

Edited by Dr. (Fr.) Mukti Clarence, S. J.

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TOWARDS SUSTAINABLE GROWTH IN INDIA: CONNECTING THE MISSING DOTS

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Acknowledgment

These few sentences reflect my appreciation, first and foremost, we thank the Almighty for inspiring us to publish this edited book "Towards Sustainable Growth in India: Connecting the Missing Dots." Second, I'd like to express my gratitude to all those who toiled to the creation of this book. I am indebted very much to every contributor to the book, who are the members of the faculty of the XITE College. Moreover, it was the support and cooperation of Dr. (Fr.) E.A. Francis S. J., the Principal of XITE College, that enabled us to bring out this edited book, for which we are always thankful to him. Fr. George Cheradayil, S.J. earns our appreciation for availing the funds for the publication of this book. I acknowledge with great thanks the valuable directions and advice that I have received from the members of the Jesuits community of the XITE Campus. Also, I express my gratitude to Dr. Sanchita Ghosh and Prof. Akinchan Xaxa for supporting me in proofreading and editing I'd also like to point out that the Kripa Drishti Publication provided us with all of the professional assistance we needed, such as cover design, proofreading, and printing the book, so our heartfelt gratitude to everyone at the printing press.

Finally, I am proud to say that from whatever XITE College has achieved in the academic domain, we owe much to our faculty for their continuous support in all our endeavors. My prayer now is that this edited book becomes a light to those who seek to understand the nuances of sustainability and its application in the developmental enterprise. The XITE College is happy to dedicate this book to all those who are harbingers in sustainable-related work.

Dr. (Fr.) Mukti Clarence S. J.

Forward

The XITE College makes every effort to create an environment in which both teachers and students can devote significant attention to the need and importance of critical analysis and investigation. The current book, in my opinion, is the consequence of such an activity. First and foremost, I thank the contributors of the book for studying the subject with a razor-sharp keen intellect. In the same vein, I'd like to thank the college's research cell, led by Dr. (Fr.) Mukti and Dr. Sanchita Ghosh for taking a keen interest in this project and carrying it out with audacity.

I must acknowledge that the title of this book, "Towards Sustainable Growth in India: Connecting the Missing Dots," is well chosen. A topic of this sort must be examined and investigated because of its importance. As far as I can tell, sustainability is a prevalent topic these days. As a result, its definition, measurement, implication, and application become universal. If India is to achieve sustainable growth, the current research problem must be addressed: what is a success, are we losing sight of sustainability, is sustainability a just cliche?

Meeting our own needs without risking future generations' ability to satisfy their own is what sustainability means. The United Nations declared 17 Sustainable Development Goals (SDGs) for 2030 (eradication of poverty and hunger; provision of quality education, wellbeing, gender equality, clean water, clean energy, economic growth, climate action, and peace). As a result, the chapters in this book address two key areas: understanding the concept and its implications. Rapid technological progress, more corporate enterprise, population growth, increased governmental engagement in business, and increased social consciousness make development work critical. These elements influence how people think about sustainability and its implications. I am sure the contributors of the book worked hard to put their reflections together to educate young minds about the fundamental concepts and principles of sustainability. Thus, this book will become a good friend to you and help you comprehend the complex concept of sustainability, allow you to analyze any project through the desired lens, and raise our society's esteem and morale to new heights.

> Dr. (Fr.) E.A. Francis, S. J. Principal, XITE College June 2023

Editor's Note

These days academia grapples with the discourse on poverty, exclusion, violence, and availability of natural resources for future generations. They got public attention since United Nations (UN) declared Sustainable Development Goals (SDGs). Sustainable development (SD) is a buzz phrase when one talks about the progress and growth of a particular country. It touches almost every sphere of life for example governance, polity, institutions, and citizens' well-being. Though this concept was popularized by the UN; however, it requires focus, evidence-based research, and generalization of implications to reach people concerned so that it becomes intelligible to the masses. The purpose of this book is to offer to the debate on SD and areas that remain uncharted (the missing dots) of a particular discipline and its ramification.

Faculty of XITE College have explored the topic from their subject domain and brought to the fore the newer insights and knowledge that the academic community desires. This is achieved through a rigorous review of papers, case studies, and analysis of the same. The book, in sum, argues that the topic SD includes multiple perspectives for example democracy, education, policy, taking care of mother earth, and economy which presupposes ethical human behavior and civic sense. Another important area that books discover is development which focuses on inclusiveness, and political will to pursue. In other words, to give a place where "everyone life's matters" in the present and future. We have the means and will to achieve SD but unless it becomes a concerted effort, the gap will continue to remain.

Prof. Amit Chaturvedi in his chapter explains that as far as India is concerned, the SDG4 is being taken seriously. The government has made significant efforts to ensure educational sustainability by 2030. The National Education Policy 2020 was written with this goal in mind. This chapter attempts to explain the various provisions of SDG4 and the NEP 2020.

He also attempts to examine and comprehend the government's many plans and activities aimed at achieving educational sustainability by 2030. This chapter was prepared using secondary data by the writers. The analysis and comments presented here are solely based on the writer's ideas and his extensive expertise in the educational area.

Dr. Partha Priya Das states in his chapter how Tinplate Company of India Ltd. (TCIL) appropriates human, social, economic, and environmental foundations - known as the four pillars of sustainability. To back up his argument, Dr. Partha uses the Tinplate Company of India Limited's ESG (company's environmental, social, and governance performance) ranking of 54% versus 32,122 other companies.

In the next chapter, Dr. Pramod argued that the SDGs 2030 are a worldwide initiative of 193 United Nations (UN) Member Nations calling for bold actions toward sustainable development that prioritize people, planet, peace, and prosperity. In this setting, the Environment Social Governance (ESG) initiative to achieve the SDGs takes on added relevance. The path forward is a holistic humane approach underpinned by pure professionalism with a multi-disciplinary foundation in using ESG as the framework to achieve the SDGs.

Dr. Radha Mahali analyzes and examines the role of NAMSA in Sustainable Agriculture in her chapter by highlighting several Central Sponsored programs / Schemes under NAMSA's banner. She evolved the approach using secondary data and denotes that Governments distribute ongoing and newly initiated programs throughout the country following the requirements of the development process. Finally, she asserts that Sustainable Agriculture is critical to the process of Sustainable Development. Agriculture is one of the most effective tools for alleviating poverty and improving local livelihoods. One of the most important requirements of the agriculture sector is the establishment of effective governance structures and related policies at all levels. As a result, studying Sustainable Agriculture and the role of government in it is important. Therefore, the Government ought to initiate some schemes and programs to achieve its goal.

Dr Rajesh Kumar Rana in his chapter examines that women make up around half of the total population in our country. Girls will be excluded from economic activities if they are treated differently than boys. When this happens, the country's growth and human development will be cut in half. Because it is the daughter who will become a future mother. Education for daughters is critical in creating a decent social environment and enhancing the lives of future generations. It also aids in population management by encouraging family planning, lowering child mortality rates, and challenging societal dogmas.

Prof Ria Basu maintains in her chapter how our eyes avoid the societal evil of sexual exploitation against the backdrop of prosperity. Sacrificing sacred sexuality on the altar of progress isn't it numbing? Prof Ria supports her argument by using nuances from two of Manto's child characters, 'Sarita' from Dus Rupaiyya' and 'Khali' from Tamasha' to discuss the importance of studying the sociocultural and psychosexual causes that cause their understanding of the world around them to become 'ugly' and 'distorted'. The rationale for this chapter's inclusion in the area of sustainability is that the path to growth does not include combating the evil of sexual exploitation. As a result, this chapter calls for a discussion on the subject.

Dr. Sanchita Ghosh Chowdhury, in her chapter, has explored that the automobile sector in India accounts for more than 7% of India's GDP and over half of the country's manufacturing GDP. Therefore, it remains a significant employer, supporting almost 37 million direct and indirect jobs. To discover acceptable solutions, a slowdown in such a sector must be extensively analyzed and the causes and effects meticulously isolated. She has tried to identify plausible causes and assess the likely consequences so that suitable policy measures can be implemented to address the distortions

In another chapter by Prof. Shailesh Kumar Dubey juxtaposes that Carbon emissions are the primary source of environmental damage, putting environmental sustainability in peril. This ecological concern, for which all economic actors bear responsibility, has not gone unnoticed. He stated that environmental taxes, renewable energy, and access to clean fuels and cooking technologies reduce carbon emissions for economies. Urbanization and population growth, on the other hand, increase emissions. Thus, policy approaches that would aid in lowering carbon emissions and their negative environmental repercussions must be investigated.

Prof. Sushmita Choudhury Sen investigated in her chapter how, although women make up over half of the Indian population, their participation in entrepreneurial activity remains severely constrained. During founding and maintaining their businesses, they face a variety of gender-specific and gender-neutral problems. There is an urgent need to decode policy imperatives and interventions that can foster an environment conducive to women entrepreneurs in India.

Dr (Fr) Mukti Clarence indicates in his chapter the initiative of the Jesuit Order who have come with the preference in their ministry and how those preferences are close to sustainability. Consequently, it could be said that Universal Apostolic Preference (UAP) is in keeping with the SD. Fr. Mukti proposes that the four apostolic preferences focus on improving social justice for the poor and vulnerable, with a deliberate emphasis on the effects of climate change. It is geared toward "the mission of reconciliation and justice in all of the apostolic services" of the Jesuits, including their lay associates. In other words, UAP is oriented around ending poverty and protecting the environment, and he finds each of the preferences to be extremely resonant with SD.

In the end, my sincere thanks to all the authors for their contribution in the way of the chapter. My heartfelt gratitude to our principal Dr (Fr) E.A. Francis for his incessant guidance, inspiration, and support in the publication of this book. I remain indebted to Prof. Akinchan Xaxa who helped me in editing and proofread. I hope that this book will be immensely valuable and through-provoking for the readers. Nothing will give us greater pleasure than to hear from the readers how well, or not, the book has fulfilled the objectives it set out to achieve. Keep the feedback coming, and we promise to get better at what we are doing-one written word, at a time.

Dr. (Fr.) Mukti Clarence, S. J. The Editor

Contributors' Profile

Prof. Amit Chaturvedi has been working as an Assistant Professor in the Department of Business Administration at XITE College, Jharkhand since 2018. Earlier he completed a full-time MBA program from Biju Patnaik University of Technology, Odisha in 2005 with 70.5 %. He has qualified National Eligibility Test (NET) conducted by University Grants Commission (UGC) in management with 74.29%. He is pursuing his Doctoral Research in Management from Arka JainUniversity, Jharkhand. He has seventeen years of teaching experience in different colleges and institutions including as a resource person in the National University Students' Skill Development Project, a central government project implemented by Tata Institute of Social Sciences, Mumbai. He had been an Academic Counsellor & Evaluator at Sikkim Manipal University and was recognized as an Edunxt resource person by the same. Presently he is an Academic counselor for the MBA program offered by Indira Gandhi National Open University. His research interest includes Business Ethics, Service Marketing, International Business, etc. He has attended numerous FDPs, workshops, seminars, conferences, and training programs including short-term courses offered by IIT Kharagpur, and presented several papers in seminars and conferences. He writes articles for the XITE College magazine and a chapter for the edited book. He is a lifetime member of the Indian Society for Training & Development, New Delhi, and a Life Time Associate Member of the Indian Society for Applied Behavioural Science, New Delhi. Mr. Amit stands for values like Equality and Justice.

Dr. Partha Priya Das started his career as a PGT in Accountancy and Business Studies at Jamshedpur Public School. After serving 21 years as a senior teacher and a member of Quality Circles in school, he joined as a member of the faculty in the Department of Commerce and Business Administration at XITE College, Gamharia. Dr. Das's area of interest is Accountancy, Income Tax, Marketing, Research Methodology, and General Management. His research area focused on Globalization and its impact on Private Sector Enterprise. He is also the NAAC coordinator in the college and takes care of IQAC with the team members. Dr. Das published many research articles in various peer-reviewed journals and book chapters. Since 31 years of being actively involved in teaching, he is also engaged in the cultural field through Indian Classical Music and established himself as a graded artiste in All India Radio.

Dr. Pramod Kumar Singh is currently working as an Assistant Professor at XITE College. He has over 6 years of teaching experience in the field of Commerce & Business Management taking MBA, M. Com, BBA & amp; B. Com classes and also has experience working in a multinational company, where he has worked in various foreign languages as well. He has also published various research papers in reputed journals. Professor Singh's research interest includes E-Commerce, Finance, costing, and taxation. During a short period, his knowledge and accomplishments are remarking.

Dr. Radha Mahali is presently teaching as Assistant Professor in the Department of Economics at XITE College, Gamharia. She obtained her Ph.D., and MA in Economics with Gold Medal. Her specialization is Demography, Industrial Economics, and Labour Economics. Also, she has cleared UGC NET. Her research area includes women's economic empowerment. She has a total of more than 10 years of teaching experience.

Dr. Rajesh Kumar Rana is currently, he is an assistant professor at XITE College, Ghamaria, Jamshedpur, Jharkhand. Formerly, he was teaching at the University Department of Economics, Ranchi University. He completed his Ph.D. in Economics from the Department of Economics, Ranchi University, Ranchi. The thesis is titled "Gender Disparity in household expenditure on human development of school-going children in Jharkhand: a case study of Chatra District". He has published seven articles; one in an international journal and six in national journals, and has edited a

chapter in a published book. Five research papers were presented by him on varied topics, like gender disparity, environmental problems, higher education, and entrepreneurship. He has also attended four workshops on Gender and Media, Feminist Research Methodologies, Women's Studies: Basic Concepts and Issues, and Women in Contemporary India: Contexts and Possibilities. He is a UGC: NET/JRF scholar and has received a Ph.D. scholarship award from IAWS (Indian Association for Women Studies). His Post Graduation was done from the University Department of Economics with a specialization in Mathematical economics and Econometrics from Ranchi University, Ranchi. Graduation was completed in economics with a specialization in Mathematical economics and Econometrics from R. L. S. Y College, Ranchi University, and his Intermediate (Arts) and matriculation was from JAC Board. His area of interest is in econometrics and is passionate about human development in the context of the economically marginalized, and gender disparity within the former.

Prof. Ria Basu is currently pursuing her Ph.D. on 'Locating the multifaceted nature of Human Sexuality in the works of Sarat Chandra Chattopadhyay, Ismat Chughtai, and Saadat Hassan Manto from Dr. H.S Gour Vishwavidyalaya (Central University of Sagar), Sagar, Madhya Pradesh. She has completed her graduation and Post-graduation in English Literature from the Department of English, Banaras Hindu University (BHU). She has spent around four years working as a senior English faculty in an institution that trains students for career enhancement and acing aptitude examinations worldwide along with being the Campus Recruitment Trainer for IIT (Indian Institute of Technology) BHU, Varanasi. Her areas of specialization are Gender Studies, Sexuality Studies, and Indian Sexuality, and has several publications on the same. She has also read her research papers at various International and National Conferences. She has been an orator since the age of 12 and a thespian since her school days leading to her representing her school and university nationwide. She is currently working as a Faculty in the Department of English at Xavier's Institute of Tribal Education (X.I.T.E), Jamshedpur, Jharkhand, India.

Dr. Sanchita Ghosh Chowdhury is an Assistant Professor of Economics and Finance at the Xavier Institute for Tribal Education, Gamharia, India. Trained in Economics with specialization in Econometrics and Statistics, she has worked in several eminent institutions including RWTH, Germany, and XLRI, Jamshedpur. Her current research interests include public policy, economic shocks, and economic reforms. With over 14 years of experience in teaching and research, she is passionate about motivating and empowering students to explore and understand their inherent skills.

Mr. Shailesh Kumar Dubey is an Asst. Professor at XITE College, Gamharia. He possesses the following eligibility: NET(Commerce), ACS (Associate Company Secretary), CA Final, Pursuing Ph.D., MCOM(Finance), SAP FICO. His research area includes taxation, accounts, company laws, and Auditing. He has teaching experience of 5+ years and industry experience of 10+ years in internal, bank audit, company law, taxation, and corporate finance. Further, he has experience in project implementation with a demonstrated history of working in the accounting and taxation industries.

Prof. Sushmita Choudhury Sen is a research scholar at Kolhan University, Chaibasa, and is presently working as an assistant professor in the Department of Commerce at XITE College, Gamharia. She holds two post-graduation degrees: an MBA (Finance) and an M.Com. (Marketing). She has been teaching for the past twelve years. Her area of research includes management, behavioral economics, and behavioral finance. She has published five book chapters in edited books and six research papers in UGC-certified peer-reviewed open-access journals. She is also a lifetime member of the Indian Commerce Association. She has presented research papers in seventeen national and international seminars and participated in 16 workshops.

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1. New Education Policy (NEP 2020) of India-Scope and Challenges

Prof. Amit Chaturvedi

Abstract:

The fourth goal of seventeen Sustainable Development Goals (SDGs) 2030 set by United Nations is Quality Education. One of its targets is that by 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. The New Education Policy (NEP 2020) of India has to be fully implemented by 2040. The institute or the university has to function as a universe of knowledge implying that the knowledge is always an intersection of various disciplines. The NEP 2020 talks of having a single regulatory body to govern the higher education in the country. To fully implement the NEP 2020 there has to be a broad consensus between the central government and all the state governments.

The NEP 2020 also talks about inculcating innovation and creativity among the students of schools and colleges. Since India is a signatory to the SDGs of United Nations therefore the NEP 2020 includes provisions of value education at different levels. The NEP indicates increasing the expenditure on education sector up to 6% of the GDP. This policy also provides the multiple entry and multiple exit options to be given to the students of higher education. The mid-day meal scheme has also been extended to the preschool level.

At present 0.69% of GDP of India is spent for research and innovation which needs to increased. The goal is to make GER as 50% by 2035. The NEP should promote studies related to gender equality, women issues, marginalised section of the population etc. The enrolment of population from such sections should be increased and should be given priority.

Keywords:

New education policy; GDP; SDG; skill-based education; India

Introduction:

The fourth goal of seventeen Sustainable Development Goals (SDGs) 2030 set by United Nations is Quality Education. One of its targets is that by 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

The first Education Policy in India was brought in 1968 and the second one was introduced in 1986. National Policy of Education (NPE) 1968 gave a new direction to standardize education within the country. It was instrumental in creating a structure of 10+2+3 and promoted the use of the mother tongue as well. The 1986 Education Policy, under the Prime Ministership of late Shri Rajiv Gandhi, had talked about access, equity, quality, affordability and accountability related to the education sector.

After a long period, the new education policy has been introduced in the country. This policy sounds very ambitious and progressive. The New Education Policy (NEP 2020) formulated by the government of India in 2020 has to be fully implemented by 2040.

The time frame for its implementation sounds very long considering the fact that this policy itself has come after a long time. The new education policy talks about the multi-disciplinary studies.

There would be no Single Discipline University after 2030 which means that the universities have to prepare themselves to introduce new disciplines of study which may be a challenge for the those operating with a single discipline. The different sectors in many of the economies world over has taken a very significant role and therefore the knowledge and its applications are well appreciated and practised.

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It will continue to be like this in future as well since this is an era of knowledge revolution. The institute or the university has to function as a universe of knowledge implying that knowledge is always an intersection of various disciplines and all knowledge finally meet in an ocean of knowledge. The knowledge produced should be an integration of the different disciplines that are taught in the university. The previous governments in India did not focus so much on the education sector.

The Art. Science and Commerce streams being incorrectly thought earlier as unrelated streams is now correctly interlinked in this policy. Students' choices have been widened. The subjects could be taken from all the streams and they can be studied together. This would give them more flexibility and would allow them to see the possible linkages that the different subjects have.

The conventional belief of assuming Art, Science and Commerce as different and separate streams had led to the confusion about the ultimate knowledge. In the last thirty years since globalisation the applicants for engineering and business management courses have increased many folds. These disciplines have dominated the education sector in India. The Liberal Art has been less focussed. The components of social and human values are not properly focused in professional education as it is focused in the streams of Liberal Arts. The students completing professional education are highly intelligent but have less morality and they do not stand for human and social values when the circumstances and the situation demand. The social science and the liberal art help the students to develop a holistic mind. It has also been said that the colleges would provide degree in the future as it is the case in USA implying more of autonomy would be given to the colleges. There are no regulators like University Grants Commission in USA. In India the higher education system is over regulated and grossly underfunded. Autonomy is not given to the lower levels or the affiliated institutions. The power is still not delegated to the lower levels in India. The regulators should trust their affiliated colleges and University and certain degree of autonomy should be provided to them so that they can function at their own pace. The present higher education system is Vice Chancellor centric. The departments and the lower levels should be empowered. Policy in itself is not a law but a loose commitment. The education comes under the concurrent list in the constitution of India. It is a state's subject as well as a centre's subject and therefore the full implementation of New

Education Policy would be a challenge. The different states have to pass legislations in their legislative assemblies. Invariably there are differences of opinion between the centre and the state and therefore the full implementation of the new education policy would be difficult and time consuming. Many commissions and councils related to the different discipline in education sectors have been passed in the Parliament and they have taken the shape of a law. The new education policy talks of having a single regulatory body to govern the higher education in the country. Statutory bodies like UGC have to be repealed in the Parliament itself and it will again be a time-consuming affair. To fully implement the NEP 2020 there has to be a broad consensus between the central government and all the state government. The institutions would be required to change their approach in this new education policy. The foreign universities would be introduced in India. There is a scope of the top 100 universities of the world entering in the Indian market. It would be interesting to see foreign universities' operation in India and its impact on the existing government and private colleges and universities from the perspectives of the educational fee, quality of education and the system that they would offer. It is a great move that the Right to Education Act has been extended and now it will be applicable for the children between 6 and 18 years. In the age of globalisation, the time to market has become very short. The concept of innovation and its importance has become very significant and every corporation and country in the world is focusing on it. On the expected lines, the new education policy also talks about the inculcating innovation and creativity among the students of schools and colleges in India. The views of different business tycoons in India reflect that the Indian graduates are not employable and the required skill set has to be developed in them so that the degree holders are ready for the industry. Similarly, the policy also talks of developing critical thinking abilities among the students.

The word value reflects the importance, worth, desirability and the respect something gets in return (Soykan, 2007). As a sociological concept, values refer to similarities and shared demands.

Social values are moral beliefs and principles that are accepted by the majority so as to ensure the continuity of a society (Ergil, 1984). What sociologists call collective consciousness are called by philosophers' objective soul are the domain of common values (Ulken, 2001). Values are belief-based narratives that shape our approach to stuff and events

New Education Policy (NEP 2020) of India-Scope and Challenges

(Ulgener, 1991). Societies without ideals cannot be happy (Kanad, 1942). Values are the common thoughts about what is socially right or not, and directly affect human behavior (Kornblum 1994; Özgüven, 1994; Halstead and Taylor 2000; Carr and Skinner 2009). Value education constitutes a solid basis for a better human being, society and world. (Mimar 2014). Values education and character education are among the concepts that define a successful education in terms of student success and academic acquisitions (Lovat, 2011). Value education should be included in the curriculum and there is the need of a comprehensive programme of value education which can enable students to meet new situations in the world of values, not only as they are now, but also in any new situation that may arise in future. The importance of value-oriented education is to understand and bring highly commendable values and wisdom in the students. It is an integral part of intellectual development. (Reyaz 2018). Study of the comparisons of national curricula on citizenship education and globalization raises more questions than answers. It appears clear that striking a balance between aligning with universal commitments and responsibilities and enduring centrality of the nation state as the primary citizen agency for belonging and identity is a major challenge (Kymlicka, 2000; Pashby, K. 2008; Reid, A., Gill J. and Sears, A. 2010) and that only some national curricula are starting to address this challenge. (Cox, 2016). An article in UNESCO's journal, Prospects, stated that 'globalization is one of the most important changes taking place in societies around the world today and yet it is unclear that schools have realigned their purposes to prepare their students to be competent citizens in an age of globalization' (Reimers, 2006, p. 277). UNESCO defines Global Citizenship Education (GCED) as '...a framing paradigm which encapsulates how education can develop the knowledge, skills, values and attitudes learners need for securing a world which is more just, peaceful, tolerant, inclusive and sustainable' (UNESCO, 2015, p. 9). The concept includes 'civic and citizenship education' but expands it beyond its national 'boundedness', transforming its traditional content (which referred to living together in local and national contexts, and relationships with the national political system), through a new perspective and framing, which are defined by the GCED's global reach. Global Citizenship Education (GCED) is a concept that lies at the heart of UNESCO's vision for education in the 21st Century (UNESCO, 2015a), and is a pillar for the Sustainable Development Goals and the 2030 Education Agenda (UN, 2015; UNESCO, 2015b).

GCED supersedes earlier education initiatives, integrating prior definitions on 'education for international understanding, cooperation and peace, and education relating to human rights and fundamental freedoms' (UNESCO, 1974), 'education for peace, human rights and democracy' (UNESCO, 1995), and education for 'learning to live together, learning to be, learning to know and learning to do' (Delors et al., 1996). Furthermore, the new concept of GCED embraces all key dimensions of educational transmission: curriculum, pedagogy and evaluation, principles and practices, as well as teaching and learning. (Cox, 2016). Since India is a signatory to the sustainable development goals of united nations therefore the new education policy 2020 includes provisions of value education at different levels.

