

National Council of Applied Economic Research

Annual Report 2017–18

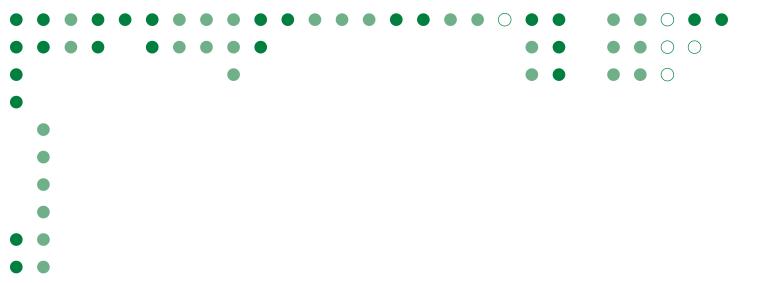




National Council of Applied Economic Research

Annual Report 2017–18





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Published by
Anil K. Sharma
Senior Fellow and Secretary and Head, Operations
National Council of Applied Economic Research
Parisila Bhawan, 11 Indraprastha Estate
New Delhi 110 002
Tel: +91-11-2337-9861 to 3
Fax: +91-11-2337-0164
info@ncaer.org
www.ncaer.org

Compiled by Jagbir Singh Punia Coordinator, Publications Unit

NCAER | Quality . Relevance . Impact

he National Council of Applied Economic Research, or NCAER as it is more commonly known, is India's oldest and largest independent, non-profit, economic policy research institute. It is also one of a handful of think tanks globally that combine rigorous analysis and policy outreach with deep data collection capabilities, especially for household surveys. NCAER celebrated its 60th anniversary in 2016.

NCAER's roots lie in the early vision of India's first Prime Minister of a newly independent India needing independent institutions as a sounding board for government and for industry. Remarkably, for its time, NCAER was established in 1956 as a publicprivate partnership, both catering to and supported by government and by industry. NCAER's first Governing Body included the entire Cabinet of economics ministers and the leading lights of the private sector. These included names like C. D. Deshmukh, J.R.D. Tata, John Mathai, and Asoka Mehta. The Ford Foundation provided substantial, early financial support, combined with support from the Finance Ministry and Tata Sons.

Over more than six decades, NCAER's Governing Body has included almost every prominent Indian economist and industrialist, including Dr Manmohan Singh as a member during 1976–82, and Ratan Tata as President during 1994–98.

Designed in the late 1950's by the highly-regarded, Harvard-trained architect, A. P. Kanvinde, NCAER's iconic campus located in the heart of New Delhi has been home to some of the best economists, statisticians, journalists, and corporate minds of India. On July 27, 2013, Prime Minister Dr Manmohan Singh laid the foundation stone for the new NCAER India Centre (NIC).



Phase 1 of the NIC, consisting of a new office tower, a new conference centre, the NIC Plaza and ample underground parking was completed in 2018. Phase 2, the architectural restoration of the original 1961 Kanvinde Parisila Bhawan building, will be completed in 2019. This major upgrading of NCAER's physical facility is part of a long-term expansion plan to grow NCAER's human, social, systems, and financial capital.

NCAER's research falls into four thematic areas:

- Growth, macroeconomics, trade, finance, and fiscal and monetary policy;
- The investment climate, industry, infrastructure, domestic finance, labour, land, and urban;
- Agriculture, natural resource management, and the environment; and
- Poverty, human development, equity, gender, and consumer behaviour.

NCAER faculty generate and analyse empirical evidence to support and inform public policy choices in these areas. NCAER's core strengths in primary data collection provide a strong foundation for its work. In late 2017, NCAER took a major step forward in this direction with the establishment of the NCAER Centre for Data Innovation. NCAER hosts the annual India Policy Forum (IPF, now in its 16th year) and the Neemrana Conference (celebrating its 20th anniversary in 2018). The IPF

proceedings are published as the annual *India Policy Forum*, one of the highest citations-ranked economics journals out of India. NCAER also publishes the quarterly, refereed, international journal *Margin: The Journal of Applied Economic Research*, in continuous publication for over five decades. NCAER regularly brings expertise, evidence, and informed debate to the public discussion of important policy choices with its numerous outreach and public policy events.

NCAER researchers pursue a mix of their own and bespoke research for governments and industry. This is supported by long-term research grants from international and national donors, core support, contract research and income from NCAER's small but rapidly growing endowment. A substantial portion of NCAER's bespoke research is supported by central and state governments and industry. NCAER is among the two largest members worldwide of the Think Tank Initiative, covering 43 policy research institutions in 20 countries receiving competitive core funding from an international donor consortium.

NCAER's Governing Body is headed

by Mr Nandan M. Nilekani, the creator of *Aadhar* and the former Chairman of the Unique Identification Authority of India, co-founder and former CEO of Infosys Ltd, and now the Non-executive Chairman of the Infosys Board. NCAER has been led since May 2011 by its ninth Director-General, Dr Shekhar Shah, who joined NCAER from the World Bank where he was last the Bank's Regional Economic Adviser for South Asia.

NCAER is an increasingly networked institution with a growing number of overseas and domestic non-resident researchers. NCAER maintains extensive links in India and outside with major think tanks and universities, including NBER, the Chicago Council on Global Affairs, the Brookings Institution, the University of Michigan, the University of Maryland, Columbia University, Stanford University, the London School of Economics, Oxford University, Australian National University, Monash University, and the Asia Global Institute in Hong Kong. NCAER's links in South Asia include almost all the major economic think tanks in the region.

For further details please visit www.ncaer.org



The new buildings of the NCAER India Centre.







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The NCAER India Centre at various stages of its construction.



Governing Body

The Governing Body of NCAER, headed by its President, includes prominent persons from government, industry and academia, and is elected by the General Body of NCAER. The Chief Executive of NCAER is its Director-General. The General Body, which includes all members of the Governing Body, representatives from the central government, public sector corporations, corporate houses, other institutions, and individuals.

The Governing Body met twice during 2017–18, on August 9, 2017 and on March 17, 2018. The General Body met on August 9, 2017.

President

Nandan M. Nilekani Non-executive Chairman of Infosys Ltd, Bengaluru, former

Chairman, Unique Identification Authority of India, New

Delhi, and co-founder and former CEO, Infosys

Vice-President

M. S. Verma Former Chairman, Telecom Regulatory Authority of India,

New Delhi, and State Bank of India, Mumbai

Members

Mukesh D. Ambani Chairman, Reliance Industries Limited, Mumbai

Surjit S. Bhalla Member, Prime Minister's Economic Advisory Council, New

Delhi

Shaktikanta Das Secretary, Economic Affairs, Ministry of Finance, New Delhi

(until May 2017)

Yogesh C. Deveshwar Chairman, ITC Limited, Kolkata

Ashish Dhawan Founder and Chairman, Central Square Foundation, New Delhi

Subhash C. Garg Secretary, Economic Affairs, Ministry of Finance, New Delhi

(from July 2017)

Deepak S. Parekh Chairman, HDFC Limited, Mumbai

Rajendra S. Pawar Co-founder and Chairman, NIIT Group, New Delhi

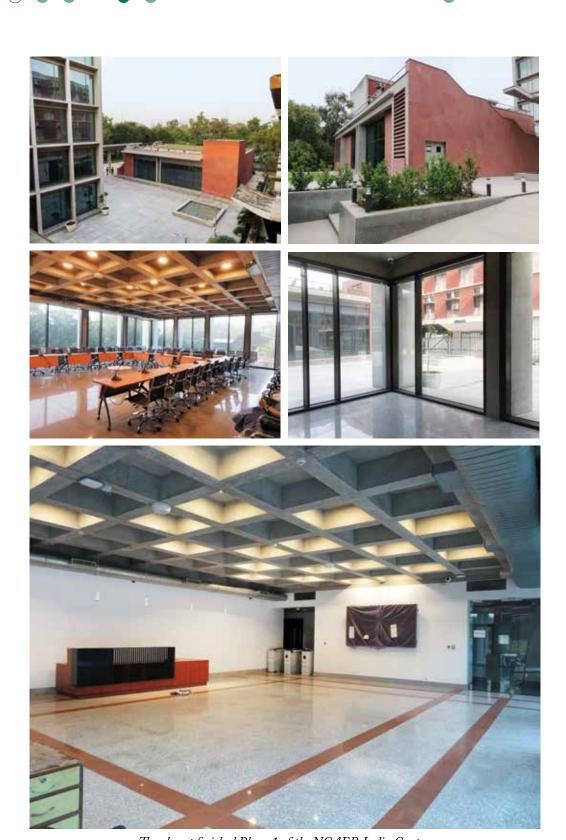
Shekhar Shah Director-General, NCAER, New Delhi

Secretary

Anil K. Sharma Senior Fellow and Head of Operations, NCAER, New Delhi

Founding Governing Body Members in 1956		
John Mathai Chairman, State Bank of India	J.R.D. Tata Chairman, Tata Industries Ltd	
C.D. Deshmukh Union Minister of Finance	Asoka Mehta Member of Parliament	
T.T. Krishnamachari Union Minister of Commerce and Industry V.T. Krishnamachari	J.F. Sinclair General Manager, Burmah-Shell Oil Storage and Distributing Co. of India Ltd	
Deputy Chairman, Planning Commission	N.R. Pillai Secretary-General, Ministry of External Affairs	
General Body		
Life Members	Donor Members	
Bimal Jalan	Bata India Ltd	
Subir Gupta	DCL Polyesters Ltd	
D.N. Patodia	ICICI Bank Ltd	
	State Bank of India	
	New Zealand High Commission, New Delhi	
Institutional and Corporate Members		
1. ASA & Associates LLP	8. Kotak Mahindra Bank Ltd	
2. Associated Chambers of Commerce and Industry of India	9. National Dairy Development Board	
3. Bharat Forge Ltd	10. National Stock Exchange of India Ltd	
4. Central Board of Excise and Customs	11. NIIT Ltd	
5. CESC Ltd	12. Orient Paper and Industries Ltd	
6. Godrej and Boyce Manufacturing	13. Reliance Industries Ltd	
Company Ltd	14. Sakthi Sugars Ltd	
7. ILFS Ltd	15. Triveni Engineering and Industries Ltd	
Ordinary Members		
1. Agarwal Maheswari & Company	3. Martin & Harris (P) Ltd	
2. EPW Research Foundation	4. SidhoMal Paper Conversion Co. (P) Ltd	

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The almost finished Phase 1 of the NCAER India Centre.



 $Governing\ Body\ Members\ at\ NCAER.$

Director-General's Message

By any measure, 2017-18 was an eventful year at NCAER, with much achieved and much yet to be done. My greatest thanks, as always, go to NCAER faculty and staff for their consistent hard work and their commitment to NCAER's mission, and to NCAER's Governing Body for its guidance in implementing NCAER's growth strategy. With their support and that of the many friends of NCAER, it is a privilege to be presenting this 62nd Annual Report of the National Council of Applied Economic Research for 2017-18.

2017-18 was marked by a major institutional completion and a major institutional start. In February 2018 we formally took over the new additions to the NCAER campus in the form of our new office tower, our new international conference centre, the parking garage and the newly created NCAER Plaza. As final fittings and technical fit-outs are completed and regulatory approvals are received, we expect to move into the new buildings during the second half of 2018. Thereafter, we will commence the architectural restoration of our current iconic office building, Parisila Bhawan, which we have occupied since 1961. The major institutional start in 2017 was the establishment of NCAER's National Data Innovation Centre, about which I write below.

THE NCAER CENTRE FOR DATA INNOVATION

NCAER remains one of the few think tanks globally that not only analyses data but also collects it, particularly using large scale national household surveys. This partly reflects India's own methodological leadership in statistics and sampling in the 1950s and earlier, a leadership that unfortunately has since

eroded. Furthermore, advances just in the past decade in statistical methodologies, integration of survey and administrative data, digital technology, geospatial imagery, connectivity, and big data analytics offer immense opportunities to build on India's statistical architecture for collecting, analysing, and distributing data for research and policymaking.

In response to these emerging opportunities and challenges, NCAER launched the NCAER National Data Innovation Centre on December 12, 2017. The Centre is funded by a threeyear Bill and Melinda Gates Foundation (BMGF) grant to NCAER, and a parallel BMGF grant to our overseas university partners, the University of Maryland and the University of Michigan. NCAER was awarded the grant from a highly competitive field of 16 applicants. The Centre will bring together our work on the India Human Development Survey (IHDS) with exciting new surveys and methodologies that will provide a test bed for continuous innovation and piloting. The Centre will initially launch a Delhi Metropolitan Area Survey (DMAS) as a learning and experimentation platform. One of the objectives of the Centre will be to port successful innovations to the Government of India's Central Statistical Office and the National Sample Survey Organisation. NCAER Senior Fellow and Maryland Sociology Professor Sonalde Desai is the BMGF grant's principal investigator and the first Centre director.

NCAER has recruited a number of new staff for the Centre, and work has started on health, financial inclusion, agriculture, and gender, for which study instruments are being developed. A brainstorming session on time-use data



was organised in January 2018. We also organised a workshop on women's economic empowerment in March 2018. The Centre is spearheading NCAER's move to computer assisted personal interviewing (CAPI) and staff are being trained in CAPI skills, particularly using the Blaise 5 platform which is being standardised for all of NCAER's survey data collection. Preparations are being made for launching DMAS at the beginning of 2019.

NCAER's research in 2017-18

NCAER's work falls into four large and overlapping programme areas:

- Growth, macroeconomics, trade, international finance, and economic policy;
- The investment climate, industry, infrastructure, domestic finance, labour, land and urban;
- Agriculture, natural resource management, and the environment; and
- Poverty, human development, equity, gender, and consumer behaviour.

In addition, as exemplified by the establishment of the Centre for Data Innovation this year, the scientific collection of economic, social, and demographic data in all these areas remains key to NCAER. The IHDS itself has its 1993-94 origins in the earlier NCAER survey on the Human Development Profile of India. NCAER is also the originator of REDS, the NCAER Rural Economic and Demographic Survey (earlier called ARIS), started in 1969, and therefore possibly the world's second-oldest longitudinal panel data set, only a year younger than the famous US Panel Study of Income Dynamics.

Highlighted below are several key examples of our ongoing and new research during 2017-18.

Evaluating the Government's programme on Handloom Cluster Development. NCAER had been invited in April 2016 by the Union Ministry of Textiles to evaluate the Ministry's National Handloom Development Programme and its Comprehensive Handloom Cluster Development Scheme in 115 clusters. In a second phase, the Government requested NCAER in 2017 to extend this work to cover 139 new handloom clusters. Under the Scheme, the Government has used block-level cluster development approaches to help weavers' groups upgrade skills and increase their sustainability. This large, nation-wide project is looking at the impact of this approach using a base-line survey and concurrent monitoring and evaluation. It is assessing the current situation of the handloom sector and providing quarterly physical and financial progress reports on the effectiveness of the Scheme.

Building Synergies: Matching Business Reforms to the Ease of Doing Business' Index. NCAER completed and released a study exploring groundlevel business realities connected with local reform initiatives on tax administration, construction permits, transparency, inspections, and compliance with environmental and labour laws and regulations. We undertook two special purpose surveys covering statelevel officials and firms for this study funded by the British Foreign and Commonwealth Office Prosperity Fund. The study provides policy makers and investors feedback on the level of awareness and effectiveness of the business reforms being implemented, and highlights areas where further work needs to be carried out to ensure that the reforms serve the needs of the intended end-user.

Addressing India's skilling challenges. Work progressed on NCAER's research project on skills funded by J. P. Morgan that is examining India's challenge of generating good jobs for its very large young population. The work is exploring questions around India's skills gaps, the current levels and distribution of cognitive, technical, and non-cognitive skills, the skills employers are looking for, and how the skills individuals possess affect their labour market outcomes. On completion of this Phase 1 work and the release of a report, in Phase 2 NCAER will mount a skills survey in the Delhi NCR Region using a globally comparable survey instrument that will allow it to benchmark its findings.

Health-seeking behaviour in four *Indian States.* NCAER is partnering with the Nossal Institute for Global Health at the University of Melbourne and the Population Council in a repurposed, three-year study funded by the BMGF that was originally to look at the BMGF-supported Primary Healthcare Services pilot programme in Uttar Pradesh for potential scale-up. Under the new study, NCAER will survey a total of about 7,500 to 9,000 households spread over two districts each in Tamil Nadu, Maharashtra, Uttar Pradesh, and Odisha for their health-seeking behaviour. NCAER will design survey instruments, collect, clean and analyse the data, and prepare research papers. Households will be surveyed in all four states simultaneously to avoid seasonal variation.

Understanding child vulnerability through life-cycle frameworks. This study funded by UNICEF seeks to understand the issue of child vulnerability in India using a life-cycle approach and social protection vulnerability analysis. The study assessed the challenges faced by poor children, current programmes that address such challenges, the sources of risk and exclusion related to life cycle

changes, and recommends how better social protection systems could be developed.

