practical approaches on sustainable offering practices through customer engagement. The study has also examined the opportunities and challenges of sustainable offering practices in India. The study is based on a previous study and secondary data has been used for analysis. The outcome revealed the process for successful sustainable offering practices in context of Indian consumers. The analysis has helped to understand different practices of sustainable offering through engaging stakeholders.

Keywords: green products, sustainable development, sustainable offering.

1. Introduction

Various issues are raised in marketing strategy with the passage of time. Marketers have always tried to adopt different marketing strategies to compete in the market and to protect wellness of human beings. Today, sustainability is the new area being considered by various companies for long-run growth and development of their business. Sustainability works on triple-bottom-line approach i.e. people, planet and profit where people's need is given higher priority followed by conservation of planet whereas least importance is given to profit. The Brundtland Commission Report (1987) coined the phrase sustainable development as *Our Common Future* and defined sustainable development as *development that meets the requirements of the present generations without*

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compromising the ability of future generation to meet their own needs (Brundtland, 1987). It also recovered the discussion on the importance of business society for sustainable development.

Sustainable offering practices is a long-run vision which deals with such strategies which are based on ecological, moral and ethical principles. Marketers and customers are directly or indirectly associated with all of these three dimensions. Thus, customers' engagement and marketing practices need to be analyzed simultaneously. Therefore, there is a need to design marketing strategies which can deal with problems engaging the customers. However, it is not easy for marketers to design such strategies through which they can attract and engage customers in their economic activities. Many a times, sustainability is considered as environmental sustainability however it is not only limited to the ecological issues but also includes social and economic matters (Obermiller et al., 2008). Thus, sustainability includes those practices which could be evaluated in terms of sustainability through environmental, economic and social dimensions. Sustainability in the field of marketing can be explored in various perspectives. Both green issues and social issues can be considered simultaneously to study sustainability in the field of marketing. However, sustainable development can be studied in a better way by considering environment (green), society and economics together.

2. Research Methodology

The greatest problem in green marketing in India is the vicious cycle of the Indian economy. There are few collective initiatives taken by the society where all backbones such as people, government and business enterprises have come together to promote green offerings in India. This is due to a general lack of understanding in the people of India on the theoretical and practical implementation of green offering. This research is focused on theoretical framework and practical

approaches on sustainable offering practices through customer engagement. The study has also examined the opportunities and challenges of sustainable offering practices in India. The study is based on a past study carried out by various researchers and secondary data analysis. The sources of secondary data are newspapers, magazines, books, journals, conference proceedings and Government reports.

3. Social and Green Marketing Practices

In late 1950s, societal marketing thought was introduced in India, which was grounded on bringing ethical and social reflection into offering activities. Social offering is the design, implementation and control of programmes intended to influence the appropriateness of social philosophies and connecting considerations of product planning, designing, costing, communication, delivering, and research (Kotler, 1971). With the development of offering practices in the field of societal offering, various related difficulties were discovered and categorized into respective fields. Kotler and Lee (2005) surveyed 23 companies and examined their 36 corporate social responsibility initiatives. They categorized these initiative into 6 groups i.e., cause marketing, corporate social marketing, cause related marketing, community volunteering, corporate philanthropy and socially responsible business practices. Social and green marketing practices are both connected with each other. The practices of green marketing are ultimately associated with society and sustainability. If the society is not connected with the green drive, the chance of success will minimize. The best option for sustainable offering practices is that social and green marketing should go hand-in-hand.

Green marketing is an emerging phenomenon which has been developed with specific focus in the contemporary marketplace. It is developing as a significant idea in India vis-à-vis in other developing and developed countries. It has been experienced as a significant approach of expediting sustainable development. Green marketing is understood as all activities designed to ease and produce any exchanges envisioned to satisfy human needs and wants, such that those human needs and wants get satisfied with minimum damaging impact on the natural atmosphere (Polonsky, 1994). Green consumers are those consumers who avoid purchasing products which are likely to hamper the health of the society. These include products which may cause significant detriment to the ecology during manufacturing cycle, use an unbalanced quantity of energy, cause unwanted waste, use raw materials derived from endangered species, involve unwanted use, or cruelty of animals or adversely affect other nations in the globe (Elkington, 1994). It is observed that two out of every three consumer are green in developed country whereas one out of every six consumer is green in developing nations. However, the environmental commitment of individual consumer varies because of variable standards, expectation from producers, demand and purchasing power. It will be appropriate to define a green consumer as one who is engaged in green consumption alone and one who purchases in a more suitable, sustainable and responsible way. Every consumer has a bundle of needs and wants, and the same is true for green consumers as well. Through large number of activities such as providing electronic statements through email, electronic copies of tickets etc., traditional marketing methods are getting replaced by e-marketing. The latter is reflected in using recycled material for printing, general use of materials in an efficient way like waterless printing, reusing printed one-side paper for reprinting, etc. Retailers are identifying the value of alliance with other business houses, ecological groups and research societies to promote and fulfil their environmental promises. Some retailers are selling paper or biodegradable shopping bags under the roof of Go Green Environment Fund to minimize plastic use and fulfil their green promises. Creditability is the key to successful green offering of green product. In green offering practices, one should never institute unrealistic expectations nor overstate ecological claims. It is equally required to communicate the green messages in a simple manner and through trustworthy sources. Promotion of green credentials and achievements by companies has also become important. This can be done by publicizing stories of the company's and employees' green initiatives. Other ways include conducting ecological awards and reward programmes to profile environmental credentials for both customers and key stakeholders (Sarkar, 2012).

Green marketing is an excellent strategy from the business point of view as well. A visionary marketer is one who not only convinces the consumer, but also involves the consumer in marketing his product. This can be best achieved through Green Marketing. Green offering is not just another approach of marketing but it has greater importance which needs to be pursued with much greater vigour, it is connected to both social and environmental dimension. Due to the threat of global warming it is very important to make norms rather than exception or just a mania of green offering (Sarkar, 2012). Further, the three pillars of sustainable development framework - environment, economy, and society - need to be given more importance in evaluation of performance of business operations (Belz and Peattie, 2012; Kumar et al., 2012).

4. Sustainability Through Customer Engagement

The achievement of sustainable objective depends on individual company's sustainable efforts recognized by the market. If a company keeps continuity on its production and marketing of sustainable products, the demand for such products will certainly increase. A suitable way for stimulating the sustainable demand is to create a market through continuous supply of sustainable products. The business organisations need to prepare market pull strategy to connect with consumers directly in order to sell their green products. They also need to address the sustainability conscious consumers so that they can understand the value of environmental and societal friendly manufacturing. A better action plan for such a market pull strategy may address both the categories of customers, end consumers as well as retailers. Through appropriate market segmentation, the sustainable demand can be stimulated strategically. For this move, a good identification of the market segments that are natural buyers of the sustainable attributes is required because they have a compliance obligation or voluntary commitment to improve performance (PricewaterhouseCoopers, 2010).

Marketers should wisely carry out the translation of messages about green products and its long-term benefits. These messages must underline that customers are not paying for the product but they are paying for the long-term benefits of green products which will ultimately benefit them directly and those companies are focusing not only on corporate profits but also on efficiency, durability, recycling, reuse and other sustainable attributes. Both mainstream as well as committed green consumers should be considered by marketers while designing green product and its campaign. The task does not end here, it is also important to make the consumers delighted by offering best green products in order to compete with competition in this segment. Business organisations must therefore be prepared to either narrow the focus in order to capture a piece of the market, or throw something "you are pretty sure they will want" out there. In this way, marketers can increase their chances to be successful. Once marketers are confident that their strategy is working, then they can go for mass marketing of such products.

5. Components of Green Offering Practices

The components of green offering practices are divided into two segments (Fig. 1). The first segment includes Growth, Recycle, Ecology, Equality and Non-Profit which shows the way to successful implementation of green offering practices. The second segment includes Government, Resident, Enterprise, Economy and Nation which are the stakeholders of green offering initiatives. For success of green practices, both the segments have to actively participate towards green offering drive. The various components are briefly discussed below.

Growth: In the initial stage, the growth of green offering practices are always slow due to low response from customers. However, once customers become aware about the benefits of green offering, rapid growth can be expected. The cost of offering of such products will also become low in the long-run because other firms will also get into this and there will competitive pricing of such products.

Recycle: The conservation of natural resources will help minimize the cost of production. Recycling and reuse will ensure that the same product can be used multiple times or for other needs. There are various raw materials which can be used for the production of several products. If the used material can be reused further, then the cost of production will be low and it will also help preserve natural resources.

Equality: Equal efforts form every stakeholder are required for successful implementation of sustainable offerings practices. The government, society, consumers, organization and all others stakeholders of an individual nation need to participate in this drive. They need to take initiative so that all sections of the society are involved in this drive.

Ecology: Conservation of natural resources and balancing ecosystem is the prime concern of green offering practices. The balance of ecosystem is very crucial for the next generation so that their survival on this Planet can be sustained. Therefore, the process of green offering must ensure that it is satisfying the present need of society with minimum damage to the environment.

Non-Profit: There are various stakeholders who are directly or indirectly linked with green offering practice. The concern of green offering has to be non-profit so that cost of offering by producer will be low which can help them to offer such product at a low price. This will attract consumers to buy and use such products frequently.

Governance: Proper governance is required to impose green offering related guidelines for marketers and consumers which can build mutual trust between them. The authorities must penalize unethical practices of marketing relating to green offering. It should also appreciate and award the green consumers for their contribution to the environment.
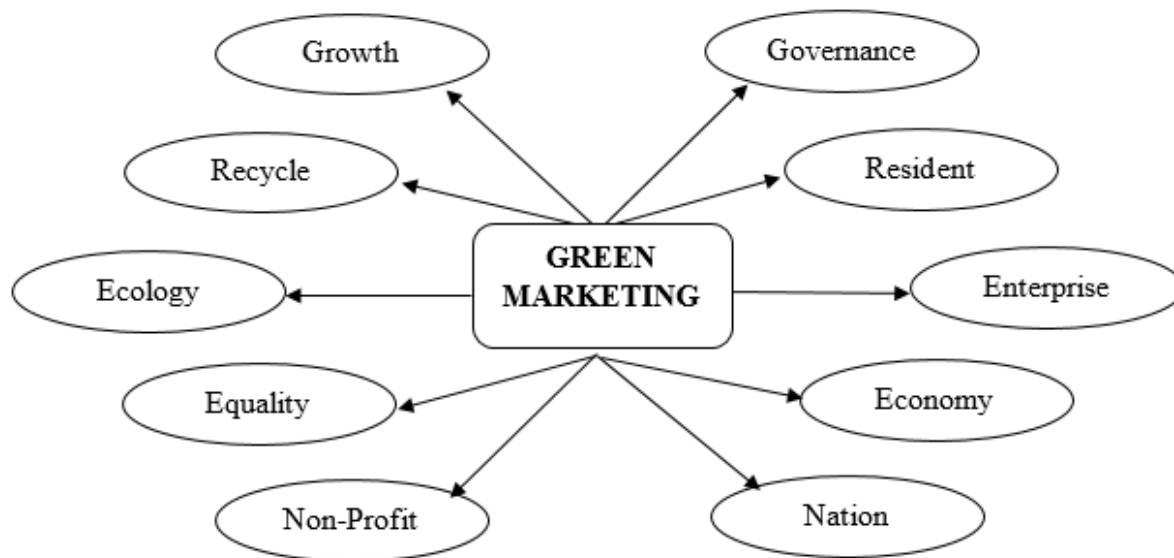
Figure 1. Components of Green Offerings Practices.

Resident: The resident is the buyer and the seller of any economy. They are the followers and violators of rules and regulations in every country. Therefore residents are the backbone of success and failure of green offering. Citizen of the nation should be made aware about merits of using green products and demerits of not using such products. The government bodies and marketers can convince them to buy and use green products to save the environment.

Enterprise: The main motive of any organisation is to earn profit but in case of green product, the enterprise should plan for long-term profit. This is because in order to become successful in green offering, there may be chances that in the short-run, company may run on low profit or sometime on loss as well. Enterprises play a very important role in changing the traditional consumption pattern of consumers into green products consumption by offering such products at affordable prices.

Economy: The economic indicators of the country have direct impact on success and failure of green offering. There is high chance of success of green offering in developed economy where people are literate, have high purchasing power and there are more number of green producers. It becomes easy for marketers to campaign their offering to consumers in such a scenario. Customers can also choose the best green product from various offerings.

Nation: Political initiatives are required for successful implementation of green offering practices. Government should promote the buying and selling of green products in the country. Governments can motivate producers to offer green products through tax relations, subsidy in R&D and technology procurement, etc. which will help producers to earn profit in short-term and will further motivate greater number of producers to take green offering initiatives.

6. Sustainable Marketing in India

Preservation of environment and satisfying the customers need with reasonable profiting margins is a challenging task but it is the need of business society today. Sustainable marketing with green offering concept has developed with a particular importance in modern business. It has emerged as an important concept in both developing and developed countries throughout the world, and in India. Green offering is an important tool for facilitating sustainable economic development (Tiwari, n.d.). The Indian customers are ready to pay a premium price for green products. What is concerning, however, is that the current consumption levels in the Indian market are too high and unsustainable. There is thus a need for green marketing and a need for a shift in consumer behaviour and attitude towards more environment friendly lifestyles. Literate and urban Indian consumers are informed about the benefits of using green products. However, the concept is new to illiterate and rural Indian consumers. The new green movements must reach all segments of the society, which may require a lot of money, time and collective effort. A report of India's Ayurvedic Heritage states that Indian consumers do appreciate and give importance to use natural, organic and

herbal beauty products (Saini, 2014). Nowadays, Indian consumers are also health conscious and are preferring to perform regular *yoga* and are keen to consume organic food (Sarkar, 2012). Due to this, we can predict that Indian consumers are somehow aware about benefits of green products and are ready to buy such products. Therefore, with only small initiatives, Indian consumers can be made more aware about the environmental benefits of green products and can be made to actively participate in making such purchases.

7. Sustainable Offerings: Several Opportunities

Sustainable offerings is an improvement in marketing practices which incorporates both economy and relationship marketing aspects from social, moral and environmental viewpoints. It also considers deep understanding of diverse shoppers and their adoption pattern (Noo-urai, 2016). However, future marketing will be determined by several influences such as relationship management, increasing of production technology, and communication, etc. Moreover, businesses and marketers have to bring long-term solution in order to maintain congruency in customer relationship and customer value for growth of environmental and social concern into economic growth and its bearing on climate variation. Sustainability marketing focuses on increasing customer value, social value and ecological value. The product has to be analysed from a sustainable development perspective rather than considering only prices, distributions and promotions in order to target audiences by integrating social and ecological factors into the marketing procedure (Belz, 2006). Sustainability marketing could potentially lead to long-term opportunities and success in marketing. The process of sustainability marketing through consumer engagement needs to be ingrained in organizational goals, consumer goals and societal goals. Sustainable marketing also follows the economic paradigm which is focusing on the traditional economic exchange process and profit as the ultimate goal. Moreover, in the introduction stage, the strategies of sustainable marketing should focus on bearable consumers, who are glad to pay higher prices for environmental friendly products.

Almost one-fourth of customers like to buy eco-friendly products whereas nearly 28 percent may be put into health conscious consumer's category (Tiwari, n.d.). Therefore, a fair size of buyers are available in the Indian market for green products. Buyers and suppliers of industrial products need to be pressurized from all stakeholders concerned about the environment so as to minimize negative impact on the environment. Green offering has high significance and relevance in developing nations like India (Sarkar, 2012). The producers and marketers can produce their products and services by reducing the impact on the environment and increasing their good effects on society. These impacts could be the result of proper design, use of materials, water and energy consumption, packaging, delivery, marketing disposal and reuse and other attributes. This balanced approach is a proof that sustainable products try to integrate all three components of sustainable development. On one hand, the sustainable product strategy considers and integrates environmental and social dimensions along the entire value chain. On the other hand, the sustainable products are competitive and economically successful in long-term. In this way, consumers can reduce the impact by the choices they make, sustainable goods and services they buy and how they use them (Belz and Karstens, 2010).

8. Sustainable Offerings: Various Challenges

In this era of globalization, it is a challenging job for marketers to maintain customers and consumers in fold along with preservation of environment, which is the emerging requirement of the time. Sustainable marketing and sustainable economic development go hand-in-hand and therefore both of them are crucial matters for countries like India. The word sustainable is related to something durable or long lasting. In a nutshell, such offerings are the one which have long lasting relationship with customers without any specific locus to deliberation of sustainability concerns or sustainable growth. Most of the marketers charge a premium price for their new natural and organic products. But in most of the cases, consumers do not feel the same way. Many researchers have found that customers are more likely to buy eco-friendly products over a non-eco-friendly one if they have been billed the same amount (Skirbol and Nelson, 2015). Manufactures and sellers need to apply such findings in their business policy to offer eco-friendly product within customers' budget to increase demand of such products. They also need to have a clear understanding of their audience, and what they want from brands.

Green offering requires a wide range of tasks which includes product design & modification, amendment in the production process, changes in packaging as well as promotional activities (Tiwari, n.d.). The product design and packaging have to be compatible with the existing design so that consumers can easily upgrade the conventional system into a green one. However, making such feasible products may be difficult, costly or may not be possible with all products. In many a case this is also the reason for failure of green initiatives because since the benefits are felt in long-term, companies have to make high initial investments without any immediate results.

This means higher costs of green products which does not bother the committed green consumers but has been certainly found to bother the mainstream consumers. Thus, green products need to be easy to install and integrate as well as their replacement amount should be affordable to inspire their greater adoption by mainstream consumers.

Green marketing involves marketing of green products/ services, green technology, green power/ energy for which a lot of money has to be spent on R&D for their development and subsequent promotional programs which ultimately may lead to increased costs. Consumers' awareness about environmental threats and green benefits is the key to success of green product offering. The organizations practicing green offering have to work hard to convince all the stakeholders. It may seem unproductive to convince the shareholder and other stakeholders about the long-run benefits of green offering as compared to short-run expenditures. However, for mass acceptance of green products, the benefits have to reach to all stakeholders even if it means investing considerable money and time initially. Efforts are also required by governments, NGOs, educational institutions, business houses and society at a large to create awareness among the consumers to promote eco-friendly buying behaviour (Sujith, 2017). All possible measures should be undertaken by the marketers to convince customer to buy green product; eco-labelling schemes is one of the best possible alternative for convincing them. However, what has become clear is that green offering can be successful and profitable only in the long-run. A marketer must be certain that s/he is provoking the right stories for the target audience that lead to greater green insights, instead of making assumptions around the product and consumers' needs.

Companies also need to take into account that rival companies may follow a similar green strategy and thus profit margins may eventually fall. Hence the business needs to plan for long-term rather than short-term and also prepare to compete with competition. At the same time, the respective business should avoid falling into the lure of unethical practices to make profits in short term. Another aspect that needs to be looked into is that considerable lack of standardization exists in case of green marketing. There is a strong belief held by many customers that some of most of the green marketing promises are false (Fiegerman, 2010; Gottlieb, 2013). This requires greater monitoring by the Government and corporate regulation bodies who need to monitor the green marketing activities and on the basis of their surveys, issue certifications and licenses. Once the

certification is received by the company, only then it should be allowed to green label its products. Such an initiative from the Government's side will bring confidence in the customers to buy green products with greater confidence.

9. Conclusion

The conceptual framework of sustainable marketing has been understood in similar way all around the world. Green marketing is still unfertile in most of the economy around the world. The major cause of failure is adoption cost and lack of trust in marketers. Both hurdles can be ruled out through customers' engagement which will reduce the cost of both marketers and consumers through creating a long-term relationship. Ultimately, this will build mutual trust. Marketers have failed to involve majority of consumer in green initiatives in India. If marketers can motivate the Indian consumers through highlighting environmental benefits for going green with minimum compromises on their budgetary schedule, it will go a long way in initiating green consumerism. Active participation of consumers is important for the success of green offering practices and a large number of consumers in India lack this awareness at present. All the major pillars of a nation, like government, society and business houses have to take initiatives in this direction in order to accomplish this goal. Further, empirical study on sustainable marketing practices through consumers' engagement is required. Using the correct terminology is also important and instead of sustainable marketing or green marketing, researchers may consider the term sustainable offering practices in future studies.

10. References

Belz, F.M. 2006. Marketing in the 21st Century. Business Strategy and the Environment. 15: 139-144.

Belz, F.M. and Karstens, B. 2010. Strategic and Instrumental Sustainability Marketing in the Western European Food Processing Industry: Conceptual Framework and Hypothesis. In: Proceedings of the Corporate Responsibility Research Conference, Euromed Management. School Marseille France, September, 15-17.

Belz. F.M. and Peattie, K.J. 2009. Sustainability Marketing: A Global Perspective. 2nd Edition UK: John Wiley & Sons, Ltd.

Brundtland, G.H., 1987. Our Common Future. Oxford University Press, New York (USA).

Elkington, J. 1994. Towards the sustainable Corporation: Win-win-win Business Srategies for Sustainable Development. California Management Review. 36 (2): 90-100.

Fiegerman, S. 2010. Eco-Friendly Fakes: Don't Trust the Label. URL: https://www.thestreet.com/story/12805916/1/eco-friendly-fakes-don-t-trust-label.html (Accessed on 06/01/2018).

Kotler, P. and Lee, N. 2005. Best of Breed: When it Comes to Gaining a Market Edge While Supporting a Social Cause, "Corporate Social Marketing" Leads the Pack. Social Marketing Quarterly. 11(3-4): 91-103.

Kotler, P. and Zaltman, G. 1971. Social Marketing: An Approach to Planned Social Change. The Journal of Marketing. 35(3): 3-12.

Kumar, V., Zillur, R. and Goyal, A.A. 2012. Evolution of Sustainability as Marketing Strategy, Beginning of New Era. Social and Behavioral Sciences. 37: 482-489.

Noo-urai, N. and Jaroenwisan, K.. 2016. Sustainability Marketing - A Changing of Marketing Concept Lead to Sustainable Business. International Journal of Business and Social Science. 7(4): 114-119.

Obermiller, C., Burke, C. and Atwood, A. 2008. Sustainable Business as Marketing Strategy. Innovative Marketing. 4(3): 20-27.

Polonsky, M.J. 1994. An Introduction to Green Marketing. Electronic Green Journal, 1(2).

PricewaterhouseCoopers. 2010. Green Products - Using Sustainable Attributes to Drive Growth and Value - Sustainable Business Solutions. URL: http://www.pwc.com/en_US/us/corporate-sustainability-climate-change/assets/green-products-paper.pdf (Accessed on 02/01/2018).

Saini, B. 2014. Green Marketing in India: Emerging Opportunities and Challenges. IOSR Journal of Business and Management. 15(6): 67-73.

Sarkar, A. 2012. Green Marketing and Sustainable Development Challenges & Opportunities. International Journal of Marketing Financial Services & Management Research. 1 (9): 120-134.

Skirbol, S. and Nelson, K. 2015. 4 in 5 Consumers Think Eco-Friendly Products Cost More "Green". URL: https://www.prnewswire.com/news-releases/4-in-5-consumers-think-eco-friendly-products-cost-more-green-300061649.html (Accessed on: 06/01/2018).

Sujith, T.S. 2017. Awareness of Green Marketing and Its Influence on Buying Behaviour of Consumers in Kerala. International Journal of Scientific Research and Management. 5(7): 6156-6164.

Tiwari, J. (n.d.). Green Marketing in India: An Overview. IOSR Journal of Business and Management. 33-40.

Global Warming: Threat to Sundarbans and the Silence of Indo-Bangladesh Mass Media

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Abstract: The Sundarbans or the 'beautiful forest' is a cluster of low-lying islands in the Bay of Bengal, considered as one of the natural wonders of the world, which is facing the problem of global warming since the past few decades. Global warming, climate change, increasing water level and salinity of the river as well as inlet areas are some recognized threats to the Sundarbans. This is threatening species survival, the health of natural systems and causing extinction of biodiversity. This study is a modest attempt to examine the factors because of which the burning issues of Sundarbans are almost excluded from the attention of the media in India as well as Bangladesh. This is despite the fact that various initiatives have been taken by the governments and at the private level in these two countries to conserve the Sundarbans ecosystem. The research paper summarizes findings of newspaper reports on Sundarbans, from Earth Day to World Environment Day 2017 (22 April to 5 June) of two reputed broadsheets dailies i.e. The Daily *Prothom Alo* (Dhaka, Bangladesh) and The *Ei Samay Sangbadpatra* (Kolkata, India). The youngest member of the mass communication family, the film has also been included in this paper. This is because the joint production of the two Bengali film industries has already made a lot of cinema. There is going to be more in the near future, where many issues of India and Bangladesh are getting priority, but the destruction of Sundarbans has never been the subject of any such media intervention.