It also includes direction to impart constitutional studies. The policy also talks of admitting students from diverse background and practising the principle of inclusivity in education which is also a guideline from UNESCO.

The fact of the matter is seventy percent of the education sector in India has gone in private hands over a period of time. Privatization is directly or indirectly encouraged in education. The continuous increment in the privatization of schools and colleges in India and its impact on the society has also been addressed in the policy where the government has talked about increasing the expenditure on education sector up to 6% of the GDP. The investment done by the government in their institutions can be easily observed. The policy also talks about the primary education to be imparted in the mother tongue but it would be a big challenge to practically implement this idea in the private schools. This policy also talks about the multiple entry and multiple exit options to be given to the students of Higher Education. It means at the completion of each year of the graduation program the students will have option to change the college or university. Further the students can get a certificate, diploma, bachelor's degree or research with bachelor's degree at the end of first, second, third or fourth year respectively. The students can also drop for some years and can continue later with previously earned credits. The credits will be deposited in Academic Bank of Credit. The mid-day meal scheme has also been extended to the preschool level but it has to be closely monitored because the cases of wrong and adulterated food offered under this scheme are reported in the media. The policy also favours the reduction in the curriculum.

New Education Policy (NEP 2020) of India-Scope and Challenges

We have already seen the tussle related to the NEET medical entrance examination in India that is conducted for the entire country. The research conducted in the west related to the countrywide common test infers that the common test is exclusionary. Therefore, single entrance test for all the colleges and universities in India may not be very bright idea considering the limitations and variations of the country's geography. Research is always required to be upgraded and in this direction the NEP talks of emphasis on research and innovation. When the government talks about the 'Make in India' programme or making India as an export hub then it has to boost the competitiveness of the industries. Therefore, the research and innovation are something that should be made important right from the school and college level up to the industry level. The governments of Japan and South Korea spends a good percentage of their GDP on research. Similarly, the corporations of these countries also spend a high amount on research and development. At present 0.69% of GDP of India is spent for Research and Innovation. For USA this data is 2.8%. China spends 2 percent. For Israel and South Korea this data is 4.3% and 4.2% respectively. The MPhil degree will no more be offered by the higher education institutes. The Gross enrolment ratio has always been poor for different reasons and its effect on the macro environment has also been very pathetic. At present the gross enrolment ratio is 23% and the goal is to make it 50% by 2035. The NEP should promote studies related to gender equality, women issues, marginalised section of the population etc. The enrolment of population from such sections should be increased and should be given priority.

References:

- 1. Carr D. & Skinner D. (2009). The cultural roots of professional wisdom: Towards a broader view of teacher expertise. Educational Philosophy and Theory 41(2):141-154
- Coser, L. (1977). Ideas in historical and social context: Masters of sociological thought. USA: Harcourt Brace Jovannovich, Inc. Qengel, Y. (2011). Human values for a safety future. Egitime Baki§, 19, 13-17. Dogan, i. (2011). Sociology of education. Ankara: Nobel Yayinlari. Ergil, D. (1984). Society and human. Ankara: Turhan Kitabevi.
- 3. Cox, C., 2017. Global citizenship concepts in curriculum guidelines of 10 countries: Comparative analysis.

- 4. Halstead, M. & Taylor, M. (2000). Learning and teaching about values: Areview of recent research. Cambridge Journal of Education, 30, (2).
- Kanad, H. F. (1942). National idealism and national education, (Milliyet ideali ve topyekün milli terbiye). Ankara: Qankaya Matbaasi. Koenig, S. (2000). Sociology, (Translated by S. Sucu & O. Ayka§), istanbul: Ütopya Kitapevi. Macionis, J. (1997). Sociology. New Jersey: Prentice-Hall International.
- 6. Kornblum, W., (1994). Sociology in a changing world. Harcourt Brace College Publishers.
- 7. Lovat T (2011). Values education and holistic learning: Updated research perspectives. Int. J. Educ. Res. 50(3):148-152.
- Mimar Türkkahraman. "Social Values and Value Education" Procedia - Social and Behavioral Sciences, vol. 116, 2014. doi: 10.1016/j.sbspro.2014.01.270
- [Reyaz Ahmad Bhat. (2018); VALUE BASED EDUCATION: A NEED OF PRESENT SOCIETY. *Int. J. of Adv. Res.* 6 (Oct). 838-843] (ISSN 2320-5407). www.journalijar.com
- Reimers, F. 2006. Citizenship, identity and education: examining the public purposes of schools in an age of globalization. *Prospects*, vol. XXXVI, no. 3, September 2006.
- 11. Soykan, Ö. N. (2007). Is it possible a general valuable human moral? (Genel ge§er bir ahlak olanakli midir?). In K. Recep (Eds), Degerler ve
- 12. Özgüven, İ. E. (1994). Psikolojik testler [Physchological tests]. Ankara.
- Araştirmalari Dergisi, 18, 149-155. Ülken, H. Z. (2001). Knowledge and value (Bilgi ve deger). istanbul: Ülken Yayinlari. Whitehead, A. (1959). The aims of education. New York: Macmillan.
- 14. https://www.un.org/development/desa/disabilities/envision2030-goal4.html
- 15. https://en.unesco.org/themes/inclusion-in-education/action

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2. Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

Dr. Partha Priya Das

The Key Message:

Sustainable development in India encompasses a variety of development schemes in social, clean-tech (clean energy, clean water and sustainable agriculture) and human resources segments, having caught the attention of both Central and State governments and also public and private sectors.

In fact, India is expected to begin the greening of its national income accounting, making depletion in natural resources wealth a key component in its measurement of gross domestic product (GDP). The term sustainability is broadly used to indicate programs, initiatives and actions aimed at the preservation of a particular resource. However, it actually refers to four distinct areas: human, social, economic and environmental – known as the four pillars of sustainability.

Breakthrough of the Company:

Tata Tinplate, listed as The Tinplate Company of India Limited (TCIL), is a subsidiary of Tata Steel. Founded in 1920, TCIL is India's oldest and current largest tinplate manufacturer. TCIL has a 70% market share in India and exports a fourth of its products outside India.

On January 20, 1920, the Burmah Oil and The Tata Iron & Steel Company (TISCO) jointly incorporated The Tinplate Company of India Limited (TCIL) to cater the demand that arose during the First World War.

By November 1921, structural steel for the plant and machinery were imported from USA and UK and, the plant was set up at Golmuri, near

the Tata Steel works, Jamshedpur. By December 18, 1922, first Hot Dip Plant started rolling out finished tinplate. In April 1928, the Victoria brand kerosene oil of the Burmah Oil, was packed in cans made from the tin sheets produced at TCIL.

With the outbreak of World War 2, TCIL diversified into the manufacturing of un-tinned black plates used in Jettison tanks for the Royal Air Force. Also, TCIL took over processing of steel from sheet mills of Tata Steel to augment production.

TCIL entered into an agreement with Wean United Canada, for switching to Electrolytic Tinning Process. In 1973, ETL-1 was commissioned with a capacity of 90,000 tons per annum, capable of producing tinplate and tin free steel. In 1996, TCIL setup its first Cold Rolling Mill Complex (CRM-1) with a capacity of 110,000 tons per annum, as part of backward integration to produce TMBP coils as raw material for the tinning line there by removing the dependence on imports. In 2005, TCIL commissioned a printing and lacquering line, as a part of forward integration, thereby reducing supply chain inefficiencies.

In 2007, TCIL doubled the capacity by commissioning of the second Tinning Line (ETL-2), enhancing the mill capacity from 179,000 MT to 379,000 MT. In 2008, TCIL set up its second Cold Rolling Mill (CRM-2) facility to meet the requirements of TMBP coils to feed the second tinning line ETL-2. Addition of new assets increased the company's turnover by lifting the production and sales to 360,000 tons in 2018–19. In 2012, Tata Steel increased its shareholding in TCIL to 73.44% which currently stands at 74.96%. Through volumes, TCIL holds 70% market share in India and exports 25% of the production to South-East Asia, Europe, and the Middle East. In August 2021, announced its expansion plans, an additional capacity of 3,00,000 tons per annum.

TCIL manufactures Tinplate as cut sheets & coils, Electrolytic Tinplate, Tin Free Steel (TFS)/Electrolytic Chromium Coated Steel (ECCS) and other value-added/downstream products. TCIL caters diverse segments, including but not restricted to Edible Oils, Paints & Pesticides, Processed Foods, Battery & Aerosols, and manufacturers of bottle crowns. In 2018, TCIL introduced 'PAXEL', India's first branded tin can for edible oil packaging. Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

The Tinplate Company of India Limited (TCIL) is a pioneer and leading tinplate producer in India. With a strong parentage from Tata Steel, TCIL was able to provide unrivalled quality and on-time delivery.

This enabled TCIL to maintain our leadership position in the tinplate market. 47% Domestic tinplate market share 18% Growth in sales over FY 2020-21 3,79,000 MTPA Production capacity in FY 2021-22 3,00,000 MTPA Capacity addition planned Becoming bigger and better We have a state-of-the-art 3,79,000 MTPA manufacturing facility at Jamshedpur, Jharkhand and we have achieved ~100% capacity utilisation. With growing demand for tinplate driven by rising urbanisation and penetration of organised retails, we have planned to expand our capacity by additional 3,00,000 MTPA at our existing location in the next few years.

The vision of the company is to be an industry leader in value creation, servicing packaging needs and creating a greener future. Mission Service customer requirements of green packaging by offering reliable, cost-effective and value-added tin mill products.

The tinplate industry in India was primarily dominated by the Tinplate Company of India Ltd. (TCIL) in the early years after India gained independence in 1947.

The company, which was established in Kolkata in 1920, was the first to produce tinplate in India and played a crucial role in developing the Indian metal packaging industry.

TCIL began as a collaboration between the Indian Iron and Steel Company (IISCO) and the British tinplate manufacturers "Lyle, Mackay and Company" and "The Tin Plate Company, London". The company started producing its first tinplate in 1923 and quickly established itself as a leading tinplate manufacturer in the country. In the following years, TCIL expanded its operations and set up additional facilities in Jamshedpur and Pune to meet the growing demand for tinplate products. The company's products were widely used in the food and beverage industry, including packaging for fruits, vegetables, and other perishable goods, as well as for paints, chemicals, and pharmaceutical products.

In the 1960s and 70s, TCIL faced mounting competition from other players in the tinplate industry, including Indian Steel and Wire Products (ISWP) and Bengal Steel.

Additionally, the Indian government's policy of promoting small-scale industries led to the proliferation of smaller tinplate manufacturers across the country.

In the face of this competition, TCIL invested heavily in modernizing its production facilities and expanding its product range. The company also established a research and development centre to improve the quality of its products and develop new alloys and coatings to meet changing customer needs.

In the 1990s, TCIL signed a technology licensing agreement with USbased tinplate manufacturer, JW Aluminium Co., to produce high-quality tinplate for the Indian market. This collaboration helped TCIL improve its production processes and introduce new products and services, enabling it to compete effectively in the Indian tinplate market.

Today, TCIL remains the leading producer of tinplate in India and continues to innovate and evolve to meet the changing needs of its customers. The company's products are used in a wide range of applications, including food and beverage packaging, pharmaceuticals, and industrial products, and TCIL is recognized as a pioneer in the Indian metal packaging industry.

Tinplate Company of India Ltd. (TCIL) is one of the leading tinplate manufacturers in India. The company's sustainability approach is based on its commitment to the environment, social responsibility, and economic growth.

Environmental Responsibility: TCIL believes in minimizing the environmental footprints of its operations. The company has implemented various initiatives to conserve natural resources, reduce energy consumption, and promote green practices. It has a zero-waste philosophy, which means that it strives to reduce the amount of waste generated and reuse or recycle it whenever possible. Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

TCIL has also installed a rainwater harvesting system to conserve water and an effluent treatment plant to treat waste water before it's discharged. The company has a dedicated team to monitor and reduce its carbon footprint by optimizing energy and resource usage.

Social Responsibility: TCIL is committed to promoting human rights, fostering diversity and inclusive behaviour, and supporting the local communities where it operates. The company provides employment opportunities to the local population and emphasizes on their personal and professional development.

TCIL has set up various programs to support local education, healthcare, and infrastructure development. It also collaborates with the government and other stakeholders to address social issues such as poverty, inequality, and discrimination.

Economic Growth: TCIL strives to create value for all its stakeholders, including customers, shareholders, and employees. The company aims to achieve sustainable economic growth by focusing on innovation, excellence, and customer satisfaction.

TCIL invests in research and development to develop new products, improve processes and increase efficiency. It has also implemented a robust quality management system to ensure that its products meet the highest standards.

In conclusion, TCIL's sustainability approach is based on its commitment to environmental responsibility, social responsibility, and economic growth. The company's initiatives reflect its determination to build a sustainable future for itself and its stakeholders in a socially responsible way.

Human Sustainability in TCIL:

Human sustainability aims to maintain and improve the human capital in society. Investments in the health and education systems, access to services, nutrition, knowledge and skills are all programs under the umbrella of human sustainability.

Natural resources and spaces available are limited and there is a need to balance continual growth with improvements to health and achieving economic wellbeing for everyone.

In the context of business, an organisation will view itself as a member of society and promote business values that respect human capital. Human sustainability focuses on the importance of anyone directly or indirectly involved in the making of products, or provision of services or broader stakeholders e.g., the human capital of the organisation.

Communities around the globe may be positively or negatively affected by business activities, or impacted through methods used to source raw materials. Human sustainability encompasses the development of skills and human capacity to support the functions and sustainability of the organisation and to promote the wellbeing of communities and society.

Tinplate Company of India Ltd. (TCIL) is committed to promoting human sustainability through various initiatives that focus on employee well-being, health, safety, and professional growth.

The company has a strong belief that sustainable development can only be achieved through the creation of a healthy, positive and safe work environment that values diversity and encourages personal and professional growth.

Here Are Some of The Initiatives Taken by TCIL For Human Sustainability:

- **A. Employee Well-Being Programs:** TCIL regularly conducts employee well-being programs that aim to improve the physical, mental, and emotional health of its employees. The company provides access to on-site clinics, gyms, and sports facilities to promote a healthy lifestyle.
- **B.** Workplace Safety: TCIL ensures that its employees work in a safe and hazard-free environment. The company has implemented strict safety policies, procedures and training programs to minimize accidents at the workplace.
- C. Professional Development: TCIL believes in the growth and development of its employees. The company provides training

Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

programs, job rotation opportunities and career development initiatives to its employees, thus fostering a culture of continuous learning and development.

- **D. Diversity and Inclusion:** TCIL values diversity and aims to create an inclusive and respectful work environment. The company has implemented policies and programs that promote equality, diversity and inclusivity.
- **E. CSR Initiatives:** TCIL actively contributes to the social development of the community. The company has undertaken various CSR projects aimed at improving the health, education, and social welfare of society.

These initiatives and policies have helped TCIL create a positive work culture that promotes employee well-being, professional growth and personal development. By investing in human sustainability, TCIL has not only gained a competitive advantage but also ensured the sustainable development of its stakeholders.

Social Sustainability in TCIL:

Social sustainability is about identifying and managing business impacts, both positive and negative, on people. The quality of a company's relationships and engagement with its stakeholders is critical.

Directly or indirectly, companies' affect what happens to employees, workers in the value chain, customers and local communities, and it is important to manage impacts proactively.

Businesses' social license to operate depends greatly on their social sustainability efforts. In addition, a lack of social development, including poverty, inequality and weak rule of law, can hamper business operations and growth.

At the same time, actions to achieve social sustainability may unlock new markets, help retain and attract business partners, or be the source for innovation for new product or service lines. Internal morale and employee engagement may rise, while productivity, risk management and company-community conflict improve.

Tinplate Company of India Ltd. is one of the leading manufacturers of tinplate, which is used in the packaging of food and beverages, paints, chemicals, and other products.

As a responsible corporate citizen, the company is committed to social sustainability, which involves improving the quality of life of its stakeholders, including employees, customers, suppliers, and the community at large.

The Following Are Some of the Social Sustainability Initiatives Undertaken by Tinplate Company of India Ltd.:

- **A. Employee Development:** The Company offers various training and development programs to its employees to enhance their skills and knowledge. It also provides opportunities for career growth and advancement.
- **B. Health And Safety:** Tinplate Company of India Ltd. is committed to providing a safe and healthy working environment for its employees. It regularly conducts health and safety audits and provides necessary training to prevent accidents and injuries.
- **C. Community Development:** The Company has undertaken various CSR initiatives to improve the living conditions of the communities in which it operates. It has undertaken projects such as building schools, providing clean drinking water, and developing infrastructure.
- **D.** Environmental Protection: Tinplate Company of India Ltd. is committed to minimizing its environmental impact. It has implemented various eco-friendly practices such as waste reduction, energy conservation, and water recycling.

In conclusion, Tinplate Company of India Ltd. is committed to social sustainability and has undertaken various initiatives to improve the quality of life of its stakeholders.

By prioritizing social sustainability, the company is creating a positive impact on society and contributing to the sustainable development of the country.

Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

Economic Sustainability in TCIL:

Economic growth is concerned solely with generating sales and profits. Economic sustainability refers to practices designed to create the longterm economic development of a company or nation while also managing the environmental, social, and cultural aspects of its activities. It is about balancing economic growth and generating profit with the impact on the environment and people.

Economic sustainability is important for a business because it cannot achieve long term growth if it exhausts natural or human resources. Business today can no longer harm the environment or their communities to deliver ongoing economic growth, because to continue to do so creates conditions that destabilize the context in which the business operates.

Businesses are increasingly embracing the health of the environment and people as part of their money-making strategies. In addition to the benefit to the long-term future of the planet, economic sustainability delivers many advantages to business. For example, it helps them assess their operations to monitor things like energy waste, which leads to savings. And by enacting better social practices, companies avoid turnover and have a more productive staff. Being an economically sustainable business can help win contracts from clients and governments, and can increase customer loyalty.

Tinplate Company of India Ltd. (TCIL) is one of the leading manufacturers of tinplate in India. The company has a strong focus on economic sustainability, which is evident from its various strategies and initiatives.

Cost Optimization: TCIL focuses on cost optimization through various measures such as process optimization, raw material efficiency, inventory management, and logistics. These measures help the company to reduce its operating costs and improve profitability.

Innovation: TCIL has a strong focus on innovation to drive economic sustainability. The company constantly invests in research and development to develop new products and optimize its manufacturing processes.

Sustainability Reporting: TCIL publishes an annual sustainability report that includes its economic, social, and environmental performance. The report provides stakeholders with a transparent view of the company's financial performance and sustainability strategies.

Stakeholder Engagement: TCIL engages with its stakeholders, including customers, suppliers, employees, and communities to understand their needs and expectations. The company uses these insights to develop sustainable business models that meet the needs of its stakeholders, while also driving economic growth.

Corporate Governance: TCIL has strong corporate governance practices that ensure transparency, accountability, and ethical behaviour. These practices help the company to build trust with its stakeholders, which is critical for economic sustainability.

Overall, TCIL's focus on economic sustainability is aligned with its business strategy and helps the company to achieve long-term financial viability, while also contributing to the sustainable growth of the Indian economy.

Environmental sustainability in TCIL:

The Tinplate Company of India Ltd. (TCIL) is a leading producer of tinplate and tin-free steel products in India. As a manufacturing company, TCIL has a significant impact on the environment. Therefore, implementing environmental sustainability practices is crucial for the company to reduce its environmental footprint and improve its overall sustainability performance.

Here are Some Potential Environmental Sustainability Practices that TCIL can Consider Implementing:

A. Energy Efficiency and Renewable Energy: TCIL can invest in energy-efficient technologies and equipment to reduce energy consumption and associated emissions. Additionally, the company can explore renewable energy options, such as solar or wind power, to generate clean energy and reduce its reliance on fossil fuels. Sustainable Canning: Momentous for the Tinplate Company of India Ltd. (TCIL)

- **B.** Waste Management: TCIL can implement a comprehensive waste management system to minimize waste generation, segregate and recycle waste, and dispose of hazardous waste safely.
- **C. Water Conservation:** The production process at TCIL requires significant amounts of water. The company can implement water-saving technologies, such as rainwater harvesting and water recycling, to reduce its water consumption and minimize its impact on local water resources.
- **D. Product Design:** TCIL can focus on product design that incorporates sustainable materials, reduces waste generation, and promotes recycling and reuse.
- **E.** Stakeholder Engagement: TCIL can engage with its stakeholders, including employees, customers, and local communities, to raise awareness of environmental issues and promote sustainable practices.

By implementing these practices, TCIL can improve its environmental performance, reduce its environmental impact, and contribute to a more sustainable future.

Concluding Note:

Sustainability reporting is becoming increasingly important for companies, as stakeholders, including investors, customers, and employees, are becoming more interested in the sustainability performance of the companies they engage with. By reporting their sustainability performance, companies can demonstrate their commitment to sustainability, build trust with stakeholders, and improve their overall sustainability performance. Companies typically report their sustainability performance through sustainability reports, which provide information on the company's environmental, social, and governance (ESG) performance. By the month of January 2023, the ESG ranking of the Tinplate Company of India Limited is 54% compared with 32,122 Companies.

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3. ESG - Marching Towards Sustainable Development Goals

Dr. Pramod Kumar Singh

Abstract:

The UN Sustainable Development Goals 2030 are a worldwide initiative initiated by 193 Member States, calling for major initiatives in sustainable development aimed at people, the planet, peace and prosperity. It is in this context, the initiative to achieve Sustainable Development Goals through Environmental Social Governance is of particular importance. A number of less developed countries, however, have quietly taken major initiatives. Significant steps have also been taken by India, with the new framework for business responsibility and sustainability reporting, BRSR, coming into effect from the financial year 2022-23. A comprehensive Humanist Approach, supported by sheer professionalism with a multidisciplinary base to use ESG as an enabling framework for achieving Sustainable Development Goals is the way forward.

Introduction:

As the global environment remains highly volatile and uncertain due to diverging monetary policy stances, geopolitical tensions, elevated crude oil prices and persistent supply bottlenecks, emerging economies are vulnerable to destabilizing global spill overs on an ongoing basis. The ability to forecast the future course of the global economy is contingent on the evolution of the virus and the ongoing conflict between Ukraine and Russia.

Thus, policymakers face daunting challenges even as recovery from the pandemic remains incomplete. "Sustainable development refers to a mode of human development in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for the generations to come." – **Dr. A P J Abdul Kalam, Former President of India**

ESG - Marching Towards Sustainable Development Goals

While the last 30 years have clearly seen sweeping progress and economic development around the world, there are three main concerns. And its rapid growth is driven by many unique challenges to deal with. If we do not address the current problems of our planet and the environment, they will escalate rapidly and become more difficult to deal with. The Sustainable Development Goals (SDGs) are viewed as guidelines that require concrete plans to meet these challenges. India's population is estimated at 17% of the world's population, with only 2.4% of arable land and depleted water and forest resources. Moreover, India is set to become the world's most populous country by 2025.

India's future society will only be sustainable if the country can meet at least the basic necessities for the proper survival of its entire population.

The current developments underline the imperatives for countries to make this planet a better place to live. The harsh truth for all countries, whether rich or poor, is that as long as society is economically unbalanced as well as unstable, fuelling sustainable economic and social growth addressing all sections of the society and the environmental concerns is a pipe dream.

The requirement is a sincere, open and inclusive mind set as well as gigantic effort, calling for a new model of development that will simultaneously give a push to positive economic advancement, provide a framework for sustainability in decent living for all in an inclusive manner and reverse the damage already caused to the environment at the least, failing which any endeavour towards SDG's is bound to be piecemeal and / or exclusive and / or inadequate. In this context, ESG through crystal clear policy measures is suggested as the route to be pursued for marching towards attaining Sustainable Development Goals (SDG's).

The Sustainable Development Goals (SDGs):

The SDGs 2030 is a global initiative by 193 Member Nations of the United Nations (UN) calling for bold initiatives towards sustainable development focusing on people, planet, peace and prosperity and they offer a globally accepted framework with uniform metrics for all countries against which to measure and compare progress.

The SDGs identify 17 areas across 163 interrelated indicators, encouraging alignment and concerted and coordinated action among stakeholders. You can see that the SDGs are ambitious goals aimed at eliminating, rather than reducing, things like malnutrition and poverty. From India's perspective, the development narrative needs to be reviewed and revised so that no one is left behind as the country seeks to grow into true leadership.

Conceptual Framework of ESG:

Whenever a company or company's sustainability is assessed from an investor's perspective, both financial and non-financial aspects are considered and analysed. On the non-financial side, he has three key dimensions for measuring and evaluating the sustainability of a company's or society's investment.

ESG is about integrating social and environmental concerns into business operations and pursuing long-term vision rather than short-term opportunism. Companies and corporations that adhere to ESG standards are widely believed to demonstrate their willingness to act ethically in these three key dimensions.

Commitment to ESG commitments is inevitable over the long term, in value and substance, given the global and domestic scenario of being held so high by all other stakeholders, including the companies themselves.

Strategy Led Action Plan:

ESG is more than good intentions. It's about creating a tangible, practical plan that achieves real results. Success is not about climate change, diversity and disclosures alone.

