

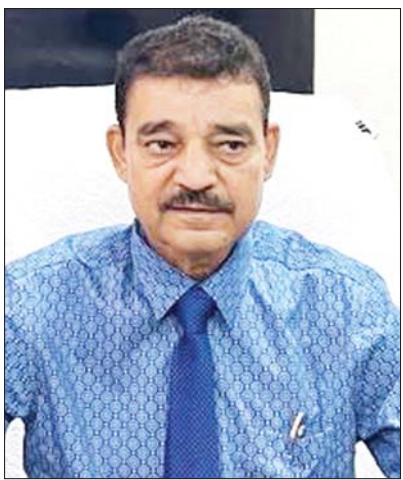
PERSONALITY

An Upright Officer

Aryan Gandral

The Rig Veda says "Dharma (duty) is what holds life on earth together". It is the cumulative performance of duties of all in the society which ensures its smooth functioning. Often it is not just "one person one duty", but also "one person" delivering at various fronts.

This piece is dedicated to many of our country's TAX men and women, one of them my father, Rakesh Kumar, IRS, who has retired after serving 36 years in the Income Tax department. He joined the department as an inspector, rising up the ranks, to finally reach the prestigious post of the Commissioner of Income tax (Indian Revenue Service). We often read about official stories of the public servants, how they bring about social change and also how in certain cases, they bring a bad name to their department but little is said in regards to the constant conflict of duties they face be it ethical vs moral, public vs private and official vs personal. The fact that only few of them juggle all these duties and there is never a negation of duty is what sets them apart.



My personal experience while growing up in such a household has been enriching, full of learnings and insights so as to what encompasses a devotion to public service, a sense of commitment and above all indomitable courage in the face of adversities.

The personal battle started when things fell apart in the joint family, with him moving out with his wife and two young daughters. Finding solace in temporary rented places, he built the family a 'home'. Constant transfers in the polarising decade of 1990 meant postings in Kashmir and Punjab, many declined but he rose to the occasion, showing courage and a sense of duty. He recalls that he did in fact feel a sense of insecurity for his family but here comes the role of his support system, his wife. She sacrificed her higher education for the family to be held together, stood beside him in the worst of times and still does not have an iota of regret for how these 36 years have been. You see, how it is not always a 'one man show'.

Things started to change with the dawn of the new millennium, he got promoted to a higher rank and things on the domestic front also stabilized. So, I saw a far brighter picture than my sisters but still it's a story worth sharing. While growing up the 12-year-old kid hardly understood what a "march rush", the closing of the financial year meant for the tax officials. All he was scared about were his final exams, for which he had not studied probably because he was busy playing with his friends throughout the preparatory leave. His only concern now, "Where should he go?" He goes to his father, the 'officer' sitting with heaps of files at 3 am. The officer had planned that he would work till 5 am and then sleep for 2 hours before heading off to the office but the father had to be there for his son too. So did the father sacrifice or the officer? Neither, instead a man sacrificed his sleep, and this continued for 10 days

straight till both the tasks reached their desired conclusions.

Another incident worth sharing is rather recent, 2020 September, he was posted at Srinagar as a 'Range Head' (equivalent to the commanding officer in the armed forces). The residential-cum-office building was a newly built wooden structure. On an unfortunate night, a massive fire broke out in the adjacent building having the capacity to engulf the income tax complex as well. He duly informed the fire department but the time was short and immediate action was required. The leader took up the challenge with utmost composure with the active help of the few officers and staff members present, using water pipes they manually held the ground till the fire brigade arrived. Still, he does not take any credit for the swift action plan he put in place, showing exemplary courage and commitment under such pressing circumstances but credits the save to all those who ably supported the task. A "true leader" who empowers his team to reach the desired goal.

Growing up specially during the high school and college years in Delhi, with him, while the other half of the family was in Jammu, the son had to look nowhere for a role model, he had in his father a friend, philosopher and guide. A sportsman par excellence, an intellectual well versed and a personality with his feet firmly on the ground. Above all, a man of highest character, following the revered doctrine of 'Nishkama karma'.

While he has retired from the department, the values and experience learnt in the journey would continue to hold relevance in his life and certainly his yearning for public service will guide his future endeavours. As far as the department is concerned, the colleagues describe it as a 'legacy', a void which is not easy to fill. Above all, he is an inspiration not just to me but to many who have come across him.

In the official farewell event organised by his department there was a flow of emotions, I saw his colleagues sharing their experience of working with him. Some highlighted his work ethics, some his leadership skills and deep subject knowledge, some his optimism and cheerful nature but there was one thing common in the words of everyone who spoke - a sense of respect, for an officer who worked with a sense of selflessness and public spiritedness. In his own farewell speech, he highlighted instances where he felt proud of being part of the department and also those where he felt that he as well the department could have done better. This shows his quest for perfectionism in achieving the highest ethos of public service.