Keywords: global warming, Indo-Bangladesh, mass media, Sundarbans.

1. Introduction

The Sundarbans mangrove forest is known for its high species diversity. This World Heritage Site (UNESCO, 1987) coastal wetland is known for its natural beauty which is flourished by crocodiles, birds, deer, fish, people, rivers, river dolphins, snakes, trees, creeks and the *bonbibi* rituals where the ultimate feather in its cap is the Bengal tiger. Shared by India and Bangladesh, the unique Sundarbans forest located in the delta of Padma, Brahmaputra and Meghna river basins, extends across North & South 24 Parganas of West Bengal (India) and Khulna, Satkhira, Bagerhat districts of Bangladesh. The history of the Liberation War of Bangladesh, sharing of water resource of River Teesta, the Rampal Power Plant, Silver Hilsa, the Rights of Bengali Language, Rabindranath and Nazrul - all these factors have tied Indo-Bangladesh together, and one of the strongest connection is the Sundarbans. But in the present day, the Sundarbans have faced a dangerous warning due to global climate change. With rising sea levels, the islands here are disappearing (The Independent, 2006). For example, according to the School of Oceanographic Studies in Calcutta, satellite images have shown that the south of *Hariabhanga*, which is known as New Moore Island of India and the South *Talpatti* Island of Bangladesh, has completely submerged underwater (BBC, 2010). Another nearby island named *Lohachara*, was submerged in 1996 and almost half of the area of *Ghoramara* Island is now underwater. The latter had a population of 40,000 individuals and as of 2016, the island was inhabited by 3,000 residents (NPR, 2016). Simultaneously, increasing salinity of the water and soil in this region has severely threatened the health of mangrove forests. Frequent cyclones like 2009 Aila and erratic monsoon raining pattern are also damaging the ecology and humanity of the Sundarbans (Priyadarshini, 2006).

Sometime in the nineteenth century, the concept of global warming and the need for conserving nature around the world began to become clear (Singh, 2013). At that time, enlightenment about environmental issues was being developed rapidly with the research of Swedish chemists Svante Arrhenius, who was the first to claim that fossil fuel combustion may result in enhanced global warming (Enzler, n.d.). He proposed that the presence of carbonic

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acid in the air and a doubling of the CO_2 concentration could lead to 5°C rise in the global average surface temperature of the Earth due to the increased concentration of greenhouse gases (Arrhenius, 1896). Another global warming expert Stephen Schneider also predicted the adverse impact of global warming on the world in 1976. Finally, in 1988 it was acknowledged that the global climate was much warmer than 1880 (Maslin, 2004). Subsequently, after fully understanding the importance of nature conservation and the need to protect nature from the adverse impacts of global warming, the Intergovernmental Panel on Climate Change (IPCC) was founded by the World Meteorological Organization and the United Nations Environmental Programme (UNEP). The 19th Principle of the 26 policies of Declaration of the United Nations Conference on the Human Environment (UNEP, 1972) focuses on Environmental Education. It talks about creating environmental awareness among the young generation and in adults. For doing so, the presence of mass media and media campaigns is an important requirement. It is since then that mass media started entering into the global environment arena, of which the Sundarbans is an integral part.

As is true for most neighbouring nations, there are several initiatives between India and Bangladesh with regards to preventing the destruction of the mangrove ecosystem. At the national and international level in these two countries, various aspects of nature conservation have been strengthened in order to protect the Sundarbans. Large number of programmes and projects are being undertaken at the Government and Private level to save the mangrove, among which encouragement of ecotourism, mangrove plantation, creating an alternative source of livelihood are notable. Indo-Bangladesh researchers are continuously carrying out research to save the Sundarbans. But curiously in all the initiatives to save the Sundarbans, the media of these two states - especially the Bengali newspapers and the film industry where the interest of the general people are deeply hidden - is virtually silent.

2. Silence of Indo-Bangladesh Mainstream Bengali Newspapers and Films

2.1. Newspapers
Edmund Burke, Member of Parliament (1766-1794) of the House of Commons with Whig Party stated that after the country's Legislative Assembly, Executive and Judiciary, the Press is the 'Fourth Estate' or 'the fourth pillar'. The Press is the mouthpiece of national philosophy and public opinion (Aggarwal and Gupta, 2001). Burke further highlighted that the press has a role to play in the formation of the state and in the

transformation of the society. But after making a detailed analysis of the newspapers of both India and Bangladesh, it can be deduced that the newspapers of both the counties are active to protect the local environment, but are virtually non-starters when it comes to creating public awareness on relevant national as well as international environmental issues, like the destruction of the Sundarbans. The methodology for this paper is such that an information analysis was carried out from Earth Day (22 June) to World Environment Day (5 June) of two major newspapers in the year 2017. The two newspapers are 'Prothom Alo' (Dhaka Edition) and 'Ei Samay' (Kolkata Edition). The total number of news articles published in both these newspapers on Sundarbans during the study period (44 days) is 10, out of which 8 were published in 'Prothom Alo'.

Table 1: News on Sundarbans in The Daily *Prothom Alo* (Dhaka) (22/04/2017 - 05/06/2017).

Date	Headline
22/04	*The Sundarbans claim to be declared a risky World Heritage*
	Instead of Rampal, it is necessary to set up power plants in alternative places
29/04	*UNESCO observes the government initiative to protect the Sundarbans*
06/05	*Rampal's pollution will kill 150 people a year*
21/05	*UNESCO proposes to take the Sundarbans to a risky list*
	The claim of cancellation the Rampal project
05/06	*Prime minister was on the occasion of World Environment Day*
	Dangers in salt are increasing in Khulna and Satkhira

Table 2: News on Sundarbans in The *Ei Samay Sangbadpatra* (Kolkata) (22/04/2017-05/06/2017).

Date	Headline
06/05	*The mangrove downstream is going on*
18/05	*...the excitement of the Sundarbans pollution*

According to preliminary quantitative analysis, 'Prothom Alo' plays a leading role in the society, but the amount of coverage it gives to the issues of Sundarbans is far from satisfactory. After carrying out a little in-depth analysis, it is found that out of the total eight news articles of 'Prothom Alo', four are published on the two special 'environmental days' (22/04 and 05/06), when there is a high probability to transmit environmental news by the media. Such new coverage on special days are largely

dependent and a result of some or the other initiative by the Government often owing to international announcements. Further, 60 percent of the media coverage is focused on discussing the adverse environmental impact of the Rampal Power Plant. Another newspaper '*Ei Samay*' which has been introduced in 2012, has not played any significant role to raise awareness about the issues of the Sundarbans during the time period studied. This newspaper was found to not even have utilized the special 'environment days' to disseminate information or idea for the conservation of the Sundarbans.

2.2. Film Industry

In many cases, India has maintained good friendship with Bangladesh, and the joint production cinema has played an important role in this friendship (The Hindu, 2003). Since the 1980s, the collaboration of Tolly-Dhallywood has gained huge popularity, especially after 2010. Due to this joint production, many mainstream films like *Padma Nodir Majhi*, *Shankhachil*, *Moner Manush*, *Doob:* No Bed of Roses are continuously made and screened for cinema lovers in both these countries. Moreover, the presence of various well-known production houses like *Jaaz* Multimedia, *Eskay* Movies, Impress Telefilm Ltd, SVF Entertainment, Viacom 18 Motion Pictures, etc. has enriched Indo-Bangladesh film industry considerably. However, cinema lovers in these two countries will not be able to find any films regarding the Sundarbans. *Nandan*, a Government-sponsored Film and Cultural Centre in Kolkata, organised Bangladesh Film Festival 2018 where several films such as, *Aynabaji*, Guerrilla, *Amar Bondhu Rashed,* etc. were selected to be screened. In addition to this, an exhibition of rare photographs based on the liberation war has been selected as the theme of films in near future. However, there is no mention of any documentary or initiative regarding Sundarbans in this huge activity. Nevertheless, film critics and experts in these two countries are repeatedly defensive about this youngest member of the mass media family. However, the Film industry in these two countries (mainly Bengal and Bangladesh) should not only focus on business interests but also in carrying out effective transformation of the society by engaging and educating people. After all that is also one of the roles that the Film industry must play in the successful building of any nation (Naurla, 2008).

3. Possible Reasons for the Silence of the Media

The advent of globalization in the 21st century and ensured that the media is providing its services to the public and the same is being consumed by the masses every second. In such a scenario, there must be some reasons behind the silence of mainstream media on the issue of the destruction of the Sundarbans. To transform the society for its betterment and manifest the truth is the main objective of mass media. However, it seems that the main objective of media houses, at least in this context, has become purely of business. In the hope of making quick profits, without having to make much investment, the same old information is being re-disseminated by the print and the film media which is easily able to influence the general public. There are hardly any efforts that are being made to change the thinking of individuals or the society at large, and no attempts are being made to move people out of their comfort zones even amidst the wake of the ongoing climate crisis. For every media house (newspaper or film production house), there are certain readers or viewers who are familiar with and agree with the ideas aired by the respective media house. So, if a new concept is raised, then the potential grasp and influence on the recipient may change in either direction. Therefore, because of the already deep interest of the people in issues like politics, sports, entertainment and criminal issues, the media continues to delay in making efforts towards raising awareness for now emerging issues like the ongoing environment crisis.

Secondly, due to the economic condition of Bangladesh and India, many people in these two counties continue to live below the poverty line. As a result, as is true for other third world countries, people and media houses are not much bothered about the impact of environment on the lives of individuals. Therefore, the media is perhaps hesitant to explore the need for raising environmental awareness in Bangladesh and in certain parts of India. Thirdly, the total number of journalists trained or deputed to cover environmental issues is inadequate and it was found that the ones that exist lack both motivation and training. Environment being a now emerging issue, requires a degree of understanding before journalists can get involved and report issues related to this field. In the Annual Report of UNEP and in 'UNEP Programmes and Resources for Environmental and Training - An Introductory Guide' (2004), it has been repeatedly highlighted that with the help of journalists, the media is able to influence the general public (UNEP, 2006). The role of media in environmental awareness is thus critical and needs to adequately appreciated and utilized. So primarily in every country, there is a need and special requirement for conducting conferences, workshops and training camps for journalists on the broad theme of how (and why) to cover environmental issues.

In other cases, internal problems of the states is also an important factor affecting mass media involvement in covering the issues of Sundarbans. According to

environmentalist Subhash Dutta, the central and state governments have blamed each other more than once in the hearing of the Sundarbans pollution case (*Ei Samay*, 18 May 2017). According to the newspaper report of *Prothom Alo*, the Head of the South African company Timber's Watch, Wally Man is of the view that Bangladesh has Sundarbans, which is the biggest helper to combat climate change. But Bangladesh is threatening themselves into danger by creating a power project (*Prothom Alo*, 29 May 2017) which may affect the Sundarbans. Although UNESCO has agreed to cancel the implementation of this project, but the Government of Bangladesh has rejected this cancellation. After analyzing media reports, it has been seen that the Government itself is hesitant to make a decision on this matter, which only highlights the dismal situation of lack of coverage for the Sundarbans in newspaper and film industry of both these countries.

4. Why and How the Media Needs to Participate

4.1. Survival
This research paper is based on two major cities (Kolkata and Dhaka) in the two neighbouring countries (India and Bangladesh). After developing a good understanding of the environmental challenges being faced by the Sundarbans, it has been found that these two cities and the entire nation of Bangladesh are directly dependent on the various ecosystem services of the Sundarbans mangrove ecosystem. In the issue of "The Sinking Sundarbans: But How Will the Government Correct Its Own Folly?" of 'Mainstream Weekly', the Journal which was fighting for freedom of the press during the 21-month long Emergency period of India, Sanhita Mukherjee writes that the destruction of the Sundarbans will raise questions about the existence of Kolkata, where the capital of West Bengal has already begun to douse (Mainstream Weekly, 2016). During the International Conference on Environment Day in 2017, Sheikh Hasina acknowledged that the Sundarbans is not only the heritage of Bangladesh, it is also an important reason that keeps the country of Bangladesh alive. This fact has also been recognized many times in various research papers, discussions, feature compositions, magazines of different organizations, etc. In such a situation, the inhabitants of Kolkata and Bangladesh need to awaken to save themselves, and powerful tools like newspapers and films need to become the principal weapon.

4.2. Social Responsibility
According to the Commission of Freedom of the Press (1947), one of the main function of the media is social responsibility. Media have to accept and fulfill certain obligations to society by setting high or professional standards of truth, accuracy, objectivity and balance. A functional media is critical for a functional democracy. It should therefore be the principal duty of the mass media to slow down the long-term social disorder like, environmental unawareness, and to inspire people to protect nature.

4.3. By Using Well-Known Persons
According to the theory of Two Step Flow of Mass Communication, Paul Lazarsfeld points out that most people are not directly influenced by mass media, but rather form their opinions based on opinion leaders who interpret media messages and put them into context. Opinion leaders are those who are initially exposed to a specific media content, and who interpret it based on their own opinion. This person can be an entertainment or movie personality, athlete, artist or any other well-known person. For example, in the *Swachh Bharat Abhiyan* campaign in India, the Central Government has used various influential and well-known personalities in social advertising for motivating rural and urban India for a healthy life. With the help of this method, the media of both countries can take an effective role in increasing public awareness about the environmental challenges faced by the Sundarbans.

4.4. Alternative Journalism
In an attempt to raise awareness and protect the Sundarbans, newspapers publishing regular columns or essays can go a long way. Citizens can also write letters to the editors which should be written by readers with some news value. Such attempts will help more people to become aware and come together for understanding and solving the environmental challenges of the Sundarbans. As a result, readers may become aware regarding Sundarbans by taking on the role of journalists. Here, the role of photojournalism also needs to be highlighted because regardless of education or literacy, a picture is indeed worth a thousand words. In the case of films, mass media can be influenced much more on the issue of Sundarbans, especially if the portrayal of this issue is done in a systematic manner. Issues and challenges of the residents of Sundarbans and the action (or lack of action) in this direction needs to form part of film narratives.

5. Conclusion
The main objective of this study is to analyze the role of media for protecting Sundarbans in India and Bangladesh. Global warming and environmental changes are destroying the existence of mangroves in Sundarbans, which has become a big challenge for the entire world. Thus, mass media tools need to be involved and activated

in these two developing countries. Media houses from other nations also need to play a similar role. This needs to occur before the destruction of the Sundarbans take an irreversible turn. And finally, even if mass media immediately begins to play an active role in this matter, it may still be difficult to obtain the results immediately. This is because when a new idea enters into a nation through the mass media, its benefits may take many years to be realized by the society.

6. References

Aggarwal, V.B. and Gupta, V.S. 2001. Handbook of Journalism and Mass Communication. Concept Publishing Company, New Delhi, India.

Arrhenius, S, 1896. On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground. Philosophical Magazine and Journal of Science (Fifth Series). 41: 237-276.

BBC. 2010. Disputed Bay of Bengal Island 'Vanishes' Say Scientists. URL: http://news.bbc.co.uk/2/hi/south_asia/8584665.stm (Accessed on 20/12/2017).

Enzler, S.M. (n.d.) History of the Greenhouse Effect and Global Warming. URL: https://www.lenntech.com/greenhouse-effect/global-warming-history.htm (Accessed on 20/12/2017).

Mainstream Weekly. 2016. The Sinking Sundarbans: But How Will the Government Correct Its Own Folly? URL:http://www.mainstreamweekly.net/article6311.html (Accessed on 20/12/2017).

Maslin, M. 2004. Global Warming, a Very Short Introduction. Oxford University Press, Oxford.

Narula, U. 2008. Mass Communication: Theory and Practice. Har Anand Publications Pvt Ltd, New Delhi, India.

National Public Radio. 2016. Rising Tides Force Thousands to Leave Islands of Eastern India. URL: https://www.npr.org/2016/05/20/478915685/rising-tides-force-thousands-to-leave-islands-of-eastern-india (Accessed on 20/12/2017).

Priyadarshini, S. 2006. Vanishing Islands Displaced Climate Casualties Underlying Truth. URL: https://www.telegraphindia.com/1061030/asp/know how/story_6929967.asp (Accessed on 20/12/2017).

Singh, G. 2015. Environment and Sustainable Development. Human Rights, Gender and Environment. Delhi: Virtual Learning Environment, Institute of Lifelong Learning, University of Delhi.

The Hindu. 2003. Multiplexes a Boon for Serious Cinema. URL: http://www.thehindu.com/lf/2003/10/30/stories/200 3103000460200.htm (Accessed on 20/12/2017).

The Independent. 2006. Disappearing World: Global Warming Claims Tropical Island. URL: https://web.archive.org/web/20061228004107/http://news.independent.co.uk/environment/article20999 71.ece (Accessed on 20/12/2017).

UNESCO. 1987. World Heritage List: Sundarbans National Park. URL: http://whc.unesco.org/en/list/452 (Accessed on 20/12/2017).

United Nations Environment Programme (UNEP). 1972. Declaration of the United Nations Conference on the Human Environment, Stockholm. URL: http://www.undocuments.net/unchedec.htm (Accessed on 20/12/2017).

United Nations Environment Programme (UNEP). 2004. UNEP Programmes and Resources for Environmental and Training - An Introductory Guide. Division of Environmental Policy Implementation, UNEP.

United Nations Environment Programme (UNEP). 2006. Annual Report. URL: http://staging.unep.org/pdf/annualreport/UNEP_AR _2006_English.pdf (Accessed on 20/12/2017).

Analysing the Great Urban Divide: Turning the Lens to Rural to Understand Slums

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Abstract: Instead of looking at slums as strictly 'urban problems' requiring 'urban solutions', this paper attempts to build a structural link between growth of slums in urban areas and, what can be called, the 'decay' of the rural in India. It contends that uneven development of Indian cities with great spatial disparities – made evident by increasing number of slums – is related to uneven development between rural and urban areas. Thus, in order to grapple with the 'enigma' of slums, the political economy of rural areas – from where the migrants living in slums 'originally' belong – becomes the essential site to engage with. The paper foregrounds the need to study transformations in the rural domain in order to make sense of the growth of slums in cities. In a nutshell, the argument is that the 'decay' of the rural and the 'swelling' of the city are to be visualised in hyphenated terms since the rural-urban divide is at the heart of the 'great urban divide'.

Keywords: city-centrism, development discourse, slums, structural transformation, urbanisation.

'The all-pervading disease of the modern world is the total imbalance between city and countryside, an imbalance in terms of wealth, power, culture, attraction, and hope. The former has become over-extended and the latter has atrophied. To restore a proper balance between city and rural life is perhaps the greatest task in front of modern man' (Schumacher 1973: 189-190).

1. Introduction

By critically reassessing the city-centric development discourse this paper seeks to look at the phenomenon of slums in the broader context of the 'decay' of the rural[a]. It is contended that the phenomenon of spatial disparities in Indian cities made evident by increasing slums is interlinked with the imbalanced development between India's rural and urban areas. Thus this paper argues for a shift in perspective – a shift from the centricity of city in development discourse to seeing the 'great urban divide'[b] and the rural-urban divide as structurally linked.

The argument is advanced by dividing the paper in three parts. First part seeks to present a quick snapshot of the politics of development which, owing to its euro-centric and urban bias moorings, attempts to set a grand principle towards which every society's future course is supposed to unfold - the absolute and essential importance of urbanisation with a replica of (Western) City as the terminus of development. It has been argued that the planning and policy discourse in 'urban studies' in India, intendedly or unintendedly, shares the above outlined 'principle' and hence the proliferation of 'slums' is seen to be a result of lack of implementation of the master plans. Thus in the dominant discourse the 'problem' of slums are understood through a city-centric perspective – devoid of any link with the rural.

The implicit assumption here is of a 'structural transformation' where people are supposed to move from farm to factory and from the country to the town. However this assumption has been problematised throughout the paper. Second part walks into the domain of the rural and agrarian in India to capture a glimpse of the distress in this realm. The argument arrived in this section that, due to the 'decay' of the rural and agrarian economy, people working in this domain are witnessing a crisis resulting into an outflow. Third part, by building upon the second, attempts to develop a prima facie case for a suspicion for the axiomatic feature of development discourse, i.e., the assumption of a successful 'structural transformation'. If this argument is true then it necessarily calls for a turning of the lens to the rural to understand urban slums.

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2. Politics of Development and Centricity

2.1 The 'Catch Up' Paradigm: City as Terminus

The 'derivative' discourse of development creates an imagery in which the agrarian and rural 'developing' countries are supposed to 'catch-up' with the industrialized and urban West. This calls for the 'imperative' of structural transformation – where willy-nilly every society has to move from agriculture to industry and from the country to the town. It has often been argued that the term 'development' carries distinct connotations. It may include, as put by Gasper, 'long-term economic growth and change; societal progress; planned intervention; what happens in the world's South; and what agencies in or from the world's North do to, with, and in the South' (Gasper, 2004). However, 'development', as put by Mira Kamdar, 'is traditionally understood as industrialisation and urbanisation' (Kamdar, 2012). Merriam-Webster dictionary informs that a 'developed' country and society is one 'having a relatively high level of industrialisation and standard of living'. Petit Robert dictionary notes that a 'developing country or region' is one 'whose economy has not yet reached the level of North America, Western Europe, etc.' (Rist, 2002). Thus in the mainstream idea, often the end point is to measure up to the modern West. The dominant conception of development which holds sway is inextricably interwoven within the templates of industrialisation and urbanisation. Whatever conception one may subscribe to development, it generally concurs within the rubric or domain which includes the dynamics associated with the conundrums of the countries or societies seeking to 'industrialise' and 'urbanise' – as this is viewed as the answer to the enigma called poverty. Thus 'development' is often used to refer to the narrative or the process of transition/ transformation towards a modern industrial urban economy. There is a set linearity towards a 'fixed' future – of urbanised and industrialised society.

The mainstream development discourse, however, is increasingly seen as euro-centric. Critics have advanced their arguments from various directions (Nandy, 1996; Mehmet, 1995; Tucker, 1999; Escobar, 1992; Sardar, 1999). Owing to this, one of the marked features of euro-centrism is the centricity of city and industry. The pedigree of this thought goes back to the idea of 'evolutionism' shared by theorists of social change ranging from Jean-Baptiste Say, Lewis Morgan to Karl Marx (Rist, 2002). In fact, in the nineteenth century in particular, the social science in the West was profoundly preoccupied with conceptualising Europe's great transition towards industrialisation, urbanisation and capitalism. Here an inextricable link was made between natural history and social history and biological evolutionism with the social evolutionism. Of particular interest here is not only the 'uni-linearity' but in addition the contempt for those who are not 'civilized', i.e. those who are agrarian or rural. Also here one notices a clear link between industrialisation/ urbanisation and the 'civilisation'. Orthodox notions of development, firmly rooted in the philosophy of social evolutionism, with a presupposed superiority of West over other societies, informed the core of the subsequent theories of development (Rist, 2002).