Measuring the investment potential of *India's States: the N-SIPI 2017.* Covering 20 States and Delhi NCR, the NCAER State Investment Potential Index (N-SIPI) 2017 was the second edition of the N-SIPI started in March 2016 that ranks states on their investment climate. N-SIPI is a pioneering effort to provide metrics of economic governance, competitiveness and growth opportunities at the state and regional levels. N-SIPI is designed to provide a systematic and reliable "go-to" reference for policy makers, existing businesses, and potential domestic and overseas investors. N-SIPI complements the policy initiatives of the government on its Make in India, Skill India, and Start-up India campaigns and the effort spearheaded by the Department of Industrial Policy and Promotion (DIPP) to improve India's rankings on the World Bank's Ease of Doing Business Index. The Secretary, DIPP, released the N-SIPI 2017 results in July 2017 to considerable media attention.

Constructing national tourism satellite accounts (TSA) for India and regional accounts for States and UTs. At the request of the Union Ministry of Tourism, NCAER pioneered India's first TSA for 2002-03 and followed it up with India's second TSA in 2011-12. In constructing the third Indian TSA, again supported by the Ministry of Tourism, NCAER's objective is to provide a coherent, credible, and internationally comparable set of tourism accounts. This important foundational work is also developing estimates of tourism value added for all Indian States and Union Territories. The TSA are helping to analyse the importance of tourism for the economy, employment generation in tourism, and the relationship between tourism and the rest of the economy.

"Has India's economic transformation promoted women's economic empowerment?" Work progressed on this study that NCAER won in an IDRC Canada research competition co-funded by UK DFID and the Hewlett Foundation. The research is using data from NCAER's IHDS-1 (2004-05) and IHDS-2 (2011-12) datasets to examine how India's rural and urban economic transformation has affected women's economic empowerment, and vice versa. It is throwing important light on issues such as the declining labour force participation ratio of urban women in India. It is generating evidence on the degree to which sectoral changes produced by economic growth and public policies are influencing women's opportunities in the labour market.

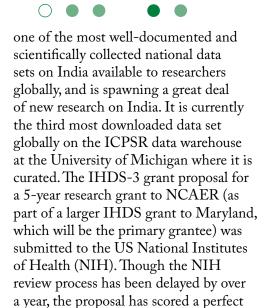
Evaluating DI-LRMP, the Government's Digital India Land Records Modernisation Programme. Land records in India need modernisation and remain in a poor state. In August 2016, NCAER, working in close collaboration with the Department of Land Resources in the Ministry of Rural Development, launched a multi-institution pilot study involving NIPFP and NCAER in New Delhi and IGIDR in Mumbai to look at the effectiveness of the DI-LRMP in three states—Himachal Pradesh (by NCAER), Rajasthan (NIPFP), and Maharashtra (IGIDR). The pilot studies covered one taluka in each state: state level reports and a synthesis report have been produced, both pointing the way to a comprehensive national study on improving land records in India that could be mounted. NCAER coordinated the three institutions with grant support from the Omidyar Network. State studies by the three institutions and the overall synthesis study by NCAER were released in November 2017.

Exploring how Indian States are implementing Direct Benefits Transfers.

Detailed state-level work continued on the research project to develop, test, and disseminate a readiness index to gauge the readiness of Indian states to implement the Direct Benefits Transfer (DBT) programme of the Government of India. Based on its digital Aadhaar biometric ID, DBT is a key element of the Central Government's effort to rationalise individual subsidies by making direct payments into beneficiary accounts. NCAER's work is progressing in close cooperation with the DBT Mission of the Government of India. It is particularly focussing on how states differ in meeting the challenges in the adoption and implementation of DBT and what might be best practice examples of states in implementing DBT. This research is supported by a grant from the Bill and Melinda Gates Foundation.

Doubling Farmers' Income in India. NCAER is a lead knowledge partner for the Ministry of Agriculture and Farmers' Welfare in the work of the Committee on Doubling Farmers' Income, on which NCAER is also a member. NCAER researchers have authored Volume II of the Committee's Report on the Status of Farmers' Income: Strategies for Accelerated Growth. The Volume examines aggregate growth rates needed at national and state levels, and more disaggregated sectoral growth rates, to achieve the goal of doubling farmers' real income. The study assesses current farmers' incomes and activities, changes that have occurred over time, factors affecting farmers' income, public and private capital formation, and policies required to ensure accelerated growth in famers' income.

The NCAER India Human
Development Survey-3. The NCAER
IHDS data, collected in partnership with
the University of Maryland, College
Park, is India's only national household
longitudinal panel survey. It is also



NCAER'S OUTREACH AND PUBLIC POLICY EVENTS IN 2017-18

2018.

10 in the final round of NIH reviews and

is awaiting final funding approval, which

is most likely to arrive around October

NCAER regularly brings expertise, evidence, and informed debate to the public discussion of important policy choices with its numerous outreach and public policy events. Some of these are highlighted below. Details are available in the activities section of this Annual Report.

The 2017 India Policy Forum. The 14th India Policy Forum (IPF) held July 2017 commenced with a keynote address by Dr Arvind Subramanian, Chief Economic Advisor, Government of India, who also released the 2016-17 *India Policy* Forum Volume. The 2017 IPF featured five research papers covering topics in air pollution, state finances, India's import of services and its consequent role in global value chains, ICT in Indian agriculture, and explaining Indian city growth in the 2000's. The papers were accompanied by an IPF Policy Roundtable on Financial Inclusion and Beyond: Understanding Indian Household Finance and a special IPF Roundup on Market Failure vs Government Failure: What are these IPF

papers telling us? The 2017 IPF Lecture was delivered to a packed audience by Professor Lant Pritchett of Harvard's Kennedy School of Government on "Avoiding the morning-after blues: Building state capability while times are good".

The Quarterly Review of the Economy Seminars. NCAER's Quarterly Review of the Economy Seminars and its quarterly macroeconomic forecasts are widely reported in the media. The NCAER QRE team presents growth forecasts based on both NCAER's quarterly and annual models. Each QRE also features one or more keynote speakers from industry on an issue of topical interest. The QREs are combined with NCAER's work on the NCAER Business Expectations Survey, also released quarterly and also widely reported in the Indian and overseas media.

NCAER dialogue with the Policy Research Institute (PRI) of the Japanese *Ministry of Finance*. This dialogue, in October 2017 in Tokyo, was hosted by PRI and the Asian Development Bank Institute. It explored possible areas of cooperation between India and Japan, with a focus on one of the biggest challenges that India faces, that of skills and jobs. The dialogue brought together senior policymakers, academics, think tanks, and private sector experts from both countries. Dr K P Krishnan, Secretary, Ministry of Skill Development and Entrepreneurship, Government of India, participated through videoconferencing. Rajesh Chadha, Prerna Prabhakar, and I represented NCAER.

Book launch: The 21st Century: Asia's? The book, by NCAER Distinguished Fellow Rajat Nag, was released in November 2017, and is based on five NCAER lectures that Nag had delivered earlier. The book shares Nag's insights garnered during his long years of working

at the Asian Development Bank. A panel discussion with Nag that I chaired included Dr Shyam Saran and Dr Sanjaya Baru as discussants.

Mid-Year Review of the Economy 2017-18. Continuing its longstanding partnership with the India International Centre, NCAER released its 2017-18 Malcolm Adiseshiah Mid-year Review of the Indian Economy in November 2017. Dr Bimal Jalan, former NCAER President and RBI Governor, chaired the Review and gave the opening remarks. NCAER has over time expanded the focus of the Review to include detailed discussions on key policy issues. This year's Review included three special presentations on NCAER nowcasting work, a discussion of GST design issues, and a discussion on financial markets to assess the pros and cons of recent policy announcements about recapitalisation of public sector banks, issues of credit growth, and the impact of demonetisation on digitisation.

Modernising India's land records. The three-institution study led by NCAER on the modernisation of land records in three Indian States was released in November 2017. The study recommends a number of reforms that could help to improve property records and services, enhance the impact of computerizing land records, and potentially reduce land litigation in India. The study assessed the Government's Digital India Land Records Modernization Programme in Himachal Pradesh (NCAER), Maharashtra (IGIDR) and Rajasthan (NIPFP). The work was supported by the Omidyar Network (ON). NCAER staff and ON personnel met after the event to consider areas in which ON could support further work at NCAER on land policy and economics: discussions are underway for a multi-year grant for a Land Policy Initiative at NCAER.

The 6th CD Deshmukh Memorial Lecture 2018. Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics at the University of Cambridge, delivered NCAER's 6th C D Deshmukh Memorial Lecture at the Nehru Memorial Library on February 9, 2018. The distinguished audience included eminent economists, civil servants, industry analysts, media and a large number of students. In his lecture "Measuring the Wealth of Nations", Dasgupta explored a conceptual framework that offers a unified language for both thinking about intergenerational sustainability and the key policy issues that must be addressed for increasing the current well-being of citizens.

The 12th Five-Institute Budget Seminar. NCAER, NIPFP, CPR, ICRIER, and IDF continued the tradition of coming together once a year to have institution directors present their assessment of the longer term reform and development implications of each Union Budget. The 2018-19 seminar, held in early February 2018, drew a substantial audience with a lively Q&A moderated by Mr Shyamal Majumdar, Editor of the Business Standard.

STRENGTHENING NCAER'S INSTITUTIONAL CAPABILITIES

Progress on the NCAER India Centre. Phase 1 of the construction of the NCAER India Centre, involving a new office tower, the new conference centre, the NCAER Plaza, ample underground parking, and landscaping, was completed during FY2017-18, with the buildings thereafter being fitted for audio visual capabilities and networking. The general contractor formally handed over the substantially completed buildings to NCAER in mid-February 2018. NCAER received regulatory approvals for electrical works and lifts in early March, followed by a fire safety clearance from the Delhi Fire Service. Once



NCAER staff move to the new buildings, Phase 2 will start with a sensitive architectural restoration of NCAER's original 1961 building designed by A P Kanvinde, one of India's most celebrated architects of that era.

Building NCAER's human capital.

During 2017-18, we continued the previous years' success with recruiting fresh PhDs from the US job market.

We have recruited two candidates from Boston University and the University of New Mexico. While continuing to recruit within India for the best-trained research staff at all levels, we expect to continue to do more hiring in the US and European job markets as NCAER's staffing needs grow.

Think-Tank Initiative (TTI).

NCAER continued to play a lead role among the 14 South Asian institutions in Phase 2 of the TTI grant. At the February 2018 TTI Regional Meeting in Sawar in Bangladesh, I was invited to lead the opening plenary session, and was also a panellist on a number of other sessions. NCAER's focus in using TTI remained on consolidating the core objectives of improving research quality, improving organisational performance, and strengthening policy outreach. TTI Phase 2 will end in March 2019. NCAER's TTI journey demonstrates the vital need for and the value of providing core support for independent think tanks. We will work with other TTI institutions and the TTI funders to carry the message to the larger global funding community of the vital importance of such support for evidence-based policy making.

Concluding remarks

It's been an eventful year, with both the regular rhythm of activities and the additional burden of the NCAER construction project keeping some of us very busy. I would like to thank the entire NCAER community of research

faculty and administrative staff for their excellent contributions during 2017-18. I am particularly indebted to four staff whose contributions to my work stood out—Dr Anil K Sharma, Senior Fellow, Secretary of NCAER's Governing Body and Head of Operations; Ms Akansha Dubey, Special Assistant to the Director-General, who left NCAER in August 2017 for graduate studies at Stanford; Mr Rabi Narayan Panda, Controller and Finance Head; and Ms Sudesh Bala, Executive Assistant to the Director-General. I am grateful as well to NCAER's Senior Research Councillor, Dr Rajesh Chadha for keeping an eye on our research programme, and our section heads for their careful work, particularly Rakesh Srivastava, who managed the complicated deployment of new, state-ofthe-art IT infrastructure in the NCAER India Centre. All provided invaluable management support in a busy and challenging year.

NCAER is fortunate to have a Governing Body that has provided consistent, insightful guidance over the years. I am grateful to NCAER's President, Nandan Nilekani, and Vice-President, M. S. Verma, for their many contributions to NCAER's well-being and growth. Finally, I want to thank our research partners, grant funders, and well-wishers in India and abroad for enabling NCAER to remain true to our 62 year old mission, most clearly reflected in the motto that is now part of NCAER's logo, "Quality . Relevance . Impact".

Shekhar Shah

August 31, 2018

Director-General





Night scenes of the new T1 Office Tower and the T2 Conference Centre at NCAER.

Activities

NCAER Events

Conferences, Seminars, Workshops, Roundtables, Lectures, and Book Launches*

2017

April 1: A Conversation on "Emerging Issues in Health, Education, and Service Delivery"

Chair: Dr Shekhar Shah, NCAER Speaker: Prof Karthik Muralidharan, University of California, San Diego and NCAER

April 18: Second Technical Advisory Committee Meeting of the Digital India Land Records Modernisation Programme (DI-LRMP) Impact Assessment

Chair: Dr Shekhar Shah, NCAER
Presentation: NCAER, NIPFP, IGIDR
Teams

Speaker: Mr Deepak Sanan, NCAER

May 26: Third Steering Committee of NCAER DBT Readiness Research Project

Co-Chairs: Dr Rajesh Chadha, NCAER; Mr Peeyush Kumar, DBT Mission Presentation: DBT Team led by Dr Bornali Bhandari and Mr R Venkatesan, NCAER

Speakers: Dr Pawan Bakhshi, BMGF; Mr Arun Sharma, DBT Mission; Ms Tulsipriya Rajkumari, DBT Mission; Mr Babu Ahmed, Andhra Pradesh Government, by VC; Mr Ragavan Venkatesan, IDFC Bank Ltd (by VC); Mr Mitul Thapliyal, and Ms Sakshi Chadha, MicroSave

June 8: NCAER "Quarterly Review of the Economy"

Chair: Dr Rajesh Chadha, NCAER

QRE Presentation: NCAER QRE Team led by Dr Bornali Bhandari

Guest Speaker: Mr V S Krishnan, Ernst and Young

Discussants: Dr D K Pant, India Ratings; Mr Harish Rajput, Tally Solutions Ltd

July 4: NCAER Seminar on "Mobile Data Acquisition"

Chair: Mr Prabir Kumar Ghosh, NCAER

Speakers: Mr Ramakrishnan Selvaraj and Mr Ramesh Gopinath, Etamine PGG India Pvt Ltd, Bengaluru

July 5: Third Technical Advisory Committee Meeting of Digital India-Land Records Modernisation Programme (DI-LRMP) Impact Assessment

Welcome Remarks: Dr Shekhar Shah, NCAER

Chair: Mr Deepak Sanan, NCAER
Presentation: NCAER, NIPFP, IGIDR
Teams

July 11–12: The 14th India Policy Forum, 2017

Papers by: Prof Michael
Greenstone, Dr Santosh
Harish, and Dr Anant
Sudarshan, University of
Chicago and Prof Rohini Pande, Harvard

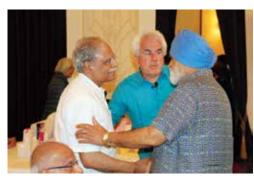
^{*}During April 1, 2017 to March 31, 2018. Additional details, and in some cases multimedia and event presentations, can be viewed by scanning the SPARQ code mentioned in this listing. Core support for a number of these outreach activities from the Think Tank Initiative is gratefully acknowledged.











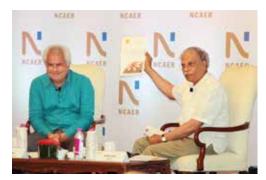


















[Scan SPARQ code for event details and videos of all IPF events.]

IPF 2017 Policy Roundtable: "Financial Inclusion and Beyond: Understanding Indian













































Ashok Lahiri, Bandhan Bank;
Prof Tarun Ramadorai, Imperial
College London and NCAER;
Ms Monika Halan, Mint; Prof
Rajnish Mehra, Arizona State,
NBER and NCAER; Prof
Renuka Sané, NIPFP
IPF 2017 Lecture: "Avoiding
the Morning-after Blues:
Building State Capability
While Times Are Good" by
Prof Lant Pritchett, Harvard
Kennedy School
Chair: Dr Shekhar Shah,

Household Finance", with Dr



July 18: NCAER's State Investment Potential Index | N-SIPI 2017

NCAER





Welcome and Introduction: Dr Shekhar Shah, NCAER

Co-Chairs: Ms Sindhushree Khullar, Former NITI Aayog; Dr Rajesh Chadha, NCAER

Keynote Speaker: Mr Ramesh Abhishek, DIPP

Presentations: Dr Indira Iyer, Ms Mythili Bhusnurmath, and Dr Anjali Tandon, NCAER

State Presentations: Mr Arvind Kumar, Industrial Promotion, Telangana; Mr Ranvir Prasad, UP State Industrial Development Corporation
Speakers: Mr A Didar Singh, FICCI; Mr Rajat M Nag, NCAER; Mr Shihab Ansari Azhar, World Bank; Mr Danish A Hashim, CII.