The Prime Minister from the Red Fort this year highlighted the five promises of the Indian nation, one of them is the performance of the duties for India to be a developed country by 2047. The efforts and sacrifices of such officers would be of paramount importance.

Today when he retires, if one asks him what he would want to do now after serving the country for more than 3 decades, his answer - just enjoy a good game of lawn tennis once in a while. Simplicity and finding joy in the little things are his mantra.

(The author is pursuing MA Political science from Delhi University)

SCIENCE & TECHNOLOGY

VERTICAL FARMING

An Innovative Approach For Horticulture Sector

Reetika Sharma and Parshant Bakshi

Hunger rates are worryingly high on a global scale, driven by the climate crisis, the COVID-19 pandemic, conflicts, poverty and inequality. According to the Global Report on Food Crises (GRFC), they surpassed all previous records in 2021. The GRFC 2022 findings state that there are currently 53 countries/territories with close to 193 million people who are severely food insecure and in need of immediate assistance and grow significantly due to the crises in Afghanistan and the ongoing war in Ukraine. Comparing this to the previous peak attained in 2020, there has been an increase of roughly 40 million individuals (reported in the GRFC 2021). Innovative thinkers are exploring alternatives to traditional farming as urban populations continue to grow in order to feed everyone with less negative environmental effects on our land and water supplies. One such approach that has been put into practice all around the world is vertical farming. In order to

aquaponic gardening techniques use growing mediums such as cocopeat, perlite, vermiculite, rock wool, and many others in lieu of soil. Vertical farming becomes sustainable by using 95% less water than other horticultural techniques as the approach gets more scientific and efficient. Vertical farming enables growers to grow seasonal or regional crops year-round inside, whereas traditional farming's yield is constrained by geography and seasonal variations. They can create a greenhouse or other controlled environment anyplace to cultivate crops.

As a result, consumers may have better access to fresher produce, especially those who live in urban regions that are normally far from conventional farm fields. Although the high costs of vertical farming are frequently deterring, shipping containers and vacant warehouses are widely accessible and reasonably priced. Parking lots and metropolitan areas can now have fresh food thanks to the conversion of these spaces into vertical farming ecosystems, which also gives new life to abandoned infrastructure. In situations where traditional open-field farming is impractical, such as deserts and densely populated cities, vertical farms are being constructed. The main drawback is that you lose access to the Sun, the most abundant (and cost-free) energy source on Earth. Artificial light sources are frequently necessary for growing plants vertically in stacked systems, and these sources can be expensive. HVAC (heating, ventilation and air conditioning) systems are expensive and use a lot of energy needed for vertical farming to control humidity. Another drawback is the overall lack of knowledge and experience in increasing horticultural output in a controlled environment.



conserve space and utilise the least amount of energy and water for irrigation, fruit crops can be grown conveniently in urban environments by stacking them vertically, known as vertical farming.

The vertical farming industry is still in its infancy in India, but there are a few entrepreneurs and agri-tech firms trying to change it. Professor Dickson Despommier first put forth the current idea of vertical farming in 1999. His idea was to grow food close to where it would be consumed, cutting down on transportation time and distance while doing so. In order to have fresher fruits and vegetables available faster and at a lower price, he aimed to grow more food in urban areas. As a result, vertical farming is defined as the cultivation and production of plants and crops on surfaces that are inclined vertically and stacked vertically. The plants are arranged physically in a tower-like structure. In this manner, the amount of space needed to cultivate plants is reduced. Then, to keep the plants in the ideal atmosphere for a successful growth, a combination of artificial and natural lighting is used. The third element is the plant's growth medium. Aeroponic, hydroponic, and

The majority of cultivars currently used in vertical farming are also used in open field cultivation. As a result, fruits and produce cultivated through vertical farming are usually equivalent to or equal to those grown through traditional field production in terms of nutrition, flavour, and quality. The practise of vertical farming is new. Even though it is still a small market today, it has enormous development potential as crop production, automation, and environmental control technologies advance and energy costs drop. Urban horticulture has been practised for millennia, but the industry of climate-controlled urban farming is still nascent. To increase the profitability and productivity of modern urban farms, interdisciplinary research in genetics, plant biology and physiology, horticulture, farming systems, engineering and physics will be required. Over the years, horticulture scholars have contributed knowledge that has benefited broad-acre farmers and consumers. Similar support must be given to urban horticulture if it is to help feed expanding urban populations in the face of rising climate variability.