It's about embedding these principles- and more across business- from investment to sustainable innovation. Bringing together your best people and smartest technology so you can see more, go deeper and act swiftly. Enabling to tackle the biggest challenges of today – and capture the best opportunities of tomorrow.

ESG - Marching Towards Sustainable Development Goals

Transforming from the Inside for the Outside:

How well is business adapting to a changing world? A world where success is no longer measured by financials alone? From net zero to the circular economy.(needs fragmentation) When put ESG at the very heart of your operation, take bold steps towards a model that will deliver sustainable business advantage and measurable value. It's an approach that makes possible the operational, cultural and financial changes needed to future-proof business.

The Measure of Transparency:

Responsibility. Sustainability. Diversity. How well does your business measure up? A new business environment needs new thinking. One that infuses ESG metrics right through all areas of operation and creates maximum transparency. With the right combination of data and disclosures, can be confident in both clearer reporting and greater trust...not just for now, but for the long term.

The Leadership Agenda:

Sharp, actionable insights curated to help turn ESG theory into action. Covering everything from the economic realities of ESG to how leaders can close the gap between net zero ambition and reality.

Business leaders, like ship captains, must navigate both surface waves and deeper currents. As every captain knows, waves on the ocean surface can capsize a ship, and so must be carefully navigated. But it's the currents—the more enduring forces that are sometimes harder to see that exert lasting influence on a ship's direction of travel.

References:

1. Alawneh R., Ghazali F., Ali H., Sadullah A. F. (2019). A Novel framework for integrating United Nations Sustainable Development Goals into sustainable non-residential building assessment and management in Jordan. Sustainable Cities and Society, 49, 101612.

- 2. Alshehhi, A.; Nobanee, H.; Khare, N. The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. Sustainability 2018, 10, 494.
- 3. Bamberger P. A. (2018). AMD—Clarifying what we are about and where we are going. Academy of Management Discoveries, 4(1), 1–10.
- 4. Bansal P., DesJardine M. R. (2014). Business sustainability: It is about time. Strategic Organization, 12(1), 70–78.
- 5. Cairms, R.D. On accounting for sustainable development and accounting for the environment. Resour. Policy 2006, 31, 211–216.
- 6. Chandler D. (2020). Strategic corporate social responsibility: Sustainable value creation. SAGE.
- 7. Davis G. F. (2015). What is organizational research for? Administrative Science Quarterly, 60, 179–188.
- 8. Ghemawat P. (2001). Distance still matters: The hard reality of global expansion. Harvard Business Review, 79(8), 137–147.
- 9. PricewaterhouseCoopers. (2015). Making it your business: Engaging with the Sustainable Development Goals.
- United Nations. (2015b). Transforming our world: The 2030 agenda for sustainable development (Resolution Adopted by the General Assembly on 25 September 2015). https://sustainabledevelopment.un.org/post2015/transformingourwo rld.

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4. National Mission for Sustainable Agriculture (NAMSA) with reference to Sub Missions: Rainfed Area Development, Agroforestry and Soil Health Management

Dr. Radha Mahali

Abstract:

Indian Economy is a developing economy. Indian rural economy is full of resources by not only natural resources but also human resources. According to the Global Economy World Bank recent data 64.61% of population lives in rural areas. Now a day all countries of the world are focusing to achieve sustainable development goals. Sustainable Agriculture plays an important role in Sustainable development process. Agriculture is one of the most effective instruments for reducing poverty, local livelihoods. One of the crucial requirements of the agricultural sector is to ensure that effective governance structures and related policies are in place at all level. Therefore, it is relevant to study about Sustainable Agriculture and the role of government in it. Government initiates some schemes and programme to achieve its goal. In India under National Agriculture Policy, government started National Mission for Sustainable Agriculture (NAMSA). The main aim of the study is to analyse and evaluate the role of NAMSA in Sustainable Agriculture. The study highlights about some Central Sponsored programmes / Schemes under the flagship of NAMSA. In this study secondary data have been used for evolution the scheme. As per requirements of development process governments spread ongoing and newly started programmes all over the country.

Keywords:

rural economy; agriculture; NAMSA; rainfed area; agroforestry; soil health management

Introduction:

Agriculture is known as the back bone of a country. It plays a crucial role in Indian Economy. According to the census 2011, 54.6% of total workforce are engaged in different types of agriculture an allied sector activity. It accounts for 18.6% of India's GVA at current prices during 2021-22. Agriculture sector plays very crucial role in providing job opportunities in rural sector in India. Labour force participation Rate is 56.9% for male and female 27.2% for female (PLFs 2021-22). Development of rural sector is also important because literacy rate of rural area is less then urban area that is 83.5% for male and 68.9% for female. Agriculture sector plays very important role in good production of food grains for growing population. The country's total food grain production has estimated to be a record- high 314.6 million tonnes in 2021-22, an increase of 3.8 million tonnes over 2010-21. Country's last 6 years share in total GVA of the country at current prices are as follows:

| Table No 8.1: Gross value Added (GVA) of Agriculture & Allied |
|---|
| sector (Rs in Crore) |

| Items | Years | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| GVA of | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
| Agriculture and Allied Sectors | 2518662 | 2829826 | 3029925 | 3358364 | 3609494 | 3980067 |
| Percent to Total GVA | 18.0 | 18.3 | 17.6 | 18.3 | 20.0 | 18.6 |

Source: NSO, Ministry of Statistics and Programme Implementation, GOV of India

India is a developing country and now it is in 1st rank in term of population after Covid 19 Pandemic. After independence India is continuously working to create its own image in world economy. As India is a planned economy therefore it focuses on different plans/ Programmes /schemes during development process to achieve its Economic, Political and Environmental goals. Agricultural policy formation and implementation is necessary for the growth and development of agriculture sector. According to the Indian constitution, agriculture is a state subject.

National Mission for Sustainable Agriculture (NAMSA) with reference...

Because of this, states have the obligation and the right to execute agricultural policies that are specific to their circumstances, even if the central government sets the overall direction for agricultural policies and, crucially, distributes monies for their state-level implementation. States may decide to fully or partially implement programmes from the central government.

This is a reasonable paradigm in light of the varied ecological zones of the nation that call for customised interventions as opposed to policies that apply universally.

Literature Review:

Since the 1960s green revolution, which was primarily based on expanding crop production particularly in cereal production, to feed growing population of nation at that time Indian agricultural policy was production centred. Now day Indian Agricultural policies are income – centred, it seeks to achieve high productivity, reduced cultivation cost and remunerative prices on the product. It also focusses to earn higher profits from farming activities. Therefore, Traditional technic is no longer useful to fulfil food requirement for growing population of a country. Sustainable agriculture is an alternative for solving fundamental and applied issues related to food production in an ecological way (Lal (2008).

A multidisciplinary approach should be used to assess the social and economic effects of the new farming systems, with the help of economists or social scientists. Therefore, sustainable agriculture fosters the development of multidisciplinary studies that associate agronomy with ecology, economics, sociology and geography (Lichtfouse et al., 2004).

The difficulty of this task is that it involves not only human activities, such as farm management and agricultural policy, but also several independent variables, such as climate, topography, soil type, animal gas emissions, etc. (Cymerman 1994; Kielbasa et. al. 2016).

Additionally, farmers from all regions exhibited a great resistance to taking risks and implementing new practises.

Because the cropping pattern in rainfed areas is dominated by low-value and low-density crops and is dependent on the monsoon, the income of the farmers in rainfed areas are certainly non-comparable to those farmers from the well-endowed regions. (Dhawan 1988b; Narayanamoorthy 2021).

Government of India begin with strong initiatives and put the efforts towards bringing in irrigation to the drought prone areas and precariously water scarce regions with focusing on equity and stability. (Dhawan 1988a).

Meynard et al. (2006) identified four different ways to design innovative agricultural systems for sustainable development of a country:

- a. Inventing new farming systems, breaking off with the current traditional ones.
- b. Identifying and improving farming systems built by the local stakeholders.
- c. Providing tools and methods to stakeholders to improve their own systems or evaluate those proposed by Scientists and Economists.
- d. Identifying the economic, social and organisation conditions that may help the Policy makers, Governments and farmers to adopt alternative farming systems.

The purpose of sustainable agriculture is to protect and save natural resources. Some of these may become depleted, e.g., soil nutrients, or seriously damaged or contaminated (groundwater or water courses).

Therefore, more sustainable agricultural practices are emerging to conserve and protect resources (Cordell, White 2011) In reference to agriculture, soil quality has been defined as "the capacity of soil to function within ecosystem boundaries to sustain biological productivity, maintain environmental quality, and promote plant and animal health" (Doran and Parkin, 1994).

Compared to natural ecosystems, agricultural ecosystems undergo many disturbances and modifications and have many more nutrient inputs and outputs (Hendrix et al., 1992; Magdoff et al., 1997).

National Mission for Sustainable Agriculture (NAMSA) with reference...

Agriculture sustainability is the process of making sure that current agricultural interactions are carried out with the intention of keeping the environment as pristine as naturally feasible based on ideal-seeking. The Food and Agriculture Organization defined sustainable agriculture as "production which fulfils food security, environmental protection, and economic and social needs in rural areas" [FAO 2016].

The following sections attempt to assess the performance of some central government sponsored scheme of the flagship under National Mission for Sustainable Agriculture (NAMSA) aimed at addressing sustainability issues in agriculture with reference to Sub Mission on Rainfed Area Development, Agroforestry and Soil Health Menegment.

National Mission for Sustainable Agriculture (NMSA):

NMSA was first envisaged as one of the eight missions outlined under the National Action Plan on Climate Change (NAPCC) proposed in 2008. It is the flagship central government policy that aims to make agriculture sustainable in a comprehensive manner. As a programmatic intervention since 2014-15, the mission aims at,

"Making agriculture more productive, sustainable, and remunerative and climate resilient by promoting location specific integrated/composite farming systems; soil and moisture conservation measures; comprehensive soil health management; efficient water management practices and mainstreaming rainfed technologies" (MoAFW 2019: 101).

NMSA has been designed for converging, consolidating and incorporating all ongoing and newly proposed activities related to sustainable agriculture with a special focus on soil and water conservation, water use efficiency, soil health management and rainfed area development. The National Mission for Sustainable Agriculture (NMSA) was established with the goal of increasing agricultural output, particularly in climatically susceptible rainfed areas, by concentrating on integrated farming, efficient use of rainwater, control of soil health, and resource conservation. The mission encompasses all three dimensions of sustainability mentioned earlier. The centrally sponsored schemes under the mission are:

Rainfed Area Development:

Agricultural productivity depends on the standard and accessibility of natural resources like soil and water. By encouraging conservation and sustainable use of these limited natural resources through suitable agriculture methods and agricultural productivity growth may be sustained. Indian agriculture remains predominantly rainfed covering about 57% of the country's net sown area. Thus, conservation of natural resources in conjunction with development of rainfed agriculture holds the key to meet burgeoning demands for food grain in the country. Rainfed Area Development (RAD) Scheme was made operational from 2014-15 in the country as a component of National Mission for Sustainable Agriculture (NMSA) to mainstream development of rainfed areas in a sustainable manner. Through the adoption of Integrated Farming System (IFS) models created by the Indian Council of Agriculture Research (ICAR), Rainfed Area Development (RAD) strives to promote sustainable agriculture production. Through improved soil health management, increased efficiency in using rainwater, prudent chemical usage, crop diversification, and progressive adoption of croplivestock-tree farming systems in an integrated manner, RAD seeks to promote improved agronomic practises that are location-specific.For the improvement and preservation of agricultural practises as well as natural resources, RAD use an area-based strategy. This component was developed using a "watershed plus framework" to examine the possible use of the natural resource base and assets created or made available through soil conservation and watershed development initiatives funded by the MGNREGS, PMKSY-WDC, RKVY, etc. This component will introduce appropriate farming systems by integrating multiple components of agriculture such as crops, horticulture, livestock and fishery with agro based income generating secondary agriculture activities and value addition.

The salient features of Rainfed Area Development are;

a. Through crop rotation and crop variety, RAD encourages longer periods of soil cover (mulching), which is crucial to boosting the soil's organic matter.

National Mission for Sustainable Agriculture (NAMSA) with reference...

- b. Increasing protective irrigation from rainwater sources through effective water management strategies that is required to secure rainfed crops in times of short interval droughts.
- c. Promoting indigenous seed varieties that are more climate-resilient while ensuring their high quality, diversity, and timely availability.
- d. As farmers' knowledge and management abilities are improved, location-specific agronomic advances are used to create integrated agricultural systems that promote regenerative agriculture.
- e. Strengthening support systems for Extensive Livestock Systems (health care, breeding, drinking water, fodder in commons, etc.)
- f. Promote fisheries in rainfed water bodies through institutionalized support systems.
- g. Integrated value chain support systems, with a focus on local markets, to realise the growth potential of farming production systems based on pulses, millets, and oilseeds.
- h. Risk minimization, resilience building and enhancing private investment.

A. Objectives:

- a. To implement a location-specific and landscape-based strategy to dry-land areas in order to achieve natural resource conservation and sustainable use, improvement of agriculture production systems, and livelihood development through integration/convergence of schemes in an area-based approach.
- b. Location-specific Integrated/Composite Farming Systems will help to make agriculture more profitable, productive, and tolerant of climate change.
- c. To conserve natural resources through appropriate soil and moisture conservation measures;
- d. To increase the knowledge and skills of farmers and other stakeholders in the field of climate change adaptation strategies, in coordination with other ongoing Missions like the National Food and Nutrition Security Mission and the National Initiative for Climate Resilient Agriculture (NICRA).
- e. To improve the productivity of rainfed farming by mainstreaming rainfed technologies refined under All India Coordinated Research Project on Dry land Agriculture (AICRPDA-NICRA) and by

leveraging resources/provisions made under other Schemes/Missions like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), PMKSY-WDC, NFNSM, RKVY, Krishionati Yojana, SMAE, National Mission on Natural Farming etc.

The importance of the programme can be understood by the fact that 68.3 million hectares (mha) of the 140.1 million hectares (mha) of cultivated land used to produce food grains are irrigated, while the remaining 71.7 mha are rainfed.

| Year | Coverage under Integrate Farming System (in Hectare) | | Expenditur INR) | e (in Crore |
|---------|--|----------|--------------------|-------------|
| | Target | Achieved | Target | Achieved |
| 2015-16 | 42,380.6 | 35,543.1 | 152.2 | 123.5 |
| 2016-17 | 55,833.5 | 40,961.5 | 200.8 | 147 |
| 2017-18 | 72,518.3 | 50,075.8 | 270.1 | 180.2 |
| 2018-19 | 99,346.5 | 69,988.8 | 281.1 | 183.4 |
| 2019-20 | 50,114.6 | 45,270.5 | 191.1 | 66.6 |

| Table 8.2: Targets | and Achievements | under RAD Scheme |
|---------------------------|------------------|------------------|
|---------------------------|------------------|------------------|

NMSA: It is evident from examining the coverage aim and financial allocation for the programme over time that the programme continuously fails to meet the objectives.

Sub Mission on Agro Forestry:

India became the first country to adopt a National Agroforestry Policy in 2014. Agroforestry is the term used to describe both traditional and contemporary land-use systems where woody perennials (trees, shrubs, bamboos, and palms) are purposefully incorporated alongside crops and/or animals in a variety of spatial or temporal arrangements. It is described as the research and practise of interactions between agriculture and forestry that involve farmers, trees (woody perennials), forests, and livestock on various sizes.

National Mission for Sustainable Agriculture (NAMSA) with reference ...

Agroforestry creates a green corridor enabling sensitive species to move between different habitats. It offers potential to sequester carbon in the soil when trees are sustained.

Agro Forestry Achievements:

- a. Large Farmers are the primary adopters of agroforestry in India.
- b. 25 million Ha Area is under agroforestry across 15 agro climatic zones.
- c. More than 5 million farmers practise agroforestry across India.
- d. Eucalyptus, Melia, Popur and Casuarina are the popular trees integrated under agroforestry.
- e. It is considered particularly beneficial to the income generation capacity of marginal and small farmers across India

| Sr. No | Agro- climatic regions / Zones | State represented |
|--------|-----------------------------------|--|
| Ι | Western Himalayan region | Himachal Pradesh, Jammu & Kashmir, |
| | | Uttarakhand |
| п | Eastern Himalayan region | Arunachal Pradesh, Assam, Manipur, |
| | | Meghalaya, Mizoram, Nagaland, Sikkim, |
| | | Tripura, West Bengal |
| Ш | Lower Gangetic plain region | West Bengal |
| IV | Middle Gangetic plain region | Uttar Pradesh, Bihar |
| V | Upper Gangetic plain region | Uttar Pradesh |
| VI | Trans Gangetic plain region | Chandigarh, Delhi, Haryana, Punjab, |

Table 8.3: Represent different Agro- climatic regions/ Zones in India

| Sr. No | Agro- climatic regions / Zones | State represented |
|--------|------------------------------------|---|
| | | Rajasthan |
| VII | Eastern plateau and hills region | Chhattisgarh, Jharkhand, Madhya Pradesh, |
| | | Maharashtra, Odisha, West Bengal |
| VIII | Central plateau and hills region | Madhya Pradesh, Rajasthan, Uttar Pradesh |
| IX | Western plateau and hills region | Madhya Pradesh, Maharashtra |
| Х | Southern plateau and hills | Andhra Pradesh, Karnataka, Tamil Nadu |
| XI | East coast plains and hills region | Andhra Pradesh, Odisha, Puducherry, |
| | | Tamil Nadu |
| XII | West coast plains and ghat region | Goa, Karnataka, Kerala, Maharashtra, |
| | -•B.o | Tamil Nadu |
| XIII | Gujarat plains and hills region | Gujarat, Dadra & Nagar Haveli, Daman & |
| | | Diu |
| XIV | Western dry region | Rajasthan |
| XV | Island region | Andaman & Nicobar Islands, Lakshadweep |

Source: Planning Commission (Khanna, 1989) has identified 15 resource development regions in the country, 14 in the main land and remaining one in the islands of Bay of Bengal and Arabian Sea.

National Mission for Sustainable Agriculture (NAMSA) with reference...

| State | Percentage of Net Sown Area under |
|-------------------------------|-----------------------------------|
| | agroforestry |
| Jammu and Kashmir + Ladakh | 12 |
| Himachal Pradesh | 5 |
| Punjab | 10 |
| Haryana | 10 |
| Delhi | 2 |
| Uttarakhand | 10 |
| Rajesthan | 2 |
| Uttar Pradesh | 0.5 |
| Gujrat | 8 |
| Madhya Pradesh | 8 |
| Bihar | 14 |
| Jharkhand | 21 |
| West Bangal | 7 |
| Maharashtra | 9 |
| Chhattisgara | 13 |
| Odisha | 13 |
| Goa | 8 |
| Andra Pradesh + Telangana | 19 |
| Karnataka | 9 |
| Pandicherry | 6 |
| Tamil Nadu | 13 |
| Kerela | 4 |
| Sikkim | 8 |
| Assam | 9 |
| Meghalaya | 7 |
| Tripura | 10 |

Table 8.4: Represent percentage of Net Sown Area under agroforestry

Towards Sustainable Growth in India: Connecting the Missing Dots

| State | Percentage of Net Sown Area under agroforestry |
|-------------------|--|
| Arunachal Pradesh | 9.8 |
| Nagaland | 1 |
| Manipur | 5 |
| Mizoram | 3 |

Under net sown area Jharkhand has covered maximum net sown area that is 21% of its Total area and Telangana covered 19% area by agroforesty.Punjab, Haryana, Uttrakhand, Bihar, Chhattisgara, Odisa, Tamil Nadu, Tripura covered 10-15% by agroforestry.

Rest countries comes under 5-10% Net sown area by agroforestry Only Nagaland, Delhi, Rajesthan and Mizoram comes under very low covered area that is 1-3%.

Different states have different geographical and political conditions which affects implementation of scheme for that particular area.

| Year | Area covered (hectare) | Trees Planted |
|---------|---------------------------|---------------|
| 2016-17 | 373 | 463159 |
| 2017-18 | 2273 | 3473699 |
| 2018-19 | 2819 | 1937075 |
| 2019-20 | 774 | 260056 |

 Table 8.5: Annual area covered and trees planted under

 Agroforestry

NMSA: The intended expansion of the tree cover is also consistent with India's nationally determined commitment to the Paris Agreement, which calls for the improvement of the tree cover to create an additional 2.5–3 billion tonnes of carbon sinks. After 2020 tree plantation affected by Covid 19 Pendamic.

National Mission for Sustainable Agriculture (NAMSA) with reference ...

Soil Health Management (SHM):

The ability of the soil to support and sustain crop development while maintaining environmental quality is referred to as the "soil health" or "soil quality" of an agro ecosystem.

In order to improve the soil health of the Indian soils, government of India has initiated two major schemes namely:

- Soil Health Management Scheme
- Soil health card Scheme

The goal of SHM is to promote both location-specific and crop-specific sustainable soil health management, including residue management, organic farming methods through the creation and linking of soil fertility maps with macro-micro nutrient management, appropriate use of land based on land capability, prudent fertiliser application, and minimising soil erosion/degradation.

Assistance is given for various improved packages of practises based on land use and soil characteristics, developed by thematic maps and databases created by geographic information systems (GIS) on the characteristics of land and soil gathered through substantial field-level scientific studies.

Soil Health Card Scheme

In February 2015, the central government had launched the Soil Health Card Scheme. Under this programme the government plans to issue soil card to farmers to help them get a good harvest by studying the quality of soil. The major components of the scheme are:

- a. Issue of Soil Health Cards
- b. Training for soil analysis
- c. Financial assistance for package of nutrient recommendations
- d. Capacity building and regular monitoring and evaluation
- e. Constitution of the Project Management Team (PMT)

| Phase | Duration | Total card no (Crore) |
|-----------|-----------|--------------------------|
| Phase I | 2015-2017 | 10.74 |
| Phase II | 2017-2019 | 11.69 |
| Phase III | 2019-2020 | 13.53 |

 Table 8.6: Under this scheme soil health card has been distributed in different phases are as follows:

Press Information Bureau

Table 8.6: shows that the distribution of Soil Health Card is continuously increasing during different faces of distribution.

Under the scheme the states have been sanctioned for the setting up of Soil Halth Laboratories, 429 static labs, 102 new mobile labs, 8752 min labs, 1562 village – level laboratories and strengthening of 800 existing labs. The Soil Health Management Scheme has shown to be beneficial for farmers, but it is also giving the agrarian young jobs. Farmers and village youngsters up to the age of 40 are eligible to establish Soil Health Laboratories and conduct testing under the programme. A laboratory may cost up to Rs. 5 lakhs, of which the Central and State Governments may cover 75%. Self-Help Groups, Farmers' Cooperative Societies, Farmers Groups, and Agricultural Producing Organisations are all subject to the same rules. (PIB)

Conclusion:

India is a process of Sustainable Agricultural development. Each and every year centre government is introducing different programme/ Schemes to achieve its goal. Under this chapter only three submissions have discussed, there are many others programmes/Schemes and policies have to be studied. By studying three submissions of NAMSA it is observed that achievements are in progress but goals are yet to have achieve because there is difference in achievement among different states. Some state takes more initiative of some central sponsored programme and others are getting less benefits from it. It is due to different Political, Economic and Environmental conditions. National Mission for Sustainable Agriculture (NAMSA) with reference ...

Bibliography:

- 1. **CYMERMAN R. 1994**: "Balanced economy (sustainable development) in rural areas. In: Advisory in sustainable development of rural areas". *Szczecin.* Wydaw. Druk p. 11–36
- 2. **CORDELL D., WHITE S. 2011**." Peak phosphorus: Clarifying the key issues of a vigorous debate about long-term phosphorus security". *Sustainability*. No 3(10) p. 2027–2049
- 3. Dhawan, B D (1988a): "Irrigation in India's Agricultural Development: Productivity, Stability and Equity," *Studies in Economic Development and Planning*, Sage, New Delhi
- 4. Dhawan, B D (1988b): "Dryland versus Irrigated Farming", *Economic & Political Weekly*, Vol. 23, No. 12, pp. 575-576.
- Doran, J. W., and T. B. Parkin. 1994. Defining and assessing soil quality. Pp 3–22 in J. W. Doran, D. C. Coleman, D. F. Bezdicek, and B. A. Stewart, eds. Defining soil quality for a sustainable environment. Soil Science Pub. 35. Madison, WI: *American Society* of Agronomy
- 6. **FAO 2016.** "Sustainability assessment of food and agriculture systems (SAFA)" [*online*]. *Rome. Food and Agriculture Organization of the United Nations.*
- 7. Available at: http://www.fao.org/nr/ sustainability/sustainability-assessments-safa/en/
- 8. Government of India, Press Information Bureau, 2020, Soil Health Card scheme of Central Govt: A success story, *Ministry of Agriculture & Farmers Welfare* 05 February 2020
- 9. Government of India, Annual Report 2021-2022: "Periodic Labour Force Survey (PLFs)", *Ministry of Statistics and Programme Implementation. NSSO*
- 10. Government of India, Annual Report 2022-23, Department of Agriculture & Farmers Welfare, *Ministry of Agriculture & Farmers Welfare*
- Kielbasa., Drangert J.O., Ulen B., Tonderski K. 2016: "Drivers and constraints for Polish farmer's implementation of measures to remediate nutrient leaching to waters." *International Scientific Journal Mechanization in Agriculture and Conserving of the Resources*. Scientific Technical Union of Mechanical Engineering – Bulgarian Associate of Mechanization in Agriculture. Year 62. Iss. 4 p. 22–26.