August 24: NCAER "Quarterly Review

of the Economy"

Chair: Dr Rajesh Chadha, NCAER

QRE Presentation: NCAER team led by Dr Bornali Bhandari

Speaker: Mr Tushar Arora, HDFC Bank Discussant: Dr Sanjib Pohit, NCAER

September 8: NCAER Seminar on "GDP Nowcasting: A New Approach to Know-the-now-GDP"

Chair: Dr Rajesh Chadha, NCAER Speakers: Dr Sanjib Pohit and Dr Soumya Bhadury, NCAER

September 14: NCAER Round Table

Discussion on the Digital India-Land Records Modernisation Programme





(DI-LRMP) Impact Assessment
Chair: Mr Deepak Sanan, NCAER
Presentation: NCAER Team
Speakers: Dr Namita Wahi, CPR; Dr
Pranab Ranjan Choudhary, NRMC; Mr
Sanjoy Patnaik, Center for Rights and
Resources; Dr Deepika Jha, IIHS
Keynote Remarks: Mr Peter Rabley,
Omidyar Network

October 16: NCAER Seminar on

"Colonial Legacy, Services Trade and LDCs"

Chair: Dr Shekhar Shah, NCAER

Speaker: Dr Anirudh Shingal, World Trade Institute, University of Bern

Discussant: Dr Sanjib Pohit, NCAER

October 23: TTI Annual Monitoring Visit Theme discussion on "Reflections on the TTI experience at NCAER & globally: sustainability, opportunity, responsibility"

Chair: Dr Shekhar Shah, NCAER
Visitors: Dr Anindya Chatterjee and Dr

Samar Verma

Participants: NCAER team and Governing Body Members











October 31: NCAER-ADBI-PRI

Tokyo Dialogue on "Partners Together: India and Japan Meeting India's Skills and Jobs Challenge"



Welcome and Opening

Remarks: Mr Toshinori Doi, PRI; Dr Shekhar Shah, NCAER; Dr Naoyuki Yoshino, ADBI

Co-Chairs: Mr Chul Ju Kim, ADBI; Dr Shekhar Shah, NCAER; Prof Toshiro Nishizawa, PRI

Speakers: Mr Ajit Ranade, Aditya Birla Group; Dr Shujiro Urata, Waseda University; Mr K.P. Krishnan, Ministry of Skill Development and Entrepreneurship, Government of India, by VC; Mr Hisashi Takeuchi, Suzuki Motor Corporation; Mr Vishwas Udgirkar, Deloitte India; Dr Naoyuki Yoshino, ADBI; Mr Kyosuke Inada, JICA; Mr Toshinori Doi, PRI; Mr Rajat Nag, NCAER (by VC); Dr Rajesh Chadha, NCAER; Mr Takashi Shimada, Indo Business Centre Ltd; Mr Atul Satija, Nudge Foundation; Dr Prerna Prabhakar, NCAER

[Scan SPARQ code for event details]

November 8: Book Launch of "The 21st Century: Asia's?" by Rajat
Nag
Chair: Dr Shekhar Shah,
NCAER

Panellists: Dr Shyam Saran, Former Foreign Secretary, Government of India; Dr Sanjaya Baru, FICCI; and Mr Rajat Nag, NCAER [Scan SPARQ code for event details]





November 11: NCAER-IIC Malcolm

Adiseshiah Mid-Year Review of the Indian Economy 2017-18



Welcome and Introduction:

Dr Shekhar Shah, NCAER; Air Marshal (Retd.) Naresh Verma, IIC









November 13: NCAER Pilot Impact
Assessment of the
Government of India's
Digital India-Land Records
Modernisation Programme
(DI-LRMP): "Release of
State and Synthesis Reports"
Chair: Dr Shekhar Shah, NCAER
Keynote Remarks: Mr T Haque, NITI
Aayog; Mr Dinesh Singh, DoLR







Panellists: Mr T Haque, NITI Aayog; Mr Peter Rabley, Omidyar Network; Mr Deepak Sanan, NCAER Presentations: Ms Sudha Narayanan, and Diya Uday, IGIDR; Mr Anirudh Burman, NIPFP; Dr Prerna Prabhakar and Mr Deepak Sanan, NCAER Partners: NIPFP and IGIDR

November 24: Fourth Steering
Committee Meeting of NCAER DBT
Readiness Research Project
Co-Chairs: Dr Rajesh Chadha,
NCAER; Mr Peeyush Kumar, DBT
Mission
Presentation: DBT Project Team led
by Dr Bornali Bhandari and Mr R
Venkatesan, NCAER
Speakers: Mr Arun Sharma, DBT
Mission; Ms Shalini Gupta, DBT

Mission; Dr A Santosh Mathew, Former Indian Administrative Service; Dr Rinku Murgai, World Bank; Mr Babu Ahmed, Real Time Governance (by VC); Dr Pawan Bakshi, BMGF; Mr Devesh Sharma, BMGF; Mr Mitul Thapliyal, MicroSave; Mr Roy Mathew, Centre for Digital Financial Inclusion

December 7: NCAER Seminar on

"Market Failure, Government Failure, and the Welfare of Poor People"

Chair: Dr Shekhar Shah, NCAER

Speaker: Dr Shantayanan Devarajan, World Bank

December 12: NCAER National Data Innovation Centre, first meeting of the Centre Programme Advisory Panel (CPAP)

Welcome and Introduction: Dr Shekhar Shah, NCAER

Speakers: Dr Sonalde Desai and Dr Shekhar Shah, NCAER; Dr Pronab Sen, NSC

December 12: Launch of the NCAER

National Data Innovation Centre and Panel Discussion on "Imagining a Statistical Data Architecture for a 21st Century India"



Welcome and Introduction: Dr Shekhar Shah, NCAER

Keynote Remarks: Prof T N Srinivasan, Yale University and NCAER Chair: Dr Pronab Sen, NSC Panellists: Prof Ashwini Deshpande, DSE; Dr Madhav Chavan, Pratham;













C Manna, CSO and NSSO; Dr Mudit Kapoor, ISI; Dr Sonalde Desai, NCAER

December 13: NCAER-JICA Roundtable Consultation on JICA Country Analysis Paper 2017 Welcome and opening remarks: Dr Shekhar Shah, NCAER; Mr Kyosuke Inada, JICA

Presentations: NCAER and JICA
Teams

December 15–17: 19th Neemrana Conference

Speakers: NBER Associates and invited Indian policymakers, economists, industry leaders

The 2017 Neemrana Lecture: "India: The State of the Economy", Dr Arvind Subramanian, Chief Economic Adviser, Ministry of Finance, Government of India

2018

January 12: NCAER Centre for Data Innovation Brainstorming Session on "Methodologies for Collection of Time Use Data"

Welcome Remarks: Dr Shekhar Shah, NCAER

Chair: Mr A K Shiva Kumar Speakers: Dr Indira Hirway, Centre for Development Alternatives, Ahmedabad; Dr Sonalde Desai and Dr Pallavi Choudhuri, NCAER

January 17: NCAER Seminar on

"PRIndex: A Global Indicator of Citizen's Perception of Property Rights"



Chair: Dr Shekhar Shah, NCAER

Presentation: Dr Malcolm Childress; Dr David Spievack, Land Alliance

Discussant: Mr Deepak Sanan, NCAER

January 19: NCAER Seminar on "Impact of SEZs on Poverty and Human Well-being in Undivided Andhra Pradesh"

Chair: Dr Shekhar Shah, NCAER

Speaker: Dr Aradhna Aggarwal, Copenhagen Business School



Discussant: Mr Nilotpal Goswami, CAG

February 9: The 6th C.D. Deshmukh

Memorial Lecture 2018, "Measuring the Wealth of Nations"



Chair: Dr Shekhar Shah, NCAER

Speaker: Sir Partha Dasgupta, University of Cambridge

February 10: The Five-Institute Budget Seminar on "The Union Budget 2018–19:







Reforms and Development Perspectives" (NCAER-NIPFP-ICRIER-IDF-CPR) Chair: Mr Shyamal Majumdar, *Business Standard*

Speakers: Dr Shekhar Shah, NCAER, Dr Rajat Kathuria, ICRIER, Dr S K Shanthi, IDF; Dr Yamini Aiyar, CPR; Dr Rathin Roy, NIPFP

February 15: NCAER

Seminar on "Trends in India's Income Distribution"

Chair: Dr Shekhar Shah, NCAER





Presentation: Dr Surjit Bhalla, Chairman of Oxus Research and Investments and a Member of the Prime Minister's Economic Advisory Council and of NCAER's Governing Body Discussant: Dr Pronab Sen, IGC

February 16: NCAER "Quarterly Review of the Economy"

Chair: Dr Rajesh Chadha, NCAER

QRE Presentation: NCAER





Team led by Dr Bornali Bhandari
Guest Speaker: Mr Nikhil Gupta,
Motilal Oswal Securities Ltd
Discussants: Prof Arup Mitra, NILERD;
Dr Radhicka Kapoor, ICRIER

March 6: NCAER Seminar on "New

Approaches to the Financial Inclusion of Small Farmers in India"

Chair: Dr Shekhar Shah, NCAER

Speaker: Prof Dilip Mookherjee, Boston University

Discussant: Dr Renuka Sane, NIPFP

March 15: NCAER Discussion on "India

Development Update-India's Growth Story"

Chair: Dr Shekhar Shah, NCAER

Speaker: Dr Poonam Gupta, World Bank





March 24: NCAER Centre for Data

Innovation and IFMR-IWWAGE Workshop on "Kathopakathan" A Conversation about Women's Economic Empowerment"

Opening Remarks: Ms Anna Roy, NITI Aayog

Introductions: Dr Sonalde Desai, NCAER; Ms Sharon Buteau, IFMR Chairs: Ms Yamini Atmavilas, Bill and Melinda Gates Foundation; Mr TCA Anant, Former Chief Statistician of India



Speakers: Dr Farzana Afridi, ISI; Dr Radhicka Kapoor, ICRIER; Dr Santosh Mathew, Former Joint Secretary of

Rural Development; Mr P C Mohanan, National Statistical Commission

















The launch function for the NCAER National Data Innovation Centre, December 12, 2017.



NCAER's Research Programme

NCAER's research programme is structured around four thematic areas:

- Growth, macroeconomics, trade, finance, and fiscal and monetary policy;
- The investment climate, industry, infrastructure, domestic finance, labour, land, and urban;
- Agriculture, natural resource management, and the environment; and
- Poverty, human development, equity, gender, and consumer behaviour.

These themes cover NCAER's own research as well as research studies sponsored by governments and the private sector. NCAER's sponsored studies requested by others must be in line with NCAER's own research priorities in these areas. In many cases, NCAER studies involve outside collaborators. The list below contains research studies as of March 31, 2018 undertaken by NCAER in the year 2017–18. For detailed descriptions, please refer to the corresponding serial numbers in the sections that follow.

	Programme/Project/Study	Sponsor (s)
A. G	rowth, macroeconomics, trade, finance, a	nd fiscal and monetary policy
A1.	India Policy Forum 2017–18* Project Leader: Shekhar Shah Editors: Shekhar Shah, Barry Bosworth, and Karthik Muralidharan	HDFC, Reliance Industries, SBI, Sage Publications and Citigroup
A2.	Quarterly Business Expectations Survey* Project Leader: Bornali Bhandari	NCAER, New Delhi
A3.	Quarterly Review of the Economy* Project Leader: Bornali Bhandari	NCAER and QRE annual subscribers
A4.	Mid-Year Review of the Economy 2017–18* Project Leader: Bornali Bhandari	Think-Tank Initiative, the India International Centre, and Malcolm and Elizabeth Adiseshiah Trust, New Delhi
A5.	Five-Institute Budget Seminar on the Union Budget 2018–19* Project Leader: Shekhar Shah	The World Bank, New Delhi
A6.	The C. D. Deshmukh Memorial Lecture 2018* Project Leaders: Anil Sharma and Shekhar Shah	NCAER, New Delhi
A7.	Think-Tank Initiative Phase–II Project Leaders: Anil Sharma and Shekhar Shah	International Development Research Centre, India

^{*}Programmes, projects and studies completed during financial year 2017–18 are marked with an asterisk. The rest are ongoing.

	•				
A8.	Third Tourism Satellite Account (TSA) of India and States/UTs of India for 2015–16 Project Leader: Poonam Munjal	Ministry of Tourism, New Delhi			
B. Th	e investment climate, industry, infrastrurban	acture, domestic finance, labour, land,			
B1.	The Employment Impact of the Proposed Investments during 2015–20 by the Indian Railways* Project Leader: Kanhaiya Singh	Ministry of Railways, New Delhi			
B2.	NCAER-State Investment Potential Index* Project Leader: Indira Iyer	Self-Development, TTI, New Delhi			
В3.	NCAER Labour Economics Research Observatory and New Skills at Work India Project Leader: Bornali Bhandari	J.P. Morgan Securities India Private Limited, Mumbai			
B4.	A Pilot Impact Assessment of the Digital India Land Records Modernisation Programme* Project Leader: D. B. Gupta	Omidyar Network Fund, Inc.			
C. Ag	C. Agriculture, natural resource management, and the environment				
C1.	Doubling Farmers' Income by 2021–22* Project Leader: Rajesh Chadha	Ministry of Agriculture and Farmers Welfare, New Delhi			
C2.	Study for Establishing a Separate Authority for the Office of the Central Registrar of Cooperative Societies Project Leader: Saurabh Bandyopadhyay	Ministry of Agriculture and Farmers Welfare, New Delhi			
C3.	Identifying Institutional Funding Gap of the Cooperative Sector in India Project Leader: Saurabh Bandyopadhyay	National Cooperative Development Corporation, Ministry of Agriculture and Farmers Welfare, New Delhi			
C4.	Contribution of ICAR Institutes in Agricultural Policy Project Leaders: Prem Vashishtha and Tarujyoti Buragohain	Indian Council of Agricultural Research, New Delhi			
C5.	Promoting Paddy: An Impact Assessment for India—An Evaluation of New Paddy Varieties and Packages of Practice* Project Leader: Laxmi Joshi	Indian Council of Agricultural Research (ICAR), New Delhi			
	overty, human development, equity, gend				
D1.	India Human Development Survey–II* Project Leader: Sonalde Desai	U.S. National Institutes of Health			

D2.	Wage Employment and Migration Project Leader: Sonalde Desai	The Ford Foundation
D3.	The NCAER National Data Innovation Centre Project Leader: Sonalde Desai	Bill & Melinda Gates Foundation
D4.	Pathways Linking Economic Transformation to Women's Access to and Control over Resources in India Project Leader: Sonalde Desai	UMD and IDRC/CRDI
D5.	Assessing Direct Benefit Transfer Readiness Assessment of States and UTs Project Leaders: R. Venkatesan and Bornali Bhandari	Bill & Melinda Gates Foundation
D6.	Vulnerability Analysis of Children in India* Project Leader: Anushree Sinha	United Nations Children's Fund (UNICEF)
D7.	The Challenge of Retaining Girls in Secondary Education in Dhaulpur, Rajasthan: Using Demand Curve Analysis and Pilot Design to Scale up the Pre-Matric Scholarship Scheme for Girls Project Leader: Anushree Sinha	IPE Global Limited, New Delhi
D8.	Evaluation of Handloom Cluster 2016–17* Project Leader: K. A. Siddiqui	Development Commissioner (Handlooms), Ministry of Textiles, New Delhi
D9.	Monitoring and Evaluation of 139 Handloom Cluster 2017–18 Project Leader: K. A. Siddiqui	Development Commissioner (Handlooms), Ministry of Textiles, New Delhi

A. Growth, Macroeconomics, Trade, Finance, and Fiscal and Monetary Policy

Under its broad theme of Growth, Macro, Trade, and Fiscal and Monetary Policy, NCAER continued to provide an assessment of economic conditions through its Quarterly Survey of Business Expectations, macroeconomic forecasting models and the Quarterly Reviews of the Economy (QRE). These documents disseminated insights, data and forecasts on the performance of various sectors of India's economy. NCAER's Mid-Year Review of the Economy 2017–18, done annually in November, with the India International Centre, presented a comprehensive assessment of the Indian economy and discussed two special topics, viz. New Paradigms in Financial Sector Development in India and Healthy Aging in India: Situation and Challenges.

The need to boost business sentiment and increase private investment was highlighted in the Five-Institution Seminar on the Union Budget 2017–18. Several important fiscal reforms are expected that will hopefully improve the fiscal health of the economy and lay strong foundations for lifting sentiment and for sustained, rapid growth that creates rural and urban jobs.

The India Policy Forum 2017, the annual conference organised by NCAER in July every year, included a lecture on, 'Avoiding the morning-after blues: Building state capability while times are good' delivered by Lant Pritchett, Professor of the Practice of International Development, Harvard Kennedy School. The 19th Neemrana conference on the Indian economy was held in December 2017.

The studies carried out under the programme area of 'Growth, Macroeconomics, Trade, Finance, and Fiscal and Monetary Policy' are summarised below.*

A1. India Policy Forum 2017-18*

Sponsors: SBI, HDFC, IDFC, Reliance Industries, SAGE Publications, and Citigroup

Project Team: Shekhar Shah, Akansha Dubey, Sudesh Bala, Anupma Mehta, Jagbir Singh Punia, and Prem Prakash Joshi

Editors: Shekhar Shah, Barry Bosworth, and Karthik Muralidharan

The Fourteenth India Policy Forum (IPF) conference was held in New Delhi during July 11–12, 2017. Dr Lant Pritchett, Professor of the Practice of International Development, Harvard University, delivered the 14th annual IPF lecture on "Avoiding the morning-after blues: Building state capability while times are good".



