

# SUSTAINABLE DEVELOPMENT GOAL 8

#### **DECENT WORK AND ECONOMIC GROWTH**

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

#### Overview

Education Institutions are hubs where SDG 8 can be addressed in many ways, not only in providing decent jobs but also in raising future workforce towards contributing to decent work and economic growth.

SDG 8 - Decent Work and Economic Growth, has 12 targets and 16 indicators. It emphasizes achieving productive employment and decent work for all women and men, including young people and persons with disabilities, and equal pay for work of equal value.

At Shiv Nadar, we contribute to SDG 8 through – teaching, research, university practices, and partnerships. Here is a glimpse of our work.



#### **Teaching and Learning**

The School of Humanities and Social Sciences has many departments which offer courses for undergraduate and graduate students, such as Economic Growth and Environmental Quality (ECO 292), Economic Growth and Development (SWC 601), Economic Development (ECO 415), Growth and Inequality (ECO 425), Economics of Discrimination (ECO 684), Interrogating Histories and Theories of Economic Development (INT 202), Development Economics (ECO 605), Education for Sustainable Development (SWE 313). We also offer meaningful education around sustainability and related areas to all students across the University, such as Environmental Studies (CCC 704), Environmental Impact Assessment (CCC 406), Energy for Sustainable Future (CCC 614), and Green Energy Technologies (CCC613) and many more.



#### Research

#### ■ Electronics Manufacturing Entrepreneurs in a performance Bonsai Trap: the case of an emerging economy

The study explores the evolution of Indian domestic electronics manufacturing post-economic reforms and investigates the lack of natural growth stages among Indian start-up/SME electronics manufacturers. The study adopts a qualitative methodology, more precisely, a phenomenological approach to walking through policy/regulatory reforms amid market distortions, technological gaps, and colonial mindset from the perspective of Indian domestic electronics manufacturers. The study has adopted the Gioia method of data analysis to suggest a few research propositions inductively. The phenomenological approach revealed eight essential structure (essence) narratives to explore the complex issues that plague the industry: make in India, made in India, preferential market access strategy, equitable market access strategy, blue ocean strategy, competitive positioning strategy, technical capability and importance of policy/regulatory arbitrage. Practical implications: The situation of Indian electronics manufacturing units is comparable to the bonsai tree situation, where natural evolution in business stages does not exist; they are born and die as start-ups/MSMEs.

While the favorable FDI policies, digital India, and make-in-India initiatives have strengthened domestic electronics production, they have yet to significantly impact India's position in global trade, including manufacturing and exports. © 2023, Emerald Publishing Limited.

Mishra, Brajesh, Avanish Kumar, and Ishaan Mishra. "Electronics manufacturing entrepreneurs in a performance bonsai trap: the case of an emerging economy." *Benchmarking: An International Journal* (2023).

#### ■ Religious institutions and gendered time use: evidence from Ramadan festivities in India

The paper discusses how the religious mandate of the holy month of Ramadan affects the gendered distribution of time use within Muslim households in India. Using rich data on time use from a nationally representative time use survey and employing a difference-in-differences methodology, the paper argues that Ramadan moderates the gender disparities in intrahousehold time use for Muslim households. The moderating influence is stronger in districts with a higher Muslim proportion. The reduction in gender differences is due to declines in gender-specific time use in employment, learning activities, domestic work, and self-care. Reduction in domestic work time for women, especially food preparation time, is more pronounced in districts with a high Muslim proportion, suggesting the 'communalisation of domestic work' due to Ramadan.

**Dasgupta, Aparajita,** and **Ashokankur Datta.** "Religious institutions and gendered time use: evidence from Ramadan festivities in India." *Journal of Population Economics* 37, no. 3 (2024): 57.

#### ■ How Social Considerations Improve the Equity and Effectiveness of Ecosystem Restoration

Ecosystem restoration is an essential means to address global sustainability challenges. However, scientific and policy discourse often overlooks the social processes that influence the equity and effectiveness of restoration interventions. The present article outlines how social processes critical to restoration equity and effectiveness can be better incorporated into restoration science and policy. Drawing from existing case studies, the paper elaborates how projects that align with local people's preferences and are implemented through inclusive governance are more likely to improve social, ecological, and environmental outcomes. To underscore the importance of social considerations in restoration, the paper overlays existing global restoration priority maps, population, and the Human Development Index (HDI) to show that approximately 1.4 billion people, disproportionately belonging to groups with low HDI, live in areas identified by previous studies as being of high restoration priority. The paper concludes with five action points for science and policy to promote equity-centered restoration.