- 12. Lichtfouse E., Habib R., Meynard J.M., Papy F. (2004): "Agronomy for sustainable development", *Agronomie* 24, 445.
- 13. Lal R. (2008): "Soils and sustainable agriculture". A review, *Agron. Sustain. Dev.* 28, 57–64.
- 14. Magdoff, F., L. Lanyon, and B. Liebhardt. 1997: "Nutrient cycling, transformations, and flows: Implications for a more sustainable agriculture." *Advances in Agronomy* 60:1–73
- 15. Meynard J.M., Aggerri F., Coulon J.B., Habib R., Tillon J.P. (2006)," Recherches sur la conception de systèmes agricoles innovants," Rapport *du groupe de travail*, septembre 2006, 72 p.
- 16. Narayanamoorthy, A (2021): "Farm Income in India": *Myths and Realities*, Oxford, New Delhi.
- 17. National Mission for Sustainable Agriculture, (n.d.). Achievement under sub-mission on Agroforestry. NMSA.
- 18. https://nmsa.dac.gov.in/RptAchievementAgro.aspx
- 19. National Mission for Sustainable Agriculture, (n.d.). *All India achievement under Rainfed Area*
- 20. Development. NMSA
- 21. https://nmsa.dac.gov.in/RptActivityAchievement.aspx
- 22. Soil Health Management in India, https://www.icfa.org.in/assets/doc/reports/Soil_Health_Managemen t_in_India.pdf

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5. Causes and Consequences of Gender Disparity in Household Expenditure on Children's Education

Dr. Rajesh Kumar Rana

Abstract:

Gender equality is one of the important goals of sustainable development. Gender equality means, male and female are treated equally in all spheres. The term gender is a socially constructed difference between men and women, boys and girls. The role of Gender is determined on the basis of social norms, behaviours, activities, relationships, responsibility and their physical strength. Gender also determines the women's participation in decision making within and outside the household, political, economic, social and cultural participation in the society. Without gender equality human development, economic and social development is not possible. Most of developing nations, gender disparity is a most serious problem or females are not treated equally. It is a big challenge to the policy makers or government to bridge the gender inequality. There are various types of gender disparity found in society, like gender disparity in occupations, political participation, economic participation and disparity in decision making in households. To measure the gender disparity, there are various indexes used to identify the gender disparity, like GDI (Gender Development Index), GII (Gender Inequality Index), GEM (Gender Empower Measures) and Gender parity index etc. All these indexes measure the gender disparity at macro level or aggregate average methods. These methods do not examine the gender disparity within the household that how parents treat their children on the basis of gender. Exploring the gender disparity in households across the children is very important, especially in education. This article tries to collect various factors that lead to gender disparity in households across school going children from the various articles, books, reports and other sources (Internet) and also examine the future consequences of gender disparity in household education.

There are various factors responsible for gender disparity in household education, like parent's education, occupations and age, household income, gender, education and occupations of household head, socioeconomic norms etc.

Keywords:

Gender Disparity, Household, Gender disparity in education, Human Capital, Developing Countries.

Introduction:

People usually feel that gender and sex are synonymous but the recent view is different. According to WHO the term gender is a socially constructed difference between men and women, boys and girls based on social norms, behaviors, activities, relationships, responsibilities, and their physical strength. Gender is used to denote a set of roles in household work, political participation, economic activities, decision making inside the home or outside the home, responsibilities, right, expectation and obligation that are socially or culturally associated with being male and female, or boys and girls. Gender also includes the power relations between and among women and men, and girls and boys (Anderso1998). It is based on shared beliefs and norms within a society or culture about male and female characteristics and capacities. The concept of gender and their roles are not the same for all societies or cultures in the world.

These roles are determined by the socio-cultural and economic organization of a society and by the prevailing religious, moral and legal norms. The concept of gender changes according to the geographical region, religion, rural and urban scenario, and with time.

Sex refers to how people are classified biologically i.e., male or female at birth. Infants are assigned a sex based on a group of characteristics such as internal reproductive organs, genitalia, chromosomes, and hormones (USAID 2012a). The concept of sex varies very little from culture to culture, with time, generation-to-generation, religion-toreligion and different socio-cultural aspects etc. Causes and Consequences of Gender Disparity in Household Expenditure ...

Concept of Gender Disparity:

Gender disparity shows the different lived experience of genders across many domains including education, health, interests, family life, career, participation in decision making and political affiliations. Gender inequality is experienced differently across different cultures and regions (Salimah H. 2008).

There are many types of gender disparity/ inequality like Basic facility inequality, Special opportunity inequality, Professional inequality, Ownership inequality etc. but one of the most important gender disparities is a educational disparity as it leads to life time disadvantages because in today's world education is a one of the major determinant of life time success and also contributes to human capital formation of country.

The best educated tend to have a brighter future. If children do not get proper quality education their future will be constrained because they will be unable to fully avail opportunities.

The full development of mental and emotional abilities needs a nurturing and stimulating environment, which is not possible without proper education. To earn well, one needs a good education but initially, children's education totally depends on household or parental decisions. In most cases in developing nations, parents discriminate against their children on the basis of the gender of children and girls are always discriminated against.

Causes of Gender Disparity in Education of Children:

The growth of any country requires contribution from all citizens in economic activities and in creating a good social environment, through becoming good citizens of a country. This is only possible by educating all citizens. Education is not a onetime investment but it is a continuous process. Education starts from childhood onwards. Usually, children's education is totally dependent on parental decisions or their attitude towards children but parents' decisions or attitudes depend on multiple socio-economic factors, geographical area, traditional norms, religious faith, government facility etc.

Education is a basic human right for all and ideally should be without any discrimination like gender, casts, religion, regions, race etc. In this chapter, only causes and consequences of gender disparity in education of children happened within the household are discussed. There are many factors that lead to gender disparity in education of children, some of the few reasons or factors are discussed below.

Household Reasons:

There are many household characteristics that lead to gender disparity in education of children like size of household, type of household, gender, education and occupation of the household head, education of parents, birth ordered of sibling, domestics chores,

• Size of Household:

The per capita income is dependent on the size of the household and number of working members. If the number of members is large and the earning member is only one then the share of per capita income is low. Therefore, parents try to invest in their children on the basis of private future returns. So, in a patriarchal society, boys are expected to give more private returns than girls, hence parents tend to invest more on boy's education (Khandhaker and Mizanur 2013).

If the size of the family is small then the per capita income will be high. In this case the probability that parents treat boys' and girls' education equally will be higher. Gender disparity is also found when numbers of siblings are large, and the reason may be considered to be low income. (Himanshu H. and Talukdar Bedanga 2017)

• Type of Household:

Gender discrimination in education of children is also dependant on the type of household, if a family is living in a joint family, they get less discrimination but households spend less amount of money on children's education. But this type of discrimination also depends on the number of working members and their pay scale. If the numbers of working members are more than one and have a good salary then they spend more on their children but in turn they spend less on girl's education. Causes and Consequences of Gender Disparity in Household Expenditure ...

However, nuclear families do not discriminate, especially in primary education. Some nuclear households also discriminate if they live in rural areas and they do not have sufficient income (Rana R.K. 2019).

• Characteristics Of Household Head:

Decision about household and children's education and health also depends on the household head's gender, occupation and their age. Most of the researchers found that female headed households do not discriminate in education of children as compared to male headed households.

But in some cases, a female headed household faces the income constraint then they also discriminate because she also wants a male good bread earner in future.

Therefore, she spends more on boy's education than girls. In most cases females would become head of the household due to the husband being physically handicapped or dead or drunk or suffering from serious disease (Rana R. K. & Madhumita DasGupta 2019).

If the household head earns a high fixed salary, then discrimination is found less but if the household head is a marginal, or small farmer, or they are casual labour then girls are discriminated against the boys. Age of the household also determines the girl's education because as older household head discriminate more than younger.

• Father And Mother's Education:

There is negative correlation between gender disparity in education of children and mother and father's educations. Among father and mother's education, mother's education is a very important factor because mother will care for their children better than anyone else.

Some studies found that illiterate mothers and highly educated mothers discriminate less than literate mothers whose education is more than primary and less than matriculation. Illiterate mother thought that I am illiterate but my children should not be illiterate because they felt or experienced the importance of education.

Father's education is also important for children, if the father is highly educated or has more than higher secondary education; girls face less discrimination than those of an illiterate father.

• Birth Order of Sibling:

Birth order is an important factor determining children's education. When a pair of siblings are of mixed-sex, parents spend equally but if the first two children are girls and then boys, parents spend less on a girl's education than boys.

Most parents want a mixed-sex pair of children then parents treat children's education equally. If two first children are boys then they have a girl in the household parents do not discriminate against boys (Liu 2007).

• Enrollment Decisions:

Gender Discrimination in children's education is also seen at the time of taking decisions on children's enrollment in school. Generally, Parents send their boys to private school and send girls to government school. Even when parents enroll their children (both male and female) in private school, boys are sent to excellent private schools or situated in urban areas but girls are sent to local private schools. If children (boys and girls) are going to government school, parents don't discriminate.

• Domestic Chores:

There are many domestic factors that cause the gender disparity in education of children, such that most girls help their mother in domestic work, like fetch the water and fire wood (mainly in the rural areas), caring for young children, sweeping and cooking. These are social problems associated with the family (Ravinder Rena 2005).

Domestic chores are mainly associated with a girl child therefore girls do not go to school frequently or sometimes she drops school. In general, boys help or contribute to their father's work and girls help to their mother's work. These trends are generational. Causes and Consequences of Gender Disparity in Household Expenditure ...

Economic Reasons:

One of the most important reasons to discrimination across children's education is the economic condition of the household or parents because ultimately without income parents cannot facilitate good education for the children. At present education is a costly service and without good income parents cannot afford better education. Some economic reasons are as follow.

• Poverty:

When people do not have sufficient income to provide basic needs to the family, they are unable to spend sufficient amounts of money on their children's education. Due to income constraints, parental decisions will be tilled toward boy's education and they will give less importance to girl's education. Therefore, with low-income parents give more preference to the boy's education than girl's education (Quayes S. and Ramsey R. D. 2015). In developing countries, lowering per capita income leads to low household savings and low levels of savings hamper the present education of children as well as future education of children.

• Expected Rate of Returns:

Households invest in the education of children on the basis of expected rate of return in future. Most of developing nations, girls leave their parents' house and start living with her husband after getting married. Therefore, parents prefer to invest more on a boy's education than a girl's education.

• Occupation of Household Head and Parents:

Gender disparity also happens due to the occupation of household heads and parents. If parents have low income and household heads have good salaries then discrimination will not be found. It means either parent (mother and father) or household head have good sources of income then boys and girls get equal chance to study. If parents are doing a job in industry, government job, business or any fixed income earner, they discriminate less than those whose parents are doing job in casual (unorganized sectors where salary is too less and job insecurity is very high), daily wagers or even small and medium farmers.

• Level Of Household Income:

Level of household income is one of the main determinants of gender disparity in household expenditure on children's education because whichever household has low income, they spend approximately equal on both educations because parents send their children to government school but as household income increases the gender discrimination also increases. After a certain level of income, they are again treated equally.

Household income is not only dependent on the job status of parents or household head but also depends on area of agricultural land, financial (Share, debenture, insurance policies, etc) and physical wealth (rental house, machine etc) or ancestor's wealth.

Social, Cultural and Traditional Norms:

Various socio norms and perceptions are also responsible for gender disparity in education of children like early marriage, fear of affaire, social status (Virgin bride and becoming good and educated wife), patriarchal society, dowry system, polygamy, economic and social security for family, traditional role and responsibility of male and female in the society etc (Emily Hannuma,, Peggy Kong, and Yuping Zhang 2009).

• Early Marriage:

In developing countries, girls get married early due to illiteracy or some social norms. Due to the early marriage of girl's parents do not want to study further but boys continue his studies. They thought that investing in girl's education would be wastage. There is another reason that grooms want to marry virgin girls.

Therefore, they prefer to get married with such a girl whose age is under 18 years old, and some families also want a less educated bride because they want to suppress and control the bride or wife, or sister-in-law etc.

They also become unpaid workers. If parents want to educate their daughter but they fear about their daughter's marriage because they may face more difficulty in finding a suitably educated groom.

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• Fear to Affairs:

In most backward nations or some developing countries, there is a serious concern or fear of the family about a girl's emotional attachment to the peer groups or outsiders.

They consider that such attachment of girls will lessen the social prestige of the family. Therefore, parents don't want to send their daughter to school, especially secondary school (after 8th or upper primary).

In some African countries, parents don't want to send their daughter to school because there are problems like drinking, smoking, drugs, involvement in illegal activities, HIV infection etc (Wanyoike 2003). These activities are also spreading more rapidly in Asian countries, like India, Pakistan, Afghanistan, Thailand etc.

• Cultural Norms or Patriarchal Society:

The girls are discriminated in education against boys because of some cultural norms. There is a tradition that girls leave the parent house after she gets married and she leaves with husband and boys are future bread earners. In such cases investing in education of girls is considered as wastage of resources. Whereas, investing in boys will be fruitful in the old age of parents. There is a boy's responsibility to provide family's economic and social security, as they are also the heirs of the ancestral property in most cases (Sivakumar M. 2008).

• Dowry System:

In this system, grooms demand a heavy amount of money from the bride's parents to get married. Therefore, the bride's parents start saving money from the girls' childhood of the. Due to this the parents save some part of their income. Therefore, they spend less on the education of the girls.

If they spend on the girl's education, but still, they have to pay dowry at the time of marriage. Therefore, parents give less importance to a girl's education than boys.

• Role And Responsibility of Male and Female in the Society:

Gender refers to the role and responsibility distributed among the human (male and female) in the society. Especially in rural or even some times in urban areas too, a female is considered as home maker or taker if she works inside the household but boy's responsibility is that of the bread earner, and he has to go outside the home to earn money.

Thus, female is known as a house maker and male is known as a bread earner. Therefore, parents invest less in girl's education than boys.

Supply Side of Education:

Supply side of education refers to the quality of education and facilities which are provided by the government or school management in the school. Parents are more concerned about girls; however, parents also examine the status of school like, social environment around school, toilet facilities for girls, water facilities and other security like behavior of male teachers or lack of female teachers in the school.

After that distance of school that creates hurdles in girl's education. Parents don't want to send his daughter to such a school which is situated far from home (Ravinder Rena 2005).

• Consequences of Gender Disparity in Children's Education:

Education is a primary right of every individual. It is the most important foundation stone, on which the future road-map of a person likely depends. Education can truly change individual belief, ideologies, values and skill sets.

Education gives the ability to think rationally, pursue dreams and aspirations in life and teaches and gives the ability to achieve them while leading a dignified life and teaches to give respect to others in the society. Education can increase equality in society through education because educated people understand their political, economic and social rights.

Education provides to the people a means to live their lives with principle, and gives us the freedom of expression.

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Thus, education is essential for overall development of the human being and his personality. The literacy rate of a country determines its prosperity and economic health.

As education helps to create the human capital of a country (Romer 1990), it means, education is the key factor affecting the economic growth. There is a direct relationship between economic growth and expenditure on education, and it also increases the HDI (Darvishan Ali and Hakimzadesh's2015) of a country. Empirical studies have also proved that there is a direct relationship between education and growth of real per capita GDP. The study of Kianda Foundation (2011) found that education is very important for the well-being of the entire society, especially for girls and women. Educating a girl child is a commitment towards empowering her in different social situations and investment in our economic development at the grassroots level.

Education helps in the capital formation of countries because educated society facilities have better development than an uneducated society. Education improves productivity and prosperity, and improves people's life experiences. Education increases the efficiency and capability of labour and government, and increases the national income along with other capabilities.

Education helps to increase the accumulation of human capital, and significantly contributes in increasing the national income of a country, especially when access to education is equal for all without any discrimination of gender, religion, region and level of income. However, most developing countries have gender discrimination due to poverty, religious beliefs and social norms (son preference).

In such cases, girls are discriminated against boys in access to education at household level. This discrimination will prevent about half of the population from participating in economic activities properly.

Gender discrimination does not affect only the present generation but also negatively affects the future generation because a girl is a potential mother. Educated mothers are likely to understand better the importance of education, health care of children, hygiene, family planning, empowerment and dignity of women. The gender discrimination faced by women or girls reduces the value of the HDI.

Therefore, if children acquire good education, they automatically become aware of their abilities and they are able to get or create the best opportunities and earn high income in the labour market, or from business and equally contribute to the prosperity of economy and society.

Conclusion:

In any country the female population is approximately half of the total population of the country. If girls are discriminated against compared to boys, it means half of the population is excluded from the mainstream of economic activities.

However, the growth of the country will also be half, as well as human development also decline. Girl's education is not enough for economic development but it has a big role to make a good social environment, and betterment of future generations because its girl will become a future mother. It also helps to control the population by adopting family planning, reduces child mortality rate, for breaking dogmas of society etc.

References:

1. WHO Report

2010",https://www.who.int/genomics/gender/en/#:~:text=(1)%20'G ender'%20describes,%2C%20health%20policy%2C%20and%20leg islation. (5/03/2015)

- Anderso (1998), The people make the paradigm, Journal of organizational behavior https://doi.org/10.1002/(SICI)1099-1379(199807)19:4<323::AID-JOB912>3.0.CO;(p-2).(01/07/2015)
- 3. USAID (2012a),https://sbccimplementationkits.org/gender/key-gender-concepts/ (16/02/2017)
- Salimah H. Meghani (2008), "Disparity vs Inequity: Toward Reconceptualization of Pain Treatment Disparities", Volume 9, Issue5 Pages 613-623, https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526-4637.2007.00344. (18/05/2019)
- 5. Khandaker, Mu. Mizanur Rahman (2013) "Gender discrimination in healthcare spending in the household and women's access to

Causes and Consequences of Gender Disparity in Household Expenditure ...

resources: perspective of Bangladesh", The University of Tokyo. www.semanticsscholar.org (5/03/2017).

6. Himanshu Himanshu and Bedanga Talukdar (2017), "Family Size Composition and Intra-household Education Expenditure Exploring Gender Disparity in Education in India".

https://www.researchgate.net/publication/331791858. (20/03/2019).

- Rana R. K. (2019) "Determination of household expenditure on education of school going children in Chatra District of Jharkhand", Jamshedpur Review-Gov-Regd, Refereed, Pear Reviewed, Multi-Disciplinary Research Journal, Volume-5 Issue-42 Sept- Oct 2020, ISSN- 2320-2750) (25/05/23).
- Rana R. K. & Madhumita DasGupta (2019), "The gender disparity in household expenditure on education of school going children in Jharkhand: Evidence from Chatra District. (Journal of Social Development, Volume-XI Number-1&2, 2019, ISSN-0974-651X).
- Liu, H. (2007), "The quality–quantity trade-off: evidence from the relaxation of China's one-child policy", *Journal of Population Economics*, vol. 27, issue 2, PP-565-602 Department of Economics, National University of Singapore,

https://econpapers.repec.org/article/sprjopoec/v_3a27_3ay_3a2014 _3ai_3a2_3ap_3a565-602.htm. (22/02/18).

- Rena, Ravinder (2005) "Gender Disparity in Education An Eritrean Perspective", USA: The Global Child Journal, Vol.2. No.1, pp. 43-49. (A Biannual Journal of the To Love Children), https://mpra.ub.uni-muenchen.de/10315/1/MPRA_paper_10315.pdf (10/01/2018)
- 11. **Quayes, S.**, Ramsey, R.D. (2015), "Gender Disparity in Education Enrollment in Pakistan", *Asian Economic and Financial Review* 5:3 pp. 407-417,

www.conscientiabeam.com (10/01/2016).

12. Emily Hannuma, Peggy Kong, and Yuping Zhang (2009), "Emily Hannuma, Peggy Kong, and Yuping Zhang (2009) investigate the gender gap in education in rural northwest china", NIH Public Access Author Manuscript, Int J Educ Vol 1; 29(5): PP 474–486. doi: 10.1016/j.ijedudev.2009.04.007.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2753976/pdf/nihm s-112027.pdf. (20/03/2019).

13. Wanyoike, W. (2003). Understanding Youth and Family from a Christian Perspective. Nyeri,

http://52.172.159.94/index.php/ijird/article/viewFile/51718/41803, (19/09/19).

- 14. Himanshu Himanshu and Bedanga Talukdar (2017), "Family Size Composition and Intra-household Education Expenditure Exploring Gender Disparity in Education in India".
- https://www.researchgate.net/publication/331791858. (20/03/2019).
- Rena, Ravinder (2005) "Gender Disparity in Education An Eritrean Perspective", USA: The Global Child Journal, Vol.2. No.1, pp. 43-49. (A Biannual Journal of the To Love Children), https://mpra.ub.uni-muenchen.de/10315/1/MPRA_paper_10315.pdf (10/01/2018)
- 16. Sivakumar M. (2008), "GENDER DISCRIMINATION AND WOMEN'S DEVELOPMENT", https://files.eric.ed.gov/fulltext/ED502567.pdf.((22/02/18).
- Romer (1990), "Capital, Labor, and Productivity, Brookings Papers on Economic Activity", MicroeconomicsVol. 1990 (1990), pp. 337-367,

https://www.jstor.org/stable/2534785 (17/04/2016)

18. Kianda Foundation (2011), "Partners and Clients of Female Sex Workers in an Informal Urban Settlement in Nairobi, Kenya" https://www.researchgate.net/publication/51660426_Partners_and_ Clients_of_Female_Sex_Workers_in_an_Informal_Urban_Settlem ent_in_Nairobi_Kenya. (19/06/2019) Towards Sustainable Growth in India: Connecting the Missing Dots ISBN: 978-81-19149-33-9

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6. Locating the Socio-Sexual Exploitation of Manto's Child Characters Amidst a Canvas of Development: A Select Study

Prof. Ria Basu

Introduction:

Today, when parties &groups insist on a modified idea of a 'third world', Development has become the most- coveted terminal, it becomes an imperative for us to share what we know of Saadat Hassan Manto's world. With 24,212 cases of child abuse being registered in India this year, we need to talk about the disastrous impact that a distorted society has in the formation of social and individual identity in adolescents.

This research paper would therefore use two of Manto's s child characters- '*Sarita'* from Dus Rupaiyya' and '*Khalid'* from '*Tamasha'* to talk about the need to study the socio cultural and psycho sexual causes that cause the understanding of the world around them to become 'ugly' and 'distorted'. The former character is forced into child prostitution and the latter experiences lynching right before his eyes.

The manner in which they respond to the tumultuous society amidst them represents the adolescent understanding of a broken world that prohibits their proper progression. This paper would therefore bring forward the fact that nearly 8 decades after he constructs these 'Afsanas 'Sarita and Khalid seem to be gathering a disconcertingly increasing number of reallife siblings in India who are living in a society whose perversions they are forced to internalize.

With the growth of a 'new disturbed identity' it becomes mandatory for us to identify the aghast that it causes in the personality of the adolescents. Therefore, to understand the malaises of their world, understanding the process of adolescent identity formation is highly inevitable.

The 1989 Convention on the Rights of the Child (CRC) defines a child as "any human being below the age of eighteen years, unless under the law applicable to the child, majority is attained earlier." Children are an integral part of the society and a state possesses the imperative to build a society for them that guarantee security, proper health and an environment in which they can grow free, think free and live uninhibited. South Asia's rich ecological, geographic and cultural diversity make the region unique but also explains why it is volatile and vulnerable in social, economic and environmental terms.

The region faces continuing challenges from weak urban governance, poor provision of public services, lack of effective social protection systems and mounting urban poverty to the impact of climate change, natural hazards, political turmoil, gender inequality, etc.

According to the upcoming Violence in childhood index, South Asia is the third highest region for violence against children scoring 37.12.

Manto's two stories 'Tamasha' and 'Dus Rupaiyaa' narrate the childhood scenario of their child protagonists who live in a society that is dark, disgruntled and torn apart. To understand these stories and the society around them, it is vital to understand these two child characters intricately.

The first story that I would like to talk about is *Dus Rupaiyaa* which is about a teenaged prostitute, *Sarita*, who is so enamored by the cars she is taken along in that the circumstances of her life fade away before that love. The first lines of the story establish the protagonist before us. It narrates the action of *Sarita* playing with other young girls who lived in her neighborhood. At the same time, we learn that the area where she played was surrounded by heaps of garbage thus immediately revealing the ambience of *Sarita* to us. We find *Sarita*'s mother expressing her duplicity as a character-on one side, we see her getting agitated when she plays with the young boys of her neighbourhood, but it is the same mother who lets her out in the open for being devoured by young men in exchange of money. *Sarita*'s silent protest against being looked down upon or mercied upon is a trait that she probably inherits from her father; a man who embraces death but does not succumb to a despotic officer.