Ray Witlin/World Bank

Outcome: The annual publication *India Policy Forum 2017/18*, Volume 14, was published in July 2018.

A2. Quarterly Business Expectations Survey*

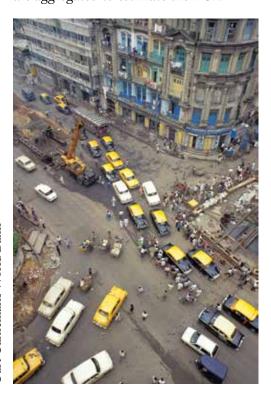
Sponsors: NCAER, New Delhi

Project Team: Bornali Bhandari, Ajaya Kumar Sahu, K. S. Urs, Mridula

^{*} Programmes/projects completed during financial year 2017-18.

Duggal, Heena Bhatia, Ann James, Upender Kataria, Madhav Gupta, Sumit Aggarwal, Anupma Mehta, Praveen Sachdeva, Sudesh Bala, Khushvinder Kaur, Shilpi Tripathi, and Vipin Kumar

Objectives: Supplementing a wide range of quantitative data on the indicators of economic activity, these quarterly surveys of the business sector have aimed at providing an assessment of the qualitative dimension of business expectations. The surveys now provide two broad indicators of business sentiments. The Business Confidence Index (BCI) is focused on understanding the business sector respondents' judgements on the course of economic growth, investment climate, financial position of firms and capacity utilisation. The responses are aggregated to provide an overall BCI. The Political Confidence Index (PCI) is based on the respondents' perceptions of political management of economic issues including management of overall economic reforms, inflation, employment, and the fiscal position of the government. The responses to eight such indicators are aggregated to estimate the PCI.



The survey is conducted each quarter in the six major cities of Delhi, Mumbai, Chennai, Kolkata, Bangalore and Pune. The findings of the survey during 2015–16 reflected pessimism in sentiments during the first three quarters with an upturn in BCI towards the end of the year

Status: The findings of the surveys carried out during the year were disseminated to the public through media and also to the subscribers to NCAER's *Quarterly Review of the Economy*. The BCI is also cited in RBI's quarterly Macroeconomic Review.

A3. Quarterly Review of the Economy*

Sponsors: NCAER and QRE annual subscribers

Project Team: Bornali Bhandari, Mythili Bhusnurmath, Anil Kumar Sharma, Saurabh Bandyopadhyay, Devender Pratap, Anjali Tandon, Soumya Bhadury, Pallavi Choudhuri, Anusha Avyukt, Prerna Prabhakar, Sandhya Garg, Sanjukta Das, Ajaya Sahu, Sumit Aggarwal, Heena Bhatia, Mridula Duggal, Ann James, Madhav Gupta, Pulkit Chaturvedi, Praveen Sachdeva, Anupma Mehta, Sudesh Bala, Sangeeta Chaudhary, Khushvinder Kaur, Vipin Kumar, Shilpi Tripathi, and Prem Prakash Joshi

The QRE provides a comprehensive review of developments in the economy in the agriculture, industry, services, trade, finance, prices, public finance, and macroeconomic sectors. The reports also provide annual macroeconomic forecasts. A review of the economy is prepared each quarter and provided to the subscribers of the Review and to the media. The subscribers are also invited to the quarterly presentation on the state of the economy seminars at NCAER.

Contributors: Anusha Avyukt, Saurabh Bandyopadhyay, Soumya Bhadury, Bornali Bhandari, Mythili Bhusnurmath,

Pallavi Choudhuri, Anil Kumar Sharma, Devender Pratap, Sanjukta Das, Sandhya Garg, Anjali Tandon and Prerna Prabhakar

Expert Commentators at Quarterly Review Seminars

D. K. Pant, India Ratings Harish Rajput, Tally Solutions Ltd. Sanjit Pohit, NCAER

Arup Mitra, NILERD

Radhicka Kapoor, ICRIER

Special Presentations

V. S. Krishnan, Ernst and Young Tushar Arora, HDFC Bank Nikhil Gupta, Motilal Oswal Securities Ltd.

Status: Quarterly discussions on the economy provide a forum for interaction among the readers of QRE, invited experts, and NCAER researchers. The Review is also made available to the public through the press and its articles are often cited by the media.

A4. Mid-Year Review of the Economy 2017-18*

Sponsors: Think-Tank Initiative, the India International Centre, and Malcolm and Elizabeth Adiseshiah Trust, New Delhi

Project Team: Internal: Bornali Bhandari, Ajaya K. Sahu, Sumit Aggarwal, Praveen Sachdeva, Rakesh Srivastava, Rajendra Lenka, Anupma Mehta, Sudesh Bala, Sangeeta Chaudhary, Khushvinder Kaur, Jagbir Singh Punia, Shilpi Tripathi, Vipin Kumar, and Prem Prakash Joshi

External: Pinaki Chakraborty, NIPFP, "GST Reform: Some Design Issues" and Tushar Arora and Sakshi Gupta, HDFC Bank, "Some Select Issues in the Financial Markets"

Objective: To provide a comprehensive review of the Indian economy for 2017–18.

Contributors: Anusha Avyukt, Saurabh Bandyopadhyay, Soumya Bhadury, Bornali Bhandari, Pallavi Choudhuri, Anil Kumar Sharma, Devender Pratap, Sandhya Garg and Anjali Tandon

Status: The 2017–18 review was presented on November 11, 2017, at the India International Centre.



A5. Five-Institute Budget Seminar on the Union Budget 2018–19*

Sponsor: The World Bank, New Delhi

Project Team: Shekhar Shah, Rohini Sanyal, Soumya Bhaduri, Bornali Bhandari, and Rajesh Chadha

Objectives: The Five-Institute Budget Seminar 2018–19 brought together the heads of the five institutes— Centre for Policy Research, the Indian Council for Research on International Economic Relations, the India Development Foundation, NCAER, and National Institute of Public Finance and Policy to share a reflective view of the Union Budget and its longer-term implications for the Indian economy under the leadership of the NDA Government, now well into its second half.

There were high expectations from the

fifth budget of the present government. The debate on the short and longer-term impact of the November demonetisation continues, and the Budget was expected to present some novel measures to compensate for the costs. GST is slowly but surely moving forward, the Committee looking into the Fiscal Responsibility and Budget Management Act has completed its work, and discussion of the pluses and minuses of fiscal consolidation and the implications for monetary policy continue. Several important fiscal reforms are expected that will hopefully improve the fiscal health of the economy and lay strong foundations for lifting sentiment and for sustained, rapid growth that creates rural and urban jobs. At the same time, uncertainty in global markets shows no signs of letting up, especially with Brexit and the arrival of the new US President. The executive directors of these five India's leading economic policy research institutes came together in March 2007 for the first time to present their assessment of the longer term reform and development implications of the Budget. The discussion was moderated by Shyamal Majumdar, Editor of the Business Standard.

Status: Panel discussion completed.

A6. The C. D. Deshmukh Memorial Lecture 2018*

Sponsor: NCAER, New Delhi

Project Team: Shekhar Shah, Anil Sharma, Anwesha Pandey, and Sudesh Bala

NCAER instituted the C. D. Deshmukh Memorial Lecture in 2013 in memory of one of India's most eminent economists and a founding father of NCAER. He was a founding member of NCAER's first Governing Body in 1956 and NCAER is privileged to honour the

memory of C. D. Deshmukh as part of its own 60-year legacy. This year's lecture, which was sixth in the series, was delivered by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge on "Measuring the Wealth of Nations". The distinguished audience included eminent economists, senior civil servants, prominent media persons, industry analysts, and students.

Status: Completed.

A7. Think-Tank Initiative Phase-II

Sponsors: Think-Tank Initiative funded by the William and Flora Hewlett Foundation, the Bill and Melinda Gates Foundation, DFID UK, IDRC Canada, and DGIS Netherlands

Project Team: Anil Sharma and Shekhar Shah

Objectives: The Think-Tank Initiative is a multi-donor programme designed to strengthen independent policy research institutions to enable them to provide objective, high-quality research that both informs and influences policy. The low level of assured core support constrains independent institutions like NCAER to generate resources needed for investment in either staff or infrastructure, and does not allow the institution to make the desired impact on shaping policy. To achieve this objective the grant from the Think Tank Initiative



is being used for laying the foundation for strengthening independent in-house research, improving organisational performance, and creating structures and an environment for policy linkages, communication, and outreach. After the completion of four years of Phase-I in September 2014, Phase-II was started in October 2014 and will end in early 2019.

Status: Ongoing.

A8. Third Tourism Satellite Account (TSA) of India and States/UTs of India for 2015–16

Sponsor: Ministry of Tourism, New Delhi

Project Team: Poonam Munjal, K. A. Siddiqui, P. K. Ghosh, Palash Baruah, Asrar Alam, Monisha Grover, and Gautam Das

Objectives: The key objective is to estimate the contribution of the tourism sector in the GDP and employment of the country using the UNWTO recommended methodology. Both direct and indirect contribution are to be estimated. The scope of work involves the preparation of TSA Tables and Accounts using the Supply and Use Tables framework.

Status: Inception Report submitted.

B. The Investment Climate, Industry, Infrastructure, Domestic Finance, Labour, Land, and Urban

India is currently the fastest growing economy of the world. It has been one of the leading engines of growth in the world economy during the last decade. It weathered the global financial crisis with resilience, recording the second highest GDP growth rate globally. Though there was a dip in 2008–09, the growth of the gross value added at factor cost averaged at 8.8 per cent during 2005–06 to 2010–11. The growth decelerated during 2011-12 to 2013-14 and picked again thereafter and touched 7.9 per cent and decelerated to 7.1 per cent in 2016–17. The IMF has projected India's growth rate at 7.3 per cent in 2018 and 7.5 per cent in 2019. A key concern now is that the Indian economy is performing well below its potential. Although investments in infrastructure are being made, the economy seems to have hit a roadblock arising from a deficit in physical infrastructure and in the pace and direction of economic reforms, particularly in the factor markets. There is an urgent need to improve the investment climate so as to attract new domestic and foreign investments in physical infrastructure including power, roads, ports, airports, telecom, urban, and agricultural supply chains.

NCAER has been at the forefront of providing support to the government's efforts to build, maintain, contract, and finance physical infrastructure

NCAER's landmark 1996 study titled "India Infrastructure Report: Policy Imperatives for Growth and Welfare" remains one of the first comprehensive assessments of the infrastructure deficit that had been allowed to develop over the



years and has spawned similar, very useful studies since then. NCAER continues to contribute important studies and reports on a variety of pertinent topics including energy, telecom, transport, urban land and housing, and rural infrastructure.

NCAER has conducted a number of studies in these areas. One of the studies provided primary data support to the National Housing Bank for the development of Residex—an index of residential property prices in the country. NCAER has done prominent work on Information and Communication Technology (ICT), particularly in developing e-readiness benchmarks for states, suggesting the readiness for value creation opportunities for firms, government, and consumers. It has since then developed a comprehensive index of e-development based on several components that suggest the extent of digital success that a state has achieved across service delivery, inclusion, innovation, and value creation.

The NCAER State Investment Potential Index (N-SIPI) 2017, now done annually, assesses the relative attractiveness of states by virtue of relative ranks among other participating states. The NCAER Labour Economics Research

Observatory is working on assessing the new skills in India based on education, employment and employability.

The studies carried out under the programme area of 'The Investment Climate, Industry, Infrastructure, Domestic Finance, Labour, Land, and Urban' are summarised below.*

B1. The Employment Impact of the Proposed Investments during 2015–20 by the Indian Railways*

Sponsor: Ministry of Railways, New Delhi

Project Team: Kanhaiya Singh, Y. K. Tanwar, and Tara Joshi

Objectives: With revamping of the budgeting system, and prioritisation of infrastructure development, there seems to be a paradigm shift in the investment programme of the government. The Ministry of Railways is currently working towards execution of an investment plan of Rs 8.56 lakh crore over the five-year period, 2015-16 to 2020-21. The amount of investment is almost double the outlay planned for the entire Twelfth Plan period. With this investment, the total assets of the Indian Railways are likely to increase by almost 200 per cent. The objective of this study is to estimate the quantum of potential direct and indirect employment likely to be generated by this investment.

Status: Completed.

B2.NCAER-State Investment Potential Index*

Sponsor: Self-Development, TTI, New Delhi

Project Team: Indira Iyer, Mythili Bhusnurmath, Anjali Tandon, Anusha Avyukt, Tarujyoti Buragohain, Prerna Prabhakar, and Asrar Alam

Objectives: The N-SIPI is helpful in assessing the relative attractiveness of states by virtue of relative ranks among

other participating states. The proposed study re-visits the existing pillars by possibly broad-basing to include additional explicit pillars indicating the land policy and environment within the states.

Key Findings: The key findings of the 2017 N-SIPI show that Gujarat, Delhi, Andhra Pradesh, Haryana, Telangana and Tamil Nadu are the top six states for business investment potential. At a greater level of detail, Gujarat also tops the rankings for the 4th N-SIPI pillar on economic climate and the 6th pillar on perceptions. Delhi is second overall and tops the ranking on infrastructure but loses out on governance and political stability. Compared to 2016, Haryana and Telangana have made the most rapid gains moving up 12 and 8 spots, respectively, to finish among the top five states in terms of their investment potential.

Date of completion: July 17, 2017.

B3. NCAER Labour Economics Research Observatory and New Skills at Work India

Sponsor: J.P. Morgan Securities India Private Limited, Mumbai



Scott Wallace/World Bank

Project Team: Rajesh Chadha, Devender B. Gupta, Bornali Bhandari, Pallavi Choudhuri, Mousumi Das, Saurabh Bandyopadhyay, Tulika Bhattacharya, Soumya Bhadury, Girish Bahal, Prem S. Vashishtha, Ajaya K. Sahu, Praveen

^{*} Programmes/projects completed during financial year 2017-18.



Rawat, Aarti Garg, Sanskriti Goel, Anjali Parashar, Sudhir Swarup, Aishwarya Aggarwal, and Upender Kataria

Objectives: India has one of the world's youngest populations and one million job-seekers will join India's labour force every month for the next 20 years. India urgently needs to meet its 3E challenge of education, employability, and employment if it is to reap the demographic dividend. How India's youth are trained and skilled will determine their readiness to be productive in the jobs of today and tomorrow. Against this background, through this first research initiative in its new Labour Economics Research Observatory (LERO), NCAER will examine the 3E chain in India, focusing on both the supply and demand for skills using a combination of analytics and surveys. Supported by J.P. Morgan, this two-year research programme will engage key stakeholders from government, industry and skills training providers through a research advisory committee and convening; and will have the potential to contribute both to policy as well as practice pertaining to employability, labour markets and the skilling supply chain. The research will take a 360-degree perspective of the complex skilling environment to look at not only employability but also youth aspirations, employer requirements and interest, and related policies as well as how it all ties into India's education system.

Status: Ongoing.

B4. A Pilot Impact Assessment of the Digital India Land Records Modernisation Programme*

Sponsor: Omidyar Network Fund, Inc.

Project Team: D. B. Gupta, Deepak Sanan, Prerna Prabhakar, and Sadhna Singh

Objectives: The objectives of the study are:

- To evaluate the performance of activities taken up under the erstwhile National Land Records Modernisation Programme (NLRMP) and current Digital India-Land Record Modernisation Programme (DI-LRMP);
- To identify the constraints and gaps in the implementation of these programmes;
- To identify good practices in the achievement of the programmes' objectives; and



Based on the above, to suggest appropriate changes for improving the effectiveness of the DILRMP.

The following key activities were undertaken to achieve the stated objectives:

1) Activity I: Assessment of the Computerisation of Land Records (CLR) Status: To assess the status of the progress made with the computerisation initiatives

2) Activity II: Assessment of the Real Time Mirror (RTM) Status: To assess

the extent to which the records are a real time 'mirror' of the ground situation

Pilot impact assessment for the DI-LRMP was undertaken by three institutions for three Indian states -National Council of Applied Economic Research (NCAER) for the first state (Himachal Pradesh), National Institute of Public Finance and Policy (NIPFP) for the second state (Rajasthan) and Indira Gandhi Institute of Development Research (IGIDR) for the third state (Maharashtra). The states were selected based on the geographical diversity as well as disparate land administration system in the three states. In addition to this, NCAER prepared a synthesis report, comparing the assessment findings across states and providing policy suggestions for making the DI-LRMP more effective.

Key Findings: The main findings indicate a decent pace of digitisation of land records, highlighting the relative strengths and weaknesses of the three states. However, the assessment observed failure of the administration to ensure real-time updation of land records, possibly due to lack of instructions in

this direction or failure on the part of revenue functionaries to adhere to the instructions. To rectify the situation, the impact assessment team has suggested changes in the design of DI-LRMP in a way such that the states are partly funded based on the inputs required for digitisation of land records and rest based on the performance of the states to computerise land records and to ensure the real-time updation with regard to changes in ownership, possession, and encumbrances, among other things. The comparative performance can be assessed by introducing a land records index and hence ranking states on this index. This will incentivise states to make the necessary efforts in the direction of land record management and would fit well with India's current focus on competitive 'co-operative federalism' that could prove to be a significant step towards achieving the national goal of effective land record management and conclusive titling.

Dissemination of key findings and report release: The report was released at a widely attended event, organised by NCAER on November, 13, 2017.