Löfqvist, Sara, Fritz Kleinschroth, Adia Bey, Ariane De Bremond, Ruth DeFries, Jinwei Dong, Forrest Fleischman, et al. "How social considerations improve the equity and effectiveness of ecosystem restoration." *BioScience* 73, no. 2 (2023): 134-148.

#### **■** Performance measurement of sustainable freight transportation: a consensus model and FERA approach

Sustainable freight transportation aims to reduce environmental emissions, social inequity, and economic inefficiency to drive the business. The lack of a continuous sustainability assessment and monitoring tool increases the reluctance of freight transporters to adopt world-class sustainability practices. This paper attempts to develop the performance index for a sustainable freight transportation system by innovatively integrating the Consensus Model (CM) with the Fuzzy Evidential Reasoning Algorithm (FERA). A CM has been used to determine the degree of importance of each Key Performance Indicator identified across three sustainability dimensions. FERA has been used to aggregate subjective judgments with crisp quantitative values. This approach can uniquely handle various uncertainties related to impreciseness in decision-making. This study has demonstrated an integrated approach for developing a freight transportation system performance index. Sensitivity Analysis of the model provides logical inferences and an understanding of the robustness of the model outputs. The study results show that firms with higher profitability in the market are focusing more on making their operations sustainable. A proportionate approach of firms towards economic, environmental, and societal well-being may assist in achieving higher sustainability.

**Fulzele, Vijayta,** and **Ravi Shankar.** "Performance measurement of sustainable freight transportation: a consensus model and FERA approach." *Annals of Operations Research* 324, no. 1 (2023): 501-542.

#### ■ Measuring economic mobility in India using noisy data: A partial identification approach

The paper examines economic mobility in India while accounting for misclassification to better understand the welfare effects of the rise in inequality. To proceed, the paper extends recently developed methods on the partial identification of transition matrices. Allowing for modest misclassification, overall mobility has been deficient: at least 65% of poor households remained poor or at risk of being poor between 2005 and 2012. Muslims, lower caste groups, and rural households are in a more disadvantageous position compared to Hindus, upper caste groups, and urban families. These findings cast doubt on the conventional wisdom that marginalized households in India are catching up.

**Li, Hao, Daniel L. Millimet,** and **Punarjit Roychowdhury.** "Measuring economic mobility in India using noisy data: a partial identification approach." *Journal of the Royal Statistical Society Series A: Statistics in Society* 186, no. 1 (2023): 84-109.

#### ■ Religion in the labor market: evidence from India

This paper analyzes the education and wage gaps between Hindus and Muslims from 1983 to 2011–2012 in India. The paper finds that Muslims are worse off than Hindus in terms of education, and this disadvantage has increased over time. The authors argue that the wage gap is more pronounced at the higher end of the wage distribution, which we interpret as a glass ceiling effect. The wage gap has increased over time, which is more pronounced at the upper quantiles. The difference in education has a significant contribution to the Hindu-Muslim wage gap, and the Hindu-Muslim gaps are more pronounced in urban areas relative to rural areas. Comparing Muslims with different Hindu castes, while the disadvantaged castes have improved their condition relative to Muslims over time, the condition of Muslims relative to the advantaged castes has worsened. Dividing the sample into younger (aged 16–35) and older (36–65) cohorts, the Hindu-Muslim gap in education is more acute in the younger cohort, and the Hindu-Muslim wage gap is more pronounced in the older cohort.

**Bhattacharjee, Shampa,** and **Arka Roy Chaudhuri**. "Religion in the labor market: evidence from India." *Applied Economics* 55, no. 41 (2023): 4781-4816.

#### **■** Impact of cross-border reverse migration in the Delhi-UP region of India during the COVID-19 lockdown

The declaration of a nationwide lockdown in India led to millions of migrant workers, particularly from Uttar Pradesh (UP) and Bihar, returning to their home states without proper transportation and social distancing from cities such as Delhi, Mumbai, and Hyderabad. This unforeseen migration and social mixing accelerated the transmission of diseases across the country. To analyze the impact of reverse migration on disease progression, the authors developed a disease transmission model for the neighboring Indian states of Delhi and UP. The model's essential mathematical properties, including positivity, boundedness, equilibrium points (EPs), and their linear stability, as well as computation of the basic reproduction number (R 0) \left({R}\_{0}), are studied. The mathematical analysis reveals that the model with active reverse migration cannot reach a disease-free equilibrium, indicating that the failure of restrictive mobility intervention caused by reverse migration kept the disease propagation alive. The study estimates a significantly shorter doubling time for the exponential growth of the disease in both

regions. This case study exemplifies the importance of carefully considering these issues before implementing lockdowns and social isolation throughout the country to combat future outbreaks.