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In understanding the character of her father, we see that the Subaltern has a voice here; but that voice is trampled. The most defined and pronounced part of Sarita's child -like nature is her affinity towards car rides. The car and the ambience that she experiences while the car drives past trees, buildings and people are the part of her imagined perfect world; beautiful and picturesque not gruesome like her real world. Sarita although being sexually victimized and being forced into a 'false' idea of being a woman, dreams of a world where all these inhibitions do not exist. The story ends when Sarita, ecstatic at the end of a day spent in a car with three feeble young clients, returns the ten rupees to one of them given to her saying that she did not do anything that demanded her remuneration. Living in a tiny one room flat with her single mother who pimps her out to earn a livelihood, Sarita's life isn't exactly conventional but to a reader it appears to be the order of the day due to the manner in which Manto narrates the story to his readers. To picturize the entire scenario in which Sarita lives, we are also immediately reminded of the other children with whom Sarita plays or interacts who are also similarly being subjected to this nymphomaniac society. In such a pedophilic world, Sarita, her mother, her pimp Kishori, those three young men and the innumerable men she has been traded to are equally to be blamed.

In stealing the pleasure of a happy and humane childhood from her, these people are responsible. Vandana Shukla in one of her articles remarks about Manto: "...he continued to unmask the world by never allowing his pen to be obscured by the convenience of compromise." (Vandana Shukla, The Tribune). He was a champion of the cause of women and listened to their unspoken longings and aspirations which had always been unattended, and highlighted very pointedly the sexual subjugation they were experiencing, and became a male crusader spearheading the movement addressing the issues concerning the rightful place and dignified survival of woman in society in his times. Therefore, in her wimps and fancies, we meet the child Sarita, in her subjugation and rejection of merciful remuneration at the end of the story, we meet the woman Sarita.

Through his stories Manto voices his concerns for the terrible difficulties of women and like a true feminist he forcefully though indirectly pleads for the honor and self-esteem of his battered and bruised women characters. He also tries to solve the puzzle as what governs the manwoman relationship, within the safe limits of society and outside it.

Sarita's innate desire to experience the rides of motor cars and feel the breeze move past her hair seem to be her want to escape from the pitiable condition she actually lives in. Sarita firmly believes that Sex Trade is the reality of all girls her age, and promises her friend 'Shanta' that she would appease the former's mother to allow her to accompany Sarita to her rides. She wants to share the pleasures of these escapades with her friend too. Manto''s works re-establish the protracted patriarchal ideas of crudity and taboo which he assimilates with utmost humanism. Here taboo is just a synthetic principle that cannot blemish the humanity of the character. Najma Manzoor in the essay, Manto, Aurat aur Waris Alvi'' enunciates;

"Manto's aristocracy is such that he never preaches but continues to enlighten reader's mind and stir their conscience. Women have been subject to humiliation and Manto through his stories has empathized with their plight and has shown solidarity with their cause. His portrayals of domesticated women and prostitutes are unique for he associates unconventional attributes. for example, determination, will, not being content in every situation and above all the ability to laugh. "

Manto employs his characters as metaphors in order to accentuate the widespread maltreatment of human race in those times. He fabricated his women characters that endured the revulsion of misdemeanor against humanity, free them from those men who had metamorphosed into mutual slaughterers and did not give up even in the face of utmost suffering. Manto's women characters are powerful and rebellious deviating from the prevalent approach in Urdu narrative that vaguely debased women and underscored simply the widespread traditions of a traditionalist culture. Sarita's greatness as a character lies in the fact that she reveals herself as a mature individual before the reader unabashedly, without any modifications and that establishes her beauty. Manto's approach towards the portrayal of the child through the portrayal of woman involves a movement away from depicting women as victims of hegemonic forces. His writings present a space where women are not portrayed as simple dupes of an ideology, but rather as actively constructing positions for themselves, using discursive constructs. He had an uncanny knack for exposing the corrupt soul of the so-called civilized people of his time and he did this with his frank and honest portrayal of Oppressed, pitiable, weak and victimized people in his stories. In this story, the two Hyderabadi men in the backseat-Shadab and Anwar and Kifayat in the frontseat as the driver is symbolic of the society

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that not only performs the destruction of the childscape by polluting it with sexual perversions but also enjoys watching the deflowering of these innocent souls as voyeurs. To an immature, average reader Manto appears a sensualist dealing in obscenity and vulgarity; to a Sensitive mind endowed with all those human sensibilities and the finest qualities of heart And head, this agitated, untamed but humane spirit is found to have a great insight into Human Psychology and behavior, particularly of women, and is involved in a ceaseless struggle with the forces which dehumanize the fragile psyche of the feminine world, refusing to toe the line of irrational, hollowed and hypocritical ways of this so-called developed world. This is why Sarita finds an innumerable number of real-life sisters in 2020.

We should take into account how Manto remains a controversial writer to read or discuss in our present time which indicates how the society may remain similar to when Manto wrote—how certain systems of power are still in place and how they do influence child sexual oppression in 2020. Similarly, when further examining the wider context of portrayals in the two stories, one sees that the array of characters that Manto creates around Sarita, from her mother to Turkaram's wife, are all characters who do more than feature in the story as side-characters.

They act as thought-provoking examples of social commentary through certain personality characteristics. For example, Sarita's mother serves as a question to the concept of motherhood, whilst Tukaram's wife not having a name of her own serves as a reminder of the notion of female identity shrouded under the identity of the 'man' who owns her and how it is socially determined by the men women marry than their own selves. Manto had a much more localised upbringing and less privileged life in comparison—a life that has allowed him to represent members of the subaltern, in our case the children who are surrounded by such individuals thus charring their childhood and its memories. Manto writes in his essay 'Beautiful Girls will Be Harassed' (translated by Aakar Patel),

"As long as men are put next to women, this harassment will happen. There might come a time when women's existence is no longer necessary for men and this will stop by itself. But not before that time is this going to end." (p. 39)

Critics of Urdu literature such as Muhammad Hasan Askari, treat modern Urdu writing (of the decades of 1940's and beyond), as propelled by a desire to find a 'tradition' for "the fundamental homelessness of Modern Urdu literature", by negotiating colonial experience, forces of nationalism/marginalization and of western literary influences (As discussed in Aamir R. Mufti, "The Aura of Authenticity", 95). Manto, himself seems to have been acutely conscious of the appendage of "newness", "progress" that had been thrust upon the writing of his time, particularly his own. Deliberating in his quintessential wry style in the essay titled "Touchstone", Manto refers to the "new packages" in which Literature seems to have become available in his era- "obscene", "progressive", "reactionary" and so on. Therefore we find the characters like Sarita and Khalid being presented to the reader-a new means of imparting voice to the restlessness of the society.

'Tamasha' was published in a small literary magazine from Lahore, was built around the Jallianwallah Bagh Massacre. The darkness and the impact of the atrocities have been narrated through the voice of a 6-yearold who finds all of this meaningless. The story begins with him questioning his father that why his school remains closed-which he finds absurd and meaningless. We are immediately narrated about the incessant flying of airplanes over Khalid's house which doesn't fail to create fear in the mind of the 6-year-old. The environment in which Khalid is living is abounding with terror, trauma, abject and horror. Although young Khalid doesn't realize the grievousness of the situation that is going to come before him, he prepares for a repartee according to his understanding. The neighborhood is preparing for a confluence of the natives but constant orders to stop this kind of confluence are being sent by the despotic powers of the day. The adult members of the family understand the effect this kind of a tumultuous time is going to bring to their lives, but young Khalid is seen to respond to all of this with utmost innocence. His practice of preparing his gun with which he would take revenge is used by the author to describe unadulterated innocence.

A kind of innocence which if present in grownups could possess the capacity to make the world a better place to live in. Khalid is born into a world where he has experienced fear of despotism from a very early stage and this is more pronouncedly realized when we see six-year-old Khalid reacting to the sound of planes. His rising desire to take revenge from those who would want to hurt his family seems undeterred.

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On asking questions-he is scolded by his father and asked to go and play. Khalid questions- 'Where should I go and play?' The city is surrounded by people who are waiting for a despotic doom and his friends don't come anymore to play with him. The trauma in the air and the hatred in the society have very beautifully destroyed Khalid's childhood obliviating even spaces to play. His looking out of the window and wondering as to why the shops remain closed even after three days and eventually not coming to any answer to it point out to the pointlessness and futility of these activities around him. On hearing the sound of the firing, Khalid's saying to his father, that the 'Tamasha' has begun-is replete with sarcasm, pointing out to the grievous mockery of violence. The scene of the young boy dying before his eyes-and the parents of Khalid being unable to save him indicates the kind of fearful restlessness that prevailed in the society then. Manto writes, 'Death is painful but violence is more painful than death'. Khalid understands that he may be punished but what kind of punishment involves bloodshed? Khalid's plea to God whom he understands to be superior to any master at the end of the story moves us-making us understand that perhaps any child, any Khalid could be at the place of the boy who was victimized. Globally the World Health Organization estimates up to 1 billion children aged 2-17 years have experienced physical, sexual or emotional violence or neglect in the past year. Target 16.2 of the 2030 Agenda for Sustainable Development is to 'end abuse, exploitation, trafficking and all forms of violence against, and torture of, children."

Works Cited:

- 1. Daruwalla, K.K "The Craft of Manto: Warts and all". *The Annual of Urdu Studies*.
- 2. Gatt Dashrath "Feministic Concerns through Fleshy Designs: A Revisit to Saadat Hasan
- 3. Manto's Short Stories". *The Criterion: An International Journal in English.*
- 4. Said, Mushba "Manto and Mueenuddin: A brief analysis of who is the authentic voice of the Subaltern".
- 5. Sengupta, Roshni "Manto's universe: the Progressive Writer's Movement as a tool of literary resistance".
- 6. Najma, Manzoor "Manto, Aurat aur Waris Alvi"

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7. The Indian Automobile Industry Slowdown and its Impact on Sustainable Growth in India

Dr. Sanchita Ghosh Chowdhury

Abstract:

The automobile industry in India contributes more than 7 per cent to India's GDP and almost half of the country's manufacturing GDP. It is also a massive employer and supports almost 37 million direct and indirect jobs. A slowdown in such a sector needs to be carefully examined and the causes and impacts judiciously isolated in order to find appropriate solutions. The present article attempts to identify the potential causes and gauge the probable impacts so that appropriate policy measures can be taken to correct the distortions. This will ensure a more sustainable growth in this sector and hence for the economy.

Keywords:

automobile, slowdown, credit, investment, policy, job creation, sustainable growth.

Introduction:

The automobile industry in India has been hit by several setbacks all at once. Starting from financial crisis like Infrastructure Leasing & Financial Services Limited (IL&FS) that have induced severe liquidity crunch in the economy, an uncertainty on account of general elections foreseeing policy changes, rising ownership costs, the slow-down in the economy and the recent severe floods in keyvehicle buying states, the industry has been facing a tough time. On top of this all, came the Bharat Stage VI emission norms and the policy push for electric vehicles which didn't help the situation to get any better. Growth has been slowing since September 2018 and the situation has worsened. Sales as well as dispatches have declined across all vehicle categories, that is, passenger cars, Sport utility vehicles (SUVs), scooters, motorcycles, vans, pickup The Indian Automobile Industry Slowdown and its Impact on Sustainable Growth...

trucks, large tractor trailers and buses. The sector has been racked by huge job cuts resulting in contract workers finding themselves jobless in huge numbers.

Experts have predicted that if the slowdown continues, even permanent workers may find their jobs in jeopardy. Not only that, according to the Society of Indian Automobile Manufacturers (SIAM) the automobile industry accounts for 14 per cent of the total goods and services tax (GST) collections in India, which means that a slowdown in the sector will stretch the already overstretched budget thin.

The current research attempts to gain a deep understanding of the sector in order to identify the potential causes and gauge the probable impacts of such a slowdown so that appropriate policy measures can be taken to correct the distortions. This will ensure a more sustainable growth for this sector and hence for the economy.

The paper is divided into 4 sections. Section 1 covers the introduction and literature review, section 2 covers the extent and impactof the slow down, section 3 talks about government initiatives to fight the slow down and section 4 concludes.

Literature Review:

Thind *et. al.* (2020) confirms that a slowdown in the automobile industry in India will impact many other interlinked industries like plastic, iron & steel, rubber, tyre and battery production. They also confirm that the performance and growth of the automobile sector is related to the global and national economic performance. That is, a recession in the nation or the globe can affect the growth of the industry. they suggest several causes for the slowdown in the industry such as shift from BS-IV toBS-VI, availability of substitutes such as hired rides, a slowdown in the country's growth, an increased vehicle-life, rise in prices, increased buying costs and increased road taxes. Mohata (2023) in his article states that the growth in the automobile sector of a nation is directly related to its macroeconomic growth and technological advancements. He also opines that overall economic slowdown; liquidity issues and weak consumer demand are some of the major factors contributing to the slowdown of the automobile sector.

The paper suggested changes in government policy as a counteractive measure to promote growth in the sector. Mandal (2020) in his blog titled "India Automotive Industry: Struggling in 2020?" exerts those automobiles sales declined sharply in 2019 due to multiple factors like political uncertainity, economic issues, stringent environmental and safety regulations and changes in consumer behavior. Tripathi (2019) identifies similar reasons for the Indian automobile industry slowdown and adds that Indiahas immense scope for growth in the automobile sector and hence it is the responsibility of the government to act promptly and address the challenges so that the industry can be put on the path to growth as soon as possible. The report by TheStanding Committee on Industry (Chair: Dr. K. Keshava Rao, 2020) on 'Downturn in Automobile Sector – its impact and measures for revival' noted that the slowdown in the automobile industry had a spillover effect on the Indian economy, causing a slowdown in many other interlinked sectors. The committee also recommended that the government should declare a stimulus package for generating demand in the industry instead of just concentrating on the supply side.

The Volume of the Down Turn:

The slowdown in vehicle sales in the Indian automobile industry was spread across categories and across companies. All players, whether big or small seem to have been affected by the slowdown in sales.

Industry leaders like Maruti Suzuki Tata Motors and Hero MotoCorp have all reported major fall in sales growth in 2019 as compared to 2018. Maruti Suzuki reported a fall in sales by 34.53 per cent whereas Tata Motors and Hero MotoCorp have reported a decline of 45 per cent and 20 per cent in sales respectively between August 2018 and August 2019¹⁰.

Maruti Suzuki sold less than one lakh units in the month of August 2019, which is its lowest in over two years whereas Honda cars India and Tata Motors passenger vehicledivision, reported decline of 51 per cent and 58 per cent, their lowest in the last 10 years¹⁰.

The following table gives an account of the severe crisis that hit the industry.

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Table 5.1: Monthly Sales of New Vehicles in India in 2019

| Туре | January | Februa ry | March | April | May | June | July | August | September |
|------------------------|----------|--------------|----------|----------|----------|----------|----------|----------|-----------|
| Passenger Vehicles | 2,80,125 | 2,72,284 | 2,91,806 | 2,47,541 | 2,39,347 | 2,25,732 | 2,00,790 | 1,96,524 | 2,23,317 |
| Commercial Vehicles | 87,591 | 87,436 | 1,09,030 | 68,680 | 68,847 | 70,771 | 56,866 | 51,897 | 58,419 |
| GrandTotal | 3,67,716 | 3,59,720 | 4,00,836 | 3,16,221 | 3,08,194 | 2,96,503 | 2,57,656 | 2,48,421 | 2,81,736 |

Source: Compiled by author based on data from Marklines Flash Report

The table clearly shows that sales have almost continuously fallen between Januaryand September of 2019, the extent of fall being almost 31 per cent in just 9 months. It is also apparent that the commercial vehicle segment suffered more than the passenger vehicle segment.

The decline in the commercial vehicle segment was almost 50 per cent whereas the passenger vehicle segment fell by 25 per cent over the same time period.

The figures below give a month-wise comparison of sales of new vehicles in India between 2018 and 2019.

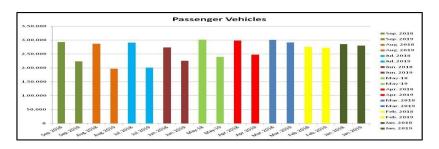


Figure 5.1: Monthly Comparison of Sales of New Passenger Vehicles in Indiafrom January to September 2018 and 2019

Source: Created by author on the basis of data from Marklines Flash Report

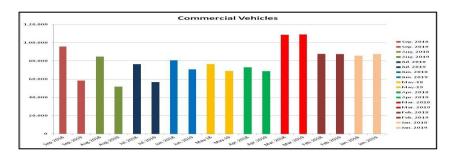


Figure 5.2: Monthly Comparison of Sales of New Commercial Vehicles in Indiafrom January to September 2018 and 2019

Source: Created by author on the basis of data from Marklines Flash Report

It is apparent from the above figures that the slowdown has worsened across both segments since April 2019 and is still continuing the downward spiral.

Potential Causes of the Downturn:

Globally, the automobile industry is doing well and that points towards the fact thatthe Indian automobile industry's current problems could be traced back to trouble rooting within the nation. A few such factors can be identified as follows;

Low Availability of Credit:

The growth in the automobile industry is dependent on several factors. One of the major factors in the recent years has been the easy availability of credit. A lot of consumers as well as small businesses buy their vehicles on loans that are made available through banks in some cases but mostly through the non-banking financial companies that have tie-ups with the vehicle selling units. According to a report by Economic Times, bank loans to finance vehicle purchases in India has slipped to 4.9% year-on-year at the end of July, less than half of the growthrecorded in the year-ago period⁹.

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The other important user of bank credit is the automobile dealers and several banks including some of the largest ones have large outstanding loans to automobile dealers. Recently, Indian banks, already burdened with burgeoning non-performing asset numbers, have become overly cautious in giving credit and the slowdown in the industry have pushed the decision against theautomobile dealers.

According to another report by Economic Times⁶, in August 2019, the State Bank of India had issued a circular to its branches, advising them to tighten collateral norms while lending to auto dealers. Non-state lenders Axis Bank and Kotak Mahindra Bank have also become cautious and averted to new unnecessary exposures and have slowed down on financing auto dealers.

In case of the non-banking financial institutions' role as dealer financers, the IL&FS and group entity defaults on repayment of dues have reduced their ability to create liquidity⁸. As about 60 per cent of commercial vehicle sales, 70 per cent of two- wheeler sales and 30 per cent of car sales are financed by NBFCs⁸, the result is an already slowing sector suffering from a further liquidity crunch.

Lower Income and Investment Growth:

Growth in income spurs consumption spending and hence is a driver of automobile industry growth. However, according to the annual report of the RBI for the fiscal year 2018-19, the Indian economy seems to be in a regressive mode. The GDP growth rate of the economy has slithered down to 5 per cent in the first quarter of the fiscal year 2019-20, the lowest in over six years. The growth of the Indian economy had been consumption led growth inclusive of both Private Final Consumption Expenditure as well as the Government Final ConsumptionExpenditure. Over the last five years, the total consumption expenditure by Indian households had accelerated with an average growth rate of 7.8 per cent compared to an average of 6.1 per cent in 2011-14⁴.

State Bank of India's group chiefeconomic advisor Soumya Kanti Ghosh said in a report that consumption slowdown is more entrenched and has dipped by Rs 1.5 lakh crore in the first quarter of 2019 as compared with the preceding March quarter⁹.

The Private Final Consumption Expenditure has suffered a sharp fall to 3.1 per cent in the June quarter as compared to 7.2 per cent in the March⁴. As a result of a slump in consumption spending both output and employment has fallen leading to deflated prices and even more unemployment as firms grapple with rising costs. The combined effects of the above have severely reduced income levels and are pushingthe economy towards a vicious cycle.

Further, income levels define the levels of saving and investment and the economic slowdown in India has impacted both private and government investment and led to reduction in gross fixed capital formation through reduced investment in research and development and technology, both of which are critical to the growth of the automobile industry in India.

New Registration, Insurance and Other Policy Norms:

Another factor dampening automobile industry growth is the new registration and insurance norms initiated by the government. Since september1, 2019, third party cover has been made mandatory for all vehicles plying on public roads, which has promptly increased the insurance cost for vehicles. As a result, the on-road price at the time of purchasing a vehicle has also shot up leading to a dampening of demand. At the same time, stricter safety norms also increased price of vehicles.

From April 1 2019, anti-lock braking systems/combined braking system (ABS/CBS) was made compulsory for cars and two-wheelers, new-vehicle registration fee was also proposed to be hiked steeply, from ₹50 to ₹1,000 for two- wheelers and from ₹600 to ₹5,000 for cars⁸, leading to further loss of potential buyers. Further, the BS IV vehicles, which are cheaper than BS VI vehicles, will not be allowed to be sold post March 31, 2020, which is bound to create inventory problems for manufacturers. Prior to all these, in July 2018, the government increased the axle load limit for all trucks.

This effectively gave existing operational trucks the permission to carry higher loads, increasing the freight carrying capacity of all trucks by almost 25 per cent⁸ and in the process dampening the demand for trucks in relation to business expansion.

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Untimely Push for Electric Vehicles:

According to the Indian Automobile Industry Report by IBEF³, the Ministry of Heavy Industries, Government of India has shortlisted 11 cities in the country for introduction of electric vehicles as a part of their public transport systems under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme. The government will also set up incubation centre for start-ups working in electric vehicles space. However, this policy is ill timed as the nation doesn't seem to be ready for it yet.

Electric vehicles have high operating expenses and long wait times at charging stations. An example is the failure of Ola's ambitious Electric Vehicle project in Nagpur just after nine months of its launch. Although introduced in 2015, with incentives as high as INR 140,000 on some cars, FAME has received only lukewarm response. Also, India still lacks thenecessary technology to support Electric Vehicle manufacturing and is yet to achieve efficiency in manufacturing critical components such as high-density batteries. The infrastructure and ecosystem necessary to build a robust supply of charging stations is another challenge for in this regard.

Immediate and Future Impact of the Downturn:

Impact on Other Sectors:

The automobile industry contributes more than 45 per cent of the countries manufacturing GDP and 7.1 per cent of India's overall GDP³. It also contributed to 4.3% of overall exports, 13% of excise revenues and provides incremental employment in excess of 19 million³. Hence a slowdown in this industry could have far stretching impacts on the economy.

Additionally, the industry has backward linkages with Mining, Steel, Primary and Fabricated Metals, Fuel, Plastic, Rubber and Glass and Electronics and forward linkages with Finance and insurance, after market services, Car hires and Rentals, Fuel supply, used car market, Advertising, Transportation and Warehousing. Thus, a slowdown in this industry will impact the performance of many other sectors too!

Slow Job Creation:

Automobile manufacturers in India have countered the slowdown in sales by slowing down production and selling off accumulated inventory. Estimates of the Federation of Automobile Dealers Associations (FADA) in February 2019, show inventory levels touched a peak 50-60 days for passenger vehicles, 80-90 days for two-wheelers and 45-50 days for commercial vehicles whereas the ideal level isthat of 21 days⁸. As a result, the first to be impacted is the huge number of temporary workers who have promptly lost their jobs. According to reports, industry leaders such as Mahindra & Mahindra, Maruti Suzuki, Tata Motors, Ashok Leyland, Toyota and Hero MotoCorp have all implemented intermittent plant closures for a few days in recent months⁸.

Component manufacturers such as Bosch, Wabco and Jamna Auto have also followed suit⁸, thus increasing the loss of jobs multifold. According to another report by News18², since April 2019, there have been over 3.5 lakh layoffs across the industry.

Government Initiatives:

The threat of extended impact of the automobile industry slowdown has prompted the government to initiate various measures in an attempt to boost demand and get the industry back on its growth track. The ban on purchase of new vehicles by government departments has been lifted. An additional 15 per cent depreciation has been allowed on vehicles acquired between August 2019 and March 2020.

A higher depreciation rate will bring down the resale value faster, prompting customers to replace the vehicle sooner. It will also bring down insurance premium from the second year onwards, apart from allowing businesses to claim higher business expenses, leading to more tax benefits. Additionally, BS-IV vehiclespurchased up to March 2020 will now be allowed to commute for the entire period of registration. For the time being the government is also going easy on the pushfor electric vehicles and is currently focusing on setting up of infrastructure for development of ancillaries/components, including batteries for exports.

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The revision of one-time registration fees has also been deferred till June 2020. To boost the financial health of automobile dealers, the government has announced therelease of the pending GST refund within 30 days. To infuse liquidity into the liquidity starved industry, the finance minister has announced that the repo rate will be directly linked to retail, housing, and vehicle loans. So, any reduction in repo rate will now be directly passed on to the lender. This will make working capital cheaper and boost production and hence employment. The low repo ratewill also lead to cheaper credit for consumers. Additionally, the Public Sector Banks (PSBs) are being recapitalised to the extent of Rs 70,000 crore which will boost credit creation.

Conclusion:

Prior to this slowdown, the Indian automobile industry was growing by leaps and bounds and is expected to emerge as the world's third-largest passenger-vehicle market by 2021¹. Contributing more than 7 per cent of the country's GDP and almost half of its manufacturing GDP, the sector's growth is crucial in fulfilling theIndian dream of becoming a 5 trillion economy by 2025. With its automotive mission plan in full swing and contributing towards innovation and technology integration in the industry, a careful and strategic management of the macro-economic factors with vigilant policy making will help the industry to reach the desired level of success. As the industry is a major contributor to the nation's GDP and employment, this success will instigate sustainable growth for India.