C. Agriculture, Natural Resource Management, and the Environment

There is no doubt that the rapid transformation of the Indian economy has led to a significant reduction in the GDP share of the agriculture and allied sectors. Nonetheless, a very large share of the rural population still depends directly or indirectly on the agricultural sector for income and employment. Consequently, faster development of the farm sector to achieve the objectives of higher growth and poverty reduction remains a priority. Simultaneously, it is equally important to generate income and employment opportunities in the non-farm sector through faster overall rural development. Thus, the prospects of faster rural development are intrinsically related to faster growth of both the agricultural as well as rural non-farm sectors. A key issue that needs to be addressed in this context is stagnation in agricultural productivity.

Various developments in the past few decades have opened up both opportunities as well as challenges for agricultural and rural development. Appropriate policies must, therefore, be designed to combat these challenges and exploit the opportunities thrown up by globalisation, rising food prices and climate change. There is an urgent need to revisit the traditional methods of agricultural production, post-harvest handling, marketing, distribution and trade, at both the domestic as well as external levels. The acceleration in economic growth has also intensified pressures on natural resources, and therefore, greater attention needs to be paid for managing the key natural resources of land, water, and forests.

Over the years, NCAER has carried out numerous studies on agriculture,



rural development and natural resource management and the environment, and this continuing priority is reflected in a number of studies that have been completed and in new studies that have been initiated. A major effort began in early 2012 to help the Ministry of Agriculture provide better short-term and medium-term outlook forecasts in agriculture, particularly for food crops. This was a multi-year effort involving networking with several other institutions and was still underway until 2017–18. As regards related issues in this area, NCAER has also carried out two studies on the functioning of the Targeted Public Distribution System (TPDS) for the Ministry of Food, Consumer Affairs, and Public Distribution, and for examining the role of the Public Distribution System (PDS) in 'Shaping Household Food and Nutritional Security', for the NITI Aayog. NCAER has also been working in the area of greenhouse gas effects, identification of institutional funding gaps in the cooperative sector, strengthening the office of the Central Registrar of Cooperative Societies, contribution of ICAR institutes in agricultural policy, and assessment of the impact of rice varieties and package of practices developed by ICAR. And, more recently, NCAER has also been working closely with the Ministry of Agriculture and Farmers Welfare as their knowledge

partner on the initiative of Doubling Farmers' Income. These studies have utilised both primary as well as secondary data.

The studies being carried out under the programme area of 'Agriculture, Natural Resource Management, and the Environment' are summarised below.*

C1. Doubling Farmers' Income by 2021–22*

Sponsor: Ministry of Agriculture and Farmers Welfare, New Delhi

Project Team: Rajesh Chadha, Prem S. Vashishtha, Sanjib Pohit, Elumalai Kannan, Seema Bathla, Devender Pratap, Anjali Tandon, Gautam K. Das, and Ruchi Jain

Objectives: The Prime Minister's vision of "doubling the income of farmers by 2022" lays the ground for the advent of a major agricultural revolution during the next five years. While there is need to enhance the productivity of the basic crop sector, the growth of highvalue agriculture and allied sectors including horticulture, livestock and food processing, also requires a major boost. Post-harvest management is the key to the monetisation of farmers' produce which would lead to increasing incomes. This study thus examines the-policy challenges and proposes strategies to facilitate doubling of the farmers' income in India by 2021–22.

Outcome: The Report examines the aggregated growth rates that need to be registered at both national and state levels, besides disaggregating them sub-sectorally. The analysis has been done on the basis that it is the real income of the farmers that is to be doubled and not their nominal income. A uniform doubling in every region may not be possible, albeit desirable, and due consideration to degradation

and depletion of arable land and other resources, the human backdrop and other associated factors is necessary. More importantly the relatively poorer regions need to 'catch up' and hence their pace of change has to be higher. All these concerns and solutions are discussed in following volumes.

C2. Study for Establishing a Separate Authority for the Office of the Central Registrar of Cooperative Societies

Sponsor: Ministry of Agriculture and Farmers Welfare, New Delhi

Project Team: Saurabh Bandyopadhyay, Laxmi Joshi, Prabir Kumar Chaudhuri (Consultant), Sadhna Naik, and Khushvinder Kaur



Objectives: The office of the Central Registrar of Cooperative Societies (CRCS) assigned this study to analyse and come up with recommendations for broad-basing the organisational set-up of the office of the CRCS and suggest measures to ensure efficient compliance of provisions of the Multi-State Cooperative Societies (MSCS) Act (2002) among cooperatives registered under the said Act. The existing organisational set-up of the CRCS consists of only limited officials, inducted mostly on deputation basis. For obvious reasons, most of them are not specialised in handling the work related to Multi-State Cooperative Societies (MSCS), their mandates and objectives, financial, audit and legal matters integral for the

^{*} Programmes/projects completed during financial year 2017-18.

purpose. Therefore, this study intends to analyse the MSCS ecosystem and thereby assess the framework of forming a separate authority, with adequate infrastructure and specialised staff strength to address various issues linked to the functioning and monitoring of the MSCS.

Status: Preliminary Draft submitted in March 2018.

C3. Identifying Institutional Funding Gap of the Cooperative Sector in India

Sponsor: National Cooperative Development Corporation, Ministry of Agriculture and Farmers Welfare, New Delhi



Project Team: Saurabh Bandyopadhyay, Tarujyoti Buragohain, Palash Baruah, S. K. Mondal, and Y. K. Tanwar

Objectives: The main issues of concern are delineated below.

The bulk of the subsidy in agriculture is going to farmers for pre-harvest operations to the extent of 80 per cent for the crop loan sector, whereas hardly any subsidy is available for post-harvest operations like storage, marketing and processing of agricultural produce.

The National Cooperative Development Centre (NCDC) is exclusively lending to cooperatives engaged in postharvest operations but is not exempted from interest subvention. It is equally important to provide assistance, interest subvention and subsidies to the cooperative sector engaged in post-harvest operations for the benefit of farmers at the grassroots level. Boosting post-harvest operations in the cooperative sector could prevent the losses being suffered by farmers due to inadequate storage and marketing facilities, and the lack of demand for processing in times of adequate or surplus production. The following issues are being assessed during implementation of this project:

- Importance of cooperatives for ensuring collective welfare at the threshold level;
- The component of subsidy in percentage terms per unit of output of agricultural produce;
- Making production safe and secure, and safeguarding farmers' interests to ensure reasonable returns on their investments; in this context, it is important to tackle the losses in postharvest produce caused by the lack of transportation and storage;
- Assessment of the number of farmers linked with cooperative activities;
- Terms of assistance for weaker sections for storing, grading, marketing, and transporting the produce; and
- Undertaking a comparative study of the activities of NCDC and NABARD, as NABARD has access to low-cost funds, which it offers for any purpose, while NCDC gives funds exclusively to cooperatives.



Outcome: The NCDC is exclusively lending to cooperatives engaged in post-harvest operations but is not exempted from interest subvention. The need to provide assistance, interest subvention and subsidy to the cooperative sector engaged in post-harvest operations is equally important in the interest of farmers at the grassroots level.

Status: Draft report submitted and comments awaited from the sponsor.

C4. Contribution of ICAR Institute in Agricultural Policy

Sponsor: Indian Council of Agricultural Research, New Delhi

Project Team: Prem Vashishtha, Tarujyoti Buragohain, Saurabh Bandyopadhyay, S. K. Mondal, Divya Anand, Praveen Sachdeva, and Sadhna Singh

Objectives: The objective of this study is to understand the contribution to agricultural policy of the research done by the ICAR during the two plan periods, viz., the Xth Plan (2002–03 to 2006–07) and XIth Plan (2007–08 to 2011–12) with particular reference to the following aspects:

- Practical bearing of research on improvement of income of the farmers;
- 2. Improving status of farming women in respect of income, health and gender gap; and
- 3. Policy implications of work on climate change and the emerging climate variability and suggestions on ways to minimize farmers' losses.

The general approach adopted is to reflect on the policy aspects by thematic areas rather than on individual projects/research institutions. The following thematic areas are highlighted:

- Agricultural Economics and Policy
- Mainstreaming Gender in Agriculture
- Food and Nutrition Security
- · Adaptive and Strategic Research
- Performance Rating

Status: Draft report submitted. Revision being done in view of comments received from ICAR.

C5. Promoting Paddy: An Impact Assessment for India: An Evaluation of New Paddy Varieties and Packages of Practice*

Sponsor: Indian Council of Agricultural Research (ICAR), New Delhi

Project Team: Laxmi Joshi, Ashwani Kumar (NIT, Kurukshetra), Praveen Tiwari, Tarujyoti Buragohain, S.K. Mondal, Anupma Mehta, and Khushvinder Kaur

Objectives: The study is an ex-post analytical assessment of the technologies developed by the National Agricultural Research System (NARS) during the Tenth and Eleventh Five-Year Plans over 2002 to 2012. The study has the following objectives: (i) to document the major rice technologies developed by NARS institutions during 2002–12 for different farming systems for crop improvement, improved mechanisation, and energy management; (ii) to undertake a meta-data analysis of the impact of both innovative and traditional rice technologies; and (iii) to examine the impact of selected rice technologies on total factor productivity (TFP) growth at the macro level complemented by regional case studies at the micro level.

Key findings: The study documented a range of paddy production indicators such as fertiliser and labour use and the costs of machinery, insecticides and seeds. Meta-analysis was used for assessing the impact of varietal



development and package of practices in terms of an improvement in yield, cost minimisation, water savings, and soil fertility management. The Study used Malmquist TFP Index for measuring the impact of new varieties on rice productivity in 12 major rice-producing states, viz., Andhra Pradesh, Assam, Bihar, Haryana, Karnataka, Kerala, Madhya Pradesh, Odisha, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal. These quantitative indicators had been supplemented with focus group

discussions in five states representing the North (Uttar Pradesh), South (Tamil Nadu), East (West Bengal and Odisha), and North-west (Punjab) regions of India. This impact assessment's findings suggest ways for public policy and programme design not only to increase paddy production but also to make it a successful business enterprise for farmers

Outcome: Final Report submitted to the sponsor in April 2017.

D. Poverty, Human Development, Equity, Gender, and Consumer Behaviour

Reducing poverty and economic and social disparities, including those based on gender, and achieving significant improvements in human development, have long been pressing concerns for Indian policymakers. Several government flagship programmes aimed at achieving these objectives and increasing inclusiveness have been launched in the past decade. The experience gained through these interventions in India as well as elsewhere shows that the success of such initiatives depends not only on the implementation of new policies and programmes, but also on bringing about institutional and behavioural changes, and, of course, on politics.

NCAER has been contributing in these areas by carrying out research to evaluate these programmes as well as mounting single- and multi-topic household surveys of income and expenditure to generate data for a rigorous exploration of these issues and for mapping the changes taking place in Indian society. A study of the MGNREGA scheme for the Planning Commission was started in 2012–13. Another study on the targeting efficiency of the Public Distribution System was launched in early 2014. NCAER has also been contributing to the broader research and policy agenda by making many of its data sets publicly available. For example, the 2004-05 and 2011–12 India Human Development Survey (IHDS) is now being used by over 9,000 researchers worldwide.

The IHDS seeks to provide the first large nationwide panel for Indian households. In order to accomplish that, all the households surveyed in 2004–05 were



re-surveyed in 2011–12 as part of the IHDS-II. With a re-contact rate of over 83 per cent, this panel provides an excellent opportunity to study changes in Indian society during an era of rapid social transformation.

The growing focus on the quality of public services and ways of making these services accessible to excluded groups have emerged as key themes within the poverty programme area. NCAER research has tackled issues of access and quality in education, health, infrastructure, and access to jobs. The work on decentralisation has complemented this focus on service delivery. As noted in the section on macro, NCAER is working on a study of gender-inclusive macroeconomic policy management and gender-aware macro models integrating intra-household behaviour.

NCAER has an ongoing study aims at assessing the Direct Benefit Transfer Readiness of India's States and Union Territories.

NCAER has also been undertaking research in another critical sphere of this programme area, the handloom sector, which is the second largest employmentgenerating sector of the Indian economy, next only to agriculture. It is also the only female-dominated sector with the proportion of female workers in it accounting for more than threefourths of the total workforce in the economy. Realising the need for a strong statistical database in the handloom sector, the Central Government has been conducting regular censuses of handloom workers since 1987-88. NCAER was appointed as the nodal consultant by the Central Government for the Second Handloom Census in 1995–96, which covered both handlooms and power looms.

For the Third Census, conducted in 2009-10, the entire census work was entrusted to NCAER by the Development Commissioner (Handlooms). This census was special not only because it provided a comprehensive database of eligible handloom weaver households and workers, but also because it facilitated the issuance of photo identity cards to all adult handloom workers. According to this census, there are 43.31 lakh handloom workers in India, of which 84 per cent live in rural areas. NCAER is currently undertaking evaluation and monitoring of selected handloom clusters in different states of India to assess the impact of various schemes implemented for the handloom workers.

Details of studies carried out under the programme area of 'Poverty, Human Development, Equity, Gender, and Consumer Behaviour' are given below.*



D1. India Human Development Survey-

Sponsors: US National Institutes of Health

Project Team: Sonalde Desai, Amaresh Dubey, Dinesh Kumar Tiwari, Debasis Barik, O.P. Sharma, P. K. Ghosh, Jaya Koti, Deepa S., Ahvayita Pillai, Anupma Mehta, Sadhika Bagga, Ishita Gambhir, and Zareena

Objectives: (1) To examine changes in India's Human Development indicators in the context of economic and structural changes in the Indian society over the past decade;

- (2) To develop lessons from the Indian experience for setting the global development agenda in the context of post-MDG discussions; and
- (3) To disseminate data and findings from the India Human Development Survey for use by Indian and international researchers.

Status: Project completed. Data in public domain and being widely used. Several papers have been published in peer reviewed journals.

D2. Wage Employment and Migration

Sponsors: The Ford Foundation

Project Team: Sonalde Desai, Amaresh Dubey, O.P. Sharma, Dinesh Kumar Tiwari, Jaya Koti, Debasis Barik, and Zareena

Objectives: This project combines two goals. First and foremost, it is a research study exploring the avenues through which labour market conditions relate to the migration process. Second, it seeks to establish the feasibility of conducting a migration study in India which covers both the origin and destination locations of the migrants. The project hopes to achieve the following results:

 Research linking labour market processes to migration; and

^{*} Programmes/projects completed during financial year 2017-18.



b) Establishing the feasibility of undertaking migration studies.

Status: Field work completed. Analysis in progress.

D3. The NCAER National Data Innovation Centre

Sponsor: Bill & Melinda Gates Foundation

Project Team: Sonalde Desai, O.P. Sharma, Dinesh Kumar Tiwari, Debasis Barik, Pallavi Choudhuri, Girish Bahal, Ruchi Jain, Neerad Deshmukh, Jaya Koti, and Anupma Mehta

Objectives: This project provides core funding for the NCAER National Data Innovation Centre (NDIC), a partnership between NCAER, New Delhi, and its Centre partners in the US, the University of Maryland and the University of Michigan. The NDIC will be a national centre of innovation and excellence in data collection that will build research capacity to strengthen the domestic data ecosystem in India. It has three primary goals:



- 1. To pilot innovative data collection methods and to mainstream successful pilots into larger data collection efforts; data collection innovations will focus both on household surveys and big data, particularly uses of administrative data;
- 2. To impart formal and informal training to a new generation of data scientists; and
- 3. To serve as a resource for diverse stakeholders including government data agencies and ministries.

The NDIC will experiment with a variety of survey instruments and modes of data collection to address shortcomings in the existing data collection approaches identified by an eminent panel of advisors. These areas are: (1) Women's economic empowerment and time use; (2) Financial inclusion and the strategies through which the poor make ends meet; (3) Health care expenditure in a climate of increasingly complex insurance mechanisms; (4) Collection of sensitive data including contraceptive use; (5) Use of geospatial data to understand transformation in agricultural activities; and (6) Use of administrative data and linkages between survey and administrative data.

The NDIC is envisaged as a hub for data-related innovations in India and for providing expertise to policymakers, government statistical agencies and private data collection agencies. Other capacity building activities that will enable NDIC to serve as a key partner in India's evolving data infrastructure include regular workshops and lectures addressing critical issues related to statistical data collection, and an annual data collectors' conference.

Status: Centre inception phase completed, research activities started.



Sponsor: UMD and IDRC/CRDI

Project Team: Sonalde Desai, Amaresh Dubey, Debasis Barik, O.P. Sharma, Dinesh Tiwari, P.K. Ghosh, Pallavi Choudhuri, Jaya Koti, Anupma Mehta, Ahvayita Pillai, Sadhika Bagga, Ishita Gambhir, and Deepa S.

Objectives: The overall objective is to examine how women's access to and control over resources has been affected by economic transformation in India.

The specific objectives of this Agreement are as follows:

- 1. To use empirical data to develop a conceptual framework for understanding the positive and negative influence of economic growth on women's economic empowerment; and
- 2. To use the research to inform policies that can mitigate the negative impacts of growth on women's economic empowerment.

Status: The project is ongoing with research papers being prepared.