Thus the templates of urbanisation/ industrialisation as 'development' has become the axiomatic feature of mainstream development discourse. This is so basic and obvious that it often goes as an unarticulated postulate and this notion floats as common sense in much of the third world. For instance, for Jawaharlal Nehru, India's regeneration after the long colonial rule 'consisted in modernising itself along the lines of modern European societies, which too had for centuries remained degenerate and turned the corner in the nineteenth century by comprehensively reorganising themselves along the lines required by the modern industrial civilisation' (Parekh, 1991). Further, 'industrialisation', or for that matter development for Nehru, 'was not just a means of solving the problems of poverty and unemployment as Gandhi and others had thought, but necessary in order to keep pace with the rest of the world… Its logic', as Parekh puts it, is 'inherently comparative' (Parkeh, 1991). 'Comparison' and 'sentiment' of 'pride' is throughout weaved in the very fabric of Nehruvian discourse. This mesmerisation however was entangled with a disdain for the rural and agrarian. 'For Nehru, agriculture was a primitive and culturally inferior activity' and 'he did not therefore think much of agriculture as an activity and peasantry as a social class' (Parekh, 1991). In a nutshell, Jawaharlal Nehru wanted to build India from the top downwards; through industries, managers and technicians. City, in such a universe, naturally assumes a pivotal role. This dominant notion of development, and its association with the city and industry, is not unique to Nehru. In fact this fascination for the city cuts across time, space and ideological orientations. P. Chidambaram, former Home and Finance Minister of India, for instance, adhering to the similar line, also puts his faith in this 'iron-fisted rule'. His 'vision of a poverty-free India' is 'where a vast majority, something like 85 percent, will eventually live in cities' (Chidambaram, 2008). Li Yongping, a Chinese official responsible for directing the urbanisation blueprint of the government of China, asserts that 'an objective rule in the process of modernisation is [that] we have to complete the process of urbanisation and

industrialisation' (Johnson, 2013). At home, the sentiment of the 'objective' rule has echoed over and over again, for instance, in the projects like Special Economic Zones (SEZs) and smart cities – singularly chasing the vision of summarily attaining an 'industrialised' and 'urbanised' (= affluent and powerful!) India. If the terminus of development is the city, which is an 'objective' rule in the development discourse, then logically it follows from this postulate that 'rural' is a temporary and 'transitory' phase. If the future belongs to the city, the slum and its 'solution' has to be located in the city. Owing to these convictions seldom the slums and its 'solution' are located in the wider milieu.[c]

2.2 Understanding Slums: City-Centric Perspective

The 'problem' of 'slums' in postcolonial Indian cities has predominantly been attributed to the scarcity of housing for the poor by the policy, activist and academic discourses (Roy, 2004; Bhan, 2009; Ramanathan, 2006; Verma, 2002). They argue that 'slums' are primarily a result of lack of implementation of the master plans. Gita Diwan Verma (2002) in her book 'Slumming India' points out that the first Master Plan of Delhi had clear provisions for low-income housing which have not materialized and this is the main reason for the growth of slums in Delhi. Further it is pointed out that 90% of the shortfall in public housing units to be built under Delhi Master Plan falls under the low-income category (Bhan, 2009). Occasionally, other parts of the state machinery such as the Supreme Court of India have also echoed similar views about slums. We can observe this in the case of pavement dwellers in Bombay in which the court acknowledged that pavements became shelters primarily because states have not implemented master plans (Dupont and Ramanathan, 2005). While these narratives attribute slums to a lack of urban housing, they are all usually silent on linking their proliferation to economic conditions in the rural areas.`

The 'solutions' to end the proliferation of new slums and clear the existing ones therefore have been largely limited to making resettlement and housing policies for the urban poor. Thus we see that the first central government legislation in India, The Slum Areas (Improvement and Clearance) Act, 1956 called for either improvement of dilapidated settlements or the provision of alternative accommodation in case of clearance of slums. Subsequent policies have only debated about whether the squatters should be provided a plot of land or housing in the form of flats and whether the state or the market should be responsible for the provision of resettlement (Kundu 2004). The policy and planning discourse rarely correlates the creation of urban slums with en masse migration of people from the rural areas. This neglect of the countryside in the imagination of policy apparatus continues to be reflected in the newer policies that are designed in the neo-liberal era for making the cities 'slum-free'. These policies such as Jawaharlal Nehru National Urban Renewal Mission 2005 (JNNURM) (GOI, n.d.a), Rajiv Awas Yojana 2011 (RAY) (GOI n.d.b), Pradhan Mantri Awas Yojana 2015 (PMAY) (GOI, 2015) make a strong case for the construction of affordable housing by the private actors in order to reach the goal of inclusive slum-free cities.

The city-centrism of the development and policy discourse has not just continued but has intensified in the neo-liberal era. The contemporary planning and policy discourse in India is replete with documents and references which show that the future of our country lies in cities or urban spaces.[d] There seems to be considerable 'investment' in the creation of an image of urbanizing India[e] which in turn shall act as a panacea for all the ills that have afflicted the development trajectory of the nation. This can be seen in a report by McKinsey Global Institute (MGI, 2010) titled 'India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth' which claims that, 'cities will be central to India's economic future… Urban India will drive a near fourfold increase in average national income… Over the next 20 years, urban India will create 70 % of all new jobs in India and these urban jobs will be twice as productive as jobs equivalent in the rural sector'. Additionally, '91 million urban households will be middle class, up from 22 million today.'

It is reminded time and again that cities are the engines of growth that already contribute 52% to our GDP and their contribution would continue to increase to 75% by 2030. Urban land was arguably one of the most important 'resource' to be tapped on in order to bring about this increase in the contribution to GDP.[f] A number of changes were brought by the policy apparatus to convert urban land into 'real estate' thereby leading to financialization of cities[g] (Searle 2008). The policy imperative of creation of affordable housing for the poor by private developers has to be seen in the context of these larger transformations in urban land. In fact it is being used as one of the instruments to make land which has hitherto been owned in 'faulty' forms to become more amenable to be brought under formal capital markets. The release of central government funds for the creation of affordable housing via policies such as JNNURM, RAY, PMAY are tied to bringing about mandatory reforms in Indian cities which enable land to be easily transferred to

developers. These policies have been largely influenced by the arguments of Peruvian economist de Soto (2000) who argues that the poor in the developing world are potentially rich because they own large swathes of land albeit in faulty forms as 'dead assets'. He believes that the problems of squatters can be solved by giving them title to the land they squat on so that they can mortgage it in the formal markets to obtain credit to start various kinds of entrepreneurial activities. His argument has been used to argue for giving affordable flats to the poor thereby providing property rights to slum dwellers. These arguments of the policy discourse should be appreciated in the larger milieu of the political economy of 'interests' involved. Nevertheless the link between the creation of 'slum-free' cities and 'affordable' housing has become undisputable in policy and planning circles (Planning Commission, 2011).

2.3 Swelling City: Burgeoning Slums

Despite making numerous policies for resettlement and rehabilitation the number of slums has continued to increase in Indian cities as has been proven by the slum censuses conducted in 2001 and 2011. The census data clearly shows that the population living in slums increased from 42.6 million in 2001 to 65 million in 2011. In fact if we look at the data on settlements by Government of Delhi (2009) in the Economic Survey of Delhi 2008-2009, we find that roughly 75% of population in Delhi lives in unplanned colonies out of which 33.9% consist of slum areas.[h] Dupont (2008) has compared the growth in the number of slums and its population to the rest of the urban population in Delhi. She has shown that there has been a constant increase in the population of slums as a percentage of the total urban population from being 5% in 1951 to 18% in 1991 to 27% in 1998.[i] Thus slum population is growing at a faster rate than the rest of the urban population in Delhi. The rate of growth of slums is even starker in Mumbai. The population of slums increased by 50% from 60 to 90 lakhs in a decade that is from 2001 to 2011 (Jain, 2010). 60% of the population in Mumbai can be said to be living in slum-like conditions. A similar argument claiming the swelling of cities in the developing countries has been made by Mike Davis and the challenge of slums report by UN Habitat that came out in 2003. In his Planet of Slums, Davis portrays how a vast humanity in the Global South – more than a billion – is warehoused in shantytowns, exiled from the formal world economy. 'In South Asia ... in the late 1980s ... 90 percent of urban household growth took place in slums ... Indian slums continue to grow 250 percent faster than overall population... Of 5,00,000 people who migrate to Delhi each year, it is estimated that fully 4,00,000 end up in slums... "If such a trend continues unabated"', Davis

quotes, "we will have only slums and no cities"' (Davis, 2006). This trend, to him, is an original development unanticipated by either classical Marxism or theories like that of Weber. Indeed at the heart of this exodus from the countryside is that the whole rural economy has been pushed on the brink of collapse which in turn leads to push migration. In fact owing to agrarian and rural distress in India the exodus out of village continues unabated. This is the subject matter of next section. However given the magnitude of the subject at hand one cannot do more than touching upon some important trends in this context. All these point to the ongoing crisis of the livelihood in rural India. And thus, the rural-urban divide, to be sure, does not function in isolation; it leads to the 'great urban divide' itself.

3. Mapping Agrarian and Rural Distress in India

Agriculture in India, rather in most developing countries, has been relatively neglected. This has been explained by various scholars with the help of urban bias theory (Lipton, 1977; Schultz, 1968; Bates, 1981; Rola-Rubzen, et al. 2001; Byerlee et al., 2005). Lipton (1977) has famously argued that as a result of complex socio-political forces, agriculture relatively receives little attention in world development. From a sample of eighteen developing countries, Schiff and Valdes (1998) have found that had the governments of these nations not forced the policies having an adverse impact on the interests of the countryside (i.e. supportive of the urban interests) the price of agricultural produce measured against the urban goods would have been 43 percent higher, particularly during 1960 to 1985. The study also demonstrated that the countries with low bias against the fields have a less distressed (push factor) migration from rural areas into urban areas.

In the development discourse in India agriculture was seen as a 'bargain basement' (Corbridge and Harris, 2000). Largely because of this approach, India is witnessing multiple forms of distresses in its agrarian and rural spheres. Farming as a source of livelihood and lifestyle is in deep and multiple existential crises. In this milieu, the most pronounced traumatic saga is that every thirty minutes a farmer commits suicide in India and more than three lakh have succumbed since 1995. Various agitations in 2017 and 2018 by farmers in the state of Madhya Pradesh, Maharashtra, Tamil Nadu and Rajasthan clearly indicate that the state of agrarian economy in the country is in doldrums. With these protests, agrarian communities are agitating for reservations as farming has been rendered non-remunerative and the condition of non-agricultural sources of livelihood in rural areas is also grim. The

significance of agriculture in the socio-economic fabric of India can be marked by a simple fact that livelihood of almost half of Indians depends on it.

One of the greatest paradoxes of economy in India is the imbalance in agriculture's contribution in gross national product vis-à-vis its share in employment. In India, the decrease in the share of agriculture in gross domestic product (GDP) has not been accompanied by a proportional decline in terms of employment. The share of agriculture and allied sector in GDP has come down sharply from 52 per cent in 1951-52 to 13.9 per cent in 2001-12. However, its share in workforce remained high at 54.6 percent, declining by merely 15 percentage points during the same period (GoI, 2015-16). It has been noted that 'the slow pace of structural transformation in agriculture can be attributed to lack of non-farm employment opportunities in rural areas to absorb a larger proportion of the workforce from agriculture' (GoI, 2015-16). Thus the movement of people from the primary to secondary and tertiary sector is sluggish. This is largely because the contribution of industry and services in terms of GDP has not been accompanied by a parallel growth in employment, formal or informal, in these sectors. This simple fact highlights the magnitude of sectoral inequality in economic terms. In India thus, almost half the people engaged in agriculture for their livelihoods generate only 13.94 percent of national income whereas other half, those in manufacturing and services, generates 86.06 percent of total national income. This is indicative of the large disparity between the per capita income in the agricultural sector and the non-agricultural sector.

Further, a cursory perusal of the relevant data about the structure of land holdings indicates another disturbing trend. One of the most important factors of income for agriculturists is the availability of land per worker.[j] Land holdings are increasingly getting smaller and the number of small and marginal farmers is constantly increasing. This fact has largely gone unnoticed. The average size of family farm was more than 3 hectares in 1947; it fell to 1.1 hectare in 2003. The share of marginal and uneconomic holding has more than doubled in last five decades (Sen and Bhatia 2004; Ready and Mishra 2009). The small holding character of agriculture in India is much more prominent today than ever before. The pressure on land, which is supposed to decrease progressively over the time, in absolute sense, has instead increased. According to the current (2018) Agriculture Minister of India, Radha Mohan Singh, '91 per cent of the total farm holding would belong to small and marginal farmers by 2030'. Thus the unburdening of the land has not taken place, and instead more and more people are

now dependent on agriculture in absolute sense. In other words, pressure on the land is not diminishing as expected – as the classic linearity argument assumes – in fact, it is mounting day by day. Modernisation theory particularly that of Rostow variant (Rostow, 1960) has prophesied that agricultural sector should move forward rapidly with the dissolution [read ending of small scale family farms] and consolidation [read the emergence large scale capitalist farming] of traditional and backward agriculture. Thus 'inefficient' small scale farming is phased out with the structural transformation. Small scale farmers, as it happened in industrialised societies, en masse, are supposed to migrate to the cities for industrial and service sector. Nevertheless, this structural transformation has not taken place as envisaged, particularly in countries like India and this is one of the prime fallacies of the mainstream theories embedded in 'linearity'. Rather large number of agrarian population has clung tenaciously to the land. In fact among the low income countries, though only 21.5 percent of total Gross Domestic Product came from agriculture, despite the fact that 70 percent of population was rural - most of which remain engaged in agriculture (UNDP, 2006; World Bank, 2007). The unburdening of the land has not taken place, and instead more and more people are now dependent on agriculture [in absolute sense]. This constant increase of small farms indicate at-least two things; (1) crisis of livelihood in the agricultural sector and (2) indication of the lopsided structural transformation, an argument dealt at greater detail in the next section of this paper.

The cumulative effect of these trends indicates a crisis of livelihood in agriculture sector. The situation is that today the average Indian farm family operates less than one hectare of land, unviable even in good years to sustain a family. The share of economically unviable marginal holdings has doubled from what it used to be fifty years ago. This trend is again different from the trajectory of the Western industrialised nations where there was a progressive increase in landholding size with the 'structural transformation' of the economy. G. S. Bhalla, citing National Sample Survey Organisation (NSSO) data, has argued that 'at all-India level, farmer households below 2 hectares accounted for above 80.5 [%] of total farmer households' (Bhalla, 2007a). That means above 80 percent of farmers in India are either small or marginal. However 'at the all-India level, a farmer household had to possess 4.01 hectares or more to be able to make both ends meet' (Bhalla, 2007a:). This trend has rendered the small and marginal farming as unviable particularly in absence of supportive and conducive milieu. Where on the one hand the landholdings are becoming smaller and smaller another worrisome trend is also visible in case of

agricultural labourers. 2001 population census showed that the proportion of agricultural labourer to agricultural workers increased from 37.8 percent in 1971 to 45.6 percent by 2001. In the same period (1971-2001) the number of agricultural labourers, in absolute sense, increased from 47.5 million to 106.8 million (Bhalla, 2007b).

Given above conditions, the share of non-farm sector in rural employment has been on increase. However in this domain also a troubling pattern is observable. Amit Basole has shown a sort of 'deindustrialization' trend in India's rural sphere. He argues that 32% of the rural workforce was engaged in some form of manufacturing in 1994. This declined to 22% in 2010 and now it stands at 17% (Basole, 2017). He further observes that while manufacturing has declined the gainers have been construction (whose share increased from 11% in 1994 to 28% in 2015) and trade (Basole, 2017). This phenomenon can be seen as an extension of the situation resulting due the process of deindustrialization during colonial times. This situation has arisen because of the very nature of industrialisation in which the exodus out of the land is not likely to be absorbed in the modern sectors of economy.

Thus both the farm and non-farm sources of livelihoods are becoming non-remunerative in rural areas. In such a scenario it is quite obvious that average income of the 'households in the largest cities are three to six times better endowed with consumer assets compared to households in the farthest-distance band of villages' (Krishna, 2017). Similarly 74.52% of rural household's monthly income of highest earning member is less than 5,000 rupees (Government of India, 2011). So the livelihoods of the rural people progressively moved away from the little local manufacturing that they were engaged in. What did these villagers, displaced from rural manufacturing do? As Krishna observes, 'unlike the industrial revolutions of the West, which converted farm labourers into factory workers, the transformation in India is of a different nature: the grandsons of peasant farmers have become *mazdoors* in the millions' (Krishna, 2017).

According to the census of India 2011 more than two thirds of Indians (68.84%) live in villages. According to socio-economic census data (Government of India, 2011) almost 73% of households were in rural areas. This means that India is overwhelmingly a rural society. To make the situation worse, there is huge disparity in the quality of life, which determines the life chances of an individual, in the rural and urban India. Anirudh Krishna notes that in terms of average incomes the big cities again fair much better than the smallest in the last distance band of

villages. No matter what one's level of education is, earnings are higher if one lives within a large town rather than a small town and in a small town rather than a remote village. The 'more rustic one's existence', says Krishna, 'the greater are the odds of disease, malnourishment and morbidity' (Krishna, 2017).

The pre-existing disparities between rural and urban areas have accentuated in the past few decades. Major cities have emerged as highly concentrated command points and the 'spatial nervous system' of the globalised economy. In fact 'the main consequence of globalisation has been that Indian cities, far from acknowledging their links with the rural hinterland on whose sufferance they are running, have been benchmarked against other "world cities"' (Shrivastava and Kothari, 2012). 'Throughout the world, globalization has suddenly heightened the role of cities and pushed villages further into oblivion' (Shrivastava and Kothari, 2012).

In this context of 'decay' of the rural the lure of the city is obvious. In a study based on primary survey across 18 states of India by the Centre for the Study of Developing Societies (CSDS), Delhi, conducted between December 2013 and January 2014, suggests that 'the dissatisfaction with economic condition lies at the heart of why majority of farmers (69%) think that city life is much better than village life' (CSDS, n.d.). Further, 'on being asked whether they would leave farming if they get an employment opportunity in the city, 61% of the farmers answered in the affirmative' (CSDS, n.d.). 'The survey reveals that most farmers do not see a future for their children in farming and would like to see them settle in the city… Better education was cited as one of the most important reasons for why farmers want their children to settle in cities, followed by better facilities, and employment opportunities' (CSDS, n.d.). Thus the 'decay' of the rural is manifested in many ways.

4. 'Lopsided Transition': Underbelly of Structural Transformation

Noting the 'lopsided transition', or the 'problem of the failure of structural transformation in India, Corbridge et. al. (2014) argue that 'the limited movement of labour out of marginal smallholding agriculture as the economy grew over the first five decades from independence, has continued through the more recent years of very high rates of growth'. This raises a question on the possibility of classical structural transformation – leading to the wishful hope that surplus labour in agriculture would be absorbed gainfully in the burgeoning industrial and tertiary sectors with the higher rate of growth - in Indian scenario. This assumes more significance in wake of India's well

documented employment creation crisis. The scholars who argue that India is witnessing jobless growth (Unni and Raveendran, 2007; Dev, 2008; Himanshu, 2007) are not entirely unfounded. Keeping an eye on the post-independence trajectory of the process of structural transformation in India, it would be a potent question to ask that whether people coming out of agriculture owing to distressed situation, given their sheer numbers, can find suitable means of livelihood in the 'modern' 'dynamic' sectors of economy.[k]

In the current scenario, along with the overburdening of land, even those who are 'coming out of agriculture' are not absorbable elsewhere in the economy. They will, more or less, remain "excluded" from the 'dynamic' sectors of the economy, and engaged in activities of such low productivity as barely allow for survival' (Corbridge et al., 2014). In his recent and now often quoted work, Kalyan Sanyal has put forward that the narrative of transition - according to which an underdeveloped economy transforms into modern, and where it is assumed that capitalism is the eventual destiny of the whole globe - particularly in post-colonial conditions, is not true (Sanyal, 2007). Sanyal's framework rules out the possibility of capital superseding 'pre-capital'. Second part of his argument suggests that, due to governmental interventions, a reversal of the primitive accumulation is also taking place. However, here, one is interested only in the first and main part of the argument. Here the assertion of Sanyal is that modern capital systematically reproduces primitive accumulation and impoverishment on the margins. This, according to him, is a perennial systemic feature which is not limited to the prehistory of capital. Further in the postcolonial contexts the vast population which gets uprooted in the process cannot be absorbed within the domain of capitalist economy and thus a wasteland of the capitalism's 'rejects' is continuously produced. It must be noted that, this particular analysis is a radical departure from the orthodox Marxist position where capitalism brings the transition to a universal modernity. Chatterjee (2008), who develops his argument in conversation with Sanyal, has also argued that the pervasive transition narrative is a false one. In other words the surplus population which has migrated from rural areas but does not find a job in the manufacturing or the industrial sector is surviving in the 'unorganised' or the 'informal sector'. However, presenting an even darker scenario, Jan Breman argues that even the informal sector does not have an endless capacity to absorb this surplus population. His fieldwork shows that the informal sector is getting saturated, thereby forcing the rural population to remain unemployed in villages. He further argues that those who find a space to live in slums are the more

fortunate ones among the rural migrants to the city. A large number of urban poor do not have any 'fixed' shelter and sleep on construction sites or form a part of the homeless population in the city (Breman, 2009). According to the Lewis model of development, the informal sector in urban areas was supposed to be a temporary phenomenon that would disappear with the completion of industrialisation and structural transformation. It is important to note that almost all the low-income population in the informal sector lived in informal settlements or slums as these were the only accommodations that they could afford. We have already seen in section I that slums or informal settlements were thought to be a 'temporary problem' that could be solved with improvement of dilapidated houses and resettlement of squatters in plots or flats. The official policy discourse still talks about creating slum-free cities which means that slums are still assumed to be a temporary feature of our cities.

5. Conclusion: Turning the Lens Towards the Rural

Given the facts enumerated above, one seemingly candid and lucrative solution needs to be rebutted. It is not likely, at least for a long time to come, that the rural people will be absorbed by India's rapidly growing urban agglomerations. More than 800 million currently live in rural areas in India - which is more than the combined population of United States, Canada, Western Europe and Australia. Waiting for urbanisation to suck up this population, given its sheer size, is an impractical proposition, particularly in light of the hitherto trajectory of urbanisation in India. The rate of urbanisation in India is sluggish even when compared to other countries like South Korea, China and Indonesia. It is a fact that a substantial number of population will continue to live in the countryside in India, even if 10-20 percent of population moves to cities in the next couple of decades. Clearly, the village is not going to die soon.

The slums are in fact the 'dumping ground' for the 'surplus' populace from the countryside resulting into - owing to absence of possibilities to be absorbed in the 'modern' domains of economy - production of an unequal explosive and, of course, exploitative terrain within towns. Thus, the rotting of villages and the swelling of cities are to be visualised in hyphenated terms. This shift in the perspective about slums and the slum-dwellers has radical entailments, foremost being that the slum question cannot be imagined in the policy discourse, and otherwise, in the absence of the rural. So the clear solution, at least in long term is, to give a massive thrust to economic activities in the countryside and small towns. This can happen only with revitalisation of the village,

which is on the brink of collapse. Along with measures to raise agricultural productivity and ensuring fair and remunerative prices for the farm produce, the focus should be on generating robust non-farm employment in the countryside. 'Check dams' need to be built at the source itself to control the unabated flow. This necessarily calls for a rectification of 'urban bias' in policy discourse.

Owing to globalisation the Atlantic world and the East Asia has become the reference point of urban cognition and imagination. However it must be noted that the urban India cannot function, as argued above, as an island. The urban and the rural cannot be seen as autonomous and disjoined categories and have to be understood as structurally related. The paper also raises larger questions about the trajectory of development undertaken by India so far and alludes to possibilities that are more in sync with India's unique socio-economic history. While economic chasm between the city and the countryside has expanded dramatically, the cultural penetration of 'the city' in the countryside, through urban dominated media like television, has further intensified the lure of the town in the rural folk. When life - rather a hope of that - is in the city, village becomes a place to flee. Slums are an inevitable product of this development logic.

6. Endnotes

[a] Needless to say that the rural areas in India are not homogenous and they are huge and diverse. Substantial number of rural people depend on off farm employment and this number is increasing as the share of agriculture in rural incomes has diminished. Despite this, agriculture remains the mainstay and the source of livelihoods, particularly given its important externalities and multiplier effects. Agriculture-led development as a pro-poor, bottom-up viable approach has been increasingly stressed, in recent years, by both professional academics and international organisations. This paper does not present a case for return to rural arcadia. It is well recognised that the present villages are cesspools of patriarchy, casteism and communalism. An analogy may help to clarify. Gender is, for instance, fractured by caste, class, region etc. But for heuristic purposes or strategic generalisations - which often illuminate some stark realities and fault-lines in our society - talk about women issues or gender as an important analytical category. Similarly and obviously rural is also stratified by caste, gender and class. Despite this, like gender, it is a useful category for heuristic purposes.

[b] This expression has been borrowed from Shrivastava and Kothari (2012).