References:

- 1. Gupta, S.*et al.* (2018). *The future of mobility in India's passengervehiclemarket.* Mc.Kinsey report, July, available online at https://www.mckinsey.com/industries/automotive-andassembly/our- insights/the-future-of-mobility-in-indias-passengervehicle-market
- 2. Here's What the Auto Industry Has to Say on Finance Minister NirmalaSitharaman's Announcements.; News18, August, available Online at https://www.news18.com/news/auto/heres-what-the-autoindustry-has-to- say-on-finance-minister-nirmala-sitharamansannouncements-2282317.html

- 3. India Brand Equity Foundation.; *Indian Automobile Industry Report*, September 2019, available online at ttps://www.ibef.org/industry/india- automobiles.aspx
- 4. Kapoor, A. (2019). *The dynamics of India's growth slowdown*. TheEconomic Times, September, available online at https://economictimes.indiatimes.com/news/economy/indicators/the - dynamics-of-indias-growth-recession/articleshow/71020942.cms?from=mdr
- 5. Mandal, S. (2020) *India Automotive Industry: Struggling in 2020*?Available online at https://www.counterpointresearch.com/india- automotive-industry-struggling-in-2020/
- Manikandan, A. (2019) Banks go slow on lending to auto dealers. TheEconomic Times, August, available online at https://economictimes.indiatimes.com/industry/banking/finance/ban king/ba nks-go-slow-on-lending-to-autodealers/articleshow/70475021.cms.
- 7. Mohata, P (2023) *The Indian Automobile Sector Slowdown*. International Journal for Multidisciplinary Research. Available online at https://www.ijfmr.com/special-issues/2/239.pdf
- 8. Parvatha, V. C. (2019). *The worst of times for India's auto sector*. TheHindu Business Line, August, available online at https://www.thehindubusinessline.com/specials/india-file/the-worst-of-times-for-indias-auto-sector/article29262079.ece.
- 9. Ray, A. (2019) *Demand for vehicle loan shrinks*. The Economic Times, September, available online at https://economictimes.indiatimes.com/industry/banking/finance/ban king/de mand-for-vehicle-loan-shrinks/articleshow/71282208.cms.
- Taumar, D. (2019). Complete Sales Analysis August 2019: Auto cos sales further see a downward trend. The Economic Times, September, available online at https://auto.economictimes.indiatimes.com/news/industry/completesales- analysis-august-2019-auto-cos-sales-further-see-adownward- trend/70941753.
- 11. Thind et.al. (2020). Slowdown In the Automobiles Sector In India: Causes And Suggestion, European Journal of Molecular & Clinical Medicine Volume 07, Issue 07, available online at https://ejmcm.com/article_5337_121d3c3794f2712959bf833d2da9 32d0.pdf

The Indian Automobile Industry Slowdown and its Impact on Sustainable Growth...

 Tripathi M. (2019). Reason and Solution of Indian Automobile Slowdown.Businessworld. Available online at https://www.businessworld.in/article/Reason-And-Solution-Of-Indian- Automobile-Slowdown/13-09-2019-176078/ Towards Sustainable Growth in India: Connecting the Missing Dots ISBN: 978-81-19149-33-9

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8. Observing Environmental Taxes, Carbon Laws, and Sustainability Rewards in India

Prof. Shailesh Kumar Dubey

Abstract:

A carbon tax is essentially a levy on the amount of carbon emitted. A carbon tax's goal is to lower carbon emissions by motivating emitters to avoid carbon-intensive manufacturing and consumption by delivering a price signal to them. Global concern exists regarding climate change, which if major mitigation measures are not adopted, might have catastrophic implications on the world.

According to projections, even a 2°C increase in global warming could result in extreme heat waves, violent storms, and widespread food shortages. According to the Global Climate Risk Index 2021, India is one of the ten countries most affected by extreme weather caused by climate change. In order to encourage future investment, consumption, and innovation along sustainable and climate-friendly routes and to assist a sustainable pandemic recovery, a carbon price is thought to be a viable instrument. India's renewable energy industry appears to be rebounding in terms of investments after experiencing a setback during the first two years of the COVID-19 epidemic.

Recent research, however, raises concerns about the sector's overall development rate, with finance emerging as a significant barrier. According to the Organization for Economic Cooperation and Development, "green growth" refers to promoting economic growth and development while ensuring that natural resources and environmental services continue to provide the necessities for human well-being on a global scale. This can be accomplished by catalysing investment and innovation to support sustained growth (OECD). Carbon prices are an effective approach to reduce carbon emissions and combat climate change. Internationally, countries' implementation of carbon pricing programmes is becoming increasingly important.

Carbon taxes would incentivize businesses to transition to cleaner, more environmentally friendly production methods, which would benefit both the economy and the environment while also absorbing the costs of negative externalities. As a result, implementing such a tax in India would be favourable.

Keywords:

Green Growth, Green Cess, carbon emissions.

Introduction:

Global concern exists regarding climate change, which if major mitigation measures are not adopted, might have catastrophic implications on the world. According to projections, even a 2°C increase in global warming could result in extreme heat waves, violent storms, and widespread food shortages. It is imperative that there be zero net carbon emissions by the end of the century in order to avoid crossing this threshold; carbon taxes are one of the strategies for achieving this goal.

A carbon tax is simply a tax on carbon emissions. A carbon tax's goal is to lower carbon emissions by motivating emitters to avoid carbonintensive manufacturing and consumption by delivering a price signal to them. Governments can use the money they receive from the carbon tax to fund research on emission reduction, green technologies, renewable energy sources, and other projects that will help reduce emissions even further.

Governments across the world are implementing sustainability tax policies to cut emissions, achieve carbon neutrality, combat climate change, and collect money for crucial policy goals. Although these objectives are similar, different policies have been put in place to accomplish them. For businesses that want to combat climate change, obtain significant incentives, or avert expensive shocks, being abreast of the changing sustainability tax policy landscape around the world is essential. However, it can be difficult to stay current as policies change quickly, especially for businesses operating internationally.

Carbon taxes have the benefit of shifting the burden of the external costs of carbon emissions—such as land loss due to sea level rise, crop damage from altered precipitation patterns, and medical expenses related to heatwaves and droughts—from the general public to the polluter. As a result, carbon taxes serve to include the costs associated with the negative externalities of carbon emissions within its scope.

Carbon taxes do not have to be imposed exclusively on carbon emissions; they might also be imposed on the use of fossil fuels such as coal and petroleum. The purpose of this chapter is to analyse how carbon taxes have affected India.

The Green Tax is a summary of the environmental taxes, carbon pricing schemes, and other incentives for sustainability that are in place in an increasing number of jurisdictions. Although there are local fuel taxes and incentives for clean energy initiatives, India has well-established national sustainability tax programmes.

In India, there is no formal system for pricing carbon, neither through carbon trading nor as a tax. The Energy Conservation (Amendment) Bill, 2022, has just been amended by the government, paving the way for the government to forward its decarbonization agenda through carbon trading, the requirement to use non-fossil fuels, and energy efficiency standards. There are high taxes on petrol and diesel, a "Green Tax" on old vehicles and lower taxes on electrics vehicles. Fiscal incentives are being considered to encourage domestic production of ACC batteries, solar panel production, and other qualifying activities. For the automotive industry, including the production of electric and hydrogen fuel cell vehicles, a Production Linked Incentive (PLI) programme has been proposed.

A Study of Carbon Taxation in The World':

Various carbon pricing systems have been implemented in a number of countries throughout the world (carbon pricing mechanisms are mechanisms that impose a price on carbon emissions). The UN reports that 23 of these countries have put in place carbon prices, largely at the national level. Countries started imposing carbon fees in the early 1990s. Finland first accomplished this in 1990, and then Norway, Sweden, and

Denmark did it in 1991. Carbon taxes have been implemented in both rich and developing nations over the years (for instance, Chile and South Africa have done so). Every country has its own system and level of carbon taxes, which are being implemented by more countries not only to try to minimise the consequences of climate change, but also to avoid being penalised by the international community.

However, there are compelling arguments for developing nations to seriously examine carbon pricing, and carbon taxation in particular, even in the absence of global collaboration. To begin with, in the absence of a carbon price, people and businesses may invest in technologies that are ultimately ineffective. Power companies, for example, will invest in brand-new power plants that use high-carbon technologies. Later, either of them will have to be abandoned, resulting in a waste of investment, or they will force nations to adopt a higher emissions path in the medium term. Today's strong signal from a carbon price could help prevent these "lock-in" effects.

Second, carbon taxes provide a significant and manageable revenue stream. The COVID-19 pandemic has intensified this requirement while also raising questions about the sustainability of the public finances in some nations. Increasing tax income is a crucial component of the development objectives of many countries as they strive to boost public investment and social safety nets.

Since these products are frequently already subject to some type of taxation (or subsidy), applying carbon prices in the form of taxes on fossil fuels, as has been done in Colombia and South Africa, is administratively possible in most nations. Carbon taxes are therefore expected to be less administratively expensive than other taxes in circumstances where the informal economy represents a significant portion of economic activity.

The Carbon Tax Structure in India:

India is one of the ten nations most impacted by extreme weather due to climate change, per the Global Climate Risk Index 2021. Because we are a developing country, it is critical that we minimise carbon emissions as much as feasible.

Even though India is one of the few countries on track to fulfil its Paris Agreement carbon reduction targets, more has to be done to assist it in the battle against climate change.

Although India does not have a national carbon tax, various state governments have imposed their own fees to offset the costs of adverse externalities, such as the Green Cess in Goa and the Eco Tax on autos entering Mussoorie. Furthermore, while the Government of India (GOI) has not technically adopted a carbon tax, it has already established legislation to collect the costs associated with negative externalities.

The Clean Energy Cess was one policy introduced by the GOI in 2010 with the goal of encouraging the use of clean fuels by increasing the cost of coal usage and donating a portion of the money earned to research and clean energy programmes.

The Clean Energy Cess, however, was abolished with the adoption of the Goods and Services Tax (GST) in 2017; in its place, a Compensation Cess on coal production was implemented at a rate of Rs. 400 per tonne. Often referred to as "India's carbon tax," the Indian Clean Environment Cess (formerly the Clean Energy Cess) was implemented in 2010 and rose from Rs 50 per tonne to Rs 400 per tonne.

To advance renewable energy programmes and R&D, a tax known as the Cess is levied on coal and its derivatives (lignite and peat). In India, in addition to the Cess, the excise duty on petrol and diesel has also been referred to as an implicit carbon tax.

To understand what kind of environmental tax policy India now has, this article primarily explores the fragmented green tax regime in India, which consists of the Cess, the excise on gasoline and diesel, and other tax efforts in the nation. Although there are no taxes or fees on fossil fuels in the country, it is argued that the Cess has several fundamental flaws in both its collection and coverage processes.

In order to encourage future investment, consumption, and innovation along sustainable and climate-friendly routes and to assist a sustainable pandemic recovery, a carbon price is thought to be a viable instrument.

Due to rising carbon prices, more auctioning from emissions trading, and revenue from new instruments, there was an increase in carbon pricing revenue of almost USD 84 billion in 2021, or about 60% above that of 2020. Carbon pricing may also be a practical financial instrument and a significant source of increasing tax income for governments.

Since failing to address policy gaps will have a long-term effect on the future of clean energy and energy security in India, the chapter also identifies problem areas in the way the other "green taxes" are levied under the current "carbon tax" regime. It then offers some solutions and recommendations.

The newly imposed Compensation Cess will remain in place until 2022. However, it only charges the use of coal, not the quantity of carbon emissions produced by coal use. This leads to two problems:

Even if people choose to utilise cleaner coal alternatives, it still penalises taxpayers in two ways: 1. It has no effect on reducing the amount of coal used and, consequently, the amount of carbon generated; and

It penalises taxpayers even if they choose to utilise cleaner coal alternatives.

India's carbon taxation plan is currently at best rudimentary. Additionally, the taxation system lacks a progressive design. Since the external costs of carbon are not adequately captured, this not only affects the country's economy but also potentially has an impact on India's foreign trade.

What Is Carbon Pricing?

The idea of placing a price on carbon pollution in order to reduce emissions and encourage investment in cleaner alternatives is gaining traction among nations and businesses, and the phrase "put a price on carbon" has now gained widespread recognition.

What does carbon pricing imply, and why is it supported by many government and industry leaders?

Governments have a number of options for pricing carbon, all of which lead to the same conclusion. By assigning a value to carbon, they can begin to determine what are known as the external costs of carbon emissions, or costs that the general public bears as a result of other events, such as damage to crops and medical costs as a result of heat waves and droughts, or damage to property as a result of flooding and sea level rise.

Carbon pricing aids in shifting responsibility for the damage back to those who caused it and have the power to stop it. A carbon price sends an economic signal, and polluters choose for themselves whether to stop their polluting activity, cut emissions, or continue polluting and pay for it. Rather than mandating who should reduce emissions and where, it instead prescribes how.

Thus, the ultimate environmental aim is achieved in the most flexible and beneficial way for society's economy. New, low-carbon economic growth drivers are fueled by the carbon price, which also promotes clean technology and market innovation. Emissions trading systems (ETS) and carbon taxes are the two primary methods of carbon pricing.

A cap-and-trade system, also referred to as an ETS, restricts overall greenhouse gas emissions while allowing low-emitting businesses to sell extra allowances to larger emitters. A market price for greenhouse gas emissions is established by an ETS by generating supply and demand for emissions allowances. The cap helps to ensure that the necessary emission reductions will take place so that everyone who emits keeps their total emissions within their pre-allocated carbon budget. By establishing a tax rate on greenhouse gas emissions or, more frequently, on the carbon content of fossil fuels, a carbon tax immediately establishes a price on carbon. A carbon tax differs from an ETS in that the decrease in emissions it will produce is not predetermined, but the carbon price is.

The nation's and the economy's conditions will determine the instrument to be used. The removal of fossil fuel subsidies, the imposition of fuel taxes, and legislation that may take into account the "social cost of carbon" are further indirect methods for more properly pricing carbon. Payments for emission reductions are another method of pricing greenhouse gas emissions.

Emission reductions may be purchased by private entities or sovereigns to fund mitigation efforts through results-based financing or to make up for their own emissions (referred to as offsets).

Nearly 40 countries, as well as more than 20 cities, states, and provinces, already use carbon pricing schemes, and more are expected to do so in the future. About 50% of their total emissions, or 13% of annual global greenhouse gas emissions, are currently covered by the carbon price schemes taken together.

Why Price Carbon?

One of the biggest worldwide issues of our day is climate change. It poses a risk to lives, livelihoods, and economic growth and has the potential to reverse decades of development progress. The science is clear as of right now: Global warming has been caused by human activity, specifically the widespread use of fossil fuels. The environment on which our existing economies were based is already changing. Since the turn of the century, 14 of the 15 hottest years since records have been kept have occurred. Extreme weather-related incidents have become more intense.

Snapshots of the science can be found in recent reports from the Intergovernmental Panel on Climate Change (IPCC) and the Turn down the Heat reports that the Potsdam Institute for Climate Impact Research produced for the World Bank. If nations do nothing, they warn, there will be harmful repercussions on ecosystems, agriculture, water supplies, and human health. We could see severe food shortages, unheard-of heat waves, and more intense storms if the world heats by merely $2^{\circ}C$ ($3.6^{\circ}F$), a warming that may occur in 20 to 30 years. Studies indicate that we have already locked in a warming of around $1.5^{\circ}C$.

The IPCC estimates that before the century is out, the world must achieve net zero emissions. So, take immediate action. Carbon price is a crucial component of the answer. The economic justifications for taking action are equally strong. The Adding up the Benefits, New Climate Economy, and Risky Business studies all highlight how acting now can lead to opportunity. The IPCC warns that waiting to act will simply drive-up prices.

One of the biggest problems facing the world now is climate change, which might reverse decades of progress and prosperity.

The importance of pricing carbon is made abundantly obvious in the most recent report from the United Nations Intergovernmental Panel on Climate Change. This will help keep the rise in the global mean temperature to two degrees Celsius above pre-industrial levels.

Various tools, such as domestic emissions trading systems, carbon taxes, adoption of a social cost of carbon, and/or payments for emission reductions, can be used to price carbon to efficiently and cost-effectively cut emissions, depending on each country's unique circumstances and priorities.

The governments are acting. About 40 national jurisdictions and more than 20 subnational ones have already put in place or slated emissions trading programmes or carbon levies for 2014. Together, these nations are responsible for more than 22% of all emissions. The process of preparing for carbon pricing is progressing in many more nations and jurisdictions. Together, they account for about half of all GHG emissions. Businesses are reacting. An increasing number of businesses are already operating within carbon price frameworks and honing their emission management skills.

Others are organising their businesses to include goals for reducing greenhouse gas emissions. More than 100 businesses from around the world officially admitted to CDP in 2013 that they already use carbon pricing as a tool to manage the risks and opportunities to their ongoing operations and future financial success. Businesses have expressed support for carbon pricing because they recognise it as the most effective and economical way to reduce emissions.

The force is increasing. If we are to create a set of cost-effective policies to enable scaled up mitigation, carbon pricing is a need.

There are various methods for figuring out the best carbon tax rate, and these methods are frequently based on the goals and policy objectives of the tax system in a particular jurisdiction.

The level of carbon emission reduction the nation aims to achieve can be used to establish the tax rate, as can the social cost of carbon, which measures the monetary cost of damages brought on by each additional metric tonne of greenhouse gas emissions. It could also be decided using the revenue strategy, where the tax rate is based on the regulatory authority's revenue considerations, or by simply using the benchmarking technique, where the tax rate is linked with the rate in nearby jurisdictions, among trading partners, or among rivals.

The premise underlying carbon pricing methods is that profit-seeking businesses would keep reducing emissions until the marginal cost of abatement is less than the societal cost of carbon. To put this into perspective, the marginal abatement cost for an entity is the marginal cost of reducing each additional unit of emissions. It depends on a number of variables, such as the rate of technological innovation in low-carbon products, the cost of compliance, and businesses' and consumers' capacity to switch from high-carbon to low-carbon products.

In order to properly price carbon and create a pathway for carbon reduction, a variety of policy instruments that are based on the market or valuation can be used. Carbon taxes, cap-and-trade programmes, emission reduction credits, renewable energy requirements, and the elimination of fossil fuel subsidies can all be categorised as explicit or implicit carbon pricing strategies.

It is imperative that there be more global cooperation. Governments agree to cooperate with one another, and businesses agree to do the same in order to achieve the long-term goal of an economy-wide carbon pricing by:

- Enhancing cooperation to share knowledge, expertise, and lessons learned on creating and implementing carbon pricing through various "readiness" platforms.
- Strengthening carbon pricing policies to reroute investment proportionate to the scale of the climate challenge.
- Bringing forward and strengthening the implementation of existing carbon pricing policies to better manage investment risks and opportunities.

India's Taxes and 'Subsidies Threaten Clean Energy Growth in The Country:

India's renewable energy industry appears to be rebounding in terms of investments after experiencing a setback during the first two years of the COVID-19 epidemic. Recent research, however, raises concerns about the sector's overall development rate, with finance emerging as a significant barrier.

Studies show that subsidies for renewable energy are being cut, taxes are rising, and imports of machinery for solar and wind energy projects are being restricted. One such analysis is a collaboration between the International Institute of Sustainable Development (IISD) and the Council on Energy, Environment, and Water (CEEW), which finds that since 2017, the subsidy for the renewable energy sector has decreased by 59%. Additionally, it stated that the country's public financial institutions were not sponsoring renewable energy projects in a way that was consistent with the energy targets.

In order to decarbonize its energy industry and keep its promise to become a net-zero nation by 2070, India wants to install 450 GW of renewable energy capacity by 2030. India now has 111.39 GW of installed renewable energy capacity. According to the most recent data, India added 15.5 GW of renewable energy capacity in the most recent fiscal year (2021–22) with investments totalling \$14.5 billion (Rs11, 338.8 crore).

According to the CEEW report "Mapping India's Energy Policy 2022," the subsidy for the renewable energy sector was Rs 16,312 crore in 2017 but only Rs 6,767 crore in the following fiscal year (2021–2022). The incentives for electric vehicles, however, roughly increased throughout that time. The research emphasised that non-banking finance companies (NBFCs) and certain private banks provided the majority of the country's assistance for clean energy projects, whilst public sector lenders focused more of their investments on fossil fuel-based energy projects. Such a scenario, according to experts who co-authored the paper, might slow the nation's progress toward meeting the 2030 goal. They want increased subsidies as well as actions to remove obstacles and financial bottlenecks.

"Solar manufacturing, green hydrogen, and potential decentralised renewable energy technologies will need more subsidy assistance in order to scale up. The supporting ecosystem, which includes storage and transmission, would also need government assistance and further investment to handle the sector's cyclical nature and the grid integration component, according to Prateek Aggarwal, a programme associates at CEEW and a co-author of the report.

According to him, the industry will require more investments from various financial institutions because the current circumstances necessitate a significant capital mobilisation through debt instruments.

According to the CEEW analysis, the installation of just the generation capacity would cost \$200 billion, compared to the combined existing exposure of banks and NBFCs to the whole Indian power sector, which is currently around \$160 billion.

"It is obvious that the banks and NBFCs lack the headroom needed to meet the funding requirement. Solutions like subsidised credit enhancement hold the key to opening up the flow of financing from the bond market to the RE sector, Aggarwal stressed, in order to address this problem.

According to the research, the sector received Rs5.4 lakh crore in total financial support for 2021–22 through subsidies, investments by public sector utilities (PSUs), and loan disbursements from banking institutions through debt. It stated that among the obstacles to the industry's expansion are a lack of openness in reporting on financial support by banking institutions and a failure to have a clear mandate of financial aims for the sector.

Financial Rules Are Required:

When asked if the Reserve Bank of India (RBI), India's central bank, needed to make any special measures to encourage clean energy funding in India, there hasn't been much of a "green" component in the reporting of annual loan disbursements for India's public sector banks, according to 'Swasti Raizada, a policy advisor at the IISD (PSBs).

"Because the PSBs have a broad range of assets, it is challenging to evaluate the funding for renewable energy that is routed via them due to the lack of precise sectoral data. This demonstrates that regulators, like the RBI, have a clear responsibility to increase transparency through mandates and support policy efforts that would increase the amount of renewable energy funding provided by PFIs (private finance initiatives), she said.

PSUs play a crucial role in India when it comes to their control over vital energy resources including coal, oil, natural gas, clean energy, and others. The report advocated a clear roadmap for these PSUs to enable target-specific movement of these governmental organisations on their approach to decarbonization by ensuring a sustainable energy mix for the country. "PSUs must determine clean energy diversification choices that best fit their current operational procedures. They then need to commit to investment goals and consistently raise their desire.

According to 'Raizada, "such planning is essential to study a company's diversification options, capital allocation strategy, and the kinds of strategic acquisitions that may be financed with its current balance sheets".

Clean Energy Vs. Coal:

There are concerns that the growth of the clean energy sector would compromise India's security of energy. How might the Indian economy be affected by the phase-out of coal?

According to a recent analysis by the think tank Centre for Study of Science, Technology and Policy (CSTEP), switching from fossil fuels to renewable energy will actually have a net beneficial impact on the Indian economy.

According to the report, increasing the proportion of renewable energy in power generation boosts household income and the GDP, with rural households benefiting more than urban households.

In rural areas, increased usage of renewable energy might increase yearly per capita income by an average of Rs2,172.

The research advocated for more renewable energy subsidies rather than higher taxes on fossil fuels because these measures could have a greater positive impact on the economy.

Instead of raising taxes on fossil fuels, Krithika Ravishankar, a co-author of the study and an analyst at CSTEP's Climate, Environment and Sustainability sector, advised investing in renewable energy and the associated subsidies to Mongabay-India. "The former has greater economic advantages, particularly in the near term."

"A tax on fossil fuels won't be helpful in limiting their use until there are enough readily available, affordable alternatives. Then, in order to incentivize businesses to invest in low-carbon technologies and lessen the tax burden, taxes might be put on unrefined fossil fuels. Since the tax burden is carried by the industry, this would simultaneously discourage the use of fossil fuels and prevent any unfavourable effects on households, she said.

Furthermore, according to the CSTEP analysis, reducing the percentage of coal-based power alone was inadequate to reduce the demand for coal as a whole. Since it was predicted that industrial demand for coal would increase over time, this was done.

To ensure significant emissions reduction and the phase-out of coal, it was emphasised that decarbonization of important industries (such as iron and cement) was also necessary.

Energy expert Vibhuti Garg's assessment for the Institute of Energy Economics and Financial Analysis (IEEFA), published in June 2022, asserted a post-covid-19 comeback in terms of investment in the industry. Compared to 2020–21, when it was 72% more than the year prior to the pandemic of 2019–20, investment in the sector increased by 125% in 2021–22.

The UK still has to invest about twice as much if it wants to fulfil its 2030 clean energy goals, the report claims, despite \$14.5 billion being invested in the renewable energy sector in 2021–22. By 2030, India's annual budget must climb from \$14.5 billion to \$30-40 billion, according to the estimate.

The Indian government asserts that it has been supporting the industry through a number of subsidies and other programmes to expand it.

In March 2022, RK Singh testified before the parliament that India had declared a trajectory for renewable purchase obligation for 2022, waived interstate transmission fees for interstate sales of solar and wind power, and allowed 100% foreign direct investment (FDI) in the sector in order to attract investment.