D5. Assessing Direct Benefit Transfer Readiness Assessment of States and UTs

Sponsor: Bill and Melinda Gates Foundation

Project Team: R. Venkatesan, Bornali Bhandari, Sandhya Garg, Sanjukta Das, Pallavi Choudhuri, Ajaya K. Sahu, Mridula Duggal, Heena Bhatia, and Sucharita Sen

Objectives: Both the central and state governments in India operate a vast array of cash and in-kind transfers to protect the poor. But these social protection schemes often suffer from substantial leakages and poor targeting, distort

market functioning by subsidising prices, and thereby impose significant fiscal stress without commensurate social benefits. India is seeking to port these subsidies into direct-to-beneficiary transfers, often called Direct Benefit Transfers or DBT. Implementing DBT should be a means to an end, not only to reduce leakages in the Indian subsidy system, but also to ensure that the targeted poor and vulnerable in society get timely transfers at low cost in terms of both time and money.

In the Indian context, DBT readiness is the ability of states/Union Territories (UTs) to pursue government to citizen (G2C) solutions through the use of Information, Communication and Technology (ICT) viz. electronic transfer of cash or in-kind benefits from government to citizen. The DBT-Readiness of all Indian states and UTs will be assessed both annually and quarterly by NCAER over the next three years starting, that is 2016 to 2018, based on annual surveys. The quarterly assessment will be based off a combination of primary and secondary data available or made available by the state/UT governments. States/UTs will be ranked relatively using the annual surveys. The quarterly rankings will be based off an absolute index, which will help the states/UTs their own growth over time. In addition to the overall DBT assessment of the states and UTs, this survey assesses the DBT Readiness of 10 Central Schemes.

Status: Ongoing.

D6. Vulnerability Analysis of Children in India*

Sponsor: United Nations Children's Fund (UNICEF)

Project Team: Anushree Sinha, Rajesh Jaiswal, Ruchi Jain, Madhusree Banerjee, Nishtha Ruhil, Poonam Dhawan, and Abhishek Agarwal

Objectives:

- To profile and analyse vulnerabilities and possible risks associated across the life of children in India using existing survey and census data.
- To map and analyse coverage of the Central Government's social protection programmes to address the vulnerabilities.
- To identify the existing gaps in the social protection schemes so as to ensure better design of such schemes.

Key findings:

- 1. The identification of beneficiaries for social protection programmes needs to be based on primary findings.
- 2. The government could introduce or scale-up innovative programmes for the very poor or for selected categories of exploited children, such as those in hazardous occupations and street children.
- 3. Service quality benchmarks are required for the delivery of social protection programmes, apart from only quantity coverage indicators.
- 4. Staff responsible for programme implementation (such as the ASHAs) need to be properly trained in the delivery of social protection schemes and their performance evaluated on a regular basis.
- 5. Government should provision for a national minimum social security cover for children of vulnerable categories of the population, such as unorganised workers, Adivasis, religious minorities, manual scavengers and other such excluded groups.

Date of completion: December 31, 2017.

D7. The Challenge of Retaining Girls in Secondary Education in Dhaulpur, Rajasthan: Using Demand Curve Analysis and Pilot Design to Scale up the Pre-Matric Scholarship Scheme for Girls

Sponsor: IPE Global Limited, New Delhi

Project Team: Anushree Sinha, Rajesh Jaiswal, Pranab Kumar, Poonam Dhawan, and Dhruv Pratap Singh

Objectives: The objectives of the two-phased assignment are to:

- 1. Undertake a formative research using desk-based and primary assessments to (1) map motivation and barriers towards education of girls and (2) identify the value of incentives required to improve retention of girls in secondary school and the expected demand curve.
- 2. Design a cash transfer pilot based on the formative research findings along with global evidence and practical considerations; and a framework for possible scale up including the cost to the Government and a cost-effectiveness analysis and requirements for implementation.
- 3. Status: Ongoing.

D8. Evaluation of Handloom Clusters 2016–17*

Sponsor: Development Commissioner (Handlooms), Ministry of Textiles, New Delhi

Project Team: K.A. Siddiqui, Poonam Munjal, P.K. Ghosh, Palash Baruah, P.K. Roy, Charu Jain, Asrar Alam, S.K. Mondal, Madhura Choudhry, Monisha Grover, Yashpal, K.K. Lal, and Shashi Singh Objectives: The key objective is to conduct concurrent monitoring of 115 identified handloom clusters in 16 different states of India. The monitoring of the clusters was done through a sample survey on a quarterly basis for six quarters. Towards the end of the sixth quarter, an impact evaluation of the implemented schemes in these clusters was also done through a survey of the handloom workers.

Status: Completed. Six quarterly reports, baseline report and end-line reports submitted and presented.

D9. Monitoring and Evaluation of 139 Handloom Clusters 2017–18

Sponsor: Development Commissioner (Handlooms), Ministry of Textiles, New Delhi





Project Team: K.A. Siddiqui, Poonam Munjal, P.K. Ghosh, Palash Baruah, P.K. Roy, Charu Jain, Asrar Alam, S.K. Mondal, Madhura Choudhry, Monisha Grover, Yashpal, K.K. Lal, and Shashi Singh

Objectives: The key objective is to conduct concurrent monitoring of 139 identified handloom clusters in 15 different states of India. The monitoring is to be done through a sample survey on a quarterly basis for six quarters. Towards the end of the sixth quarter, an impact evaluation of the implemented schemes in these clusters will also be done through a survey of the handloom workers.

Status: Two quarterly reports submitted and presented.





Activities

NCAER Publications

Books and Published Reports*

1. Report of the Committee on Doubling Farmers' Income

(August 2017, NCAER, Volume II, 202 pp.)

Study Team: Rajesh Chadha, Prem S. Vashishtha, Sanjib Pohit, Elumalai Kannan, Seema Bathla, Devender Pratap, Anjali Tandon, Gautam K. Das, and Ruchi Jain

The study report based on the Prime Minister's vision of "doubling the income of farmers by 2022" lays the ground for the advent of a major agricultural revolution during the next five years. While there is need to enhance the productivity of the basic crop sector, the growth of high-value agriculture and allied sectors including horticulture, livestock and food processing also requires a major boost. Post-harvest management is the key to the monetisation of farmers' produce which would lead to increasing incomes. The present study will thus examine policy challenges and propose strategies to facilitate doubling of the farmers' income in India by 2021-22.

The Report examines the aggregated growth rates that need to be registered at both national and state levels, besides disaggregating them sub-sectorally. The analysis has been done on the basis of the fact that it is the real income of the farmers that has to be doubled and not their nominal income. A uniform doubling in every region may not be possible, albeit desirable, and due consideration to degradation and depletion of arable land and other resources, the human backdrop and other associated factors is necessary. More importantly, the relatively poorer regions

need to 'catch up' and hence their pace of change has to be higher. All these concerns and solutions are discussed in the following volumes.

The Report of the Committee is structured through 14 volumes. The draft versions of the first four volumes of the "Strategy for Doubling Farmers' Income by 2022" have been uploaded on the website of the Department of Agriculture Cooperation & Farmers Welfare.

2. The 21st Century: Asia's? Five Lectures on the Asian Century

(August 2017, NCAER: SAGE Publications, 168 pp.)

Study Team: Rajat M. Nag, Shekhar Shah, Anupma Mehta, and Jagbir Singh Punia

Recounting Asia's spectacular economic growth over the past several decades, Rajat Nag points out how Asia now accounts for over a quarter of global GDP. Three of the five largest economies in the world today are in Asia. And millions have been lifted out of poverty. But the "two faces" of Asia, one shining and confident and full of hope, and the other deprived, malnourished, and despondent, stare at us. Which one is real? Even more worrying is the fact that these two faces seem to be moving further apart. While growing rich, Asia is also becoming more unequal. And it continues to face severe development challenges. Persistent poverty—twothirds of the world's poor still live in Asia—rising inequality, social deprivation, environmental degradation, gender bias, food, energy and water insecurity, and poor physical and social





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infrastructure pose many pressing challenges. These realities are reflected in all of Asia, and certainly in a continent sized country such as India. It is thus imperative for Asia to simultaneously confront these challenges and exploit the opportunities available to make this century the Asian Century, a proposition that the book concludes is "plausible, but not inevitable". Asia, argues Nag, needs to aggressively and proactively pursue a growth strategy that is inclusive, green and clean to achieve the aspirations of its people. In this quest for prosperity, the quality of growth is just as important as its quantity. Good governance, strong institutions, and greater regional cooperation are critical elements of a sound and sustainable development strategy for the region. Hence, while identifying the hurdles Asia faces, Nag offers his suggestions for the policy choices encouraging "inclusive, green and clean growth" that Asia needs to realise the aspirations of an Asian Century.

3. The NCAER State Investment Potential Index (Second Edition)

(July 2017, NCAER, 158 pp.)

Study Team: Indira Iyer, Mythili Bhusnurmath, Anjali Tandon, Tarujyoti Buragohain, Anusha Avyukt, Prerna Prabhakar, Anupma Mehta, and Asrar Alam

The NCAER State Investment Potential Index 2017 (N-SIPI 2017) is the second edition in the annual series of rankings of states on their growth and investment potential. It is a systematic and evidence-based index that assesses the competitiveness of states on 50 parameters grouped under six broad pillars: land, labour, infrastructure, economic climate, governance and political stability, and business perceptions. N-SIPI 2017 builds on the framework and methodology of N-SIPI 2016, and uniquely incorporates the

results of an extensive survey carried out in April and May 2017 across 20 states and the Union Territory of Delhi.

4. A Pilot Impact Assessment of the Digital-India Land Records Modernisation Programme – Himachal Pradesh

(November 2017, NCAER, 84 pp.)

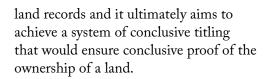
Study Team: Deepak Sanan, D.B. Gupta, and Prerna Prabhakar

This report focuses on assessing the performance of the Digital India-Land Records Modernisation Programme (DI-LRMP) scheme in the state of Himachal Pradesh, and the achievement exhibited by the state in computerising and modernising land records. It is part of a study in which pilot impact assessments were carried out by NCAER in Himachal Pradesh, NIPFP in Rajasthan, and IGIDR in Maharashtra.

The imperative for a land record management and modernisation initiative has been driven by the huge rise in the number of pending court cases relating to land disputes. Improvements on this front would not only help reduce property litigation, but also boost efficiency in land markets, thereby facilitating the ease of doing business in the country. The Government of India recognises the relevance and significance of land record management, which is reflected in its efforts to computerize the land records since late 1980s. In 2008, Department of Land Resources (Ministry of Rural Development), Government of India, merged the two existing land record computerization schemes to launch National Land Records Modernization Programme (NLRMP), which was revamped to Digital India-Land Records Modernisation Programme (DI-LRMP) in 2014. The immediate objective of the programme is to establish a modern, efficient land records management system in the country with real-time updated







The program has been in existence for many years, but had not hitherto been evaluated in detail in the field. In this context, pilot impact assessments were carried out in the three states. NCAER coordinated this effort and also prepared an overall synthesis report.

5. A Pilot Impact Assessment of the Digital-India Land Records Modernisation Programme – Synthesis Report

(November 2017, NCAER, 140 pp.)

Study Team: Deepak Sanan, D.B. Gupta, and Prerna Prabhakar

This is the overall synthesis report of the pilot impact assessments of the Digital India-Land Records Modernisation Programme (DI-LRMP) scheme carried out by NCAER in Himachal Pradesh, NIPFP in Rajasthan, and IGIDR in Maharashtra. It presents the overall policy and programme design recommendations for moving ahead on India's quest for more secure land titles.

The imperative for a land record management and modernisation initiative has been driven by the huge rise in the number of pending court cases relating to land disputes. Improvements on this front would not only help reduce property litigation, but also boost efficiency in land markets thereby facilitating the ease of doing business in the country. The Government of India recognizes the relevance and significance of land record management, which is reflected in its efforts to computerize the land records since late 1980s. In 2008, Department of Land Resources (Ministry of Rural Development), Government of India, merged the two existing land record computerization schemes to launch

National Land Records Modernization Programme (NLRMP), which was revamped to Digital India-Land Records Modernisation Programme (DI-LRMP) in 2014. The immediate objective of the programme is to establish a modern, efficient land records management system in the country with real-time updated land records and it ultimately aims to achieve a system of conclusive titling that would ensure conclusive proof of the ownership of a land.

The programme has been in existence for many years, but had not hitherto been evaluated in detail in the field. In this context, pilot impact assessments were carried out in the three states. NCAER coordinated this effort and also prepared an overall synthesis report.

6. Demographics and FDI: Lessons from China's One-Child Policy

(January 2018, NCAER, 36 pp.)

Working Paper No. 112

John Donaldson, Christos Koulovatianos, Jian Li, and Rajnish Mehra

Lucas (1990) argues that the neoclassical adjustment process fails to explain the relative paucity of FDI inflows from rich to poor countries. In this paper the authors consider a natural experiment: using China as the treated country and India as the control, they show that the dynamics of the relative FDI flows subsequent to the implementation of China's one-child policy, as seen in the data, are consistent with neoclassical fundamentals. In particular, following the introduction of the one-child policy in China, the capital-labor (K/L) ratio of China increased relative to that of India, and, simultaneously, relative FDI inflows into China vs. India declined. These observations are explained in the context of a simple neoclassical OLG





paradigm. The adjustment mechanism works as follows: the reduction in the (urban) labour force due to the one-child policy increases the savings per capita. This increases the K/L ratio and reduces the marginal product of capital (MPK). The reduction in MPK (relative to India) reduces the relative attractiveness of investment in China and is thus associated with lower FDI/GDP ratios. This paper contributes to the nascent literature exploring demographic transitions and their effects on FDI flows.

7. Money's Causal Role in Exchange Rate: Do Divisia Monetary Aggregates Explain More?

(February 2018, NCAER, 30 pp.)

Working Paper No. 113

Taniya Ghosh (IGIDR) and Soumya Bhadury

The authors investigate the predictive power of Divisia monetary aggregates in explaining exchange rate variations for India, Israel, Poland, UK and the US, in the years leading up to and following the 2007-08 recessions. One valid concern for the chosen sample period is that the interest rate has been stuck at or near the zero lower bound (ZLB) for some major economies. Consequently, the interest rate has become uninformative about the monetary policy stance. An important innovation in the research in this paper is to adopt the Divisia monetary aggregate as an alternative to the policy indicator variable. The authors apply the bootstrap Granger causality method which is robust to the presence of non-stationarity in our data. Additionally, they use bootstrap rolling window estimates to account for the problems of parameter non-constancy and structural breaks in our sample covering the Great recession. They find strong causality

from Divisia money to exchange rates. By capturing the time-varying link of Divisia money to exchange rate, the importance of Divisia is further established at ZLB.

8. Crowding-Out or Crowding-In? Public and Private Investment in India

(May 2018, NCAER, 28 pp.)

Working Paper No. 114

Girish Bahal, Mehdi Raissi, and Volodymyr Tulin

This paper contributes to the debate on the relationship between public and private investment in India along the following dimensions. First, acknowledging major structural changes that the Indian economy has undergone in the past three decades, the authors study whether public investment in recent years has become more or less complementary to private investment in comparison to the period before 1980. Second, they construct a novel data-set of quarterly aggregate public and private investment in India over the period 1996-2015 using investment-project data from the CapEx-CMIE database. Third, embedding a theory-driven long-run relationship on the model, they estimate a range of Structural Vector Error Correction Models (SVECMs) to re-examine the public and private investment relationship in India. Identification is achieved by decomposing shocks into those with transitory and permanent effects. The results suggest that while public investment crowds out private investment in India over the period 1950-2012, the opposite is true when the authors we restrict the sample to post -1980 or conduct a quarterly analysis since 1996. This change can likely be attributed to the policy reforms which started during the early 1980s and gained momentum after the 1991 crisis.







(May 2018, NCAER, 35 pp.)

Working Paper No. 115

Soumya Bhadury, Robert C. M. Beyer, and Sanjib Pohit

In India, quarterly growth of Gross Value Added (GVA) is published with a large lag and nowcasts are exacerbated by data challenges typically faced by emerging market economies, such as big data revisions, mixed frequencies data publication, small sample size, nonsynchronous nature of data releases, and data releases with varying lags. This paper presents a new framework to nowcast India's GVA that incorporates information of mixed data frequencies and other data characteristics. In addition, evening-hour luminosity has been added as a crucial high-frequency indicator. Changes in nightlight intensity contain information about economic activity, especially in countries with a large informal sector and significant data challenges, including in India. The framework for the 'trade, hotels, transport, communication and services related to broadcasting' bloc of the Indian GVA has been illustrated in this paper.

10. Lead-Lag Relationship between Credit and Output Cycles: Case of India and US

(July 2018, NCAER, 43 pp.)

Working Paper No. 116

Anusha Avyukt

To understand the interactions between real and financial aspects of an economy, this paper investigates cyclical relationship between credit and growth cycles in India and US over the period 1994-2013 in the frequency domain. Originality of

our contribution is in the use of Multitaper method of spectrum estimation which has the advantage of giving reliable estimates even in relatively short samples and provides jackknife confidence intervals of spectral statistics. Contrary to most studies which find credit cycles to be longer than business cycles, univariate spectrum to infer duration of series shows that credit and output cycles are similar in duration of approximately three years. We find that there is a strong coherence between credit and growth cycles in both India and US but the synchronization is relatively much stronger in US. Lead lag relationship suggest that credit is a reliable leading indicator in US for a broad frequency range but in India, industrial production leads non-food credit and coherence is high only in the long run. This difference can be explained by difference in financial deepening and sophistication of financial sector in the two economies and has implications for macroprudential policies and for using credit based early warning indicators.