[c] Because the terminus of development is to be the prototype of Western city, the slums are also supposed to,

one day, graduate to the formal city. In is interesting to note that the planners often see slums as extension of the 'rural' as they lack 'urban psyche'. The broad outlook of the post-colonial elite towards slums becomes particularly clear in one of the booklets released by Town Planning Organisation of the Delhi Master Plan in order to educate the citizens regarding the imperatives of the Master Plan. Culling out reasons for the existence of slums, it points to the 'pre-urban' ways of living of the slum dweller which is not compatible with life in a city: 'the obnoxious trades carried out by the slum families in their dwellings and the keeping of cattle and other animals have aggravated the problem of insanitation and congestion in the city. The strong solidarity among slum dwellers ("brotherhood ties") produced further "congestion" as migrants were drawn to their own and increased pressure on areas' (Sundaram, 2009, p. 53).

[d] 11th Five Year Plan, 12th Five Year Plan, High Powered Expect Committee 2011, National Council of Applied Economic Research Report 2005, World Urbanisation Prospects 2014, McKinsey Global Institute: India's Urban Awakening: Building inclusive cities, sustaining economic growth 2010. Although there was an urban bias in our development discourse since independence, the emphasis on the urban has gained renewed importance in the aftermath of liberalization scenario.

[e] A number of scholars (Ghertner, 2010; Searle, 2008) reflect on the 'politics' and 'economics' behind the necessity of creation of this image of urbanising India. They argue that an image of a prosperous urban India is essential to attract speculative foreign capital to be invested in urban land. Thus a discourse has to be created that lends some credibility to the fact that India is going to have a big urban middle class that would have the ability to purchase the huge housing stock built by the private developers in India.

[f] McKinsey report illustrated that India's GDP was low as compared to countries like China and Indonesia because it had low rates of investment. 'Increasing investment and foreign direct investment in particular was the strategy to increase GDP, and privatization of the land market was one of the most important strategies to bring this about' (Ghertner, 2010). World Bank's India Urban Strategy Paper (2007) argued that the agenda of transforming urban land into capital required urban land reform. This was extremely important to maintain the growth rate of 8% for the coming decades. Similarly a report by McKinsey Global Institute called 'India: The Growth Imperative' (MGI, 2001) claimed that 'product and land market barriers were the greatest hindrance to India's growth.' It calculated that 'land market distortions account for close to 1.3% of lost [GDP] growth a year.

These distortions included unclear ownership, counterproductive taxation, and inflexible zoning, rent and tenancy laws.' Inferring from this report it can be argued that slums caused a distortion in the land market due to having unclear ownership or remaining outside the formal circuit of capital.

[g] If we look at policies of Indian Government, we see a concerted effort towards commodification of urban land. In 2002, FDI for investment in townships was made legal. This policy was liberalized further in 2005 when the minimum size required for the townships was reduced and FDI was allowed in other construction related projects. Also FDI in real estate could now proceed through the automatic route that is without requiring prior approval from the government or the RBI. Secondly, as part of a change in financial policy, venture capital funds were allowed to invest in real estate in 2004 by SEBI. This gave a boost to domestic real estate. Also SEZ policy in 2005 also made large tracts of land available at extremely cheap prices for the construction of infrastructure and townships. For a comprehensive view on different phases of policies regarding urban development in post-independence India (Shaw, 1996). For a more recent account on policy changes during the neo-liberal era see Batra (2009).

[h] We can safely say that a number of areas in other categories in the survey such as urban villages (6.4%), resettlement colonies (12.7%) and unauthorised colonies (5.3%) would also exhibit slum-like living conditions.

[i] In absolute numbers the slums in Delhi have increased from 199 in 1951 to 1,100 in 1998.

[j] Others factors are price of inputs, productivity and agricultural produce. Prices of inputs are rising. On the growth side, it is well known that the single largest employer of the Indian economy, the agriculture sector, has performed worse than the other sectors particularly during the past decade and a half. Further, the price of agricultural produce has been merge. For instance, the Minimum Support Price (MSP) for Paddy increased just over 10 times, from Rs. 137 per quintal in 1984-85 to Rs. 1,470 per quintal in 2016-17. MSP of Wheat was Rs. 157 per quintal in 1984-85, Rs. 640 per quintal in 2004-05 and Rs. 1,625 per quintal in 2016-17. During the same period, the Government of India's tax revenue increased by over 50 times (Dubbudu, 2017).

[k] See also Li (2009), Chatterjee (2008) and Sanyal (2007) on this point.

7. Acknowledgement

8. References

Basole, A. 2017. What Does the Rural Economy Need? Analysis of the Promises for Rural India. Economic and Political Weekly. LII(9): 40-43.

Bates, R. 1981. Markets and States in Tropical Arica, Berkley: University of California Press.

Batra, L. 2009. A Review of Urbanization and Urban Policy in Post-Independent India. URL: https://www.jnu.ac.in/sites/default/files/u63/12-A%20Review%20of%20Urban%20(Lalit%20Batra).pdf (Accessed on 20/10/2017).

Bhalla, G.S. 2007a. Condition of Indian Peasantry. New Delhi: National Book Trust.

Bhalla, G.S. 2007b. Indian Agriculture Since Independence. New Delhi: National Book Trust.

Bhan, G. 2009. This is no longer the city I once knew. Evictions, the urban poor and the right to the city in Millennial Delhi, Environment and Urbanization 21(1): 127-142.

Breman, J. 2009. The Great Transformation in the Setting of Asia, International Institute of Social Studies. URL: URL: https://www.iss.nl/fileadmin/ASSETS/iss/Documents/Academic_publications/breman_address_web.pdf (Accessed on 20/10/2017).

Byerlee, D, Diao, X & Jackson, C. 2005. Agriculture, Rural Development, and Pro-Poor Growth: Country Experiences in the Post-Reform Era. Synthesis paper for the Operationalising Pro-poor Growth in the 1990s Project, The World Bank: Washington DC.

Chatterjee, P. 2008. Democracy and Economic Transformation in India. Economic and Political Weekly. XLIII(16): 53-62.

Chidambram, P. 2008. My vision is to get 85 percent of India into cities. Interview with Shantanu Guha Ray and Shoma Chaudhary. Tehelka Magazine. 5(21) URL: http://archive.tehelka.com/story_main39.asp?filename=Ne310508cover_story.asp (Accessed on 05/ Accessed 05/08/2018).

Corbridge, S. and Harriss, J. 2000/2001. Reinventing India: Liberalization, Hindu Nationalism and Popular Democracy, Cambridge: Polity and New Delhi: Oxford University Press.

Corbridge, Stuart et. al. 2014. India: Economy, Politics and Society. New Delhi: Oxford University Press.

CSDS. n.d. State of Indian Farmers: A Report. URL: http://www.lokniti.org/pdf/Farmers_Report_Final.pdf (Accessed on 05/10/2017).

Davis, M. 2006. The Planet of Slums. London: Verso.

De Soto, H. 2000. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else? USA: Basic.

Dev, M.S. 2008. Inclusive Growth in India: Agriculture, Poverty and Human Development. Delhi: Oxford University Press.

Dubbudu, R. 2017. In 33 years, MSP for Paddy increased from Rs 137 to Rs 1470 per quintal. URL: https://factly.in/33-years-msp-paddy-increased-rs-137-rs-1470-per-quintal (Accessed on 20/10/2017).

Dupont, V. and Ramanathan, U. 2005. The Courts and the Squatter Settlements in Delhi- Or the Intervention of the Judiciary in Urban 'Governance. In: I.S.A Baud & J. De Wit (Eds.), New Forms of Governance in India: Shifts, Models, Networks and Contestations, New Delhi: Sage.

Dupont, V. 2008. Slum Demolitions in Delhi Since the 1990s: An Appraisal. Economic and Political Weekly. 43(29): 79-87.

Escobar, A. 1992. Reflections on "Development": Grassroots Approaches and Alternative Politics in in the Third World. Futures. June: 411-36.

Gasper, D. 2004. The Ethics of Development, New Delhi: Vistaar Publications.

Ghertner, D.A. 2010. Rule by Aesthetics: World-Class City Making in Delhi. Unpublished Doctoral Dissertation, University of California, Berkeley.

GOI. 2015. Pradhan Mantri Awas Yojana: Housing for all (Urban) Scheme Guidelines. URL: http://pmaymis.gov.in/PDF/HFA_Guidelines/hfa_Guidelines.pdf (Accessed on 20/10/2017).

Government of India. 2011). Socio-Economic and Caste Census. URL: http://www.secc.gov.in/reportlistContent (Accessed on 01/10/2017)

Government of India. 2015-16. State of Indian Agriculture, Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation & Farmers Welfare Directorate of Economics & Statistics, New Delhi.

Government of India. n.d.a Jawaharlal Nehru National Urban Renewal Mission. URL: http://jnnurmmis.nic.in/jnnurm_hupa/jnnurm/Overview.pdf (Accessed on 20/10/2017).

Government of India (n.d.b) Rajiv Awas Yojana: Guidelines for Slum-free City Planning. URL: http://www.citiesalliance.org/ca/sites/citiesalliance.org/files/CA_Images/RAY_Guidelines_citywideSlum-freePlanning.pdf (Accessed on 01/07/2015).

Himanshu. 2007. Recent Trends in Poverty and Inequality: Some Preliminary Results. Economic and Political Weekly. 42(6): 497-508.

Jain, B. 2010. 62% of Mumbai lives in slums: Census. Hindustan Times. URL: http://www.hindustantimes.com/mumbai/62-of-mumbai-lives-in-slums-census/story-I3bUsll9w5f6ePEfuXJEbM.html (Accessed on 20/10/2017).

Johnson, I. 2013. Welcome to China-Town. The Indian Express. New Delhi, 16 July, 2013.

Kamdar, M. 2012. Is India's Development Sustainable' in Christophe Jaffrelot (ed.) India Since 1950: Society, Politics, Economy and Culture, New Delhi: Yatra Books.

Krishna, A. 2017. The Broken Ladder: The Paradox and the Potential of India's One Billion, New Delhi: Penguin.

Kundu, A. 2004. Provision of Tenurial Security for the Urban Poor in Delhi: Recent Trends and Future Perspectives. Habitat International. 28: 259-274.

Li, T.M. 2009. To Make Live or Let Die? Rural Dispossession and the Protection of Surplus Population. Antipode. 41: 66-93.

Lipton, M. 1977. Why Poor People Stay Poor: A Study of Urban Bias in World Development, London: Temple Smith.

Mehmet, O. 1995. Westernizing the Third World: The Eurocentricity of Economic Development, London: Routledge.

MGI. 2010. India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth. URL: https://www.google.co.in/search?q=mckinsey+report+urbanisation+india (Accessed on 20/10/2017).

MGI. 2001. India: The Growth Imperative. New Delhi: McKinsey Global Institute. URL: https://www.google.co.in/search?q=MGI.+%282001%29.+India%3A+The+Growth+Imperative.+New+Delhi (Accessed on 20/10/2017).

Nandy, A. 1996. Development and Violence in Charles B. Strozier & Michael Flynn. (eds.) Genocide, War and Human Survival, Maryland: Rowman & Littlefield Publishers.

Parekh, B. 1991. Nehru and the National Philosophy of India. Economic and Political Weekly. 26:(1/2): 35-48.

Planning Commission. 2011. Report on the Working Group on Urban Poverty, Slums, And Service Delivery System. URL: http://planningcommission.nic.in/aboutus/committee/wrkgrp12/hud/wg_Final_Urb_Pvt.pdf Accessed on 20/10/2017).

Ramanathan, U. 2006. Illegality and the Urban Poor. Economic and Political Weekly. 41(29): 3193-3197.

Reddy, D.N. and Mishra, S. 2009. Agriculture in the Reforms Regime. In: D. Narasimha Reddy and Srijit

Mishra (ed) Agrarian Crisis in India, New Delhi: Oxford University Press.

Rist, G. 2002. The History of Development: From Western Origins to Global Faith, New Delhi: Academic Foundation.

Rola-Rubzen, M F, Hardaker, J.B. and Dillon, J.L. 2001. Agricultural Economics and World Poverty: Progress and Prospects. The Australian Journal of Agricultural and Resource Economics. 45(1): 39-66.

Rostow, W.W. 1960. The Stages of Economic Growth: A Non-Communist Manifesto. Cambridge: Cambridge University Press.

Roy, D. 2004. From Home to Estate, Seminar, 533. URL: http://www.india-seminar.com/2004/533/533%20dunu%20roy.htm (Accessed on 10/10/2017).

Sanyal, K. 2007. Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism, New Delhi: Routledge.

Sardar, Z. 1999. Development and The Locations of Eurocentricism. In: Ronaldo Munck and Denis O Hearn (ed) Critical Development Theory: Contributions to A New Paradigm, London: Zed Books.

Schiff, M and Valdes, A. 1998. The Plundering of Agricultural Policy in Developing Countries. In: Carl Eicher and John Staatz (eds.) International Agricultural Development, Baltimore MD: John Hopkins Press.

Schultz, T.W. 1968. Economic Growth and Agriculture. New York: McGraw-Hill.

Schumacher, E.F. 1973. Small is Beautiful: A Study of Economics as if People Mattered, London: Blond Briggs.

Searle, L. 2008. Betting on Growth. Seminar, 582: 51-56.

Sen, A. and Bhatia, M.S. 2004. The State of the Indian Farmer: A Millennium Study. Vol. 14, Cost of Cultivation and Farm Income, New Delhi: Academic Foundation and Ministry of Agriculture.

Shaw, A. 1996. Urban Policy in Post Independent India: An Appraisal. Economic and Political Weekly. 31(4): 224-228.

Shrivastava, A and Kothari, A. 2012. Churning the Earth: The Making of Global India, New Delhi: Penguin.

Sundaram, R 2009. Pirate Modernity: Delhi's Media Urbanism. Delhi: Routledge.

Tucker, V. 1999. The Myth of Development: Critique of a Eurocentric Discourse. In: Ronaldo Munck and Denis O. Hearn (ed.) Critical Development Theory: Contributions to A New Paradigm, London: Zed Books.

United Nations Development Programme (UNDP) 2006. Human Development Report 2006. Oxford: Oxford University Press.

Unni, J. and Raveendran, G. 2007, Growth of Employment (1993-4 to 2004-5): Illusion of Inclusiveness. Economic and Political Weekly. 42(3): 196-199.

Verma, G.D. 2002. Slumming India: A Chronicle of Slums and their Savior, New Delhi: Penguin Books.

World Bank. 2007. World Development Report: Agriculture for Development, Washington D.C.: The World Bank.

Fostering Perspectives on Swedish and Indian Culture

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Abstract: This article is a reflection of cultural differences recorded by the author during her research visit to Sweden in the year 2017 (February-March month). The objectives of the research visit included understanding official dialects of both countries, existing education system and work environments, variant food habits, family structure and associations, available transport systems, sustainable living options and cultural exchange within India and Sweden. The information was first collected through existing literature and was supported by information collected through observation method, informal discussions and interactions with the Swedish people. It can be concluded that both countries are culturally very different and different parts of each country further exhibit alteration in cultural practices, languages and food preferences. Some variations are also due to population size in both countries. For instance, transportation is very well developed in developed countries due to the availability of advanced technology and less population.

Keywords: cultural diversity, India, Sweden, sustainable living.

1. Introduction
It is important to note that India and Sweden are culturally very different and different parts of each country further exhibit alteration in cultural practices. Indian culture is about diverse customs, traditions, religions and set of societal norms. In contrast, Swedish culture is generally seen as egalitarian in nature, and since the early 1970s, the Swedish establishment has very deliberately embraced feminist, anti-racist, progressive and anti-fascist stances and views. Swedish society and culture are concerned with the welfare and well-being of others, both

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within and outside Sweden (University of Gothenburg, Sweden, 2016). Hence, both the cultures differ from each other in a number of contexts, however, in today's world both the cultures are coming together. The Indian culture is getting inclined towards the West and the Swedish culture has started developing a taste for the exotic Indian food and Yoga therapies.

2. Overview of India and Sweden
To draw some comparisons, the current population of India is 1,338,826,135 as of 8 April, 2017, based on latest United Nations estimates. The current population of Sweden, on the other hand, is 9,904,614. In percentage, India's population is equivalent to 17.86% of the world's population while that of Sweden is only 0.13% of the world's population. India has a Federal Government while Sweden is a Constitutional Monarchy. What is interesting to note is that the percentage urban population in India is 32.8%; it is 85.3% in Sweden. The median age of the population also varies and it is 26.9 years for India and 41 years for Sweden. However, while average life expectancy in India is 60+ years, it is 80+ years in the case of Sweden (Worldometers, 2017). The variation in weather in Sweden is not as frequent as it is in India where one experiences all shades of weather during different seasons and in different states. This is also perhaps because of the comparatively larger geographical area of India than Sweden. In Sweden, one needs to be prepared for anything between -10°C to +10°C and since Stockholm, the capital of Sweden, is located in the Baltic Sea, the air is often humid. This makes the chill in the air much worse than what the temperature would predict. The situation also requires individuals to consume considerable Vitamin D during winters as there is the reduced intensity of sunlight (Dewitt, 2010). The below-appended Table 1 puts together and provides an overview of the general points of comparison between India and Sweden.

Table 1: General points of comparison between India and Sweden (Source: Worldometers, 2017).

	Points of Comparison	India	Sweden
i.	Continent	Asia	Europe
ii.	Language	Hindi, English	Swedish
iii.	Currency	Indian Rupee	Swedish Krona
iv.	Capital city	Delhi	Stockholm
v.	Type of Government	The Federal Republic	Constitutional Monarchy
vi.	Population	The current population of **India** is **1,338,826,135** as of 8 April 2017, based on United Nations estimates.	The current population of **Sweden** is **9,904,614** as of 8 April 2017, based on United Nations estimates.
		India's population is equivalent to **17.86%** of the total world population.	Sweden population is equivalent to **0.13%** of the total world population.
		India ranks No. **2** in the list of countries by population.	Sweden ranks No. **90** in the list of countries by population
		32.8% of population is **urban** (439,801,466 people in 2017)	**85.3%** of population is **urban** (8,461,650 people in 2017)
		Median age in India is **26.9 years**.	**Median age** in Sweden is **41 years**.
vi.	Life Expectancy	60+ years	80+ years

3. Comparison of Official Dialects

The official dialect of Sweden is Swedish and it is spoken by the dominant part of people living in Sweden. Swedish is not just the official dialect of Sweden. It is additionally one of the official dialects of Finland. There is a small population of people of Indian origin living in Sweden (approximately 6,000 in Stockholm), the majority of whom are *Punjabis, Bengalis, Maharashtrians, Gujaratis* and South Indians. This Indian community in Sweden is socially and culturally very dynamic. It was observed that diverse cultural associations under the cultural wing of Indian Embassy at Sweden hold cultural functions from time to time and observe national days which are supported by the Embassy of India in Sweden, headquartered in Stockholm. One of the key attributes of Swedish culture is that Swedes are open in nature, humble and find show off somewhat objectionable from various perspectives; Swedes want to tune into others instead of assuring that their own voice is heard. When speaking, Swedes converse gently and placidly. It is uncommon to witness a Swede showing outrage or compelling feeling out in the public. Swedes seldom underestimate hospitality or benevolence and accordingly, they often offer gratitude. Neglecting to state 'thank you' for something is seen adversely in Sweden.

To draw a comparison, interestingly, India is home to a few hundred dialects. India has 23 constitutionally recognized official languages. Hindi and English are the official dialects used by the Central Government. State Governments use respective official dialects. The regular native language dialect of at least every North Indian is Hindi. Each state and city has its own particular first language dialect e.g. in Punjab individuals communicate in Punjabi, in Bengal Bengali is spoken and in Delhi, blended dialects can be heard and so forth. According to the People's Linguistic Survey of India (PLSI), 780 unique dialects are spoken in India and the nation has lost about 250 dialects in the last 50 years (Hindustan Times, 2013). The prevalence and popularity of English in India is perhaps to blame, however, there is need for further research in this direction (Hans, 2017).

4. Education System and Work Environments

In the Swedish school system, assigning grades to students below 8th standard is forbidden. The Swedish Education System believes that getting bad grades makes a student depressed and uninspired to work. In particular, it leads students to compare grades with each other which leads to an inferiority complex, feeling of jealousy and low self-esteem in the growing years of their development. This is significantly different from the Indian Education System, where examinations are part and parcel of students' life right from the very beginning. It is interesting to note that the grading system is not considered to be a suitable system by many psychologists since it reflects direct criticism and in particular, compares one person's capabilities with another. Thus, Swedes can be restrictive with both their criticism and their appreciation as they simply do not understand these expressions to the extent that Indians do (Expatarrivals.com, 2017). The workplace and

universities environment are quite open and welcoming in Sweden. Everybody is extremely very much mannered and offers a big smile with "*Heya*". Even strangers do not hesitate in saying hello, something not so commonly found in India.

If we compare the quality of life of youth and adults in Sweden with Indian youth, then the personal satisfaction and job opportunities for individuals in Sweden are enormous. Swedish youth enjoy a sense of safety and security in their personal and professional life. The skill-oriented teaching-learning system offers them ample exposure and provides an ability which causes understudies to begin working at exceptionally youthful age. Moreover, the society inculcates values of how to be more independent and a wise citizen from a very young age. All these reasons lead to a sense of responsibility on the shoulders of young people in Sweden. Because of less populace in Sweden, youth need to confront minimal rivalry in gaining employment. However, as of late, the situation is changing. The job market has become quite demanding, requiring the youth to adjust. However, still, because of the firm inclination towards social equality in Sweden, opposition is not encouraged and children are not raised to judge that they are any more extraordinary than others.

5. Food and Food Habits

Traditional Swedish food is often based on meat and potatoes and is generous with butter and cream. Compared to Indian food, Swedish food is a bit tasteless since spices do not grow in Sweden, as they have grown in India. In the present day, however, one can find all kinds of food (Italian, Indian, Chinese, Thai, Vietnamese, etc.) in restaurants and in grocery stores in Sweden. Like most Indians, Swedes typically consume three meals per day, i.e. breakfast before going to work, lunch around 11.00 am-12.00 pm and dinner, around 6.00 pm. Between these meals, Swedes like to *Fika*. *Fika* (pronounced fee-kah) is by far the most common social activity in Sweden where one meets friends or contacts in a cafeteria and drinks coffee/ tea along with something sweet. Most workplaces in Sweden offer *Fika*-breaks during work hours to the employees, usually at 9.00 am and 3.00 pm for about 30 minutes. Swedes are the second largest coffee consumers in the world (second only to their neighbours, Finland). It is not unusual for a Swede to drink more than 10 cups of coffee every day. Their coffee is stronger than American coffee but not as strong as an Espresso. Beer and wine are often consumed on social events but there are always plenty of non-alcoholic options. All workplaces have a small arrangement of the kitchen with the eating area having basic equipment for

cooking and heating like saucepans, cups/ mugs/ sugar/ variety of tea flavours/ coffee/ cheese/ milk/ juice and so on. The presence of fresh fruits in a basket at all workplaces is a common sight. Swedes consume a lot of fresh fruits as much as they consume coffee. Indians who are vegetarians, face a difficult time initially in Sweden. It was observed that all fresh produce in Sweden is expensive as it is imported from Spain or other Western nations in the course of the winter time frame. However, new stores are now opening up in Stockholm which import Indian spices, sweets and food items from various parts of India. In contrast, India has diverse cultures henceforth; one enjoys delicacies from *Gujarati, Punjabi*, South-Indian, *Rajasthani* and *Bengali*, etc. cuisines.

6. Family Structure and Relationships

The role of the family in Sweden is significant and the privileges of youngsters are very much secured. The rights available to Swedish families to nurture their children are some of the best rights on the planet. A review of these rights is presented below.

- Either of mother or father are permitted to be absent from work until the point that their infant becomes 18 months old.
- Either parent has the privilege to lessen their workload by 25% until the point that their child reaches 8 years of age (and is formally prepared for school).
- A parental stipend is paid for 480 days, which is planned for the two guardians. Sixty of these days should be utilized by the 'minority' guardian. Thus, this component of the stipend is regularly known as 'Daddy's months'.
- Up to 60 days off every year to care of a sick child.