Dwivedi, Shubhangi, Saravana Keerthana Perumal, Sumit Kumar, Samit Bhattacharyya, and Nitu Kumari. "Impact of cross border reverse migration in Delhi-UP region of India during COVID-19 lockdown." *Computational and Mathematical Biophysics* 11, no. 1 (2023): 20220151.

#### ■ Redesign of the traditional handloom

Dr. Prakash Kumar, Associate Professor, Department of Design, received a research grant from the Department of Scientific and Industrial Research (DSIR), Government of India, for a project to <u>redesign traditional handloom</u>. The project aims to address occupational problems associated with conventional handlooms, which makes weaving a cumbersome and physically demanding task involving both legs and hands. Redesigning the traditional handloom would increase their efficiency and output, hence the income for the weaver. Another important aspect is that of marginalized weaving communities who cannot buy a new system by discarding the present setup. The project is developing a set of low-cost accessories that can be fitted to existing traditional arrangements so that at a minimal cost, weavers can increase their efficiency and income at the same time.



#### **Conversations on Campus**

### Industry Symposium - The World of Work" - Career and Beyond

The Career Development Center organized a five-day-long Career Guidance program, "The World of Work" – Career and Beyond, to discuss the changing landscape of the world of work

The program brought together practitioners, industry leaders, alumni, and representatives from various sectors to provide a deeper understanding of the trends, challenges, and opportunities shaping the 'world of work' today to address the needs and perspectives of the student community.





#### **University Operations**

#### **■** Careers at Shiv Nadar

At Shiv Nadar University, we provide a <u>diverse and inclusive work environment</u> with equal professional development opportunities and academic freedom. The university offers competitive salaries and benefits, academic leaves, and encourages work-life balance. As an employer, it offers benefits packages that include comprehensive medical coverage and other programs to promote professional growth and personal well-being. From a vast array of development programs to workshops and career programs, people from diverse backgrounds are encouraged to join the community and contribute to a discrimination and harassment-free workplace. The university hires qualified people and offers them a stimulating workplace to learn.



#### **University Operations**

#### **Disability Support Cell**

Shiv Nadar Institution of Eminence has constituted a <u>Disability Support Cell</u> (ref. bod/2019-20/632, for compliance with the Honourable Supreme Court. Order No.292 of 2006) for the staff and students with disabilities in the University. The objectives of the cell are to make the campus friendly for all with disabilities, provide easy access to resources, address problems or special needs, and facilitate the work-life journey while maintaining the confidentiality of disability-related information. Everyone on campus can access the cell via the office and contact disability.support@snu.edu.in.

#### Skill development program

At Shiv Nadar, we are committed to educational opportunities for all people regardless of gender, race, religion, or ethnicity. The University imparts a skill development program that provides critical life skills to the children of the University's third-party members residing in nearby areas and enhances their prospects for a brighter tomorrow. University faculty and students volunteer to impart classes to these children to improve their computer and language skills. Besides, the University ensures that there is no child labor across all its contracts and that all labor compliances as per the government norms are adhered to strictly.

#### **Campus jobs**

The University provides students with <u>opportunities</u> to enrich their holistic learning experience with real-life work. The work may or may not be directly related to the subjects they are studying; undergraduate students gain experiential and applied learning through these opportunities and inculcate ethics, leadership, and service attributes.

#### **Partnerships**

#### **Alumni Office**

Shiv Nadar alums have a strong network across the world. The University's Alumni Relations Office was established in January 2015. The office takes care of alumni engagement and maintains a communication channel with them, informing them of the University's achievements and making them a part of the institution's future, not just its past. This strong alum relationship has contributed to sustainable employment and growth.