Serials

India Policy Forum 2017–18 (Volume 14) (Annual)

(2018, NCAER: SAGE Publications, 322 pp.)

Editors: Shekhar Shah, Barry Bosworth, and Karthik Muralidharan

The *India Policy Forum* (IPF) is an annual publication dedicated to analysing contemporary trends in the Indian economy. Its objective is to carry theoretically rigorous yet empirically informed research on current issues related to India's economic policy. A publication of NCAER, IPF serves



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Articles

- Michael Greenstone, Santosh Harish, Rohini Pande, and Anant Sudarshan.
 "The Solvable Challenge of Air Pollution in India."
- Neelkanth Mishra and Prateek Singh.
 "A Deep Dive into State Budgets in India."
- Bishwanath Goldar, Rashmi Banga, and Karishma Banga. "India's Linkages into Global Value Chains: The Role of Imported Services."
- Shawn Cole and Garima Sharma.
 "The Promise and Challenges of Implementing ICT in Indian Agriculture."
- Rana Hasan, Yi Jiang, and Debolina Kundu. "Growth of Indian Cities and "Good" Jobs: Evidence from the 2000s."

Artha Suchi (Quarterly)

Volume 34, Numbers 3 and 4, and Volume 35, Numbers 1 and 2 (4 Issues)—under compilation

Editor: Shilpi Tripathi

A quarterly computerised index of government reports, journal articles, and newspaper write-ups related to the Indian economy brought out by the NCAER Library.

The Journal of Applied Economic Research, "Margin" (Quarterly)

(NCAER and SAGE Publications)

Volume 11, Numbers 2, 3 and 4, and Volume 12, Number 1 (4 Issues)

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Selected articles from JAER:

- Quah, Chee-Heong. 2017. "Exchange Rate Fixation between US, China, Japan and Eurozone", 11 (2): 99–120, April–June.
- Adams, Samuel; Klobodu, Edem Kwame Mensah; and Lamptey, Richmond Odartey. 2017. "The Effects of Capital Flows on Economic Growth in Senegal", 11 (2): 121–142, April–June.
- R., Niranjan. 2017. "Financial Integrational Effects on Macroeconomic Instability in India", 11 (2): 143–166, April–June.
- Dash, Santosh Kumar. 2017. "Is Money Supply Exogenous? Evidence from India", 11 (2): 167–195, April– June.





- Gunay, Samet. 2017. "Risk Configuration of S&P 500 Industries: Sigma-risk and Alpha-risk Approximation", 11 (2): 196–221, April–June.
- Solarin, Sakiru Adebola. 2017. "The Role of Urbanisation in the Economic Development Process: Evidence from Nigeria", 11 (3): 223–255, July– September.
- Ghosh, Madhusudan. 2017. "Infrastructure and Development in Rural India", 11 (3): 256–289, July– September.
- Khundrakpam, Jeevan Kumar. 2017. "Examining the Asymmetric Impact of Monetary Policy in India", 11 (3): 290–314, July–September.
- Tamilina, Larysa; Tamilina, Natalya. 2017. "Post-communist Transition as a Path Break: Comparing Legal Institutional Effects on Economic Growth between Path-breaking and Path-drifting Institutional Reforms", 11 (3): 315–347, July–September.
- Cheah, Yong Kang; Azahadi, Mohd; Phang, Siew Nooi; and Hazilah, Noor. 2017. "The Income and Demographic Determinants of Physical Activity Intensity: Evidence from a Developing Country", 11 (3): 348–364, July–September.
- Sinha, Anushree. 2017. Book review titled, "Too Many Men Too Few Women", Ravinder Kaur (ed.), 11 (3): 365–373, July–September. Orient Blackswan.
- Dua, Pami and Kapur, Hema. 2017.
 "Macro Stress Testing of Indian Bank Groups", 11 (4): 375–403, October– December.
- Yalcinkaya, Omer; Huseyni, Ibrahim; and Celik, Ali Kemal. 2017. "The Impact of Total Factor Productivity on Economic Growth for Developed

- and Emerging Countries: A Second-generation Panel Data Analysis", 11 (4): 404–417, October–December.
- Agrawal, Pradeep and Sangita, Seema. 2017. "Trade Potential between India and Central Asia", 11 (4): 418–448, October–December.
- Bissoon, Ourvashi. 2017. "Is Sub-Saharan Africa on a Genuinely Sustainable Development Path? Evidence Using Panel Data", 11 (4): 449–464, October–December.
- Ghosh, Saibal. 2018. "Does
 Government Activism Affect Secondhand Car Prices? Evidence from a
 Natural Experiment", 12 (1): 1–18,
 January–March.
- Mahajan, Varun; Nauriyal, D. K.; Singh, S. P. 2018. "Efficiency and Its Determinants: Panel Data Evidence from the Indian Pharmaceutical Industry", 12 (1): 19–40, January– March.
- Salunkhe, Bhavesh and Patnaik, Anuradha. 2018. "The IS Curve and Monetary Policy Transmission in India: A New Keynesian Perspective", 12 (1): 41–66, January–March.
- Singh, Shailu. 2018. "Patenting Matters, Not Patents: Firm Market Value, in Indian Manufacturing", 12 (1): 67–87, January–March.
- Dey, Sagarika. 2018. "The Role of Employment Diversification in Reducing Vulnerability to Poverty among Marginal and Small-holder Agricultural Households in India", 12 (1): 88–112, January–March.

Quarterly Review of the Economy (Quarterly)

Coordinator: Bornali Bhandari

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Other NCAER Staff Publications

- Anusha Avyukt. (Forthcoming).
 "Prices", November, published in the Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy, 2017–18 by NCAER and India International Centre.
- Anusha Avyukt. 2017. "Prices", published in the *Quarterly Review of the Indian Economy*, May, NCAER.
- Anusha Avyukt. 2018. "Prices", published in the *Quarterly Review of* the Indian Economy, January, NCAER.
- Bahal, Girish. 2018. "Crowding-Out or Crowding-In? Public and Private Investment in India", Working Paper No. WP 114.
- Bahal, Girish. (Forthcoming).
 "Crowding-Out or Crowding-In?
 Public and Private Investment in India", World Development.
- Bandyopadhyay, Saurabh. 2018.
 "Industry", November, published in the Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy,

- 2016–17 by NCAER and India International Centre.
- Bandyopadhyay, Saurabh.
 (Forthcoming). "Industry". In B.
 Bhandari and M. Bhusnurmath (eds.),
 The Malcolm S. Adiseshiah Mid-Year
 Review of the Indian Economy, 2016—17. NCAER and India International
 Centre, New Delhi, India.
- Bandyopadhyay, Saurabh.
 (Forthcoming). "Industry". In B.
 Bhandari (ed.), The Malcolm S.
 Adiseshiah Mid-Year Review of the
 Indian Economy, 2017–18. NCAER
 and India International Centre, New
 Delhi, India.
- Bandyopadhyay, Saurabh. 2017–18.
 NCAER Quarterly Review of the Indian Economy, June 2017 and February 2018.
- Bandyopadhyay, Saurabh.
 (Forthcoming). Demand for
 Transportation Energy in India:
 An Interpretative Overview at
 KAPSARC workshop series.
- Bandyopadhyay, Saurabh. 2018. "Will Putting the Draft Labour Code on the Backburner Increase the Burden on Employers?", *Qruis*, online journal, January 26. Https://qrius.com/labourmarket-institutions-perspectivenewly-presented-draft-labour-codesocial-security-welfare/.
- Barik, Debasis, 2018. "Ageing in India: The Health Issues". In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy, 2016– 17. NCAER and India International Centre, New Delhi, India.
- Barik, Debasis, Desai, Sonalde and Vanneman, Reeve. 2018. "Economic Status and Adult Mortality in India: Is the Relationship Sensitive

- to Choice of Indicators?", *World Development*, 103: 176–187, March.
- Bhadury, S. and Ghosh, T.
 (Forthcoming). "Money's Causal
 Role in Exchange Rate: Do Divisia
 Monetary Aggregates Explain
 More?", International Review of
 Economics and Finance, Elsevier.
 This paper is also available online at
 Indira Gandhi Institute of Development
 Research Working Paper series (Link).
- Bhadury, S. and Pratap, B. (Forthcoming). "India's Bad Loan Conundrum: Recurrent Concern for Banking System Stability and Way Forward", International Symposia in Economic Theory and Econometrics, Bruno S. Sergi (Harvard University) and William A. Barnett (University of Kansas) (eds.), Emerald.
- Bhadury, S. and Ghosh, T. 2017. "Has Money Lost Its Relevance? Resolving the Exchange Rate Disconnect Puzzle in the Small, Open Economies", under review, Journal of Financial Stability, Elsevier.
- Bhadury, S. and Ghosh, T. 2017.
 "Exchange Rate Overshooting in Small Open Economies: A Reassessment in the Monetary Framework", *Empirical Economics Letters*, 16 (11).
- Bhadury. S. and Pohit S. 2018.
 "Nowcasting' the Indian Economy:
 A new approach to know the now-GDP". *Ideas for India*. January.
- Bhadury, S., Pratap, B. 2017. "Why the Status Quo by RBI Post-Demonetisation", Quint, April.
- Bhadury, S. 2017. "Money and Capital Markets", Quarterly Review of the Indian Economy, February.
- Bhandari, Bornali. 2018. "Forecast".
 In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-

- Year Review of the Indian Economy 2016–17. NCAER and IIC. New Delhi, India.
- Bhandari, Bornali. (Forthcoming).
 "Forecast". In B. Bhandari (ed.),
 The Malcolm S. Adiseshiah Mid-Year
 Review of the Indian Economy 2017–
 18. NCAER and IIC. New Delhi,
 India.
- Bhandari, Bornali. 2016–17. NCAER
 Quarterly Review of the Indian
 Economy, April, July, October 2017,
 and January 2018.
- Bhandari, Bornali. 2016–17. *Business Expectations Survey*, April, July and October 2017, and January 2018.
- Bhandari, Bornali (with Saluja, J., Kapadia, O., Mandevia, N., Gehi, J., and M. Irani. 2017. "A Participative Development Model: Dharavi Community Land Trust" in Urban Design Research Institute (ed.), Reinventing Dharavi: An Ideas Compendium, Mumbai.
- Bhandari, B. 2017. "Forecasting growth in times of transition". http://www.ideasforindia.in/topics/ macroeconomics/forecastinggrowth-in-times-of-transition.html. November 8.
- Bhandari, B., Sahu, A. K. and Duggal, M. 2018. "Did note ban induce firms to adopt digital payment?". *Business Standard*. https://www.business-standard.com/article/opinion/didnote-ban-induce-firms-to-adopt-digital-payment-117110801663_1. html/ November 9.
- Buragohain, Tarujyoti. 2017.
 "Determinants of savings in India:
 An economic approach", Research
 Journal of the Bhartiya Arthik Shodh
 Sansthan, Varta, 37(2): 1–12, October
 2016 (printed in October 2017).

- Buragohain, Tarujyoti. 2017. "Agrarian Change: Is Rabi Cultivation getting more profitable?", Financial Express, September 21.
- Buragohain, Tarujyoti. 2017. "Trend and Pattern of Agricultural Growth in Punjab", Journal Agricultural Situation in India. LXXIV (6): 27–36, September.
- Buragohain, Tarujyoti. 2017.
 "Doubling farmers' income: Is Rabi crop more profitable?", *African-Asian Journal of Rural Development*, 50(2): 115–149, July-December.
- Chadha, Rajesh and Joshi, Laxmi. 2017. "Rising consumer incomes are creating bigger markets for processed foods", *Qruis*, online journal, December 7.
- Choudhuri, Pallavi. 2017–18.
 "Money and Capital Markets", *NCAER Quarterly Review of the Indian Economy*, April, August and November.
- Choudhuri, Pallavi. 2018. "Money and Capital Markets". In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2016–17. NCAER and IIC. New Delhi, India.
- Das, Sanjukta. 2017. "Is universal inclusion the way forward for poverty alleviation?" Blog post on Economics, August 2. http://www. econthatmatters.com/2017/08/isuniversal-inclusion-the-way-forwardfor-poverty-alleviation/
- Sonalde Desai, (with Joshi, Omkar, Vanneman, Reeve, and Dubey, Amaresh). 2017. "Who participates in MGNREGA?" Review of Development and Change, 22(1): 108-127.

- Desai, Sonalde. 2017. "Doing Gender Vs. Doing Modernity," in Bhatia, Manjeet (Ed.) Locating Gender in the New Middle Class in India, Shimla: Indian Institute of Advanced Study.
- Sonalde Desai (with Thorat, Amit, Vanneman, Reeve, and Dubey, Amaresh). 2017. "Escaping and Falling into Poverty in India Today," World Development, 93: 413–426.
- Desai, Sonalde and Malhotra, Ragini Saira. 2018. "The power of numbers". The Hindu, March 8. Link.
- Desai, Sonalde. 2017. "Reimagining the OBC quota". The Hindu, September 19. Link.
- Desai, Sonalde. 2017. "The deep divide within white Americans". The Hindu, August 23. Link.
- Charu Jain and Narayan Prasad. 2017. "Factors Affecting Teaching Abilities, Practices and Motivation

 Evidences from Senior Secondary Schools in Delhi', Paper published in Conference Proceedings Manual of 3rd International Conference on Education by 'The International Institute of Knowledge Management' (TIIKM), Sri Lanka, ISSN 2424-6700, Oct 2017, pp. 214–226.
- Charu Jain and Narayan Prasad.
 2018. Book titled Quality of Secondary Education in India: Concepts, Indicators, and Measurement' published by Springer, ISBN 978-981-10-4928-6, ISBN 978-981-10-4929-3 (e-book), 1st ed. 2018, 37, 225 p. (Brief Description of the Book published in PAA Affairs, Spring 2018, Quarterly Newsletter of the Population Association of America, Inc., p. 16).
- Mehta, Anupma. 2017. "The Female Principle", *The Pioneer*, November 27. http://www.dailypioneer.com/ columnists/oped/the-femaleprinciple.html

- Mehta, Anupma. 2018. "Time to Nurture the Hands That Feed Us", The Pioneer, February 16. http://www. dailypioneer.com/columnists/oped/ time-to-nurture-the-hands-that-feedus.html
- Mehta, Anupma. 2018. "End the Politics of Female Exclusion", *The Pioneer*, March 8. http://www.dailypioneer.com/columnists/oped/end-the-politics-of-female-exclusion.html
- Pohit, Sanjib (with T. Jamal, Y. Suman, N.K. Yadav and M.K. Saini). 2017. "Innovation Strategies in Indian Textile Sector: A case study of Surat Textile cluster" in Bhattacharya, S., Suman, Yogesh and Jamal, T. (eds.), Policy Perspectives on innovation and Sustainable Development, pp 1–9. Syahi Publication House, New Delhi, India.
- Pohit, Sanjib (with Y. Suman, Priti, T. Jamal, N.K. Yadav and M.K. Saini). 2017. "Bamboo Industry in North-Eastern Region: Trends Emerging from Survey," in Bhattacharya, S., Suman, Yogesh and Jamal, T. (eds.), Policy Perspectives on innovation and Sustainable Development, pp. 50–57. Syahi Publication House, New Delhi, India.
- Pohit, Sanjib. 2017. Book Review, "Indian Economy: Reforms and Development" by Editor: P.K. Biswas, and p. Das, Germany: Springer.
- Pohit, Sanjib. 2017. "Transaction cost in Overland Trade in South Asia", Institute of Asia & Pacific Studies Dialogue, University of Nottingham, UK, May 2.
- Pohit, Sanjib. 2017. "India's Biometric Program: Panacea or Boomerang?" August 29? Institute of Asia & Pacific Studies Dialogue, University of Nottingham, UK.