It is normal in Sweden to live respectively as a couple without being hitched. Approximately 15 percent of the populace of Sweden is in this kind of relationship. Swedish term this as "Sambo", which implies a man who lives with their sentimental accomplice, without being hitched. According to the Co-habitation Act in Sweden, couples who simply live together do not have the same rights and obligations as married couples. The Co-habitation Act defines this as, "Couples who do not wish to be bound by either marriage or civil union, but who nonetheless wish to have their relationship respected and given its deserved rights" (MSDCACL, 2003). This can create complications, particularly with regards to property and legacy. Despite the conjugal rights of a person, one cannot inherit someone else's debt or mortgage in Sweden, yet in the event that one acquire things that aren't completely paid off, one needs to ensure that every one of the obligation is paid before one can keep such items.

In contrast, marriage framework in India varies from region to region, religion to religion, caste to caste and from rich to poor. It is performed as per customised rituals of each religion. A Hindu person usually gets hitched with a Hindu girl or boy and an upper caste groom usually gets hitched with an upper caste bride. However, the present generation in India has shown some deviation and difference in thinking. Indians are now becoming more open-minded. The rural people in India continue to believe in early marriages and favours marriages in their own caste. The "arranged marriage" system is more prevalent in the Indian society and the tradition of arranged marriages is still continuing in India but conversely, a few changes are seen in this marriage procedure. Today, the guardians of an individual are anxious about the life and safety and take the consent of the person before selecting a bride or a groom. As per the Government of India, the legal age of marriage is 21 years for men and 18 years for women and the law does not permit Sambo relationships. The privilege of the legacy of property exists in India and it is typically inherited in the name of the boy (Sonawat, 2001). With greater open mindedness being adopted by the Indian society, girls are now being considered comparable to boys especially when it comes to transfer of legacy.

7. Comparison of Transport System
In Sweden, public transport is very efficient and well connected through an extensive network of underground trains (T-Bana), commuter trains, Metro (known as Stockholms Tunnelbana), subways, trams, ferry and excursion boats and buses. The latter have designated lines for inter-city and intra-city travel but are relatively costly. However, the Swedish government is quite considerate about the welfare of the school and college going students and offers a rebate on passes up to the age of 25 years. The percentage of concessions approximately varies between 30-40% of the actual price. The youth (below 25 years) likewise can avail similar rebates on shopping, food, sports etc. by virtue of the special "students card" possessed by them. The transport system in Sweden is timely, safe and accessible for all age groups especially for elderly and people who are differently abled. The principal public transport in Stockholm is governed by SL (Storstockholms Lokaltrafik AB). Likewise, different cities have different agencies governing major chunk of public transport. This also helps in regulating the overall transport system efficiently as it is governed directly by the Swedish Government (Hipple, 2017).

In contrast, the public transport is not very efficient in India except in the metro cities. The time taken in voyaging squanders parcel of time in India due to poor roads, less connectivity, expensive journeys and a huge amount of traffic jams, etc. However, the Government in India is pro-actively working for making the public transport and commutation experience better. Numerous new road and railway lines have been constructed and are under construction. Among these, the Delhi Metro Rail Corporation (DMRC) project is the major rail venture of the Government which is connecting various parts of individual cities together. The Delhi Metro is the world's 12th largest metro system in terms of both length and number of stations and is leading the way in sustainable transport. It is important to highlight that the Delhi Metro is the first metro train system in the world to receive the Environmental Standard ISO 14001 EMS during its construction phase itself. The Delhi Metro has set a benchmark performance against world's best Metros (Kaur, 2016).

8. Sustainable Living in Sweden
For most Swedes today, sustainability is a way of life. Sweden ranks first in the European Union (EU) in consumption of organic food. It is also one of the front-runners in recycling and gets the highest share of its energy from renewable energy sources. Sweden ranks at the top of the green shopper's list among all European countries. A study by the European Commission found that 40 percent of Swedes purchase Eco-labeled items, which is more than the European average (Sweden.se, 2017a). Sweden has also put in place stringent guidelines for waste management. Sweden has virtually eliminated its waste management problem and is now looking for importing waste material to feed its waste processing plants (Fredén, 2017). Swedes recycle nearly 100% of their household waste. Several Swedish companies have voluntarily joined the struggle of a waste management revolution (Sweden.se, 2017b). For example, H&M began to accept used clothing from customers in exchange for rebate coupons in an initiative called Garment Collection. The Optibag Company developed a machine that can separate coloured waste bags from each other. This way, waste sorting stations could be eliminated. The southern Swedish city of Helsingborg even fitted public waste bins with loudspeakers playing pleasant music - all in the name of recycling.

9. Conclusion
The comparison between India and Sweden indicates that both countries are culturally very different and different parts of each country further exhibit alteration in cultural practices, languages and food preferences. A key reason for this could be the difference in total area and also in the total population size of both these countries. For instance,

transportation is well developed in developed countries like Sweden due to the availability of advanced technology and less population. Both the cultures differ from each other in a number of contexts, however, in today's world both the cultures are coming together. The Indian culture is getting inclined towards the West and the Swedish culture has started developing a taste for the exotic Indian food and Yoga therapies.

10. Acknowledgement

11. References

Dewitt, C. J. 2010. The Essential Guide to Customs & Culture: Sweden. URL: https://books.google.co.in/books/about/Sweden_Culture_Smart.html?id=lx3wsfcdbnAC&redir_esc=y (Accessed on 06/07/2017)

Expatarrivals.com. 2017. Education and Schools in Sweden. URL: http://www.expatarrivals.com/sweden/education-and-schools-in-sweden (Accessed on 06/07/2017).

Fredén, J. 2017. The Swedish Recycling Revolution. URL: https://sweden.se/nature/the-swedish-recycling-revolution (Accessed on 06/07/2017).

Hans, A. 2017. English Versus Hindi and Other Regional Languages- A Survey Based Analysis. Journal of Innovation for Inclusive Development. 2(1): 50-52.

Hindustan Times. 2013. 780 Languages Spoken in India, 250 Died Out in Last 50 Years. URL: www.hindustantimes.com/books/780-languages-spoken-in-india-250-died-out-in-last-50-years/story-Y3by8ooYbXRA77xP2AEWKN.html (Accessed on 26/09/2017).

Hipple, A. 2017. Public Transportation in Stockholm: Getting To and Around Sweden's Capital. URL: www.realscandinavia.com/public-transportation-in-stockholm (Accessed on 26/09/2017).

Kaur, H. 2016. Delhi Metro: A Road Map to Sustainable Transport. URL: https://www.researchgate.net/publication/311325760_Delhi_Metro_A_Road_Map_to_Sustainable_Transport. InfralinePlus.com. (Accessed on 26/09/2017).

MSDCACL (Ministry for Social Dialogue, Consumer Affairs and Civil Liberties). 2003. URL: https://meae.gov.mt/en/Documents/Press%20Release%20Documents/2017/COHABITATION%20LAW.pdf (Accessed on 26/09/2017).

Sonawat, R. 2001. Understanding Families in India: A Reflection of Societal Changes. Psicologia: Teoria E Pesquisa. 17(2): 177-186.

Sweden.se. 2017a. Sustainable Living in Sweden. URL: https://sweden.se/nature/sustainable-living (Accessed on 06/07/2017).

Sweden.se. 2017b. Sweden Leads by Example in Corporate Social Responsibility. URL: https://sweden.se/business/csr-in-sweden (Accessed on 06/07/2017).

University of Gothenburg, Sweden. 2016. Swedish Secretariat for Gender Research. URL: http://www.genus.se/en/about-gender (Accessed on 06/07/2017).

Worldometers. 2017. Sweden and India Population, 2017. URL: http://www.worldometers.info/world-population/sweden-population and http://www.worldometers.info/world-population/india-population (Accessed on 06/07/2017).

Delimiting the Boundary of Delhi for Effective Urban Political Ecology Investigations

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Abstract: Delhi, capital of the world's largest democracy, is witnessing large-scale increase in population since the beginning of the twentieth century. Two prominent factors that have contributed to this include the shifting of capital of the British Raj from Calcutta (now Kolkata) to Delhi in 1911 and the partition of India that accompanied its independence in 1947. Delhi continued to witness high rate of migration in post-independent India due to uneven implementation of development policies. Rising population led to spatial expansion and the largest connotation of Delhi today (National Capital Region) is an area 36 times its size in 1947. Rising population has also had an adverse impact on Delhi's natural resources. Consequently, clean air, water and land availability have become limited and Delhi today is undergoing a severe sustainability crisis. The latter requires urgent intervention for restoring Delhi's urban ecosystem. Since urban areas are highly contested ecological spaces, urban ecological interventions are incomplete without political overtones. Thus, the success of urban ecological interventions lies in identifying politically correct boundaries which encompasses true 'urban Delhi' despite the political boundaries. This research contribution attempts to identify the geographical expanse of 'urban Delhi' amidst the various political terminologies that define Delhi. An understanding of various divisions and definitions of Delhi is also presented from the perspective of appreciating the challenges in urban planning. We conclude that urban ecology investigations in Delhi should be embedded within the 'Delhi conurbation', which represents a geographical area greater than the Delhi city-state but much smaller than Delhi NCR.

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1. Introduction

The National Capital Territory (NCT) of Delhi is one of the three most populated urban agglomerations (UA) in India and is witnessing urban population growth at a rate and scale unprecedented in recorded history (UN, 2015). The NCT of Delhi records a total population of 16.7 million (11,297 persons per sq. km) in the most recent Census (Census of India, 2011) making it one of the top ten most populated cities in the world. In 1997, the NCT of Delhi was divided into 9 administrative districts and each district was headed by a Deputy Commissioner for attending its administrative matters. In 2012, the NCT of Delhi was re-divided into 11 districts and the boundaries of existing districts were also modified (DoR-GNCTD, 2012). Since this re-division took place after the 2011 Census, the most reliable population data at present pertains to the former 9 districts (Fig.1). As per this data, all 9 administrative districts in the NCT have very high density of population. 5 out of these feature in the list of top ten most densely populated districts in India. In fact, the North-east district of the NCT is the most densely populated (37,346 persons per sq. km.) among all districts in India. The total area of North-east district of Delhi has been reduced in the 2012 re-division and has been added to the newly carved out Shahdara district.

This high density of population is exerting an increasing pressure on Delhi's natural resources and simultaneously, on its municipalities. A large part of Delhi was initially managed by one municipal agency (Municipal Corporation of Delhi, MCD). In addition, New Delhi or Lutyens' Delhi was managed by the New Delhi Municipal Council (NDMC) while a part of Delhi where the Indian

Army resides was managed by the Delhi Cantonment Board (DCB). In 2012, the MCD was trifurcated into North Delhi MCD, South Delhi MCD and East Delhi MCD as a response to the ever growing population and needs of Delhi (DLJLA-GNCTD, 2011). The NDMC and DCB continue to operate within the same geographical areas as earlier.

Figure 1. Map of Delhi showing the former 9 administrative districts.

Rapid urban development of NCT of Delhi has also led to a consequent increase in population of neighbouring urban centres. Rapid growth in neighbouring Ghaziabad, Gurugram (Gurgaon), Gautambudh Nagar (NOIDA) and Faridabad is apparent and cannot be overlooked. The first wave of urban population growth in these Class I cities (defined by Indian Ministry of Urban Development as an urban agglomeration or town with a population figure of 1,00,000 and above) took place as satellite towns of the capital city. These cities are therefore well connected to the national capital through suitably designed public transport system (e.g. bus, Delhi Metro Rail) which facilitates unregulated flow of individuals from one city centre to another. In fact it is commonplace to find individuals residing in cities neighbouring to Delhi who have their workplace in Delhi and vice versa. Despite this, the Delhi UA (identified by the Census of India, 2011 and defined by it as "a continuous urban spread comprising one or more towns and their adjoining out growths") does not include the above-mentioned neighbouring cities. It needs to be noted here that the NCT of Delhi and

its neighbouring cities form a continuously urbanized land-use constituent with an aggregate population of 26.4 million (Census of India, 2011). In addition, even though NCT of Delhi has the largest proportion of urban population (97.50%), there are parts of NCT (e.g. in North-west Delhi and South-west Delhi districts) which are included in the UA that show peri-urban to rural characteristics.

The perception of the physical boundary of Delhi is perhaps as ambiguous as the origin of the toponym 'Delhi' (Cohen, 1989). The NCT of Delhi, Delhi, the NCR of Delhi, the Delhi UA, the 'Delhi region' all have different actual and assumed connotations. However, there is no territorial nomenclature for the capital city together with its neighbouring cities. The closest term which delimits 'urban Delhi' can be found in the NCR Plan 2021 in the definition of the Central National Capital Region (CNCR) (formerly, Delhi Metropolitan Area) (NCRPB, 2005). However, the purpose of defining the CNCR is not to delimit 'urban Delhi' but to identify those regions which have greater prospects for urban growth. Simultaneously, the various divisions (and re-divisions) of Delhi (districts, zones, blocks, etc.) contribute further to this ambiguity. There is thus a need to place Delhi in an urban context for carrying out more meaningful urban studies. This research paper makes such an attempt and this research work is part of the Ph.D. thesis of the first author (Singh, 2012).

2. Delhi: Location and Administrative Divisions

The NCT of Delhi is part of the Indo-Gangetic alluvial plain in Northern India and lies between latitude 28°24'17'' to 28°53'00'' N and longitude 76°50'24'' to 77°20'37'' E. It is spread in an area of 1,483 sq. km. with a maximum length of 51.9 km and its greatest width is 48.5 km (Fig.1). The NCT of Delhi has an elevation ranging from 198 to 220 m above mean sea level. It shares its border with the state of Haryana in the northern, western and southern side and with the state of Uttar Pradesh in the east. The NCT of Delhi is also nested within the National Capital Region (NCR) of Delhi (Fig 2). The Yamuna River and terminal part of the Aravalli hill range (Delhi Ridge) are two most prominent physiographic features of NCT of Delhi. River Yamuna enters NCT of Delhi from North and divides the city into two unequal halves. The Delhi Ridge enters the NCT of Delhi from South and South-west districts, forking into two and expanding into a wide tableland. One part of this fork stems from Mehrauli to north of the city until the bank of the Yamuna, while the other passes by the historic Tughlaqabad fort and culminates in South district.
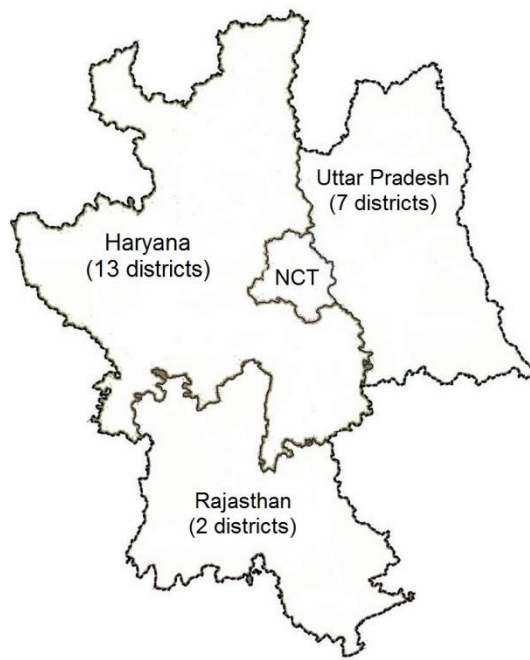
Figure 2. Map showing the NCT of Delhi nested within the NCR of Delhi.

The location of NCT of Delhi is of strategic significance and has contributed to the success of Delhi as a state capital since over two millennia, at the least. This is largely because River Yamuna and Delhi Ridge together form three sides of what is known as the 'Delhi triangle' (Mann and Sehrawat, 2009). The geopolitical location of the 'Delhi triangle', enclosing a region of over 90 sq. km. (Fig.3), gave Delhi logistic and economic prominence. It is because of this strategic location that Delhi is one of the oldest and most densely populated places in India. Historians have found evidence that Delhi was a popular choice of habitation even during Palaeolithic era, perhaps due to this strategic location (Sharma, 2006). Present day Delhi has grown beyond and above the topographic features that made Delhi the choice of capital. However, River Yamuna and Delhi Ridge continue to provide critical ecosystem services to the region and its people. At the same time, NCT of Delhi continues to remain a destination of choice for millions who migrate to it for different purposes. The location of Delhi has indeed given it a splendid history that flows into the present. Consequently, Delhi is a symbol of India's ancient values, cultural heritage and its merger with modernization.

It must be mentioned here that right from the time when the British governed Delhi to the present date, Delhi has undergone several administrative changes. This is largely due to the special character of Delhi as the Empire/National Capital. These changes have been more prominent in the last 70 years of India's independence. To carry out any environmental study in NCT of Delhi today, it is important to understand the nature and implications of these changes. This is especially because the most prominent of these changes, the restructuring of NCT of Delhi from one administrative district to nine (and later 11), took place as late as 1996. Before this, NCT was divided into five (and later, six) administrative blocks, viz. Alipur, Kanjhawala, Najafgarh, Shahdara, Mehrauli and later, City block (Singh, 1999). Consequently, studies carried out by researchers and policies drafted for urban management of natural resources 25 years back were planned according to these blocks and related divisions. Any reference to data and information older than 25 years corresponds to these blocks and other administrative entities some of which may no longer exist in the present day. Simultaneously, with the redrawing of the districts of NCT of Delhi in 2012, district-level studies made 5 years back are no longer fully valid.

In addition to the aforementioned, while Delhi has a democratically elected 'state' Government which takes care of its political administration, power for certain areas of political administration is vested with the Central Government as well. Therefore, it becomes very important to understand the chronological evolution of administration and governance of the NCT of Delhi at least during the course of the last century, to facilitate meaningful urban ecological investigations.
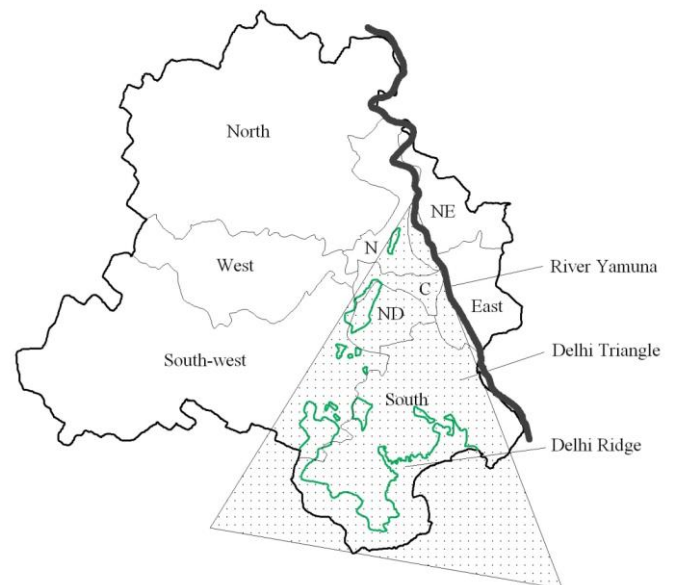

Figure 3. Map showing the 'Delhi triangle', with River Yamuna on one side and the Delhi Ridge on the two other sides.

3. Evolution of 'Delhi'

Urban centers are not static entities and evolve over time periods which are proportional to the geo-spatial, economic and political significance of the individual urban center in question. The strategic location of Delhi and the consequent economic and political significance has already been discussed. Due to this, the evolution of administrative divisions of Delhi and its growth and development has been dynamic in recorded history and has been even more rapid in the recent past. A hand drawn 'sketch of the environs of Delhi' in the year 1807 indicates that Delhi during that time thrived in and around the previously discussed 'Delhi triangle'. In the last 200 years, there has been an expansion and growth in area of 'Delhi', from 90 sq. km (Delhi triangle) to 1,483 sq. km (NCT of Delhi). The various stages during this urban land expansion over two centuries has had significant impacts on the conservation and management of natural resources (air, water and land) in the region. At the same time, the perception of what is 'urban Delhi' has been ambiguous largely due to this dynamicity. The ambiguity gets compounded in urban academic research with respect to 'Delhi' resulting in confounding conclusions, especially with respect to addressing urban sustainability. This makes it important to spell out this ambiguity and investigate and eliminate it before effective urban ecological studies can be carried out in the NCT of Delhi.

Delhi became one of the five administrative divisions of the Punjab Province under the British administration towards the later part of the nineteenth century. It then consisted of six districts, viz. Hissar, Rohtak, Gurgaon, Karnal, Ambala and Shimla. On 12th December 1911, Delhi was proclaimed as the capital of India in place of Calcutta (now Kolkata) and the districts were remodelled. A year later in 1912, Delhi was placed under a separate local Government and was declared to be a new Province (NDMC, 2017). The Delhi Province was enlarged by adding parts of Meerut district and its boundaries remained unchanged all through the Indian freedom struggle. The New Delhi Municipal Council (NDMC) began as the Imperial Delhi Committee on 25th March, 1913 to facilitate the construction of the new capital. Its name was changed to "New Delhi Municipal Committee" on 16th March, 1927. The Delhi Cantonment Board was established in 1914 with a total area of approx. 42.50 sq. km under it (DCB, 2016). After India attained her independence in 1947, Delhi was given the status of a 'Part C' state with a separate Vidhan Sabha. In 1956, on the recommendations of the State Reorganization Commission, Delhi became a Union Territory (UT) administered by the President of India. After the creation of the UT of Delhi, a strong need was felt for effective governance and management of the UT's rapid urban growth. Consequently, on 7th April 1958, a Delhi Municipal Corporation Act came into being and all existing urban local bodies, excluding the DCB and the NDMC, were merged into a newly created Municipal Corporation of Delhi (MCD, 2017). As a result, the entire UT of Delhi, excluding DCB and NDMC areas, came under the jurisdiction of the MCD. This also included rural areas and villages that are characteristic of the city's landscape even today. The MCD took over the functions previously entrusted to ten local bodies and three statutory Boards. The UT of Delhi continued to function as a single administrative unit and the power for municipal governance of the NCT of Delhi rested with the following three agencies: i) Municipal Corporation of Delhi (MCD); ii) New Delhi Municipal Committee (NDMC); and iii) Delhi Cantonment Board (DCB). Of these, the MCD was known to be the largest and most prominent municipal body occupying 1,397 sq. km or 94% of the total geographical area of the NCT of Delhi. The municipal control of the NDMC and the DCB spread over an area of 42.74 sq. km and 42.97 sq. km respectively. The MCD included both rural and urban areas of the NCT of Delhi and consequently was known to be one of the largest municipal bodies in the world. It had the unique distinction of providing civic services to rural and urban villages, resettlement colonies, regularized-unauthorised colonies, JJ squatter settlements, slum 'basties', private 'katras' etc. This exerted tremendous pressure on the MCD and due to this reason an initial proposal to split the MCD into at least eight municipalities was floated (MoEF and PD, 2001).

In 2011, after considerable deliberations, the MCD was re-divided into three municipalities, viz. 1) North Delhi Municipal Corporation, 2) East Delhi Municipal Corporation and 3) South Delhi Municipal Corporation. The New Delhi Municipal Committee was superseded in February 1980 and an Administrator headed it till the introduction of new Act in May 1994. In May 1994, the NDMC Act 1994 (duly passed by the Parliament of India) replaced the Punjab Municipal Act 1911 and the Committee was renamed as present day New Delhi Municipal Council (NDMC, 2017). Delhi Cantonment Board today is a local municipal body under the aegis of Ministry of Defense and is governed by the Cantonment Act, 2006. Delhi Cantonment is a Class 1 Cantonment. The administration of Cantonment is a Central subject as per the Constitution of India (DCB, 2016). During the Census period of 1961, Delhi constituted one district and one tehsil. The fair proportion of rural, agrarian territory and population ensured that the tehsil continued to be of administrative importance in the UT of Delhi. From 1971

to the 1991 Census, the Delhi revenue district was divided into two tehsils, the Delhi tehsil and Mehrauli tehsil.

The National Capital Territory (Delhi) Act was introduced in 1991 and the Union Territory of Delhi became the National Capital Territory (NCT) of Delhi in January, 1992. The Act provisioned a unicameral legislative body (Vidhan Sabha) with 60 seats for the NCT and a Government of NCT of Delhi led by seven member Council of Ministers, headed by a Chief Minister. However it should be noted here that according to the Act, the Head of the Government continued to be the Lieutenant Governor who is directly in charge of the land issues, law & order matters and the MCD. Four years later, in 1996, a Gazette notification divided the National Capital Territory of Delhi administratively into 9 districts and 27 subdivisions. The MCD, the NDMC and the DCB were the three statutory towns which together made up the entire geographical territory of the NCT of Delhi until 2011. After the re-division of the MCD in 2011, the statutory towns that now make up the NCT of Delhi are 1) North Delhi Municipal Corporation, 2) East Delhi Municipal Corporation, 3) South Delhi Municipal Corporation, 4) New Delhi Municipal Council and 5) Delhi Cantonment Board. Figure 4 illustrates the five most prominent recent and/ or contemporary administrative sub-divisions of the NCT of Delhi.