#### **Career Development Center (CDC) and Placement Cell**

The University has a dedicated <u>Career Development and Placement Cell</u> to prepare students for employment. The university-industry partnerships provide excellent opportunities to expose students to industry culture and better prepare them to start working at these companies after graduation. Students not only gain training in skilled industrial applications but also the ability to navigate the treacherous industrial set-up. The mutually beneficial partnerships produce groundbreaking research and innovation that solves complex problems, drives economic growth, and creates a more skilled workforce. These partnerships intend to foster a sense of individuality and responsibility in our future employees. The university extensively collaborates with reputed industries for live projects, guest lectures, leadership talks, workshops, collaborative research, internships, and placement offers for our students, along with partnering with leading industry players in domains such as consulting, mechanics, science and technology, and telecommunication.



#### **Partnerships**

#### Partnership with The Habitat Trust (THT)

Shiv Nadar University and The Habitat Trust (THT) have signed a Memorandum of Understanding to contribute to the capacity building of students. Towards this, the university students undertake internships and volunteer work at THT, and the employees at THT have an opportunity to pursue a Ph.D. at the University. Under this partnership, we regularly organize short webinars and sessions on various themes.

The collaboration also involves developing a course on conservation practitioners to be hosted at Shiv Nadar University. **THT Practitioners' course**, in collaboration with the Academy of Continuing Education, Shiv Nadar University, will begin in September 2024. The course is for conservation practitioners and will provide a strong understanding of various disciplines, how to integrate them, and their applications.

Besides, there are ongoing research projects with the School of Humanities and Social Sciences and the School of Natural Sciences.



## The Office of Principal Scientific Adviser to the Government of India facilitates the Call for Application - Venture Challenge 6.0 by Atal Incubation Centre - Shiv Nadar University.

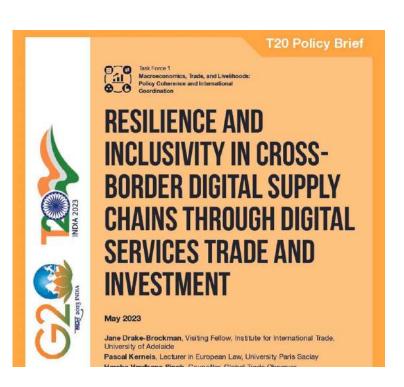
The Atal Incubation Centre - Shiv Nadar University organized the Venture Challenge 6.0. This is a closed-door business pitch competition designed to incubate aspiring entrepreneurs and support them to start, accelerate, and grow their businesses. The event inspired and actuated young minds in the country by exposing them to a competitive atmosphere where they could prove their mettle. The participants pitched their ideas and presented the business model. This call for application was especially targeted to sustainable Development Goals and thematic areas around Livelihood, Agricultural technologies, Research and innovation in areas of Renewable energy, Gender Equality, Employment, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequalities, Research in Renewable Energy, Sustainable Cities, and Communities, Emerging Technologies to name a few.



#### **Partnerships**

#### Paper on "idea bank" for the G20

Dr. Rajat Kathuria, Dean and Professor of Economics, co-authored a paper, "Resilience and Inclusivity in Cross-Border Digital Supply Chains through Digital Services Trade and Investment," as a contribution to Task Force 1: Macroeconomics, Trade, and Livelihoods: Policy Coherence and International Coordination of the T20. Think20 (T20) is an official Engagement Group of the G20 that serves as an "idea bank" for the G20 by bringing together think tanks and high-level experts to discuss policy issues relevant to the G20.



#### **Community Initiative - Dadri Development Project**

Shiv Nadar University is located in a region called Dadri in Uttar Pradesh. Dadri is a rapidly urbanizing rural region with high socio-economic inequality and low SDG outcomes. The university is deeply committed to positively impacting the region and has assumed a central role in the Dadri Development Project, a transformative initiative convened by the Shiv Nadar Foundation (SNF), a non-governmental organization. The project aims to create a "model sustainable rural community around Shiv Nadar University." This commitment is shared by the university leadership, staff, and students and is instilled in the core of the University's academic mission.

The projects include well-considered, need-based interventions with multistakeholder engagement, implemented in phases, supported by thorough evidence, and subjected to rigorous monitoring and evaluation. These projects focus on education, health care, skill development for employability, social safety, reduced inequalities, nature conservation, and agriculture.



Shiv Nadar Institution of Eminence is fully committed to the UN Sustainable Development Goals (SDGs). We have embraced a four-pronged strategy for SDGs through teaching, research, our core institutional practices, and partnerships. Deepa Hazrati Sr. Manager, Office of the Vice-Chancellor deepa.hazrati@snu.edu.in **Shiv Nadar Institution of Eminence** Gautam Buddha Nagar, Uttar Pradesh, India www.snu.edu.in/home