Utility of Carbon Taxes:

Several benefits of carbon pricing are listed below:

Carbon taxes encourage the adoption of renewable energy sources by discouraging the consumption of highly emissive materials and energy sources. Such levies will encourage businesses to look for greener sources by raising the cost of highly emissive inputs.

Carbon taxes shift the public's share of the external costs of carbon emissions to the polluter. This forces polluters to use less-emitting, more environmentally friendly production methods. Additionally, they give the government the ability to raise money that can be used to lessen any possible calamities brought on by climate change.

Carbon taxes could be a progressive system of taxation if a maximum emission threshold is established, above which such emissions would be subject to taxation. Furthermore, a carbon tax system would benefit the nation without affecting the very people it intends to protect because it taxes emissions rather than the usage of fossil fuels, which are necessary for people who are economically disadvantaged.

From the standpoint of international trade, India would safeguard itself from being shunned or punished for not enacting a carbon tax. India will also be able to defend itself against any negative effects on its exports.

Carbon Tariffs Have Drawbacks:

Although carbon taxes offer several benefits, they also have a number of drawbacks:

If carbon tax systems are not created with the economy in mind, they could have negative effects. If the system is not built to handle economic demands, it may be very difficult for people who are already having financial difficulties. As a result, a strategy for building such a mechanism must be carefully thought out and implemented.

When some necessities are made, carbon emissions are released. Carbon taxes on emissions could drive up the price of such needs and ultimately hike consumer expenditures. For a nation like India, where a sizeable portion of the populace cannot afford to pay a higher price for such commodities, this is immensely problematic. In order to avoid paying carbon taxes, businesses may hide their actual carbon emission levels, which would hide the real extent of the issue. Instead of relying on voluntary disclosure, governments would require the manpower and infrastructure, which may be time-consuming and expensive to establish, to audit corporations' emissions.

Budget 2023 – Green Growth:

Budget 2023: Union Finance Minister Nirmala Sitharaman stated that initiatives to promote green growth assist in lowering the economy's carbon intensity and create numerous chances for green employment.

Union Budget 2023: On February 1, during the presentation of the Union Budget 2023, Union Finance Minister Nirmala Sitharaman made various announcements regarding green growth. Many analysts had predicted that this year's scientific budget will emphasise clean water supply and green energy, and the Union Budget did place emphasis on these sectors.

The PM Vishwakarma Kaushal Samman (PM Vikas) Scheme, which was unveiled by Sitharaman, will provide not only financial assistance but also access to information on cutting-edge digital methods and effective green technology, among other things.

According to Sitharaman in her address, the budget for this year selected seven priorities that work in harmony with one another and serve as the "Saptarishi" directing the nation through Amrit Kaal.

The top priorities are "Inclusive Development", "Reaching the Last Mile", "Infrastructure and Investment", "Unleashing the Potential", "Green Growth", "Youth Power" and "Financial Sector".

'Green Growth' – Announcements:

"Green growth" is defined by the Organisation for Economic Cooperation and Development (OECD) as promoting economic growth and development while ensuring that natural resources and environmental services continue to provide the necessities for human well-being on a global scale. This can be accomplished by catalysing investment and innovation to support sustained growth (OECD). Green growth offers a practical and adaptable strategy for achieving verifiable progress across sustainable development's economic and environmental pillars, but it does not replace it.

The finance minister stated during this year's budget that the government would adopt a number of initiatives for green transportation, green building, and green equipment, as well as measures for energy efficiency in a variety of industries. The minister added that these initiatives to promote green growth contribute to a decrease in the economy's carbon intensity and create numerous chances for green employment.

Fuels generated from biomass sources utilising a variety of biological, thermal, and chemical processes are known as "green fuels." They are chemically equivalent to petrol, diesel and jet fuel made from petroleum. They are also referred to as drop-in fuels or renewable hydrocarbon biofuels. Because they are formed of plant and animal materials, green fuels are meant to be environmentally friendly.

A type of energy known as "green energy" is generated from natural resources like sunlight, wind, and water. One method that green energy does not harm the environment is through the release of greenhouse gases into the atmosphere.

Common forms of green energy include hydroelectric power, wind power, and renewable energy sources like solar power.

Observing Environmental Taxes, Carbon Laws, and Sustainability

However, not all forms of renewable energy are favourable to the environment. Power generation from organic material from sustainable forests is renewable but may not be environmentally benign due to the carbon dioxide released during the burning process.

Green farming is an agricultural system that uses biological pest controls and fertilisers made primarily from plant and animal wastes and nitrogen-fixing cover crops in response to the harm that chemical pesticides and synthetic fertilisers used in conventional agriculture cause to the environment. Green farming has a number of ecological advantages.

With regards to greenhouse gas emissions, noise pollution, and air pollution in particular, green mobility aims to reduce the unfavourable consequences of travel on the environment. The United Nations defines green mobility as favouring networks that don't depend on fossil fuels to operate, urban walking and cycling, and the notion of "moving people than automobiles."

An environmentally friendly structure, also known as a sustainable structure, aims to uphold or raise the quality of life in the area in which it is located.

Green building, as defined by the US Environmental Protection Agency, is the technique of developing and utilising systems that are resourceand ecologically conscientious throughout a building's life cycle, from site selection to design, construction, operation, maintenance, renovation, and deconstruction. This approach conserves energy, water, and other resources, lessens waste, pollution, and environmental deterioration, and protects occupant health.

Green technology is energy-efficient gear that is primarily solar-powered and has a battery life of many hours. Fuel, which comes from nonrenewable resources, is not consumed by this machinery.

Sitharaman claims that actions to encourage green growth aid in reducing the economy's carbon intensity, which lowers carbon emissions. The actions to support green growth will also lead to a large number of green job opportunities.

Whether they are in more recent green industries like renewable energy and energy efficiency or in more established green industries like manufacturing and construction, "green jobs" are legitimate jobs that assist protect or restore the environment, according to the International Labour Organisation.

Green jobs aid in adaptation to the consequences of climate change, boost energy and raw material efficiency, decrease waste and pollution, lower greenhouse gas emissions, and protect and restore ecosystems.

The purpose of "LiFE," or Lifestyle for Environment, is to "spur a movement of ecologically conscious lifestyle," according to Sitharaman. Prime Minister Narendra Modi has described this as his vision.

She continued by saying that India is making steady progress toward the goal of having net-zero carbon emissions by 2070 in order to bring about a transition to a green economy and industry. According to Sitharaman, "This Budget expands on our commitment on green growth."

Green Hydrogen Mission:

On August 15, 2021, the National Green Hydrogen Mission was unveiled, with a budget of INR 19,700 crore. The mission will help the country establish technological and commercial leadership in the sunrise industry, reduce reliance on imported fossil fuels, and transition to a low carbon economy. The sunrise industry is a new or relatively new sector that is anticipated to experience rapid growth in the coming years. According to Sitharaman, the government's goal is to produce five MMT (million metric tonnes) year by 2030.

Green Growth for Clean India:

'Energy Transition

Among the energy transition projects are battery energy storage systems and energy storage systems. The Union Budget 2023–24 allocates Rs 35,000 crore for high-priority capital expenditures to support net zero and energy transformation goals.

Observing Environmental Taxes, Carbon Laws, and Sustainability

'Battery energy storage systems

Additionally, 4,000 megawatt-hour battery energy storage systems funded by viability gap funding will be introduced. Viability gap funding reduces the amount of money needed to pay costs and give a profitable return for the private sector. It is intended to provide capital support for public-private partnership projects.

Systems for storing energy in batteries will direct the economy toward sustainable growth. Additionally, the government will create a comprehensive structure for pumped storage projects. Unused electricity is captured by a pumped storage system during periods of low demand.

'Inter-state transmission system

13 gigawatts of renewable energy from Ladakh will be evacuated and integrated into the grid through interstate transmission infrastructure to ensure green growth. A total of Rs 20,700 crore would be invested, including Rs 8,300 crore for central funding.

'Green Credit Programme

Under the Environmental (Protection) Act, a Green Credit Program will be announced in an effort to promote behavioural change. Businesses, individuals, and neighbourhood organisations will be encouraged to engage in environmentally conscious behaviour through the programme, which will also help to mobilise additional funding for such initiatives.

'PM' -PRANAM

The introduction of the "PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth" (PM-PRANAM) is intended to inspire states and union territories.

The programme will also promote the moderate use of chemical fertilisers and alternative fertilisers.

Waste to Wealth:

'GOBARdhan scheme

In order to assist the circular economy, which strives to keep resources, goods, and services in use for as long as feasible, 500 new "waste to wealth" facilities will be constructed as part of the GOBARdhan (Galvanizing Organic Bio-Agro Resources Dhan) programme.

The 500 "waste to wealth" facilities will include 75 urban plants, 200 compressed biogas (CNG) plants, and 300 community- or cluster-based plants. There will be investments totaling Rs. 10,000 crores.

The finance minister also announced the establishment of a 5% compressed biogas (CBG) tax for all companies that sell both natural and biogas. CBG is very methane-rich purified biogas.

Both the distribution of bio dung and the collection of biomasses will be adequately funded. 'Bharatiya Prakritik Kheti Bio-Input Resource Centres

According to the finance minister, the government will assist one crore farmers in switching to natural farming over the next three years. 10,000 Bio-Input Resource Centers will be established to create a distributed national micro-fertilizer and pesticide manufacturing network in order to accomplish this.

Protecting 'Wetlands and Mangroves':

Protecting Our Wetlands and Mangroves

'MISHTI

Wherever possible, the MISHTI effort, which stands for "Mangrove Initiative for Shoreline Habitats and Tangible Incomes," will be undertaken to establish mangroves along the shoreline and on salt pan lands. Salt pan lands are flat, mineral-covered areas of land that are often white in the sunlight and found in deserts. Observing Environmental Taxes, Carbon Laws, and Sustainability

'Amrit Dharohar

Wetlands, or places where water dominates the environment and the plant and animal life that goes with it, are crucial ecosystems that support biological variety. Ramsar sites are another name for wetlands. The Prime Minister stated in his most recent Mann Ki Baat that there are now 75 Ramsar sites in our nation as a whole. whereas there were only 26 prior to 2014."

The government will utilise Amrit Dharohar to highlight the distinctive conservation values of local communities, which have historically been at the forefront of conservation efforts. According to the Finance ministry, this plan will be executed over the course of the next three years in order to promote the best possible use of wetlands, improve biodiversity, carbon stocks, and ecotourism potential, as well as promote local communities' ability to generate revenue. Coastal shipping

Coastal shipping is an energy efficient and lower cost mode of transport, and hence, it will be promoted. It is energy efficient both for passengers and freight. Coastal shipping will be promoted through public-private partnership mode with viability gap funding.

"Green mobility via car replacement"

In order to green the economy, the administration claims that old, polluting cars must be replaced. The finance minister announced that she has set aside enough money to demolish out-of-date Central Government cars. She continued by saying that states would get support for updating old vehicles like ambulances.

Conclusion:

Implementing carbon prices is an excellent approach to reduce carbon emissions and prevent climate change. The importance of nations implementing carbon pricing policies grows on a global scale. Carbon taxes, which would benefit the economy and the environment while simultaneously absorbing the costs of harmful externalities, would push companies to switch to cleaner, more environmentally friendly methods of manufacturing.

Therefore, it would be desirable for India to introduce such a tax. However, it must be kept in mind that such a system must be developed while considering the particular needs of the Indian economy. By replacing carbon subsidies with carbon taxes and increasing taxes on fossil fuels (petrol and diesel), India transformed a carbon subsidy regime into one of the most onerous in the world. There is still a long way to go with the potential for significant gains from altering coal pricing and further reforming petroleum pricing regulations, even if annual CO2 emissions have declined and the price of petrol and diesel has risen dramatically. Overall, the implementation of a sizable carbon tax and India's ambitious solar energy initiative suggest that India can make a big contribution to the upcoming climate change summit in Paris.

The creation of a Climate Club has been discussed by international organisations working on climate policy. William Nordhaus popularised the concept in his 2015 paper "Climate Clubs: Overcoming Free riding in International Climate Policy." In addition to other requirements, the Climate Club aims to set a global target carbon price (of an incremental type) that all member countries must abide by.

Although a system of this size and scope has a long way to go before it is institutionalised, there is consensus that carbon pricing should be a crucial component of the global framework for climate policy.

Presenting a unique and appropriate opportunity to advance a global carbon pricing framework with a redistributive mechanism and in accordance with the Just Transition Declaration and Common but Differentiated Responsibilities (CBDR) principles is the current G20 Troika, led by three developing countries: Indonesia, India, and Brazil. India would have a significant advantage in an increasingly competitive world if local carbon regulations and preventative measures were designed in accordance with global policy trends. It is clear that carbon pricing is prepared to become and stay the cornerstone of the international framework for climate policy.

References:

1. Eckstein, D., Kunzel, V., & Schafer, L. (2021). Global Climate Risk Index: Who Suffers Most from Extreme Weather? Observing Environmental Taxes, Carbon Laws, and Sustainability

GERMANWATCH. Retrieved October 11, 2021, from https://germanwatch.org/sites/default/files/Global%20Climate%20 Risk%20Index%202021_2.pdf

- Ojha, V. P., & Pohit, S. (2020, September 4). Controlling emissions: Explicit carbon taxation is needed; indirect taxation doesn't help. Financial Express. Retrieved October 16, 2021, from https://www.financialexpress.com/opinion/controlling-emissionsexplicit-carbon-taxation-needed-indirect-taxation-doesnthelp/2074347
- Sawhney, A. (2021, July 15). Carbon Tax An Indian Perspective. Vidhi Centre for Legal Policy. Retrieved July 18, 2021, from https://vidhilegalpolicy.in/blog/carbon-tax-an-indian-perspective
- The World Bank. (n.d.). Pricing Carbon. Retrieved October 19, 2021, from https://www.worldbank.org/en/programs/pricing-

carbon#WhyCarbonPricing

- United Nations Climate Change. (n.d.). About Carbon Pricing. Retrieved October 10, 2021, from https://unfccc.int/aboutus/regional-collaboration-centres/the-ci-aca-initiative/about-carbonpricing#eq-7
- 6. OECD (2018), Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and
- 7. Emissions Trading, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264305304-en
- 8. IEA (2018), "Extended world energy balances", IEA World Energy Statistics and Balances
- (database), http://dx.doi.org/10.1787/data-00513-en (accessed on 16 October 2018)
- 10. https://www.csis.org/analysis/indias-coal-tax-key-stabilizing-its-energy-transition

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9. Government Initiatives to Support Women Entrepreneurs

Prof. Sushmita Choudhury Sen

Abstract:

Women today are making their mark in almost every area of life, with entrepreneurship being one of the most challenging due to the continuously evolving social, cultural, and economic background of business around the world. In terms of the economic growth and development of both women as individuals and the country as a whole, entrepreneurship is crucial. Additionally, unforeseen and highly tough barriers to a successful business, particularly for female entrepreneurs, are presented by the development of new products, technological improvements in manufacturing, economic transformation, and uncertain market conditions. The primary objective of the paper is to identify and analyze how women entrepreneurs have contributed to India's economic growth. Although it has been seen that government initiatives to encourage female entrepreneurs have positive effects on economic independence, which in turn has an impact on a range of external issues. It has also been critically examined to offer suggestions for successful promotion and create plans to help female entrepreneurs through policies and programs from the government.

Keywords:

Women Entrepreneurs, Entrepreneurship, Government Initiatives.

Introduction:

Researchers, academicians, and policymakers have all shown a keen interest in the field of entrepreneurship research. By boosting growth and prosperity, entrepreneurship is highly associated to the economic development of any economy (Schramm, 2006; Baumol et al., 2007).

In developing economies like India, women entrepreneurs have become more prevalent over the past few decades. It is clear that women entrepreneurs make significant contributions to reduced poverty, rising per capita income, and job creation (Ogidi, A. E., 2014). The issue of the gender pay gap in entrepreneurship is widespread internationally.

According to the GEM 2022–23 Global Report, there is a significant disparity between entrepreneurial activities among both genders in practically every country. In the Indian setting, there is also a significant difference between male and female entrepreneurial engagement. The goal of the current review is to comprehend the dynamics of female entrepreneurship in the Indian economy. This essay also covered how the government may encourage female entrepreneurs.

Concept of Women Entrepreneurs:

Researchers have turned to developing a comprehensive definition of women entrepreneurs in response to the rise of women in the field of entrepreneurship. Women entrepreneurs are those who assume responsibility for organizing and managing the resources of their businesses, as well as taking any associated risks in the hopes of making a profit. According to this description, women entrepreneurs are deliberate managers and decision-makers (Coughlin, J. H., & Thomas, A. R., 2002). Women who made the difficult decision to pursue entrepreneurship were motivated by a quest for independence and success.

This definition only applies to women who turn to entrepreneurship because of an opportunity, i.e., women who do so out of their own free will. This definition does not include entrepreneurs who are motivated by a need to succeed in business (Dhameja S. K. 2002). Women entrepreneurs are defined as individuals or groups who start, organize, and manage their own businesses (Suganthi, 2009). Women entrepreneurship may be defined as the innovative activity of starting and running a business venture that promotes the economic and social advancement of women in society. According to Munshi, S. et al. (2011), this definition details the beneficial economic, social, and social contribution of women entrepreneurs to society.

The Government of India states that a woman entrepreneur is one who assumes dominant financial management over an enterprise, with a minimum financial interest of 51% of the capital (Government of India, 2022). It is clear from this that women entrepreneurs fit the definition of an entrepreneur as well. The Government of India has recognized financial control as a metric in identifying women entrepreneurs.

Some scholars have classified women entrepreneurs as possessing distinctive psychological features, while others have focused on the roles they play as an entrepreneur. According to a review of the literature, women entrepreneurs in the Indian context are those who have the majority of the financial control over their business, choose to be entrepreneurs out of necessity, or are forced to do so and start, organize, and manage the resources at their disposal with the goal of making a profit.

Women business owners make deliberate decisions to run their companies. Women's empowerment on the social and economic front results from female entrepreneurship.

Characteristics of Indian Women Entrepreneurs:

Women entrepreneurship is more common in younger age groups in comparison to older age groups (Dhameja et al 2000). According to Pastole and Ruthven (2002), women entrepreneurs come from various educational backgrounds and from a variety of educational backgrounds.

According to Gupta (2013), the majority of women entrepreneurs operate service-oriented businesses and are from lower- and middle-income families (Vinze, M. D., 1987). Women are now starting businesses outside of pickles, papads, and powders, such as engineering (Munshi, S. et al., 2011). Women who own their own businesses are now becoming "technopreneurs" (Charantimath, 2005).

In both the traditional and unofficial sectors of the Indian economy, women entrepreneurs are predominated by males. However, over the past ten years, female business owners have also diversified into new and developing industries.

The difficulties faced by Indian Women Entrepreneurs:

Indian women entrepreneurs face a wide range of difficulties. The majority of women entrepreneurs identify access to simple, reasonable financing and marketing as a major problem (Panandikar, 1985). Obstacles for women entrepreneurs include high costs for inputs, complicated licensing and registration processes, and exclusion from banking and financial services (Vinze, M. D., 1987). Women entrepreneurs frequently experience extremely poor financial which places restrictions on them. circumstances, Women's entrepreneurship is hampered by a lack of social and familial support, illiteracy, and ignorance of numerous government initiatives and programmes (Rao, C. H. 1991). Financial, labour, and marketing issues are common sources of difficulty for female business owners (Chandra, 1991). Women entrepreneurs in India have significant challenges due to a lack of working capital, cash flow, industrial experience, and domestic duties (Das, M. 1999). Women are socially conditioned to be shy, introverted, and more focused on family responsibilities. Challenges include lack of managerial skills and experience, a lack of businessrelated information, lack of finance, shyness in business interactions, low achievement motivation, risk averse attitude, lower level of education, burden of family responsibilities, gender bias at the family and societal levels, and burden of family obligations (Singh S. & Saxena, S. C. 2000). Women's entrepreneurship has significant challenges from easy and affordable working capital and equity financing, limited marketing support, and infrastructure barriers (Ganesan et al. 2002). Women entrepreneurs are said to confront a variety of social, personal, marketing, mobility, government assistance, financial, production, and labor-related issues, as well as stress from balancing work and family obligations and a lack of technical skills (Dhameja, S. K. 2002). Lack of formal financing owing to insufficient collateral, marketing issues, difficulty maintaining a work-life balance, low self-confidence, a lack of business-related expertise, shyness and reluctance in business transactions, and a lack of suitable business locations are common hurdles (Sinha, P. 2003). According to Munshi S et al (2011), there are some barriers faced by entrepreneurs regardless of gender, while others are exclusive to women (gender specific). Women entrepreneurs in India face a variety of obstacles in their professional lives. Venture and working capital availability stand out as the biggest issues that women businesses face.

Another issue is gaining access to markets at reasonable prices. The development of women entrepreneurs in India is severely hampered by infrastructure bottlenecks, a lack of advisory and business development support services, ignorance of existing government support programs, and a lack of social conditioning that fosters the entrepreneurial personality of women.

A. Need for the Study:

To maintain a healthy economy both men and women should engage in entrepreneurial endeavors. As we have already stated, it might be difficult for women to launch their careers as entrepreneurs in India. Governments have therefore implemented various corrective measures to deal with those problems.

Lack of knowledge is another issue that potential female candidates must deal with. They aren't even aware of the numerous initiatives the government and self-help organizations are taking to encourage and promote female entrepreneurs.

As a result, we can conclude that achieving gender equality won't be attainable until women receive a proper education and enter all fields, including business.

B. Objectives of the Study:

- To study the support from the government of India to the women entrepreneurs.
- To study the development of women entrepreneurs.
- To understand the problems faced by the women entrepreneurs.

C. Methodology:

The present study is based on an extensive study of secondary data collected from various books, National & International Journals, and public and private publications available on various websites and in libraries focusing on various aspects of Women Entrepreneurship. This research is also a desk study based on secondary information from various articles, journals, and websites.

Review of Literature:

Researchers have turned to developing a comprehensive definition of women entrepreneurs in response to the rise of women in the field of entrepreneurship. Women entrepreneurs are those who assume responsibility for organizing and managing the resources of their businesses, as well as taking any associated risks in the hopes of making a profit. According to this description, women entrepreneurs are deliberate managers and decision-makers (Coughlin, J. H., & Thomas, A. R., 2002). Women who made the difficult decision to pursue entrepreneurship were motivated by a quest for independence and success.

This definition only applies to women who turn to entrepreneurship because of an opportunity, i.e., women who do so out of their own free will. This definition does not include entrepreneurs who are motivated by a need to succeed in business (Dhameia S. K. 2002). Women entrepreneurs are defined as individuals or groups who start, organise, and manage their own businesses (Suganthi, 2009). Women entrepreneurship may be defined as the innovative activity of starting and running a business venture that promotes the economic and social advancement of women in society. According to Munshi, S. et al. (2011), this definition details the beneficial economic, social, and social contribution of women entrepreneurs to society. The Government of India defines a woman entrepreneur as one who assumes dominant financial control over an enterprise, defined as having a minimum financial stake of 51% of the capital (Government of India, 2012). Thus, it is clear that women entrepreneurs fall under the definition of an entrepreneur.

The Government of India has viewed financial control as a metric for identifying women entrepreneurs. Some scholars have classified women entrepreneurs as possessing distinctive psychological traits, while others have focused on the roles they play as an entrepreneur.

According to a review of the literature, women entrepreneurs in the Indian context are those who have the majority of the financial control over their business, choose to be entrepreneurs out of necessity or are forced to do so and start, organize, and manage the resources at their

disposal with the goal of making a profit. Women business owners make deliberate decisions to run their companies. Women's empowerment on the social and economic front results from female entrepreneurship. The difficulties faced by Indian women entrepreneurs face a wide range of difficulties. The majority of women entrepreneurs identify access to simple, reasonable financing and marketing as a major problem (Panandikar, 1985). Obstacles for women entrepreneurs include high costs for inputs, complicated licensing and registration processes, and exclusion from banking and financial services (Vinze, M. D., 1987). Women entrepreneurs frequently experience extremely poor financial circumstances, which places restrictions on them. Women's entrepreneurship is hampered by a lack of social and familial support, illiteracy, and ignorance of numerous government initiatives and programs (Rao, C. H. 1991). Financial, labor, and marketing issues are common sources of difficulty for female business owners (Chandra, 1991). Women entrepreneurs in India have significant challenges due to a lack of working capital, cash flow, industrial experience, and domestic duties (Das, M. 1999). Women are socially conditioned to be shy, introverted, and more focused on family responsibilities. Challenges include lack of managerial skills and experience, a lack of businessrelated information, lack of finance, shyness in business interactions, low achievement motivation, risk averse attitude, lower level of education, the burden of family responsibilities, gender bias at the family and societal levels, and burden of family obligations (Singh S. & Saxena, S. C. 2000). Women's entrepreneurship has significant challenges from easy and affordable working capital and equity financing, limited marketing support, and infrastructure barriers (Ganesan et al. 2002). Women entrepreneurs are said to confront a variety of social, personal, marketing, mobility, government assistance, financial, production, and labor-related issues, as well as stress from balancing work and family obligations and a lack of technical skills (Dhameja, S. K. 2002). Lack of formal financing owing to insufficient collateral, marketing issues, difficulty maintaining a work-life balance, low self-confidence, a lack of business-related expertise, shyness and reluctance in business transactions, and a lack of suitable business locations are common hurdles (Sinha, P. 2003). According to Munshi S et al (2011), some of the obstacles experienced by women entrepreneurs are unique to them (gender specific), while others are universal (gender neutral). Women entrepreneurs in India face a variety of obstacles in their professional lives.