The presence of different divisions of Delhi leads to confounding and overlapping research conclusions and is a hindrance to long-term urban ecological studies. For example, survey of urban water management literature leads to inconclusive observations due to the use of different nomenclatures of Delhi by different researchers (Zerah, 1998; Datta et al., 2001; Trivedi et al., 2001; Kumar et al., 2011; Adhikary et al., 2011, Singh, 1999; Chatterjee et al., 2009). It is also interesting to note that while the status of sub-surface water pollution in the NCT is being assessed on a district-wise basis (DoE, 2010), its mitigation requires decisions at the level of municipalities which have administrative boundaries that do not overlap with the boundaries of the nine districts. At the same time the norms set for water demand are different for different 'zones' of the NCT, which do not overlap with any of the above discussed administrative sub-divisions.

To further add to the complexity, city development and resource management is undertaken by multiple agencies in the NCT (DUD-GNCT, 2006). It is therefore not difficult to understand the scale and level of challenges in managing and optimizing water resource in Delhi. Similarly, a study on urban sprawl in Delhi carried out by Jain et al. (2016) was based on the 9 districts (even though

Delhi was re-divided into 11 districts in 2012). The study has considerable district-level implications, which have now become diluted due to the redrawing of the administrative map of Delhi.
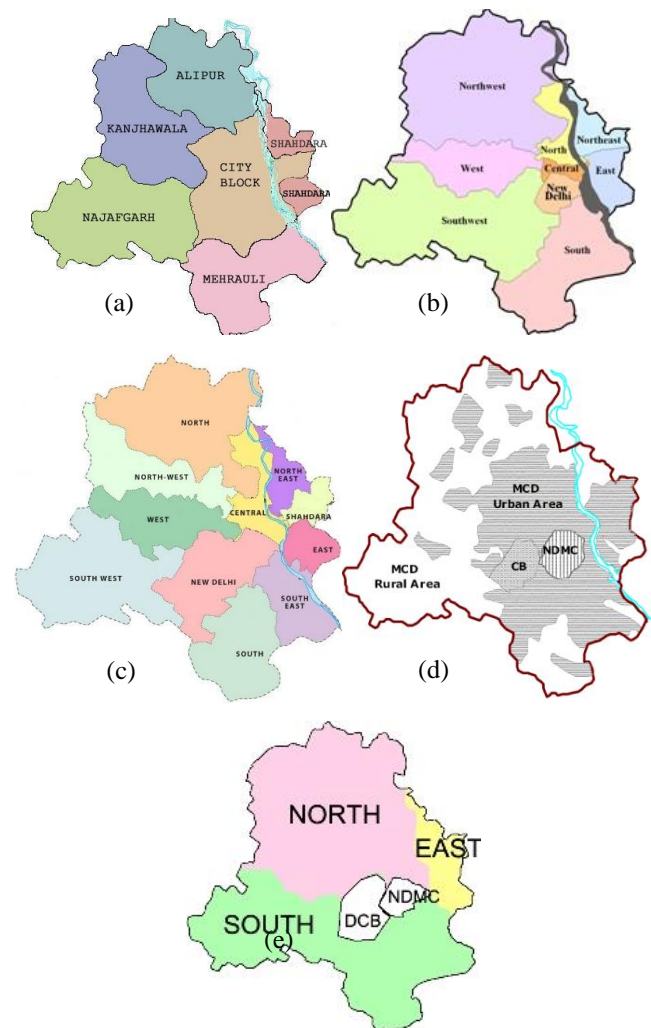

Figure 4. Administrative ambiguity: (a) blocks in Delhi, (b) 9 districts of Delhi and (c) 11 districts of Delhi, (d) 3 municipal divisions in Delhi; an (e) 5 municipal divisions of Delhi.

Another aspect that needs to be taken into account is that 'urban Delhi' exists beyond the NCT. However, lack of any single agency managing the NCT of Delhi along with the contiguous urban areas (and the lack of such a defined area) does not allow this true 'urban Delhi' to be investigated. This is yet another factor contributing to confounding conclusions while carrying out urban ecological investigations in Delhi. For example, Jain et al. (2015) carried out an urban transformation study of the "NCT of Delhi" and found a spatial shift of slums from

the city centre to the periphery. Had such a study been placed in true 'urban Delhi', it would have revealed a different scenario, viz. greater emergence and not mere shift of slums. Joshi et al. (2011) have carried out a study based on monitoring land use land cover change of Yamuna riverbed in "Delhi". However, the stretch of River Yamuna selected by them neither corresponds to true 'urban Delhi' nor to the NCT of Delhi. It is actually only the lower half of River Yamuna in Delhi that they have chosen, thereby making their study relevant to only half of Yamuna riverbed in Delhi. Similarly, while Peshin et al. (2017) claim to have carried out a spatio-temporal variation of air pollutants across Delhi-NCR, their methodology reveals that out of the 8 monitoring sites chosen, 7 are situated in the NCT of Delhi (occupying 1,483 sq. km area) and only 1 site is located in Delhi-NCR (occupying 53,817 sq. km area). The study is thus not a representative of the Delhi-NCR and is at best limited to the NCT of Delhi. Similarly, Srivastava et al. (2018) seem to have sampled air at only one site in NCT of Delhi and have used the data to make generalisation for the "most probable mixing state of aerosols in 'Delhi-NCR,' northern India." Several such published manuscripts can be identified where the ambiguity around 'urban Delhi' has affected the quality and relevance of individual manuscripts. Any urban environment study with policy implications in Delhi can be carried out only after resolving the following two challenges, at least one of which is characteristic to Delhi. 1) The NCT of Delhi is composed of different administrative sub-units with overlapping limits, and 2) 'urban Delhi' today includes an area beyond the limits of the NCT and that natural resources do not restrict themselves to political boundaries. Urban ecological investigations in Delhi therefore require careful attention and a need is felt for identifying the true 'urban Delhi' where such studies needs to be situated.

4. Introducing the 'Delhi Conurbation'

Urban landscapes are dynamic ecological systems, rapidly transforming to meet the requirements of increasing populations and post modernity (Gospodini, 2006; Pickett et al., 2011). Cities evolve from towns and transform themselves into megacities in time scales proportional to their social, political and economic prowess. With time, the more influential and magnetic among these cities evolve from megacities to conurbations. A conurbation has been defined as an extended urban area, typically consisting of several towns merging with the suburbs of one or more urban centers (Geddes, 1915). A comparison of satellite images between a gap period of 25 years (1974 to 1999) (Fig. 5 indicates rapid pace of urban growth in terms of built environment. Interpretation of the spectral growth pattern indicates that Delhi's urban growth has taken place without giving much respect to the political limitations of the NCT (Fig. 5).

'Urban Delhi' today is a contiguous area encompassing the NCT of Delhi along with the neighbouring Ghaziabad, Gautambudh Nagar, Faridabad and Gurugram. Of these, Ghaziabad and Gautambudh Nagar are administered by the state of Uttar Pradesh and Faridabad and Gurugram are administered by Haryana state. It needs to be mentioned here that in order to diffuse the rapid pace of urban population growth in the NCT, a National Capital
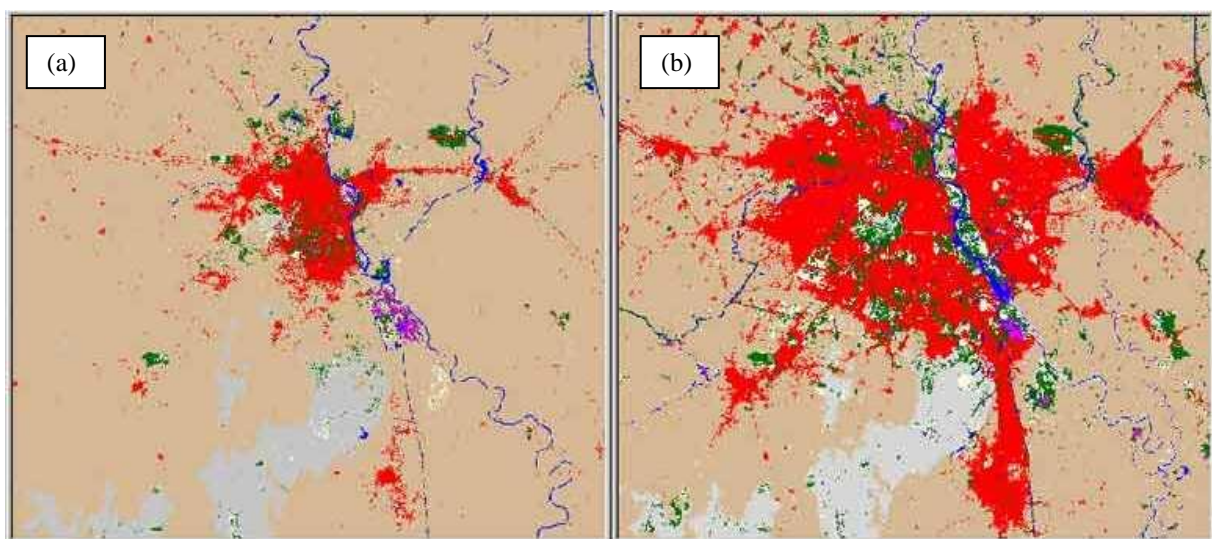

Figure 5. Satellite image interpretation for growth in urban area (red) over a period of 25 years in the Delhi region: (a) urban area in the year 1974, (b) urban area in the year 1999 (Source: UNEP, 2005).

of Delhi Region Planning Board (NCRPB) was formulated in the year 1985. The planning for the creation of the NCRPB had started as early as 1956 when it was felt that growth of Delhi could lead to problems of land, housing, transportation and management of essential infrastructure like water supply and sewerage (MoH, 1956). The NCT of Delhi initially included 9 districts from the state of Haryana, 5 districts from the state of Uttar Pradesh and 1 district from the state of Rajasthan. However, in 2013, the NCT was expanded to include 1 more district from Haryana (Bhiwani) and 1 from Rajasthan (Bharatpur). In 2015, the NCT was again expanded to include 2 more districts from Haryana (Jind and Karnal) and 1 more district from Uttar Pradesh (Muzzafarnagar). The primary objective of the NCRPB has been to prevent the very spill over urban growth which is being witnessed all across the eastern border of the NCT today. While it can be argued that the urban growth scenario in the Delhi region could have been much more sinister without the NCRPB, the fact that Delhi today has evolved from a megacity to a conurbation remains undisputed.

The 'Delhi conurbation' was first presented as part of a paper identifying challenges in optimizing Delhi's urban water footprint (Singh et al., 2011). In October 2012, a United Nations report also noted this evolution with the statement, "in recent past, Delhi has joined the league of 'meta-cities', those massive conurbations of more than 20 million people" (UN Habitat, 2013). A closer analysis of population density in the NCR reveals that out of the total of 15 original districts (excluding the NCT of Delhi) which make up the NCR, only 5 note population densities above 1,000 persons per sq. km (Fig. 6). These are Meerut, Ghaziabad, Gautambudh Nagar (NOIDA), Faridabad and Gurugram (Gurgaon). Among these, Meerut does not have the spatial advantage of sharing a physical border with the NCT. At the same time, Meerut and central-eastern Ghaziabad do not show an urban growth pattern which is influenced by the NCT, any more than it is influence by the thickly populated Western Uttar Pradesh state. It is for this reason that Meerut and central-eastern Ghaziabad districts do not form part of the 'Delhi conurbation'. In the case of Ghaziabad district, the district may be re-divided on the basis of pace and influence of urban growth. Such a re-divisioning and creation of a 'Western Ghaziabad' as an administrative entity would certainly help in more effective administration of the 'Delhi conurbation', as and when it is established. Although a recommendation to divide Ghaziabad district may sound overly ambitious, lessons learnt from recent past indicate that such a re-divisioning indeed took place for two other districts in the NCR. The district of Mewat

was carved out of the district of Gurugram (then Gurgaon) in the year 2005 while Palwal district was carved out of the district of Faridabad in 2008. The 'Delhi conurbation' can be defined as a contiguous polycentric urban area with the NCT as the urban driving force and flanked clockwise from the NE onwards till SW direction by the districts of Ghaziabad (western part), Gautambudh Nagar (NOIDA), Faridabad and Gurgaon. This forms a region which, in total area, is greater than the NCT and is far less than the NCR (Fig. 6).
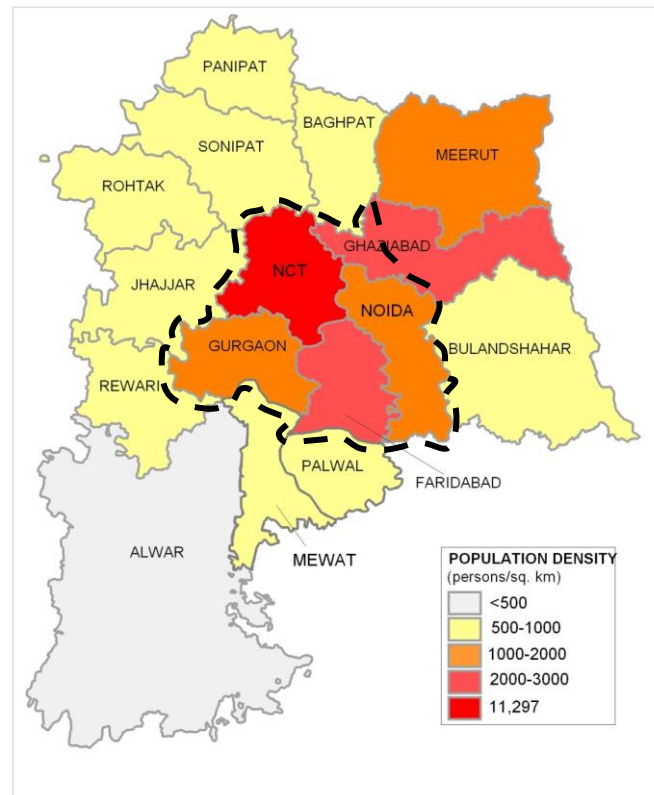
Figure 6. District wise population densities of the original districts (until 2013) comprising NCR of Delhi. The dotted line indicates the geographic area of the recommended 'Delhi conurbation'.

In the past, attempts have been made to describe a Delhi Metropolitan Area (DMA) or a Central National Capital Region (CNCR) (NCRPB, 2005). But these entities have been 1) superfluous, 2) without the purpose of administering 'urban Delhi' and therefore also included areas which are not already urban but may become so in due course of time, and 3) often without any administrative powers or any kind of jurisdiction. A need is therefore felt to establish the 'Delhi conurbation' and assign an overarching agency which has administrative powers in order to ensure sustainable urban growth of Delhi. An effective urban resource assessment and

management study should necessarily focus on the 'Delhi conurbation' for it to be comprehensive and result oriented. However, in the lack of any administrative agency managing such an entity, this can only be possible by carrying out individual studies in the NCT and abovementioned districts forming part of the conurbation and subsequently overlaying and analysing these studies. This makes the work four-fold and thus is a significant lacuna while carrying out urban ecological studies in Delhi.

5. Conclusion

Urban growth in the NCT of Delhi has surpassed its political border and Delhi is now a contiguous meta-city involving at least two neighbouring states. The Delhi megacity has now evolved into a conurbation with unique and inherently complex urban challenges. The conurbation includes the NCT of Delhi along with neighbouring districts of Ghaziabad, Gautambudh Nagar, Faridabad and Gurugram. Interestingly, this development has taken place on the eastern and southern part of the NCT, mainly along the course of River Yamuna. River Yamuna therefore plays a prominent role in influencing urban growth in Delhi, a fact which needs to be imbibed during the urban planning of the NCT. Due to the urban expansion of the NCT and the evolution of the 'Delhi conurbation', the setting up of a regulatory body for the latter is recommended. This is especially because the proposed area outlined by the 'Delhi conurbation' is far less than the overarching geographic area of the NCR. The environmental challenges of 'urban Delhi' can best be studied with respect to the 'Delhi conurbation', but this requires a central statutory body which presides over this area beyond and above the federal restrictions of state boundaries. It is recommended that such a central, administrative agency be setup for regulating, planning and sustaining urban growth in the 'Delhi conurbation'. A periodic, decadal review of the political boundary of the 'Delhi conurbation' is also recommended prior to making policies for 'urban Delhi.'

6. References

Adhikary, P.P., Dash, C.J., Chandrasekharan, H., Rajput, T.B. and Dubey, S.K. 2011. Evaluation of Groundwater Quality for Irrigation and Drinking Using GIS and Geostatistics in a Peri-urban Area of Delhi, India. Arabian Journal of Geosciences. 1-12.

Census of India. 2011. Ministry of Home Affairs. Government of India.

Chatterjee, R., Gupta, B.K., Mohiddin, S.K., Singh, P.N., Shekhar, S. and Purohit, R. 2009. Dynamic Groundwater Resources of National Capital Territory, Delhi: Assessment, Development and Management Options. Environmental Earth Sciences, 59(3): 669-686.

Cohen, R.J. 1989. An Early Attestation of the Toponym Dhilli. Journal of the American Oriental Society. 109(4): 513-519.

Datta, P.S., Rohilla, S.K., Tyagi, S.K. 2001. Integrated Approach for Water Resources Management in the Delhi Region: Problems and Perspective. In: Schumann, A. H. (Ed.) Regional Management of Water Resources: Proceedings of an International Symposium held during the Sixth Scientific Assembly of the International Association of Hydrological Sciences (IAHS) at Maastricht, The Netherlands.

Delhi Cantonment Board (DCB). 2016. Website: http://www.cbdelhi.in/website/about_overview.htm (Accessed on 19/02/18).

Department of Environment. 2010 Report on State of Environment. Department of Environment, Government of National Capital Territory of Delhi.

Department of Law, Justice & Legislative Affairs (DLJLA), Government of NCT of Delhi. 2011. Notification from the Office of the Divisional Commissioner (F.No. PS/DIV.COM/Misc./2011/1948. Government of NCT of Delhi, India.

Department of Revenue (DoR), Government of NCT of Delhi. 2012. Notification from the Office of the Divisional Commissioner (F.No. PS/DIV.COM/Misc./2011/1948. Government of NCT of Delhi, India.

Department of Urban Development (DUD). Government of National Capital Territory of Delhi. 2006. City Development Plan: Delhi. IL&FS Ecosmart Ltd., New Delhi.

Geddes, P. 1915. Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Cvics. Williams Publisher, London.

Gospodini, A. 2006. Portraying, Classifying and Understanding the Emerging Landscapes in the Post-Industrial Cities. Cities. 5: 311-330.

Jain, M., Dimri, A.P. and Niyogi, D. 2016. Urban Sprawl Patterns and Processes in Delhi from 1977 to 2014 Based on Remote Sensing and Spatial Metrics Approaches. Earth Interactions. 20(14): 1-29.

Joshi, R.R., Warthe, M., Dwivedi, S., Vijay, R., Chakrabarti, T. 2011. Monitoring Changes in Land Use Land Cover of Yamuna Riverbed in Delhi: A Multi-temporal Analysis. International Journal of Remote Sensing. 32(24): 9547-9558.

Kumar, M., Rao, M.S., Kumar B. and Ramanathan A.L. 2011. Identification of Aquifer-recharge Zones and Sources in an Urban Development Area (Delhi, India), by Correlating Isotopic Tracers with Hydrological Features. Hydrogeology Journal. 19: 463-474.

Mann, M. and Sehrawat, S. 2009. A City with a View: The Afforestation of the Delhi Ridge, 1883-1913. Modern Asian Studies. 43(2): 543-570.

Ministry of Environment & Forests (MoEF) and Planning Department (PD). 2001. Delhi Urban Environment & Infrastructure Improvement Project Delhi 21. Government of India and Government of NCT of Delhi, Delhi.

Ministry of Health (MoH). 1956. Government of Delhi, India.

Municipal Corporation of Delhi. 2017. URL: http://www.mcdonline.gov.in (Accessed on 19/02/18).

National Capital Region Planning Board. 2005. Report on Regional Plan – 2021 National Capital Region. Government of India.

New Delhi Municipal Council (NDMC). 2017. Website: https://www.ndmc.gov.in/ndmc/history.aspx NDMC (Accessed on 19/02/18).

Peshin, S.K., Sharma, A., Sharma, S.K., Naja, M. and Mandal, T.K. 2017. Spatio-temporal Variation of Air Pollutants and the Impact of Anthropogenic Effects on the Photochemical Buildup of Ozone Across Delhi-NCR. Sustainable Cities and Society. 35: 740-751.

Pickett, S.T., Cadenasso, M.L., Grove, J.M., Boone, C.G., Boone, Groffman, P.M., Irwin, E., Kaushal, S.S., Marshall, V., McGranth, B.P., Nilon, C.H., Pouyat, R.V., Szlavecz, Troy, A. and Warren, P. 2011. Urban Ecological Systems: Scientific Foundations and a Decade of Progress. Journal of Environmental Management. 92: 331-362.

Sharma, A.K. 2006. Prehistoric Delhi and its neighbourhood: physical features, In: Singh, U. (Ed.), Delhi Ancient History. Social Science Press, New Delhi. 14-25.

Singh, G. 2012. Surface and sub-surface water quality in the NCT of Delhi and its implications on the urban environments. Doctoral thesis. Retrieved from http://shodhganga.inflibnet.ac.in/handle/10603/28317 (Accessed on 15/01/2018).

Singh, G., Deb, M., Ghosh, C. 2011. Challenges in Optimizing Urban Water Footprint: the Case of the Delhi Conurbation. Proceedings of the V World Aqua Congress on Adaptive & Integrated Water Management. New Delhi, India, 16-18 November. 2: 252-265.

Singh, R.B. 1999. Urban Impacts on Ground Water Quality in the Delhi Region. Proceedings of IUGG Symposium. Birmingham. IAHS Publication. 259: 227-231.

Srivastava, P., Dey, S., Srivastava, A.K., Singh, S. and Tiwari, S. 2018. Most Probable Mixing State of Aerosols in Delhi NCR, Northern India. Atmospheric Research. 200: 88-96.

Trivedi, S.M., Yadav, B.R., Gupta, N., Chandrasekharan, H. and Ramachandran, K. 2001. Effects of Urbanization on Changes in Ground Water Quantity and Quality in Delhi State, India. Proceedings of Sixth IAHS Scientific Assembly Symposium at Maastricht, The Netherlands, July 2001. IAHS Publication. 269: 147-153.

U.N. Habitat. 2013. State of the World's Cities 2012/2013: Prosperity of Cities. Routledge.

UN. 2015. Department of Economic and Social Affairs, Population Division. World Urbanization Prospects: The 2014 Revision, (ST/ESA/SER.A/366).

UNEP. 2005. Atlas of One Planet Many People. United Nations Environment Programme. Nairobi, Kenya.

Zerah, M.H. 1998. How to Assess the Quality Dimension of Urban Infrastructure: The Case of Water Supply in Delhi. Cities. 15(4): 285-290.

Seeking Sustainable Heights in the Lives of Women Through *Aipan*: Case Study of Enactus IP College Initiative

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Abstract: India is home to a multitude of art forms. The rich cultural diversity of India lies at the very root of its existence. However, many of these art forms have either completely vanished into the unknown or are on the verge of extinction. This paper provides a brief account of one such art forms called, *Aipan*, a *Kumaoni* folk art practised in the North Indian state of Uttarakhand. This is discussed in the backdrop of 'Project *Aipan*', initiated by the Enactus team of Indraprastha College for Women, University of Delhi. Consisting of rhythmic geometrical patterns made of lines and dots, *Aipan* is traditionally made on *Geru* (an earthy-red surface) with white rice paste. It is practiced on special ceremonies and household rituals to evoke divine blessings. Project *Aipan* worked towards strengthening communities, bound by a common thread of hope fostered by collective entrepreneurial actions. Through this paper, an attempt is made to highlight the struggle to keep alive the *Aipan* art form and sustaining it for posterity. The role of women in this struggle is also highlighted, be it the Kumaoni women who have been the practitioners of this art form, or the women team of Enactus IPCW who took the charge of protecting this heritage.