(The authors are Ph.D Scholar Fruit Science and Prof and Head ACHR (Udhewala)

BOOK-REVIEW

Past and present of democracy

Ansh Chowdhari

Book: *The Decline and Rise of Democracy*
Author: David Stasavage
Publisher: Princeton University Press

By virtue of his ostentatious research base and incisive analyses, this book by David Stasavage appears as a coherent tome analysing the evolution of democracy across the globe over the millennia in a manner, that, on one hand, remains anchored in a normative foundational theory while on the other draws its legitimacy from structured empirical data drawn from a gamut of resources. His quest for finding the origins of democratic thought has led him to undertake expansive and value-laden research, the result of which has been absolutely phenomenal.

The book is divided into three major parts having four chapters in each section. This treatise has been basically written to enshrine and strengthen the normative goals espoused by democratic thought, but at the same time, it also challenges certain ingrained, and in certain cases, fictitious positions that associate democracy and its development with modernity and western values. That's why he says that "If early democracy arose independently in many human societies, modern democracy is a more specifically European invention. Early democracy was a form of rule that proved durable over thousands of years. Modern democracy is something much more recent, and we should think of it as an ongoing experiment."

The author, in this process has evaluated the rise of early democracy across the globe and a fundamental tenet that ironically keeps on repeating is the fact that primitive technology, tribalism, and lack of intensive agriculture promoted, unlike what we generally think, democratic thoughts across the world.

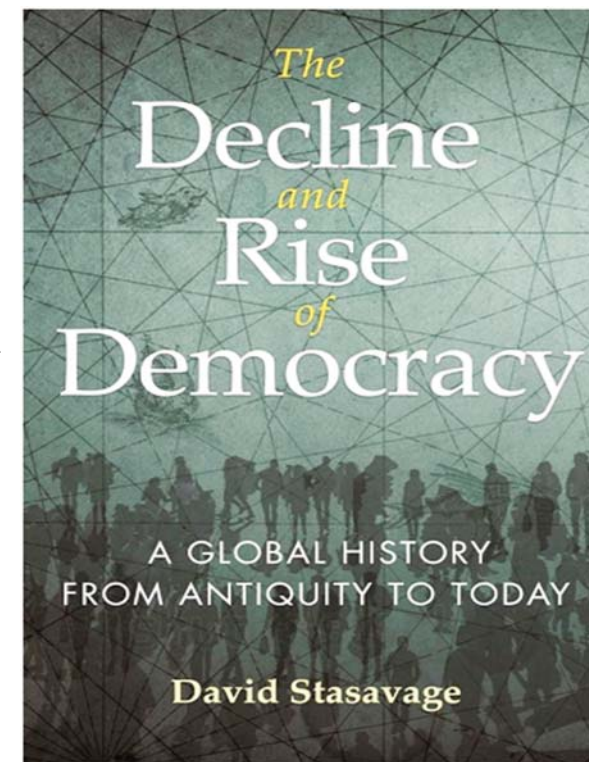
The author in the first section maintains that early democracy's rise, inter alia, was chiefly dependent on the aforementioned causative agents, yet it wasn't limited to any particular area or continent. By using Standard Cross-Cultural Sample, he has illustrated that "Early democracy was widespread in human societies" viz in Athens, the Mesopotamian kingdom of Mari, Ancient India, Huron of America, Mesoamerican Republic of Tlaxcala, Central Africa, Third dynasty of Ur. He masterfully juxtaposes these societies with early autocracies which were present in the Incas, Aztec Triple Alliance, Mississippian areas, The Azande of central Africa which make him draw an inference that "the early democracy was more likely to survive in small scale settings, in the absence of strong state bureaucracies, and finally in the absence of many technological developments that we commonly associate with civilization".

The second section of the book expressly states that an inherent weakness of rulers in medieval Europe created a system which favoured and forced, so to say, the rulers to include the people into the decision-making processes. The 'ideal despotic distribution', lack of intensive agriculture, lower taxes and technological backwardness favoured governance through consent and negotiations. The Anglo-Saxon exception is explicit, for it was a bit more systematised due to the presence of witan and witanagemot based upon the precept of Quod omnes tangit and on the other, it had the presence of communal movements that asked for autonomous assemblies for autonomous towns.

On the other side, this section elaborates why China and

the Arab states could never have the same democracy which Western Europe was striving to achieve in the same time period. The difference, chiefly, as per the author, was the presence of strong bureaucratic states and technological innovations. For instance, the Umayyad and Abbasid caliphs were governing over an area they had inherited in which a strong centralizing tendency was already present due to unforgiving desert geography and certain technological developments whilst China's strong bureaucratic state structure disallowed the need for any association with the plebians and this favoured production, conscription and rule-based merit system that established and legitimized the writ of the state.