The Government of India's top issues revolve around the availability of venture and working capital; a woman entrepreneur is the one who assumes dominant financial control (minimum financial interest of 51% of capital) in an enterprise (Government of India, 2012). Thus, it is clear that women entrepreneur's fall under the definition of an entrepreneur. The Government of India has viewed financial control as a metric for identifying women entrepreneurs. Some scholars have classified women entrepreneurs as possessing distinctive psychological traits, while others have focused on the roles they play as an entrepreneur. According to a review of the literature, women entrepreneurs in the Indian context are those who have the majority of the financial control over their business, choose to be entrepreneurs out of necessity or are forced to do so and start, organize, and manage the resources at their disposal with the goal of making a profit. Women business owners make deliberate decisions to run their companies. Women's empowerment on the social and economic front results from female entrepreneurship. The difficulties faced by Indian women entrepreneurs face a wide range of difficulties.

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7.3.2 Steps taken by the Indian government to support Women Entrepreneurs:

Because women's participation is essential to the development of the entrepreneurial sector, women's growth and development must be hastened. In order to encourage women to actively engage in entrepreneurial activities, a friendly environment must be established. Government, non-Government, promotional, and regulatory organizations must step up and take an encouraging role in fostering women entrepreneurs in India. For women to launch their own businesses, the Indian government has also developed a number of training and development as well as employment generation programs.

- **Specific target group**: It was suggested that women be treated as a specific target group in all of the nation's key development initiatives.
- Setting up training facilities: The chapter makes the suggestion that facilities for women's vocational training be designed and expanded to better meet their evolving needs and abilities.

- **Creating new equipment**: Efforts should be made to improve their productivity and efficiency through the use of the right technology, tools, and procedures.
- **Promoting support:** It was advised that the necessary support be given for promoting the goods created by female entrepreneurs.
- **Decision-making:** It was also recommended that women be included in the decision-making process.

Organizations Promoting Women Entrepreneurship in India

- National Resource Centre for Women (NRCW): A self-governing organization established in accordance with the National Commission for Women Act of 1990 to promote leadership development, educate policymakers about women's issues, and promote gender equality.
- Women's India Trust (WIT): WIT is a nonprofit organization founded in 1968 to help underprivileged and unskilled women from all communities in and around Mumbai receive training and employment opportunities in order to improve their abilities and generate a regular income.
- Women Development Corporation (WDC): In order to give women with greater career opportunities and help them become economically independent and self-sufficient, WDCs were established in 1986.
- Development of Women and Children in Urban Area (DWCUA): In order to organize urban poor women in socioeconomic self-employment activity groups with the dual goals of fostering social strength and self-employment chances for them, DWCUA was established in 1997.
- Women Development Cells (WDC): The establishment of Women Development Cells (WDCs) in Regional Rural Banks and Cooperative Banks has been supported by NABARD in order to simplify gender development in banking and to have concentrated attention on the coverage of women by banks.
- Financial Institutions Assisting Women Entrepreneurship in India: Financial institutions have been essential in helping women entrepreneurs by providing funding and consulting services during the past few years. These organizations consist of:
 - a. National Small Industries Corporation (NSIC),

- b. All-India Development Banks (AIDBs), viz. IDBI, IFCI, ICICI, IIBI, IDFC, and SIDBI
- c. Specialized Financial Institutions (SFIs), viz. Exim Bank and NABARD,
- d. Investment Institutions, viz. LIC, GIC, NIC, NIA, OIC, UII and UTI,
- e. Regional/ State-Level Institutions, viz. NEDFI, SIDCs, and SFCs,
- f. Commercial Banks, vii) Co-operative Banks, etc.

Schemes for Women Entrepreneurs in India:

Annapurna Scheme:

Women in the food catering industry who are starting small enterprises are eligible for this credit. The loan enables these female business owners to use it for capital needs like setting up trucks, buying tools and equipment, etc. This program allows women to sell packaged foods and snacks, one of the most popular companies that women entrepreneurs pursue and succeed in because it is a task that housewives have been handling for their whole lives and to which they are accustomed. This increases their sales since they have a chance to start their firm with greater resources and new products than they could otherwise afford. The scheme has a Rs. 50,000 maximum lending amounts.

Bharatiya Mahila Bank Business Loan:

This financing plan was initially developed since it greatly assists women and their companies. Women have dabbled in a variety of commercial sectors and relentlessly strive for success. The goal of this bank is to give women economic empowerment. The maximum loan amount from this source is Rs. 20 crores.

Mudra Yojana Scheme:

Through the provision of business loans and other forms of assistance, the Government of India is working to elevate the status of women in the nation and enable them to become self-sufficient and financially independent.

Following loan approval, they will receive Mudra cards, which function like credit cards and have a 10% loan withdrawal cap. According to the type of business, degree of expansion, and loan goal, this scheme has a variety of distinct plan types. The government would only lend up to Rs. 10 lakhs per loan under this Programme.

Orient Mahila Vikas Yojana Scheme:

This program is for women who individually or together own 51% of a proprietary company. This is a fantastic chance for these participants to grow their companies and advance their industry. This plan offers a discount at an interest rate of up to 2% while also not requiring collateral security. The maximum loan amount is Rs. 25 lakhs, and the payback duration is variable for up to 7 years.

Dena Shakti Scheme:

This program is solely available to female entrepreneurs who work in the manufacturing, retail, or agricultural industries, as well as those who own small businesses or micro lending institutions. The maximum ceiling restrictions for women beneficiaries are also supplied in accordance with the sector they are opening a business in or growing in, as per RBI limits. There is a Rs. 20 lakh loan cap.

Pradhan Mantri Rozgar Yojana:

This program, also known as PMRY, is one of the most beneficial for female entrepreneurs on both a social and financial level. The goal of this program is to empower women entrepreneurs and engage the best minds in the industry to generate skill-based, independent income. This program, which evolved through a number of changes to cost, eligibility, and subsidy restrictions, includes both urban and rural areas. The loan subsidy amount is limited to a maximum of Rs. 12,500 per borrower and may not exceed 15% of the project cost.

All business ventures in the commerce, services, and industries are covered under the scheme. Age restrictions apply, with a maximum loan amount of Rs. 2 lahks for businesses and Rs. 5 lakhs for services and industry.

Udyogini Scheme:

This program helps women enhance their self-worth and independence by giving them the financial means to do so. This program supports aspiring female entrepreneurs by offering loans at reasonable interest rates compared to the increasing rates in the private sector, while also serving as a reliable source of credit.

This is only applicable to people whose annual family income is less than Rs. 40,000. Loans in the trade and service industry are strongly encouraged, and the maximum amount is Rs. 1 lakh.

Cent Kalyani Scheme:

The only thing that is specifically emphasized about the program is that it is for women entrepreneurs. The program is aimed at both new enterprises and those that want to grow and expand. Self-help organizations, retail trade, and education and training are not permitted under the program.

On their website, the guidelines and a detailed list of the eligible categories are provided. This loan has no processing fees and no requirement for collateral.

Through these programs for women entrepreneurs, the chosen qualifying groups of businesswomen can apply for a loan and expand their businesses. The maximum loan amount under this Programme is Rs. 100 lacks.

Mahila Udyam Nidhi Scheme:

This program tries to close the equity gap. It encourages MSMEs and small sector investments across a range of industries to develop and succeed.

This promotes the reconstruction of SSI units that are thought to be inoperable but could really be saved. The borrower has ten years to repay the loan, up to a maximum of ten lakhs of rupees.

A. Major Findings:

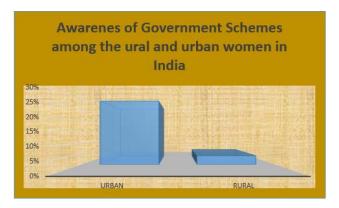


Figure 7.1: Awarenes of Government Schemes among the Ural and Urban Women in India

Source - Enterprise Survey, Athena Infonomics Research

The data shows only 4% of the rural women entrepreneurs and 20% of the urban entrepreneurs are aware of the different government schemes available to support entrepreneurs.

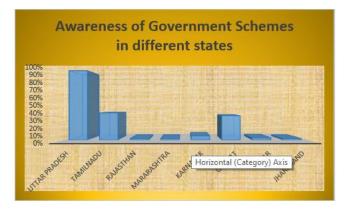


Figure 7.2: Awarenes of Government Schemes in Different States

Source: Enterprise Survey, Athena Infonomics Research

Further, the research indicates on the women entrepreneurs of Uttar Pradesh are fully aware of the financial schemes launched by the Indian government for women entrepreneurs. Rest states show a very low graph which indicates still awareness campaigns are needed to support women's entrepreneurial activities.

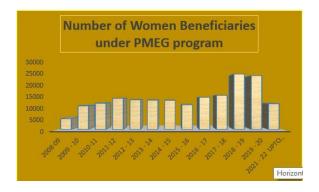


Figure 7.3: Number of Women Beneficiaries under PMEG Program

Source - PMEG Government Annual Report

The graph of PMEG shows an improvement in the number of women beneficiaries over the period of time. However, the number is not satisfactory. Therefore, it may be concluded that the efforts government is putting in to extend support to women entrepreneurs are not reaching them to the fullest. Therefore, following suggestions may help the government to reach the potential women candidates.

B. Suggestions:

Through social media, public campaigns, local chambers of commerce, etc., the government should assume responsibility for interacting with women entrepreneurs. The government and educational institutions should work together to promote entrepreneurship programs. Similarly, to this, members of the Lions and Rotary clubs should offer the government the support it needs to encourage women entrepreneurs to become aware of entrepreneurship programs. Banks should prominently exhibit numerous government-sponsored entrepreneurial programs at their branches.

Conclusions:

It is crucial that our educational institutions, both formal and informal, rise to the task of assisting our females to develop their entrepreneurial acumen towards sustainable development of livelihoods and the economy, given the significance of entrepreneurship for empowering women. In light of the aforementioned, I suggest the following:

- Women should be given the same opportunity as males to display their talents, and this can be done more successfully when they have a good education.
- With technology comes exposure; it is astounding how many female business owners continue to bury their heads in the sand when it comes to utilizing even the most elementary technical tool. It is crucial for female company owners to be aware of the various technologies that can help them grow their companies, and in this case, education plays a crucial role.
- Women entrepreneurs significantly contribute to their countries. The economy suffers when a nation does not reach its greatest potential. Less innovation, less export potential, and less employment are created when there are fewer 'high potential' female entrepreneurs, according to the study.
- "Female entrepreneurs boost their personal economic well-being through their entrepreneurial endeavors, which also result in the creation of jobs, cutting-edge goods, procedures, and services, as well as cross-border trade.

Future Scope of Women Entrepreneurs in India:

In India 20.37% of women are MSME owners which accounts for 23.3% of the labor force (India Brand Equity Foundation). They are considered to be the backbone of the economy. According to McKinsey Global, India can potentially add US\$ 700 billion to the global GDP by increasing women's participation in the labor force. The percentage of women working in the manufacturing and agriculture sectors is higher than that of men. These sectors are usually credited with helping families come out of poverty and contributing to higher household income. Moreover, literacy rates among women gbyw at 8.8% in FY21, which further highlights the bright prospects of the country.

References:

- 1. Baumol, W. J., Litan, R. E., & Schramm, C. J. (2007). Good Capitalism, Bad Capitalism, and The Economics of Growth and Prosperity. New Haven & London: Yale University Press
- Chandra, K.S. (1991). Development of Women Entrepreneurship in India: A Study of Public Policies & Programmes. New Delhi: Mittal Publications
- 3. Coughlin, J. H., & Thomas, A. R. (2002). The rise of women entrepreneurs: People, processes, and global trends. Westsport : Greenwood Publishing Group.
- 4. Das, M. (1999). Women Entrepreneurs from Southern India: An Exploratory Study. Journal of Entrepreneurship, 8(2), 147-163
- Dhameja, N. L., & Arora, S. (2020). Banking in India: Evolution, performance, growth and future. Indian Journal of Public Administration, 66(3), 312–326. https://doi.org/10.1177/0019556120953711
- 6. Dhameja, S. K. (2008). Women entrepreneurs: Opportunities, performance and Problems. Deep & Deep Publications.
- 7. Ganesan, R., Kaur, D., & Maheshwari, R. C. (2002). Women entrepreneurs: Problems and prospects. The Journal of Entrepreneurship, 11(1), 75-93
- Global Entrepreneurship Monitor (2022/23) GEM 2022-23 Global Report, published online. Retrieved from http://www.gemconsortium.org/report/49480
- 9. Government of India, 2022. SSI in India: Definitions. Development commissioner (MSME), Ministry of Micro Small and Medium Enterprises.
- K., V. (2018). A study on motivational factors influencing women entrepreneurs. Gender Parity and Women Empowerment– Challenges and Way Forward, 35–40. https://doi.org/10.9756/bp2018.1012/07
- Munshi, S., Munshi, A., & Singh, V. P. (2011). A Study on Trends Visible in Women Entrepreneur in India and Globally. Asia Pacific Business Review,7(3), 155-166
- Munshi, S., Munshi, A., & Singh, V. P. (2011). A Study on Trends Visible in Women Entrepreneur in India and Globally. Asia Pacific Business Review,7(3), 155-166.
- 13. Ogidi, A. E. (2014). Women Entrepreneurship and Poverty Reduction. Journal of Business and Entrepreneurship, 1(1), 1-8.

- 14. Panandikar, S. (1985, December 26). Women Entrepreneurs: Problems and Potentials. The Economic Times, p.5
- Patole, M., & Ruthven, O. (2002). Metro moneylenders–Microcredit providers for Delhi's poor. Small Enterprise Development, 13(2), 36-45
- 16. Rao, C. H. (1991). Promotion of women entrepreneurship. Sedme, 18(2), 21-28.
- 17. Schramm, C. J. (2006). The Entrepreneurial Imperative. New York: Collins.
- Singh, S., & Saxena, S. C. (2000). Women Entrepreneurs of Eastern UP: Challenges and Strategies of Empowerment. Indian Journal of Industrial Relations, 36(1), 67-78.
- 19. Sinha, P. (2003). Women entrepreneurship in the North East India: motivation, social support and constraints. Indian Journal of Industrial Relations, 38(4), 425-443.

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10. Jesuits' Efforts to be Sustainable visà-vis Universal Apostolic Preferences (UAP) and its Implications to India

Dr. (Fr.) Mukti Clarence, S. J.

Introduction:

On 19 February 2019, the Superior General of the Society of Jesus, Fr. Arturo Sosa SJ, announced four Universal Apostolic Preferences (UAP) for 2019-2029. The UAP was promulgated at the end of a 16-month-long process involving various levels of the Society of Jesus across the globe. On 6th February 2019, Pope Francis affirmed the UAP in his confirmation letter to Fr. General saying that the preferences were "in... agreement with the current priorities of the Church." In his letter addressed to the whole society, Fr. General wrote: "During the next ten years, the following preferences will guide us in incarnating the mission of reconciliation and justice in all the apostolic services to which we, along with others, have been sent."

1. To Show the Way to God through the Spiritual Exercises and Discernment:

The life of a Jesuit is characterized by his profound encounter with Jesus in the practice of the Spiritual Exercises of St. Ignatius of Loyola, of which discernment is an integral part. This spiritual experience and practice need to become an intimate encounter with God in all things and be shared with all our collaborators and with those we encounter in our daily lives. Pope Francis insisted that "the first preference is crucial because it presupposes as a basic condition the Jesuit's relationship with the Lord in a personal and communal life of prayer and discernment." Therefore, this preference is an "opportunity to renew our presence in the heart of human history". This preference of the Spiritual Exercises and to offer the Spiritual Exercises in as many ways as possible". Our life is governed by the choices and decisions we make all the time. Ignatian Jesuits' Efforts to be Sustainable vis-à-vis Universal Apostolic...

discernment is a process that guides us to make the preferred choices at the personal and communitarian levels. This preference invites Jesuits and their collaborators "to promote discernment as a regular habit" and "make regular use of spiritual conversation and discernment" in our implementation of the preferences at all levels of life and mission. This involves living a "faith that is incarnate and consistent, a faith that enters into dialogue with other religions and with all cultures, a faith manifested in works of justice and reconciliation, a faith lived in a community that becomes a testimony of Hope." This apostolic preference poses a huge challenge and an opportunity in the multi-religious and multi-cultural context of India, where Christian's account for about 2 percent of the population. Moreover, there is a concerted effort by majoritarian groups to malign Christian service with accusations of religious conversion. The challenge is to adapt the Spiritual Exercises, discernment, and spiritual conversation according to the context and needs of the people we serve and encounter in our daily lives. Such an effort can make Jesuit service light of hope in the darkness of despair.

2. To Walk with the Poor, the Outcasts of the World, those whose Dignity has been Violated, in a Mission of Reconciliation and Justice:

According to the second apostolic preference, Jesuits and their collaborators are invited "to walk with individuals and communities that are vulnerable, excluded, marginalized, and humanly impoverished." The path that is sought to be taken is "one that promotes social justice and the change of economic, political, and social structures that generate injustice; this path is a necessary dimension of the reconciliation of individuals, peoples, and their cultures with one another, with nature, and with God." This calls for a greater commitment "to care for migrants, displaced persons, refugees, and victims of wars and human trafficking.

This includes the commitment "to defend the culture of indigenous peoples." One of the strategies to achieve these goals is to strengthen "political democracy by imparting good civic formation, especially among those at the base of the social pyramid." Another strategy is to promote social organizations committed to seeking the Common Good to help counteract the diverse forms of neo-liberalism, fundamentalism, and populism.

Accompanying the impoverished requires credible studies, analysis, and reflection to understand in-depth the economic, political, and social processes that generate such great injustice; and contribute to the elaboration of alternative models. The goal of this ten-year effort is to promote "a process of globalization that recognizes the multiplicity of cultures as a human treasure, protects cultural diversity, and promotes intercultural exchange." India is plagued with issues of poverty and communities discriminated against based on caste, race, religion, ethnicity, gender, region, and so on. The Dalits are discriminated against based on their caste, occupation, or descent, the tribals, and other ethnic groups are discriminated against based on their ethnicity, and the minorities are discriminated against based on their religion. Most of the poor of the Indian region belong to the lowest strata of society with little possibility for upward social mobility. The call to "walk with the poor" provides many avenues for greater committed service for marginalized people of India. Firstly, this call inspires us to renew our commitment to work towards the empowerment of all marginalized sections of society through training, capacity building, and awareness of their rights and entitlements in the country. There are several socially relevant legislations and welfare measures for the economically and socially disadvantaged people of India, however, the poor have little or no access to them due to corruption and bureaucratic hurdles. Therefore, there is a need to provide handholding support and assistance to these poor communities, in collaboration with other organizations, movements, and campaigns, so that they may be able to access their rights and entitlements guaranteed to them by the State. Secondly, with the rise in fundamentalism that breeds narrow sectarian nationalism in Indian, minorities and other vulnerable communities are at the receiving end of violence and oppression by State and non-State actors. Under these circumstances, this apostolic preference inspires us to provide support or assistance to them and express our solidarity with the struggle of these communities for justice and dignified life. Thirdly, due to natural disasters, violent conflicts, development-induced displacement, and extreme poverty, there is a large-scale movement of people to safer and more prosperous or urbanized regions. They are known as distressed migrants, refugees, or even state-less people. These people are extremely vulnerable and dependent on others for assistance. This apostolic preference urges us to accompany, serve and engage in advocacy for these people.

Jesuits' Efforts to be Sustainable vis-à-vis Universal Apostolic...

3. To Accompany the Young in the Creation of a Hope-filled Future:

The youth are the hope for the future of the world. On the one hand, they create opportunities for the future through their innovative and creative spirit, and on the other hand, they bear the brunt of the challenges in our world such as "reduced job opportunities, economic instability, political violence, multiple forms of discrimination, degradation of the environment, and other social evils". Young people have been opening up to the future with the hope of building a life of dignity in a reconciled world that is in harmony with the environment. Young people are the principal protagonists of an anthropological transformation that is coming to be through the digital culture of our time, opening humanity to a new historical epoch that involves new ways of structuring human life in its personal and social dimensions that can be a light for the path toward justice, reconciliation, and peace.

Young people are drawn toward an intercultural human society that celebrates diversity rather than cultural homogeneity. Young people aspire to exercise true freedom that opens up creative spaces facilitating the emergence of a humane, intercultural society. The third apostolic preference invites Jesuits and their collaborators to create and maintain spaces for young people to allow them "to develop their full potential as human beings." Accompanying young people calls for personal, communitarian and institutional conversion as it "demands authenticity of life, spiritual depth, and openness to sharing our life-mission of justice, reconciliation, and peace.

In the Indian context, the large number of Jesuit institutions that cater to the education and well-being of young people is an opportunity to stimulate their creative minds toward building a new world that is just, equitable, harmonious, peaceful, sustainable, and prosperous.

Educational institutions, in particular, must blend academic excellence with social relevance, rootedness in cultural diversity with openness for the transformation of cultures, competence in existing knowledge with the creative generation of new knowledge, acquisition of skills with the building of convictions for ethical goals, respect for tradition with critical thinking.

4. To Collaborate in the Care of our Common Home:

In the encyclical *Laudato Si*, Pope Francis calls on all human beings to share the responsibility for the care of creation. He points out that the ecological crisis and climate change are affecting the most vulnerable people, such as indigenous peoples, urban poor, migrants, and refugees. The environmental degradation caused by the dominant economic paradigm is inflicting inter-generational damage jeopardizing the life of future generations. Therefore, the fourth apostolic preference invites Jesuits "to collaborate with others in the construction of alternative models of life that are based on respect for creation and on a sustainable development capable of producing goods that, when justly distributed, ensure a decent life for all human beings on our planet."

This includes efforts at in-depth analysis of the ecological crisis and promoting discernment on decisions that help restore the delicate ecological balance. This apostolic preference calls for an "ecological conversion" of Jesuits and their companions in mission to ensure that their lifestyle is environmentally friendly and to promote an eco-friendly lifestyle worldwide.

India has borne the brunt of environmental degradation and climate change with frequent floods, droughts, cyclones, and other natural disasters occurring every year. Pollution, declining forest cover, and shrinking Himalayan glaciers are posing severe threats to the future of the sub-continent. Jesuits in some regions of India have already been engaged in the promotion of environmental movements, such as "Taru Mitra", promotion of renewable energy like solar power, and organizing people's movements to oppose displacement and destruction of the environment. This apostolic preference invites Jesuits to build on these efforts and promote an eco-friendly lifestyle at the personal level, community level, and institutional levels. The goal may be to promote a waste-free, pollution- free and eco-friendly society throughout India.

Conclusion:

The UAP is a call to all Jesuits and their companions in their mission to be guided by the Spirit of God so that they may focus their energies and resources on the implementation of the UAP, which require personal, Jesuits' Efforts to be Sustainable vis-à-vis Universal Apostolic...

communal, and institutional conversion, to respond to the cry of the earth and its peoples. This involves intellectual depth in analyzing the socioeconomic and political realities, efficient management of economic and financial resources, and strengthening of the bonds of collaboration and networking with partners in our mission of justice, reconciliation, and peace. India has a rich spiritual heritage of many religious and cultural traditions, which needs to be harnessed for collective action for the Common Good of the people of India. The UAP challenges us intellectually to explore alternative economic development paradigms that will address the problems faced by India and globally as well. The UAP also challenges our apostolic approaches so that we develop strategies that will promote democracy with the dignity of all citizens, economic growth with equity, development with ecological sensitivity, and social justice with reconciliation and peace.

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ABOUT THE COLLEGE

XITE College is one of the top Colleges in Jamshedpur and has a brand name, XAVIER. It was founded in 2007. It was founded in 2007 in collaboration with XLRI by the members of the Society of Jesus (Jesuits) of Jamshedpur who are pioneers in the field of Education. The College caters to all categories of students and make every effort to groom them as responsible citizens and professional leaders. The College is accredited by the National Assessment and Accreditation Council (NAAC) and is UGC recognized with 2 (f). XITE College is committed to imparting academic excellence and professional competence through a value-based education system. The college prepares the student as socially and ethically responsible and enlightened citizens of India. Currently, the college offers. BBA, B. Com, B.A. English, and B.A. Economics courses. Also, the college has been privileged in receiving grants from ICSSR, DST, and NCW to run their project.

ABOUT THE BOOK

This edited book includes evidence-based reflection on the issue of sustainability as well as its unexplored subthemes. XITE College faculty members from diverse departments investigated the problem from their perspectives. The chapters included provide a concise and theoretical introduction to the subject. It addresses the fundamental foundations of sustainability, which affect every aspect of Indian growth, development, and economics. The book investigates the significance of the topic, their characteristics, and how the proposed model might contribute to the country's long-term growth. The book provides the most recent research and advancement on the subject while keeping the Indian context in mind. As a result, it answers the question of academics, students, and novices seeking knowledge on the subject.

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