Keywords: art forms, *Aipan*, development, culture, sustainability.

1. Introduction

Art defines India and its culture. Nature has always provided an inspiration to art. Even when there were no canvas to paint on, the earth became one, which provided artists of ancient times space to draw using fingers, twigs or any other tool that was available (Gupta, 2008). During his visit to India in late nineteenth century, Mark Twain was deeply fascinated with Indian culture. He opined,

"India is the cradle of human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition. Our most valuable and most constructive materials in the history of man are treasured up in India only" (1896). The manifestations of art in India can be seen in various forms of handicrafts, food, clothing etc. By looking at paintings or the *pallu* (veil) of a saree, one can identify if it is *Madhubani* painting (of Bihar) or a *patola* saree (of Gujrat) respectively. The names in the previous sentence not only connote the representation of art, but also display complete history and culture associated with it. It takes enormous time and effort to bring forth an art and this long process involved provides the edge and distinction to the Indian art. In comparison to the West in general, Indian art has valued its temporal component. Creativity or *srijnatamakta* as defined in India is process-oriented rather than product oriented (Sen, 2009). People in India and visitors from outside have admired such laborious effort and thus this helped the craftsmen to sustain their art through generations. However, with the progress towards 'fast-moving' lifestyle, one needs to take a break to appreciate art. This break from the onlooker is a motivation for the creator to continue with his/her passion and effort.

Several reasons have contributed to the near death of art forms in India. From the days of early civilization, human beings have believed in culture. Every society practiced one or the other form of art or craft. Despite rapid industrialization, rural communities have continued to be the flag bearers of our heritage traditions. Ironically, the developing and under-served rural population is actually the one still practicing the ancient cultures of the world. Today, the economy is technology based and art and culture is given less importance in this development. Craftsmen and skilled workers do not have adequate

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market access and with this they are bound to leave their traditional work. All this pushes the need to revisit such art forms so that they can be brought back to the lives of people' (IGNCA, n.d.). The entire sector that practices folk art is categorized in the unorganized sector. The entrepreneurs are chocked by chronic poverty, social injustice and serious insecurities relating to health and education. The net result of these disabilities is that small scale entrepreneurs are forced to be at risk at all times due to the indigenous methods of producing artwork followed by them. With increasing urbanization, traditions and cultures are fast eroding. Urban aspirations for a convenient life and lack of livelihood opportunities in rural India are forcing people to migrate to cities. In the process of migration, ancient and traditional practices are either looked down upon as backward or are being forgotten (Shandiya, 2014).

Nair (2000) has expressed sorrow for the near death of such art forms and especially that of *Chitrakam*, a *Gujrati* art form of decorating walls of houses with mirrors. According to her, very few Indian art forms are known and marketed in India and outside. She also informs that India has a rich tapestry of arts and crafts and that many of them have died out, and others are on the verge of extinction. Explaining the Chitrakam art form, she writes, "In the Kutch district of Gujarat, the poor, in a bid to enliven their homes, plaster small, circular pieces of mirror onto their doorways and windows; these rather crudely done pieces of art can be seen in most houses in Kutch. It is the menfolk who do it as women would rather, if it pays, do embroidery. The pieces of glass framed in doorways and windows are called Chitrakam". Such a splendid artwork has now died with passing years.

The Enactus students' team of Indraprastha College for Women (IPCW) made an attempt to revitalize the *Aipan* art form. Realising that art sustenance is possible only when artists have all that they need to lead a dignified life in their rural settings, a need to involve art in mainstream social business projects, and not just conventional charitable projects was felt. This led to the initiation of Project *Aipan* in 2014 and the creation of a marketing platform for this art form. The objective of this research based project was also to share the knowledge of *Aipan* art, to safeguard the interest of the artists engaged and to contribute to the protection and development of *Aipan* art form. The Aipan art form is peculiar of the *Kumaoni* people of the North Indian state of Uttarakhand. Scenic locales coupled with some of the most important centers of pilgrimage in India, this beautiful part of Uttarakhand has a bit of everything to offer to tourists. However, perhaps the most important contributor in popularizing

tourism in Uttarakhand is the state's rich culture, which is a fine blend of exoticism as well as philosophy. Often considered to be the heartland of Hindu culture, the culture of Uttarakhand is truly one of the most important tourist attractions of Uttarakhand.

Kumaon is one of the two administrative divisions of Uttarakhand (the other being Garhwal) and occupies an area of 21,035 sq km. It extends from the northern end of the Gangetic plains up to Tibet. *Aipan*, a folk art, has a special place in all *Kumaoni* homes. It has great social, cultural and religious significance. Interestingly, *Aipan* is known by different names and in different forms all over India, such as *Alpana* in Bengal, *Satiya* in Gujrat, *Rangoli* in Maharashtra, *Chowk pooran* in Uttar Pradesh, *Kolam* in South India, *Madne* in Rajasthan, *Arichan* in Bihar and *Bhuggul* in Andhra Pradesh (Mera Kumaon, n.d.). *Aipan* is a traditional folk art specifically made by women of Uttarakhand. This art is done on floor over brick red background (*geru*) with white paste made out of rice flour. Some of the famous *Aipan* motifs are *Saraswati Chowki, Chamunda Hast Chowki, Nav Durga Chowki, Jyoti Patta, Durga Thapa* and *Lakshmi Yantra* (eUttaranchal, 2003). It is believed that these motifs evoke divine power which brings good fortune and wards off evil (Tourism of India, n.d.). Consequently, *Aipan* is popularly drawn at places of worship, houses, and main entry doors of house and in front courtyards. Some of these artistic creations have great religious importance and these are drawn during particular religious ceremonies or auspicious occasions such as marriages, etc. Other artistic creations are for particular god/ goddess and a few for aesthetic appeal. *Kumaoni Aipan* painting has its unique identity that it is always made on empty walls and on the ground which is a symbol of fortune and fertility. Aipan art form is carried over generations and mothers pass it on to their daughters and daughters-in-law (Culture of Uttarakhand, n.d). However, owing to modernization, the *Aipan* art form is rapidly eroding. Large number of Kumaonis, who are born and brought up in cities outside Uttarakhand, may not even be familiar with it. Hence, the *Aipan* art form clearly needs revival and this was identified by Enactus IPCW as a challenge to protect and preserve this dying art form.

2. Interventions by Enactus IPCW

2.1 Methodology and Process
Enactus is an international, not-for-profit organisation that aims to harness the entrepreneurial skills of the youth to bring positive change, through community centred outreach (Enactus, n.d.). It enables entrepreneurial projects that are socially uplifting, economically viable

and environment friendly. The Enactus chapter of IPCW began in 2014 and initiated Project Aipan in November 2014. The Enactus students' team of the college surveyed a total of 100 individuals of *Kumaoni* origin living in Delhi, and found that only 38% could draw *Aipan* and still practiced it and only 22% of the individual surveyed knew the significance of the motifs. The rest of the surveyed individuals had no or little understanding of the *Aipan* art form. Further, lack of practical as well as theoretical knowledge about *Aipan* in its own community indicated an alarming situation. The intricate craftsmanship makes this art stand out but it clearly needed recognition for its survival. With a motive to preserve the *Aipan* art through entrepreneurial action, Enactus IPCW initiated Project *Aipan* with the dual objective of reviving the *Aipan* art form and for providing financial and social independence to the project beneficiaries. The strategy followed was to make the artists stakeholders in the business by imparting them necessary business skills. The project planned to imbibe leadership skills in the beneficiaries and create a self-sufficient work force so this skill could be passed on to other communities in the future.

The first step for reviving *Aipan* was to identify beneficiaries, *Aipan* artists who would benefit from the project's revenue model. For this, the Enactus IPCW students' team visited villages in *Kumaon* administrative division in Uttarakhand in December 2014. The interaction with locals, surveying of old temples and houses and a better understanding of *Kumaoni* culture was developed during this expedition. The team also conducted *Aipan* workshops for school students and rural womenfolk of *Kausani*, a hill station in Uttarakhand. During this ethnographic expedition, a 500 page long book on *Aipan* (Gyanodaya Publishers, Uttarakhand) was also collected which included information on the history of *Aipan* art and included more than 100 motifs and designs. Since most Kumaoni households have people living in cities, a list (name and contact details) was prepared of the people who have migrated to Delhi. Upon returning to Delhi, a total of 53 women from *Kumaon* (13 residing in *Timarpur* of North Delhi, 10 in Rohini area of North Delhi and 30 women residing in Almora district of Uttarakhand) aged between 26 and 50 years were identified. All the women belong to lower middle class stratum of the society and the 30 women from Almora are associated with *Cheli Aipan*, a training programme instituted by the Government in Almora, Uttarakhand.

2.2. Artist Training and Engagement
Project *Aipan* fulfilled its objectives by way of a 5-step model comprising training, creating, branding, selling, and sustaining.

a. Training: To ensure quality and finesse in production, the beneficiaries were provided with regular art trainings. The workshops augmented their skills; reduced the time taken to finish the products and increased the per hour return. Initially on an average, it took the women a week to complete a set of five envelopes. However, after the training, they could do so in one hour thereby increasing their income from this product on an average by 500%. Regular workshops were also conducted in order to impart art training, soft skills, financial literacy and marketing skills to the beneficiaries. The workshops improved the efficiency, confidence, communication skills and marketing skills of the women.

b. Creating: In the revenue based business model, raw materials was procured from inexpensive sources for which money was generated through various fundraisers. The procurement of raw materials was done by women themselves. The production was aimed to be year-round. With the help of art trainer Divya Lohiya from National Institute of Fashion Technology, the women artist learnt to work on different designs, using traditional *Aipan* designs on various media and products like bookmarks, diaries, note cards, jewellery boxes, pen stands, bags, wallets, wall hangings, cushion covers, envelopes, clay pots, etc. All paper stationery products were made with recycled paper, procured through year-round collection drives.

c. Branding: Once the products were created, they were packed with project branding, detailing the significance of the motifs in order to create awareness. To maintain operational efficiency, a coding system was also devised which helped keep track of the products made by individual woman artist.

d. Selling: Sale of finished products was facilitated through online and offline avenues. Online selling was facilitated by various e-retailing platforms such as Mile and Mile, India Crafts House, JabWeShop and E Malhar. Orders are also solicited through social media platforms like Facebook and Instagram. Through these online portals, the *Aipan* products were made available all over India and purchase orders were received from Jaipur, Ajmer, Chandigarh and places in Himachal Pradesh, transcending geographical barriers. Offline selling of *Aipan* products was carried out through various stalls and exhibitions across Delhi (Fig.1). As of December 2017, Enactus IPCW was able to generate ₹2,30,580 revenue through successful sales of *Aipan* products.

e. Sustainability: To make this initiative sustainable, the entire process of procuring raw materials and production

was completely managed by the woman artists from the beginning. To ensure efficient utilization of resources, the women artists were provided training on how to procure cheap and durable raw materials. To fulfil the goal of transforming trainees into trainers, women artists were also provided opportunity to teach *Aipan* art form to over 70 students, which created greater awareness about the *Aipan* art form.

Figure 1. *Aipan* product at display during an exhibition in Delhi *(Image by Dr. Govind Singh).*

3. Discussion

The *Aipan* dying art form was given a boost for survival through the Enactus IPCW project discussed in this paper. A detailed analysis of the challenges faced by the women artist was carried out simultaneous to the implementation of the project. A key challenge was that of gender barriers and lack of exposure. While the women artist developed confidence during the project, a few gender based obstacles were found to be difficult to overcome. These included, a) hesitation to communicate with the opposite sex, b) inability to rise up against the dominance of the male family members resulting in lack of confidence, c) financial dependence on male members which meant that women were not given the same respect as men. Another obstacle in the successful implementation of the project was the lack of awareness of one's own culture in the women artists. Some of the *Kumaoni* women were unaware of the art form and its significance. This lack of awareness was especially prevalent in the younger members among the women artists selected. They failed to see its relevance in their day to day life and were hence, unable to foresee how this project and this art form could help in their development. Lack of inclusion and motivation was yet another obstacle. Traditionally, *Aipan*

was made by rich upper-class Brahmin women who used to decorate their households with *Aipan* during festivals. This made the art form exclusive to the upper-class Brahmins and made the project beneficiaries (women artists) apprehensive in taking on the initiative. From time to time, the women artists also lost confidence and questioned the self-sufficiency of this initiative. A key challenge was also to ensure that the selected women artists do not skip the training sessions.

The largest impact of the 'Project *Aipan*' can be evaluated by assessing the confidence level of the women artists engaged in the project. It was found that only 2 out of 15 women surveyed could face the camera before their engagement. However, after their involvement with the project, all of them took pride in sharing their success story and the changes brought about in their lives due to this project and the earnings it brought to them. These women artists are now also able to contribute to the education of their children in several ways. All these factors have led to an increase in their self-worth. These women artists now have greater self-esteem which has resulted in an improvement in their social standing. The women artists are now accepted as independent entrepreneurs with good marketing skills. Project *Aipan* is thus in compliance with four of the United Nations' Sustainable Development Goals, viz. No Poverty, Gender Equality, Decent Work & Economic Growth and Reduced Inequalities. Project *Aipan* aims at reducing inequalities and poverty by employing women from weaker sections of the society and helping them make a significant addition to their household incomes. Project *Aipan* is working towards Gender Equality by employing rural women, educating them about their rights and helping them shape an identity independent of their male counterparts.

4. Conclusion

Enactus IPCW has witnessed many milestones being achieved during the implementation of 'Project *Aipan*'. The struggle to convert challenges to strength yielded positive outcomes. 'Project *Aipan*' could successfully rejuvenate a dying art form, empower its stakeholders and help preserve it for posterity. The project continues to work with women artists to assist them for achieving greater heights. Some ongoing objectives of the next phase of the project include opening an *Aipan* Store managed by women artists and further training and empowerment of the artists' folk.

The success story of 'Project *Aipan*' is also hoped to bring about a change of mindsets towards women empowerment and financial independence and equality

for all women. The hills of *Kumaon* echo with the sounds of change and revival. A bright beginning for these women entrepreneurs is just on the horizon.

5. References

Enactus n.d.. Enactus. URL: http://enactus.org (Accessed on 20/12/2017).

eUttaranchal. 2003. Aipan and Other Art Forms. URL: https://www.euttaranchal.com/culture/aipan-other-arts-form (Accessed on 20/12/2017).

Gupta, C.S. 2008. Indian Folk and Tribal Paintings. New Delhi: Roli & Janssen.

IGNCA (Indira Gandhi National Centre for the Arts). n.d. Report on Cultural Mapping of India Under UNESCO's Programme on Cultural Industries and Copyright Policies and Partnerships. URL: http://ignca.gov.in/wp-content/uploads/2017/07/UNESCO_Report.pdf (Accessed on 20/12/2017).

Mera Kumaon n.d.. Culture. URL: http://kumaonhill.blogspot.in (Accessed on 20/12/2017).

Nair, S. 2000. Reviving Dying Crafts. Expressions India. URL: http://expressindia.indianexpress.com/fe/daily/20001009/fco08009.html (Accessed on 20/12/2017).

Sen, R.S., Sharma, N. 2009. Teacher Preparation for Creative Teaching. URL: https://www.researchgate.net/publication/286079624_Teacher_Preparation_for_Creative_Teaching (Accessed on 20/12/2017).

Shandilya, I. 2014. Sustainability of Traditional Art forms. Huffpost. URL: https://www.huffingtonpost.com/ihitashrishandilya/sustainability-of-traditi_b_5657729.html (Accessed on 20/12/2017).

Tourism of India. n.d. Tourism in Kumaon. URL: https://www.tourism-of-india.com/kumaon (Accessed on 20/12/2017).

Uttarakhand Tours & Travels. Culture of Uttarakhand. URL: http://uttarakhandtourtravels.co.in/2016/07/12/culture-of-uttarakhand (Accessed on 20/12/2017).

Exploring the Scope of Agro-based Industries in Manipur and the Miracle of *Chakhao*

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Abstract: This research contribution attempts to study the role that agro-based industry as well as multi-farming in improving the agricultural sector in Manipur, India. Till now, farmers in the remote North-eastern state of Manipur have been using traditional methods of farming. However, with increasing population and due to lack of awareness towards efficient utilization of land resource, farmers in the state are struggling to keep this sector sustainable. It is thus the need of the hour to make farming economically viable in Manipur so that the food supply in the region is not adversely affected. Manipur also produces several local and nutritious crops like black rice or *chakhao*, the commercial production of which could help turn around the farming sector in Manipur towards prosperity. The properties of the black rice and how its well-planned production can augment and improve the income of the state is discussed. Presence of rich nutrients and the medicinal properties of *chakhao* make it a good crop for the health-conscious citizens. However, there is need for generating awareness about this crop and a simultaneous requirement of incentives for the farmers who are growing black rice, before it can become a useful cash crop for Manipur.

Keywords: agro-based industry, black rice, chakhao, Manipur.

The industries are the most relevant example of development, especially for the rural and remote parts of the world. All industries need raw material. Raw materials are the backbone of every industry. This is also true for agro-based industries, which have been helping mankind to sustain ourselves by providing steady supply of food right from the very beginning of civilization. Agro-based industries cover activities such as growing or raising crops or plants under different circumstances, their harvest, storage, etc. usually by an agriculturist or agronomist. The raw materials are subsequently processed into finished goods through capital investment for being sold into the market, for example, sugarcane to sugar, cotton to clothes, etc. It needs to be noted here that the agro-based industrial sector is nature-philic and eco-friendly (Balakrishnan and Batra, 2011). The development of this sector is also an opportunity for us to reconnect with nature and live longer, healthier lives by returning to the nature. We have so far only taken away from nature and industrial processes have largely desecrated nature. Further, developing agro-based industry is also a pathway for developing the rural sector (Marjit, 1991).

There are numerous ways that we have developed to produce large scale goods according to our needs, largely using industrial methods. Raw material are usually carried from their source of production, far away to a centralized industry for further processing. Interestingly, this concept of developing for the masses has not been much developed in many rural and remote areas of India, due to some obvious and not so obvious reasons. The development of agro-based industry in rural parts of India can go a long way for ensuring sustainable development of these areas since most of the land in the rural and remote parts of India are unused due to lack of awareness of the potential of land resource. Some of the immediate benefits of promoting agro-based industries in rural and remote parts of India includes agriculture becoming more lucrative and profitable, greater employment opportunities both in primary and secondary sector (i.e. production and marketing) and prevention of mass scale migration to urban areas. The promotion of agro-based

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industry will also improve social and physical infrastructure of rural and remote parts of India. Increased scope and variety of goods being produced in or around the farmland will lead to suitable commercialization of agriculture, thereby improving the income of farmers and creating more food per hectare.

The development of agro-based industries are easy to establish and have the potential of providing steady and additional income to individuals in rural areas without making large initial investments. Thus, development of agro-based industries can play a significant role in the process of economic development of any country, especially in a country as vast as India. The development of agro-based industry in rural areas will also make the agricultural sector independent from the fluctuations of the overall economy of the country since it will lead to reduced dependence on transport, etc. sectors. This will make the agricultural sector self-sustaining which will come with its own benefits in countries like India, which are pre-dominantly agrarian. It is worth mentioning here that the agricultural sector in India gives employment to backward, unskilled, uneducated labour, who will directly benefit from the self-sustenance of this sector (Bhalla, 1987). The self-sustaining of the agricultural sector will also boost production of food supply, increase the per-capita income of the rural communities and will greatly reduce migration to urban centres.

A similar approach of boosting agro-based industry is the need of the hour in the North-east Indian state of Manipur. The state of Manipur notes good agricultural productivity especially with respect to the local foods consumed by the people of the state. However, agro-based industrial sector is either wanting or not available at the scale that it benefits the people and the economy of the state. To better understand the scope of agro-based industry in Manipur, it is important to understand a few details about the state. Manipur is one among the seven North-eastern *sister states* of India and is also known as the *jewelled land*. The economy of the state of Manipur depends mainly on agriculture sector, the latter being the backbone of rural people. The agro-climatic conditions in Manipur make it suitable for growing almost all kinds of agricultural and horticultural crops. The economy of Manipur grew at a rate of 12.90% from 1980 to 1997. The agricultural sector in Manipur has been growing at the rate of 10.69% per year and the manufacturing sector has been growing at the rate of 10.53% per year (IFP, 2017). Since the agricultural sector does not require raw materials inputs as much as are required by the manufacturing sector, promoting the growth of the former will certainly address the

unemployment problem in Manipur and bring more jobs for the people.

The primary method of agricultural cultivation in Manipur is through *jhumming* (swidden agriculture) and terraced farming methods. However, a key drawback of the prevalent agricultural sector in Manipur today is that people cultivate only during the rainy season, which is the time for the growth of rice and wheat. Thus, agricultural activity is carried out only in one half of the year and during the other half of the year, the fields remain unutilized. The same pattern is followed in many other parts of India as well. It is but common sense that if the agricultural cultivation is carried out throughout the year, by growing different crops (and through crop rotation) the yield and income from this sector will increase and will be almost doubled. There are various kinds of crops including fruits and vegetables which can be rotated with the existing wheat and rice crops. Some of these include rice, maize, pulses, wheat, pineapple, orange, mango, lemon, carrot, ladyfinger, cabbage, pea, bamboo, apple, etc. Rubber plantation have already begun in Jiribam (Singh et al., n.d.) which is a place located in the west of the state. Some sectors which have good economic potential in Manipur include agro and food processing, handlooms, handicrafts, (eco)tourism, fisheries, poultry, animal husbandry and forestry. Manipur is also known for the many medicinal plants cultivated in the state. However, a key challenge in the development of the aforementioned sectors in Manipur is the general ignorance of the people of the state towards its rich cultural and biological diversity.

Among all industries with scope for economic development in Manipur, one type of industry that will be effectively profitable as well as environment friendly is that of Multi-Farming. Multi-Farming industry includes agro-cultivation, fisheries, food processing, animal husbandry, and poultry in one land at the same time. Since land as a resource is presently available in Manipur, Multi-Farming as a sector has a good scope. Multi-Farming ensures that productivity will be high and since natural manure is available as a waste product (e.g. excreta from poultry or animal husbandry) it also avoids the use of artificial fertilizers and chemicals. The waste of the animals is recycled as manure for the plants, and waste and dead plants help improve the soil quality. Multi-Farming is a highly efficient and waste-free sector. This is also true since unused plant waste can be used to feed the animals. In this way, Multi-Farming can help protect the pristine ecosystem of Manipur, boost the economy of the state while simultaneously producing healthy food. However, promoting Multi-Farming in Manipur needs to

begin with understanding the needs of the farmers and also the necessary information they require in this direction. Therefore, the use of ICT based information dissemination systems also need to be developed (Meitei and Devi, 2009).

These are the various types of Multi-Farming and Agro-based industry that Manipur can scale up. A key type is that of developing and promoting the 'black rice' crop variety which is grown mainly in Manipur. The black rice crop variety in Manipur is locally called *chakhao* and is produced in two shades, black and white with the black one being more popular. Black rice has earned greater popularity than the white one because it has more potential and nutrition (Asem et al., 2015). Black rice is harvested once a year, in the months of November-December. To plant black rice, a good irrigation system is a pre-requisite. Since black rice is a traditional rice variety of Manipur, it is well acclimatized to this place and is easier to grow. Some other traditional varieties of black rice include *poireiton, tathabi, moirang phou, khokngambi, kumbi phou, changlei* and *phoudum.* Presently, 20 varieties of black rice are grown in more than 200 hectares farmland in the state. All varieties of black rice are rich in medicinal properties and help in fighting diseases like viral fever, dengue, chikungunya and influenza (AgricultureInformation.com, 2016).