The final part of *The Decline and Rise of Democracy* focuses on the transition of early to modern democracy. In the chapter titled 'Why England was different', Stasavage's narrative vividly illustrates how democracy flourished in English land. The successful trial of plena potestas, owing to England's geography and, consequent disappearance of mandates gave rise to an incipient form of representative democracy, which ultimately begot a system of Parliamentary supremacy by the 18th century. He states how this version of democracy differed from its counterpart in America



which built a vigorous democracy based on wide political participation, although with limited suffrage and voting rights. He says that "While Great Britain led the way by establishing a new form of representative government, it was Americans who developed something closer to modern democracy". The land abundance, labour scarcity (borrowed from Evsey Domar's work) easy exit options, and a modicum of state power made consensual government a necessity in the American context. The remainder of the section records the spread of modern democracy from the United States into Europe and beyond like in India and also evaluates, though in minimal

terms, the absence of such democracy in Russia and China. As far as India is concerned, he says that "it sounds as if India's long history of collective governance made it fertile terrain for the transition to modern democracy"

The final chapter assesses the current state of modern democracy. He analyses the rising discontent and distrust among the citizens of modern democracies. By borrowing from certain political theorists, he has emphasized bridging this 'democratic deficit' by 'continuous investments in the principle of 'subsidiarity'. He's also concerned with the rising executive power and the threat of majoritarian electoral democracies to the global order.

So, it can be said that this book, though largely political is a wonderfully crafted interdisciplinary treat, for the author has ventured into historical, sociological, anthropological as well as environmental data to back up his arguments, which otherwise is a rarity in this discipline. The book makes us realize the importance of democracies, their resilience, and their faltering too. It's a valuable tool for not only political scientists and scholars but for every curious reader who wants to understand this normative idea of governance that is supposedly the 'best practicable form of governance across the world'.

Understanding social evolution from pre to post Corona Crises

Dr. Ravia Gupta

Book Title: *Information Age: Culture, Identity & Society*
Editors: Ritu, Sood, Vinit Kumar Jha Utpal & Archana Mitra
ISBN: 978-93-85696-96-1
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In the Information Age there is a growing use of social media platforms for both professional and personal purposes there by bringing a change in our culture, identity and society at large. Research in this area suggests that professional identity on social media is formed out of four things - subject expert, social media guidelines, freedom and spontaneity. According to sociologist Manuel Castells, social changes are characterized by transformation of space and time in human experience. Considering the social evolution especially post Covid, a number of subjects that need an in-depth study include religious identity, gender discrimination, digital divide, environmental governance, education policy and effect of infodemic.

This book, *Information Age: Culture, Identity & Society* draws attention on around 14 important subjects that emerged during and post Covid crises. As a transition between the Pre-Corona and Post-Corona period, this book reflects on a range of subjects, including: mapping of Muslim identity, gender discrimination, social and psychological effects of aggressive presentation on TV news, gender digital divide in India, environmental impact assessment, practices of environmental journalism, new education policy of India, social media habits, Covid-19 infodemic, evolution of visual communication, trends in advertising, freedom on OTT platforms, evolution of sketching etc.

Author Vinit Kumar Jha and Mukta Martolia used a discourse analysis approach to study social media mapping of

Muslim identity in India. The authors collected data from the Facebook walls and found that social media users considered Tablighis Jamaat as anti-social community that embarrassed the entire Muslim community for spreading Corona in India.

In a chapter on Gender Discrimination and Role of Media, authors C.P. Rashmi and Ritu Sanjeev Sood discuss the reasons for gender gap such as sexual harassment, wage-discrimination, violence, masculini-

In an interesting review of environmental impact assessment for environmental governance, authors Sayani Das and Archan Mitra urged the government to have a viable information and communication infrastructure in place for a balanced development.

In their analysis of the new education policy, opportunities and challenges in India, authors Ritu Sood, Sanjeev Sood and CP Rashmi feel that NEP 2020 offers high quality, liberal education system that is good not only for a knowledge economy but it is also mindful of other aspects of overall growth such as happiness, livelihood and creativity of an individual. Skill-based learning will help in bringing the much-needed change in Indian education system.

This book picks up issues from our daily lives and studies them in detail. It's an honest attempt to understand social evolution of our culture, identity and brings out an overall understanding of the changing social structures with empirical findings. The book is recommended for academicians, scholars, media researchers, media students and those interested in studying recent social trends with some very interesting facts and case studies.

Thus, the aim of this study is to find out journalists' use of social media platforms. Specifically, social media usage to build professional identity is studied by interviewing selected journalists from J&K. This research helps in gaining more perspectives of journalists from both public and private media on the subject through qualitative interviews. The results indicate that most journalists use only one or two social media platforms, mainly Facebook and Twitter followed by other platforms like Instagram. Social networking sites attract professional journalists from across the globe and with the growing demand for mobile news content, engagement between journalists and audience is on the rise. Considering this expansion, journalists are benefitted by presenting their identity in a way that is more truthful to help serve the profession better. However, the study concludes that journalists must be careful while sharing both content and identity on social media platforms as compared to users with no journalism background and feel that social media has made their job even more difficult and challenging.