Among all the varieties of *chakhao*, *chakhao poireiton* is considered to be most useful due to its potential property of curing cancer. *Chakhao poireiton* is purple-black in colour and both its ends are pointed. It is oval in shape and has a tempting shine on it. When cooked, this black rice variety becomes deep purple and also give a tempting aroma. It is widely used in pudding along with other fruits and nuts and is also an appetizer. Despite its filling look, this variety of black rice is actually very healthy to eat. Black rice benefits us in many ways. Besides being popular for preventing cancer, other ailments that it can help cure are diabetes, heart disease, Alzheimer's disease, heart attacks, gallstone, etc. Over polishing of this rice destroys the nutrient content and all of the dietary fibre and essential fatty acids. Black rice is rich in minerals, vitamins, fibre and fatty acid and its consumption, even in excess, does not lead to gaining weight. Further, black rice diet is a highly recommended food for post-menopausal women, especially those with high cholesterol and high blood pressure or others who are showing signs of cardiovascular disease. The benefits of black rice are not limited to the aforementioned. Consumption of black rice and physical use is also locally known to enhance skin and hair, thereby helping maintain clear and soft skin and in preventing wrinkles.

The development of agro-based industry around the black rice crop variety can bring about a magical spin around in the economy of Manipur state. This is because in addition to the large-number of nutrition and health benefits, black rice is not grown in other parts of India and can be sold as an exotic agri-product. Its development would require growing it in large scale, for which there is land and trained-human resource available in Manipur. Black rice or *chakhao* production has been preserved in Manipur since several generations despite green revolution in India which promote mainly the high-yielding varieties even though the latter required large-scale irrigation and chemicals. The technique of producing *chakhao* is still preserved in the traditional knowledge of the people of Manipur though its production is limited due to lack of awareness about its large number of benefits. However of late, new industries are indeed being set up which are utilizing *chakhao* as a raw material to produce *chakhao* products such as cakes and other snacks. With proper assistance and support from the Government, and the promotion of agro-based industry in the state, the *chakhao* crop can be grown and harvested to locally produce many types of goods like snacks, skin care products, health care products, etc. Such a value addition to *chakhao* will go a long way in promoting economic growth in Manipur and will also give recognition to Manipur in the national and international markets.

References

AgricultureInformation.com. 2016. Mr. Potshangbam Devakanta – Black Rice with Medicinal Properties. URL: http://www.agricultureinformation.com/postings/mr-potshangbam-devakanta-black-rice-medicinal-properties (Accessed on 20/01/2018).

Asem, I.D., Imotomba, R.K., Mazumder, P.B., Laishram, J.M. 2015. Anthocyanin Content in the Black Scented Rice (Chakhao): Its Impact on Human Health and Plant Defense. Symbiosis. 66(1): 47-54.

Balakrishnan, M. and Batra, V.S. 2011. Valorization of Solid Waste in Sugar Factories with Possible Applications in India: A Review. Journal of Environmental Management. 92(11): 2886-2891.

Bhalla, S. 1987. Trends in Employment in Indian Agriculture, Land and Asset Distribution. Indian Journal of Agricultural Economics. 42(4): 537.

Imphal Free Press (IFP). 2017. URL: https://www.ifp.co.in/page/items/37016/blockade-blow-to-local-entrepreneurs (Accessed on 21/12/2017).

Marjit, S. (1991). Agro-based Industry and Rural-Urban Migration: A Case for an Urban Employment Subsidy. Journal of Development Economics. 35(2): 393-398.

Meitei, L.S. and Devi, T. 2009. Farmers Information Needs in Rural Manipur: An Assessment. Annals of Library and Information Studies. 56: 35-40.

Singh, K. R., De, A., Chintala, S. R. n.d. Study of non-timber forest products, their utilization and role in the socio-economic status of the local. Journal of Science and Technology (Biological and Environmental Sciences). 6(1): 21-27.

Theorizing Disaster: A Historian's Perspective

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Disaster is a multi-dimensional social phenomenon, the study of which has generated important international debates across disciplines. Scholars, however, have yet to reach a common consensus on the definition of disaster. Most debates on human-environment relations and issues of development hinge around disaster studies. This *Opinion* piece is an attempt to theorize disaster, the historian's way. Understanding disasters, theorizing and debating them has actively engaged scholars across disciplines: anthropology, cultural geography, environment, sociology, political science, history and psychology. Though disaster studies are highly inter-disciplinary and an important site for international debates, research literature on it has remained fragmented along disciplinary lines with each field focusing on its own domain of interest.

Scholars have found it problematic to reach a common understanding or a consensus on the definition of disaster. Sociologists define disaster as organizational behaviour; geographers identify it with the 'hazardness' of a place; and political scientists speak of risk assessment policies and practices. Anthropology with its holistic perspective is perhaps uniquely suited to tackle the theoretical challenges that disasters present. In analyzing disaster and catastrophe, anthropologists have studied the construction of cultural meanings and world views (Bhargava, 2017; Oliver-Smith, 2002). Talking of disaster mitigation, psychologists have addressed the sense of loss and displacement caused by disasters. Faced with change, loss and destruction, the disaster-stricken have raised existential questions which reflect the moral and ethical values of belief systems and include concepts of social and cosmic justice, sin and retribution, causality, the relationship of the secular to the sacred and the existence and nature of the divine. In many ancient civilizations, both in the East and the West, natural disasters were earlier interpreted as a sign of divine punishment. It was believed that earthquakes, fires, landslides, floods and pestilence were an indication of divine rage against the sinful lives of the people, the incompetence of the sovereign and the general moral decline in society. A disaster was considered a challenge from God to test the human capacity to manage it through truthfulness and righteousness (Rohr, 2003). The Rigveda and Atharvaveda, the two ancient Indian scriptures, recommended expiation by performance of religious rites such as worshipping of the Gods, chanting of sacred mantras and animal sacrifices. For instance, if there was no rainfall, *Indra*, the God of Rain had to be invoked and in case the river changed its course or inundated its bank, worship of that particular river had to be performed (Agrawal, 2000).

Disasters have become a metaphor for many processes and events in the contemporary world cutting across every aspect of human life, impacting environmental, social, economic, political and biological conditions. Affecting aspects of community life disasters are both physical and social processes, in which a geophysical or biological event is evidently implicated in some form or the other in causing disaster (Blaikie et al, 2004). Disasters are primarily a social phenomenon. They are natural calamities often considered to be extreme material events that can be caused by demographic changes, rapid urbanization, environmental degradation or climatic changes. The region of South Asia and India, in particular, is considered to be one of the most disaster-prone regions with about 85 per cent of the country prone to some kind of disaster – floods, droughts, cyclones, earthquakes, landslides – able to cause destruction and bring havoc to the physical environment and the resources of its society. A recent report on natural calamity suggested that about 60 per cent of the Indian landmass was liable to earthquake of varied intensities; one-eighth (40 million ha) of its entire geographical area was unresisting to floods with one-fifth of the flood-prone area subjected to floods annually; approximately 8 per cent of the total area was prone to cyclones; and 68 per cent of the total area

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was susceptible to severe drought (Singh, 1996; Gupta, 2003).

Notwithstanding the corrosive power of rivers and the social implications of this process, the water courses since antiquity had determined human settlements and human activity. The impact of water systems on environment and human-environment relations is significantly evident by the abundance of archaeological sites along river margins and the banks of streams and lakes (Thapar, 2015). Transformations in landscapes occur whether owing to geology, geomorphology or human activity. The relation of river action to geographic forms and on some occasions to feuds over land property rights can be exemplified by the recurrently changing course of river Gandak (tributary of River Ganga) in the eighteenth century in Gorakhpur region of Uttar Pradesh (India) that created *gangshikisht* and *gangberamud* lands i.e. lands carried away or thrown away by the changing course of the rivers resulting in persistent discord over these lands. More importantly, the turbulent hydrograph of River Ganga and its tributaries caused natural disasters in the form of floods, tides and inundated banks though erosion (silting up of one bank while the other is being eroded) and avulsion (the cutting of a new channel) remained its major characteristic and method of altering its course (Bhargava, 2017).

Most debates on human-environment relations and issues of development and sustainability hinge around disaster studies. Entrenched intensely in environmental and human systems, disasters are an indicator of a society's failure to adaptation and sustainability (Oliver-Smith, 1996). Interpreting disasters, a few scholars have rejected the often-held theory that disaster means the collapse of the productive potential of a social order. Shifting the focus from the disaster event, they have emphasized on societal and man-environment relations and have defined natural disasters as the normal order of things rather than as an accidental geophysical feature (Hewitt, 1983).

From a historian's point of view, the study of disasters is a relatively young field of research initiated in response to contemporary awakening to the implications of such calamities across the globe. Historians had earlier neglected natural catastrophes and disasters as historical events, dismissing them as mere 'accidental facts'. They had argued that man was the sole 'actor' of history. So, if disasters had not been studied earlier in detail or in depth, one of the reasons lay in disaster being considered to be an event and not a process (Kempe and Rohr, 2003; Oliver-Smith, 2002). Concerns of the present have stimulated discussions amongst historians and social scientists in two directions: they have triggered off an engagement with the history of disasters during the past centuries and also drawn attention to the discursive framework within which the discussion of disasters take place, both in the present and the past. It has been argued by anthropologists like Escobar (2011) that such regions of the globe that were once considered 'salubrious' and separated from areas more prone to disease and mortality are now construed as 'unsafe' because of their susceptibility and vulnerability to disaster. Roughly three or four decades subsequent to World War II, social scientists regarded disasters as unpredictable and unavoidable extreme events, a divergence from the normal that entailed a technocratic response. But a new perspective has now emerged since the early 1980s that views hazards, argues Oliver-Smith (1996), as basic elements of environments and as constructed features of human systems though older views surprisingly have been rather enduring.

The new approach to disaster studies may be characterized by at least two requisites that have generated a basic consensus. First, the proposition that disasters are not natural but social phenomena even if triggered by extreme natural factors. Extreme factors or events may happen at any place, any time but they turn into a disaster if societies are affected and there is material damage, harm or loss of lives. The second new perspective in disaster studies is the belief that within the societies affected by disaster there are a number of factors that explain complex economic, political and social configurations that place certain societies or groups within a society at higher risks than others. These conditions are now clustered around the term 'social vulnerability'. Social vulnerability has emerged as a vital concept to explain the social character of disasters (Juneja and Mauelshagen, 2007). Social vulnerability refers to the socioeconomic and demographic factors that affect the resilience of communities. Studies have shown that in disaster events the socially vulnerable are more likely to be adversely affected, i.e. they are less likely to recover and more likely to die. Effectively addressing social vulnerability decreases both human suffering and the economic loss related to providing social services and public assistance after a disaster.

It is pertinent to suggest that historical sciences are on the threshold of a geographical turn; the results, methods and concepts developed by geographers and social scientists are usefully applied within historical disaster studies. Historians have researched to reconstruct extreme events like earthquakes, volcanic eruptions, extreme weather, climate change and others. Important investigations in historical perspective also include the strategies to cope

with disaster, its mitigation and prevention in the past and their meaning for the present. Experience, knowledge, cultural and institutional practice including organizational systems of disaster management and prevention, civil defense or even the insurance systems are based on the expectation of repetition derived from the experience of repeated disasters. Disasters can no longer be considered as single exceptional cases. Recent analyses of disasters explain why they should not be separated from everyday life and indicate how the risks involved in disasters should be connected with the vulnerability created for many people through their normal existence. These analyses are focused to understand the links between the risks that people face and the reasons for their vulnerability to hazards (Juneja and Mauelshagen, 2007).

Any meaningful discussion of what makes societies and populations particularly vulnerable to disasters (poverty is a major contributor to vulnerability. Poor people are more likely to live and work in areas exposed to potential hazards, while they are less likely to have the resources to cope when a disaster strikes. In richer regions, people usually have a greater capacity to resist the impact of a hazard) and of the role of local agency in devising measures of relief that may not necessarily conform to those envisaged by technocrats calls for an understanding of both disaster vulnerability and coping strategies.

References

Agrawal, C.M. 2000. Great Natural Calamities. New Delhi: Indian Publishers Distributors.

Bhargava, M. 2017. Changing River Courses in North India: Calamities, Bounties, Strategies – Sixteenth to Early Nineteenth Centuries. In: Meena Bhargava ed. Frontiers of Environment: Issues in Medieval and Early Modern India. Hyderabad: Orient Blackswan. pp. 232-256.

Blaikie, P., Cannon, T., Davis, I. and Wisner, B. 2004. At Risk: Natural Hazards, People's Vulnerability and Disasters, Second Edition. London & New York: Routledge, Taylor & Francis.

Escobar, A. 2011. Encountering Development: The Making and the Unmaking of the Third World. Princeton: Princeton University Press.

Gupta, H. 2003. ed. Disaster Management. Hyderabad: Orient Blackswan.

Hewitt, K. 1983. ed. Interpretations of Calamity. Boston: Allen & Unwin.

Juneja, M. and Mauelshagen, F. 2007. Disasters and Pre-Industrial Societies: Historiographic Trends and Comparative Perspectives. The Medieval History Journal. 10(1 & 2): 1-31.

Kempe, M. and Rohr, C. 2003. 'Introduction'. Environment and History. Special Issue: Coping with the Unexpected Natural Disasters and their Perception. 9(2): 123-126.

Oliver-Smith, A. 1996. Anthropological Research on Hazards and Disasters. Annual Review of Anthropology. 25: 303-328.

Oliver-Smith, A. 2002. Theorizing Disasters: Nature, Power and Culture. In: Susanna M. Hoffman & Anthony Oliver-Smith. eds. Catastrophe and Culture: The Anthropology of Disaster. Oxford: School for Advanced Research Press. pp. 23-47.

Rohr, C. 2003. Man and Natural Disaster in the Late Middle Ages: The Earthquake in Carinthia and Northern Italy on 25 January 1348 and its Perception. Environment and History. Special Issue: Coping with Unexpected Natural Disasters and Their Perception. 9(2): 127-149.

Singh, R.B. 1996. ed. Disasters, Environment and Development. New Delhi: Oxford & IBH Publishers.

Thapar, R. 2015. The Penguin History of Early India: From Origins to AD 1300. UK: The Penguin Press.

Interdisciplinary Explorations on The Fragmented Self: Conference Organised at Indraprastha College for Women, University of Delhi

The Department of Psychology at Indraprastha College for Women, University of Delhi organised an International Conference on 30 & 31st October, 2017 titled 'The Fragmented Self: An Interdisciplinary Exploration into Notions of Self and Identity in Contemporary Life'. The Conference was inaugurated by the Dean of Colleges, University of Delhi, Prof. Devesh Sinha along with the Conference Chair & College Principal, Dr. Babli Moitra Saraf. Dr. Surabhika Maheshwari, the Conference Coordinator, presented the Conference Introduction. The Keynote address by Prof. Michael Mascolo of Merrimack University, USA touched upon important facets of personality development and the many intertwined fragments of identity. The Conference was a confluence of multidisciplinary ideas on the concepts of *Self* and Identity. Eminent academicians, practitioners and specialists from around the world participated in the Conference. The Conference design included three important components: i) invited papers that were presented in the plenary sessions on contemporary academic themes, ii) paper presentations of selected works of scholars that were selected after receiving entries to the call for papers on the said theme, and iii) workshops conducted by international experts, addressing concerns of mental health, anomy, suicide, gender, social media and identity. The Conference hosted twenty seven invited speakers, chairs and discussants over two days and four plenary sessions, thirty two selected papers (out of over a

hundred abstracts received for review) and five exploratory workshops. The total registered national and international participants were over two hundred and fifty. The Conference was financially supported by ICSSR, JK Cement, Max India Foundation, CNN News 18, Jai Ingredients Pvt. Ltd, Indian Oil and Videocon DTH.

The first plenary session on Day 1 titled 'Exploring Self, Identity and Fragmentation' brought together deliberation on positioning the ideas of Self and Identity in the context of the contemporary life. The session was chaired by Prof. Girishwar Misra, Vice Chancellor, Mahatama Gandhi International Hindi University, Wardha, Maharashtra and Social Scientist and Psychologist. The speakers of this session included Dr. Sanjay Chugh, Senior Consultant Neuropsychologist from Delhi, Dr. Neil Altman, Psychoanalytic Psychotherapist from New York, Dr. Jillian Stile, Clinical Psychologist from University of Columbia, USA and Prof. Sangeetha Menon from the National Institute of Advanced Studies, Indian Institute of Science, Bengaluru. The second panel of the day titled, 'Of Me and We: Deliberations on Society, Culture and Identity' discussed the self in the relational world, exploring the nuances of culture, socialization and identity. This session was chaired by Dr. Bimol Akoijam from Jawaharlal Nehru University, Delhi. The speakers in this session included Dr. Sieun An, an experimental Psychologist teaching at Ashoka

University, Dr. Raghuram Raju from University of Hyderabad and Sociologist Prof. Siri Hettige from the University of Colombo. An exciting addition was a Skype session with Prof. Kenneth Gergen from Swarthamore College, Pennsylvania. He reflected upon the digital revolution and its impact on *Self*.

Day 2 of the Conference began with an engrossing session on 'Stories of Love, Loss and Conflict'. The session was chaired by Prof. Anand Prakash from Department of Psychology, University of Delhi. Dr. Anurag Mishra, Practicing Psychiatrist from Fortis Healthcare, Delhi beautifully wove a tale of dark forces against the backdrop of the magical world of Harry Potter for his paper titled, 'The Dark Lord has Risen: Hate, Envy and Corruption in Institutions'. Building on the analytical framework, the next paper by Dr. Anup Dhar from Ambedkar University Delhi, titled, 'Love's Letters: Between Barthes and Badiou' analysed philosophies and scripts on writing love. Dr. Suriya Nayak from the University of Salford, Manchester presented on women activism, racism and addressed the idea of loss and betrayal with her paper, 'Can the Racial Grief of Women Speak? The Implications of Racial Mourning and Melancholia for Feminist Collective Activism'. The next session aimed at consolidating the explored fragments. The session was titled, 'Towards Wellness: Revisiting Fragmentation and Integrating Selves'. This session, which was chaired by Prof. Namita Ranganathan

from Central Institute of Education, University of Delhi, encouraged discussion and interaction. The speakers for this session included Prof. Meenakshi Thapan from Delhi School of Economics, University of Delhi, Ms. Reshma Valliappan, Founder & CEO of 'The Red Door' and Prof. Girishwar Misra. The afternoon of the second day included five parallel workshops that participants could register for. These were designed and moderated by celebrated practitioners and experts: Prof. Michael F. Mascolo facilitated a workshop titled 'Building a Self

Portrait: Exploring Fragmentation and Integration', Dr. Niel. Altman & Dr. Jillian Stile did one on 'Contemporary Social Media and Fragmented Self', Prof. Siri Hettige moderated 'The Violence Within: Understanding Suicide and Interpreting Suicide Data', Ms. Reshma Valliappan conducted 'Exploring Mental Health through Creativity' and Dr. Suriya Nayak facilitated 'Gender, Oppression and Identity'. All workshops saw enthusiastic participation and promoted insight development and exploration. The Conference was

well received and appreciated by academicians and students alike. It proved to be a meeting ground for academicians, practitioners, researchers and students and provided a space for active discussion and learning on the theme and beyond.

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Rajputana Society for Natural History (Rajasthan, India) Conducted Seminar on Nature - Human - Wildlife and Mutual Co-Existence

The Rajputana Society of Natural History (Rajasthan, India) organised a Two Days Seminar on "Nature Human Wildlife and Mutual Co-Existence" in collaboration with Gandhi Smriti and Darshan Samiti (Delhi, India), and a few other local bodies like the Confederation of Community Based Organisations of India, IIP Foundation, *Nari Manch*, and The Voice of Community. The Seminar was hosted at Rajputana's Shakuntalam (Village *Ramnagar*, Bharatpur, Rajasthan), located adjacent to the World Heritage and Ramsar Site - Keoladeo National Park. The Seminar brought together experts from different disciplines to discuss and analyse the centuries old inter-connectedness between nature, human and wildlife, the now disappearing relationship between these entities and the need for reconnecting human society with the

other two realms of Nature and Wildlife. The Seminar also discussed the need and importance of overcoming the urban-rural divide while carrying out developmental activities for human communities. For development to be sustainable, it must focus not only on economic growth but also on environmental protection and social development of all sections of the society. This was the underlying theme of the Two Day Seminar, which witnessed large-scale participation of people from urban as well as rural areas. The Seminar was also joined by considerable number of youth mainly from the village communities.

The first day of the Seminar included two sessions, in which a series of presentations and talks were delivered by various Dignitaries and Experts from different disciplines.

Both the Sessions were moderated by Dr. Satya Prakash Mehra, eminent Wildlife Scientist and Founder-Advisor of Rajputana Society of Natural History (RSNH). The first session was conducted in the rural environment of Rajputana's Shakuntalam, Village Ramnagar and the second session was conducted within the boundaries of an academic institute J.K. College, Bharatpur. The Chief Guest of the occasion was Dr. Swaraj Vidan, Member of the National Commission for Scheduled Castes (NCSC), Government of India. Dr Vidan urged all participants to not let the Indian culture and heritage be forgotten and reminded them that it is this rich heritage of India which makes her a culturally developed nation in the world. Dr. Vidan was joined by Mr. Abhay Singh of National Bank For Agriculture And Rural Development

(NABARD), India; Dr. Umesh Chandra Gaur of Gandhi Smriti and Darshan Samiti, Delhi; Ms. Sadhana Gaur of Naari Manch; Mr. Surjit Singh of Banjara Society of Cultural & Natural Heritage; Dr. Sarita Mehra of RSNH and the Keynote speaker Dr. B.K. Gupta, Associate Professor, M.S.J. College, Bharatpur.

The Session began with mesmerizing Rajasthani Folk Dance *Ghoomar* performed by girls from rural communities trained by RSNH and was followed by introductory remarks and talks by the Dignitaries on the dais. The importance and contemporary relevance of the theme of the Seminar was highlighted by all speakers. Dr. Swaraj Vidan shared the rich legacy of India's past where every human being used to live in harmony with nature and wildlife as a way of life. Dr. Umesh Chandra Gaur appreciated and specially thanked the village participants for being present at the Seminar and encouraged them to continue to work towards rural development. In his Keynote speech, Dr. B.K. Gupta elaborated on Indian cultural and value system which has all the answers for the various environmental challenges being faced by India and the world today.

Both the sessions included interactive talks and presentations by Experts from the field of Environment, Wildlife, Media and other academic disciplines. These included Dr. Govind Singh from Delhi, Dr. Vinay Singh Kashyap from Jaipur, Dr. Vivek Sharma from Ajmer, Mr. Anil Rogers from Udaipur, Mr. Mukesh Panwar from Dungarpur and Mr. Diwakar Yadav from Ajmer. Dr. Govind Singh reminded the participants of the vision of Mahatma Gandhi, the Father of the Indian Nation, for carrying out inclusive development, so that the benefits of development can reach all sections of the society. He also urged the participants to join the Swacch Bharat Abhiyan (Clean India Mission) by keeping their surroundings clean and healthy. Dr. Vinay Singh Kashyap highlighted the intricate relationship between women and nature by focusing on the day to day activities carried out by women in their households. Dr Vivek Sharma shared from his knowledge of working with snakes and other reptiles and created awareness and sensitization in the participants for learning to co-exist with nature and wildlife. His talk also focused on the different species of snakes found in Bharatpur and on how to keep oneself safe from poisonous snakes. Mr. Anil Rogers focused his talk on the need to minimize human-wildlife conflict while Mr. Mukesh Panwar introduced the fascinating world of butterflies to the participants. Mr. Diwakar Yadav urged all participants, especially the youth, to realize that there life will become meaningless if the wildlife around us ceases to exist. A key highlight of the first day was the thematic display of philately themed on Nature and Wildlife. This was a unique initiative of Ms. Pushpa Khamesra and Mr. Ravi Khamesra (from Udaipur, India), of using postal stamps for raising awareness towards environment and wildlife.

The second day of the Seminar began with a field visit to Village *Umraind* in Weir Block of District Bharatpur, Rajasthan. All the Dignitaries and experts were taken to the recently constructed check-dam at *Umraind Nallah*, Village *Umraind* constructed with support from Coca Cola India Foundation (CCIF). The intricacies of the construction and working of the check-dam and also the benefits that the nearby region will obtain from it were shared by Dr. Sarita Mehra of RSNH. This was followed by the interactive public discussion led by Dr. Swaraj Vidan and other dignitaries with villagers from Village *Umraind* and neighbouring villages. The Two Day Seminar paved the way for more such interactions to bridge the deepening urban-rural divide in India. It thus served as a stepping stone for promoting inclusive and sustainable development of India as a whole.

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