- Pohit, Sanjib. 2017. "A flood of questions". *The Hindu*. October 21.
- Pohit, Sanjib. 2017. "The untold truths of Aadhaar". *Qrius*. December 23.
- Pohit, Sanjib. 2018. "GST: A small step towards easing overland logistics barriers". *Qrius*. February 8.
- Pohit, Sanjib. 2018. "Smart Cities Mission without a smart waste disposal system?". Qrius. February 27.
- Pohit, Sanjib. 2018. "Push for solar energy: Is India on the right path?".
 Qrius. March 14.
- Prabhakar, Prerna. 2017. "Trade and Environment: An Aligned Approach", Institute of Asia and Pacific Studies (IAPS) Dialogue, University of Nottingham, UK.
- Prerna Prabhakar (with Sanan, Deepak). 2017. "Land Record Digitization", in State of Land Report India, prepared by Centre for Land Governance, NR Management Consultants India Pvt Ltd.
- Prabhakar, Prerna. 2017–2018.
 "External Sector", NCAER Quarterly Review of the Indian Economy, June 2017.
- Pratap, Devender. 2018. "Services".
 In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2016–17. NCAER and IIC. New Delhi, India.
- Sharma, Anil Kumar. 2018.
 "Agriculture". In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy, 2016–17. NCAER and India International Centre, New Delhi, India.
- Sharma, Anil Kumar. (Forthcoming).
 "Agriculture". In B. Bhandari (ed.),

- The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy, 2017– 18. NCAER and India International Centre, New Delhi, India.
- Sharma, Anil Kumar. 2017–18.
 NCAER Quarterly Review of the Indian Economy, June, August,
 November 2017 and January 2018.
- Singh, Kanhaiya. 2018 उम्मीद के इन आंकड़ों में खतरों के संकेत भी हैं (Hindi) Hindustan, January 29, Delhi, https://www.livehindustan.com/ blog/nazariya/story-kanhaiyasingh-article-in-hindustan-on-30january-1774187.html
- Singh, Kanhaiya. 2018 मौके सिकुड़ने का दौर क्षणिक : "ईज ऑफ लिविंग से मध्यवर्ग की आकांक्षाओ और अवसरों के लिए खुलेंगे दरवाजे" (Hindi) Outlook, February 28, Delhi, https://www.outlookhindi.com/ story/935
- Singh, Kanhaiya. 2018 बड़ा सवालः नए भारत के लक्ष्य को हासिल करने में क्या बजट बनेगा मददगार? (Hindi) (Television Appearance) DD News, January 31, Budget Discussion-1, https://www.youtube.com/watch?v=s1NNYjb7ub0
- Singh, Kanhaiya. 2018. "Big Question: How will budget further new India goal?" (English) Television Appearance: DD News, January 31, Budget Discussions, https://www. youtube.com/watch?v=NRji7W9Vu fU&list=UUKwucPzHZ7zCUIf7If-Wo1g&index=1641
- Singh, Kanhaiya. 2018 योजना बनाने को सरकार के पास नहीं है सटीक आंकड़े, हद तो ये है कि गरीबी भी 1960 के फार्मूले से हो रही है तय Dainik Bhaskar, February 7, http://epaper.bhaskar.com/new-delhi/194/07022018/cph/6/
- Sinha, Anushree, Jaiswal, Rajesh and Prabhakar, Avantika. (Forthcoming).
 "Impact of Key Infrastructure Sectors in Creating Formal and Informal Jobs

- in Two States: Indian Regional IO Analysis", *Applications of the Input-Output Framework*, edited by Kakali Mukhopadhyay, Springer.
- Tandon, Anjali and Shahid, Ahmed. 2017. "Energy Balance in India's International Trade: An Input-Output Based Analysis", *Trade and Development Review*, 9(1–2): 1–30, May.
- Tandon, Anjali, 2018. "From Obstacles to Opportunity – Non-Tariff Measures", The Financial Express, February 12.
- Tandon, Anjali, 2018. "Time to Review India's Non-Tariff Measures", Business Standard, February 11.
- Tandon, Anjali, 2018. "The Spatial Dimension of Business Investment Decisions", *Ideas for India*, January 25.
- Tandon, Anjali, 2017. "Act Bilateral, Think Multilateral on Investment Issues: A Proposed Strategy for India", *Qrius* (formerly The Indian Economist), December 31.
- Tandon, Anjali, 2017. "Pushing the Finishing Line forward", *The Financial Express*, December 20.
- Tandon, Anjali (with Nataraj, Geethanjali). 2017. "Catch the Cart before it gets Crowded", The Financial Express, December 12.
- Tandon, Anjali. (Forthcoming).
 "External Sector". In B. Bhandari and M. Bhusnurmath (eds.), The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2017–18. NCAER and IIC. New Delhi, India.
- Tandon, Anjali. 2017–18. NCAER
 Quarterly Review of the Indian
 Economy, August 2017, and February
 2018.

Activities

NCAER Research Staff Activities

SHEKHAR SHAH

Positions Held

- Member, Governing Body, National Institute of Public Finance and Policy
- Member, Board of Directors, Institute for Policy Research Studies
- Member, Academic Council, National Institute of Securities Markets
- Member, General Council, Institute of Applied Manpower Research, NITI Aayog
- Member, NSDI Executive Committee, National Spatial Data Infrastructure, Department of Science and Technology, Government of India
- Member, Advisory Board, Government Accounting Standards Advisory Board for the Union and States (GASAB), Office of the Comptroller and Auditor General of India, Government of India
- Member, International Steering Committee, Pacific Trade and Development Conference (PAFTAD)
- Member, Committee on Doubling of Farmers' Income by 2021-22, Ministry of Agriculture and Farmers Welfare
- Member, Expert Advisory Committee on National Skills Research Division, Ministry of Skill Development and Entreprenuership
- Member, Working Group of the Commerce Minister on "US\$ 5 Trillion Indian Economy", Ministry of Commerce and Industry
- Member, National Steering Group of 'SAMAVESH' Initiative of NITI Aayog

Lectures/Presentations/Conferences/Seminars

2017

April 4: Speaker, Round Table Discussion with Mr Mark Carney, Governor of the Bank of England, hosted by the British High Commissioner, New Delhi.

April 10: Speaker, Round Table Discussion on "Bangladesh-India Relations—Looking Ahead", Nehru Memorial Museum and Library, Teen Murti, New Delhi.

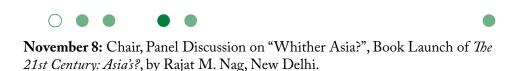
April 18: Chair, NCAER Second Technical Advisory Committee Meeting for Impact Assessment of the Digital India Land Record Modernisation Programme (DI-LRMP), NCAER, New Delhi.

April 24-25: Panellist, "Research with Impact—The Value of Global Research Collaboration in Addressing Global Societal Challenges", EqUIP Showcasing Event: 'Research with Impact', Strengthening European—Indian Research Collaboration in the Social Sciences and Humanities, Science Europe, Brussels.

May 17: Speaker, First Meeting of the National Steering Group of Samavesh, "Mechanism for Networking and Partnerships with Knowledge and Research Institutions", NITI Aayog, New Delhi.



- May 31-June 1: Speaker, "The Big Picture of the Emerging World–India", Workshop on 'Global Economy: Drivers for the Next Decade", organised by the Australian National University and the Brookings Institution, Washington D.C., USA.
- **June 7-9:** Speaker, Workshop on 'Public Private Partnership', "Chicago Forum on Global Cities", Chicago, Illinois, USA.
- **June 19:** Speaker, 'Challenges facing think tanks and researchers in communicating political economy', "Policy Challenges in the Global Economy: Productivity, Risk, and Growth", National Economic Research Organisations (NERO) Meeting 2017, OECD, France.
- **July 5:** Panellist, "Trade and Tourism through Connectivity—Focus North East and East", Charting the Course for India–ASEAN Relations for the Next 25 Years, Programme for Delhi Dialogue IX, Taj Palace Hotel, New Delhi.
- **July 5:** Chair, Third Technical Advisory Committee Meeting for Impact Assessment of the DI-LRMP, NCAER, New Delhi.
- **July 7:** Guest speaker, Roundtable Discussion on Australia's the 'India Economic Strategy', hosted by the High Commissioner, Australian High Commission, New Delhi.
- **July 10:** Panellist, "The Economic Survey Proposal", Roundtable on "Universal Basic Income in India: Emerging Perspectives", organised by the Institute for Human Development, New Delhi.
- **July 12:** Chair, 14th India Policy Forum Lecture, "Avoiding the Morning-after Blues: Building State Capability While Times Are Good" by Professor Lant Pritchett, Harvard Kennedy School, New Delhi.
- **July 18:** Chair, Workshop on NCAER's State Investment Potential Index N-SIPI 2017, IIC, New Delhi.
- August 17: Discussant, World Bank Group Country Engagement Dialogue, World Bank, New Delhi.
- **October 6:** Speaker, High Level Consultations with Think Tanks for Transforming India by 2022, organised by NITI Aayog, New Delhi.
- **October 6:** Special Address, Book Launch, "Measuring India: The Nation's Statistical System" by Mr M.R. Saluja, organised by India Development Foundation, New Delhi.
- October 9: Speaker, Brainstorming Session on, "Ideas for the Economic Survey 2017-18", Ministry of Finance, New Delhi.
- **October 16:** Chair, Seminar on "Colonial Legacy, Services Trade and LDCs" by Dr Anirudh Shingal, NCAER, New Delhi.
- October 27: Speaker, Roundtable Discussion on the Role and Relevance of Think Tanks, with Strobe Talbott, President, Brookings Institution, New Delhi.
- October 31: Chair, "Partners Together: India and Japan Meeting India's Skills and Jobs Challenge", NCAER-Policy Research Institute Tokyo Dialogue, Japan.



November 11: Welcome and Introduction, "Malcolm Adiseshiah Mid-Year Review of the Indian Economy 2017-18", New Delhi.

November 13: Presiding Officer and Chair, Panel Discussion on, "Pathways to Secure Titling in India", Pilot Impact Assessment of the Government of India's Digital India-Land Records Modernisation Programme, Release of State and Synthesis Reports, New Delhi

November 27: Panellist, Book Launch of *The 21st Century: Asia's?*, by Rajat M. Nag, organised by Emerging Markets Forum, Washington D.C.

December 7: Chair, Seminar on "Market Failure, Government Failure, and the Welfare of Poor People", by Shantayanan Devarajan, World Bank, NCAER, New Delhi.

December 8: Invited guest speaker, Symposium on "Future of India", Indira Gandhi Institute of Development Research, Mumbai.

December 11: Speaker, Pre-Budget Consultation Meeting, Union Budget 2018–19, with Economists' Group, chaired by the Union Finance Minister, Ministry of Finance, Government of India, New Delhi.

December 12: Chair, Discussion on "Organisational Strategies for the NCAER Centre", at the First Meeting of the Centre Programme Advisory Panel for the NCAER Centre for Data Innovation, The Claridges, New Delhi.

December 12: Presiding Officer, Launch of the NCAER National Centre for Data Innovation, Panel Discussion on "Imagining a Statistical Data Architecture for a 21st Century India", The Claridges, New Delhi.

December 13: Chair, "NCAER–Japan International Cooperation Agency (JICA) Consultation on JICA Country Analysis Paper 2017", NCAER, New Delhi.

December 17: Chair, "Labour Markets, and the Challenge of Job Creation", The 19th Neemrana Conference, Neemrana Fort-Palace, Rajasthan.

2018

January 15: Speaker, Meeting called by the Finance Minister to reconstitute the Advisory Council to advise him on G20 matters and to facilitate enhanced engagement of India within G20, Ministry of Finance, Government of India, New Delhi.

January 17: Chair, Seminar on, "PRIndex: A Global Indicator of Citizens' Perceptions of Property Rights", NCAER, New Delhi.

January 19: Chair, Seminar on "Impact of SEZs on Poverty and Human Well-being in Undivided Andhra Pradesh", NCAER, New Delhi.

January 23-24: Panellist, UK-India "Urban Transformations in India Programme", Economic and Social Research Council–Indian Council of Social Science Research (ECRC-ICSSR) Newton Expert Joint Panel Meeting, New Delhi.

January 31-February 1: Chair, Session on "History Returns: Intergenerational Mobility of Education in China", PAFTAD 39: Growth, Globalization and Intergenerational Issues in the Asia Pacific, Tokyo.

February 5-7: Moderator, Plenary session on "Stories of Change"; Panellist, "Do We Meet Again? Future of the South Asian Network", Remaining Relevant in the Policy World, *Sustainability Challenges of Think Tanks*, TTI-RM7, 7th South Asian Regional Meeting of the Think Tank Initiative, Savar, Dhaka, Bangladesh.

February 9: Chair, The 6th C.D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations", by Sir Partha Dasgupta, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February 10: Panellist, Five-Institution Union Budget Seminar on "The Union Budget 2018-19: Reforms and Development Perspectives", with CPR- ICRIER-IDFC-NCAER-NIPFP, The Leela Palace, New Delhi.

February 15: Chair, Seminar on "Trends in India's Income Distribution" by Dr Surjit Bhalla, NCAER, New Delhi.

February 16: Chair, "NCAER Quarterly Review of the Economy", NCAER, New Delhi.

February 20: Chair, "Tenure Security through Digitization of Records: Issues and Road Ahead", India Land Development Conference 2018, New Delhi.

March 6: Chair, Seminar on "New Approaches to the Financial Inclusion of Small Farmers in India" by Dr Dilip Mookherjee, NCAER, New Delhi.

March 10: Panellist, Discussion on "Agriculture and Inclusion", 51st SKOCH Summit, "State of Inclusion", New Delhi.

March 13: Guest speaker, "Planning for Policy Impact: Elements of Successful Strategy", International Training Workshop on Strategic Campaigns for Influencing Policy Agenda, SDPI, Bangkok, Thailand.

March 15: Speaker, "Working Group on USD 5 Trillion Economy", Ministry of Commerce and Industry, New Delhi.

March 19: Co-moderator, "Building a Global Picture", Global Seminar on Climate Change, Conflict, Health and Education: Targeting Interdisciplinary Research to Meet the SDGs, Salzburg Global Seminar and GCRF-UK, Salzburg, Austria.



RAJESH CHADHA

Positions Held

- Managing Editor, Margin—The Journal of Applied Economic Research, NCAER, New Delhi
- Member, Advisory Board, Indian School of Business and Finance, New Delhi
- Member, Editorial Board, Vision, Journal of MDI, Gurgaon
- Member, Global Trade Analysis Project, Purdue University, West Lafayette
- Honorary Distinguished Research Professor, Northcap University, Gurgaon

Lectures/Presentations/Conferences/Seminars

2017

April 5: Presentation made to FAO Evaluation Team on COSIMO modelling work done under the Agricultural Outlook project, NCAER, New Delhi.

May 16: Chair, "Energy Induced Technological Changes in Indian Economy", NCAER Brown Bag Seminar by Dr Anjali Tandon, NCAER, New Delhi.

May 24: Chair, "Geography and Supply Chain Organization: Theory and Evidence from India", NCAER Brown Bag Seminar by Dr Piyush Panigrahi University of California, Berkeley, NCAER, New Delhi.

May 26: Co-chair and Closing Remarks, "Third Steering Committee of NCAER DBT Readiness Research Project", NCAER, New Delhi.

June 5: Speaker, "Free Trade and the Rising Tide of Protectionism," 23rd International Conference on "The Future of Asia 2017", Nikkei, Tokyo.

June 6: Speaker, "South Asia Opportunities and Challenges of a Global Growth Hot Spot", 23rd International Conference on "The Future of Asia 2017", Nikkei, Tokyo.

June 22: Lecture, "Living with Mega Trading Blocs: India Needs a Strategy", Research and Information System for Developing Countries (RIS), New Delhi.

August 18: Presenter, "Rising Tide of Protectionism: Opportunities and Challenges for South Asia", NCAER Brown Bag Seminar, NCAER, New Delhi.

August 24: Chair, "State of the Economy Seminar", Quarterly Review of the Economy (QRE), NCAER, New Delhi.

August 28: Lecture, "Human Resource Planning and Development", Valedictory Function of International Training Programme at National Institute of Labour Economics Research and Development, New Delhi.

August 31: Speaker, "Farm Revenue and Sustainability", USDA-India Agricultural Outlook Forum 2017 at NASC Complex DPS Marg, Pusa Campus, New Delhi.

September 5: Chair, NCAER Seminar, "Significance of Effective Editing and Incisive Writing in Research" by Anupma Mehta, Editor, NCAER, New Delhi.

September 8: Chair, NCAER Seminar, "GDP Nowcasting: A New Approach to Know the Now-GDP" by NCAER Macro Modelling Team, NCAER, New Delhi.

October 26: Presenter, "Agriculture Outlook Report presentation prepared for the D/o Animal Husbandry, Dairying and Fisheries", Krishi Bhawan, New Delhi.

October 31: Presenter, "Growth, Investment and Trade Challenges: India and Japan", NCAER-ADBI-PRI Tokyo Dialogue Partners Together: India and Japan Meeting India's Skills and Jobs Challenge in Tokyo, Japan.

November 24: Chair and Closing Remarks, "Fourth Steering Committee of NCAER DBT Readiness Research Project", NCAER, New Delhi.

December 13: Presenter, "Growth, Investment and Trade Challenges: India and

Japan", NCAER-JICA Consultation JICA Country Analysis Paper 2017, NCAER, New Delhi.

2018

January 23: Participation in a discussion vide telephone, on "The Current Scenario of the Indian Economy" in a programme titled *The Big Debate*, on BBC Asian Network Radio, UK. This discussion was held as a precursor to Prime Minister Narendra Modi's visit to the World Economic Forum in Dayos.

March 12: Panellist, Roundtable 2, "The Future of Work", at Think 20 Mumbai, hosted by the Gateway House: Indian Council on Global Relations, Mumbai.

March 16: Chair, "Sarva Shiksha Abhiyan: Achievements, Problems and Future Prospects", "Tribal Research Institutes Revisited: An Outcome Perspective Analysis", Presentations by the faculty of National Institute of Labour Economics Research and Development (sponsored by ILO, Delhi), India Habitat Centre, New Delhi.

March 26: Presenter, "Future Areas of International Cooperation and Understanding in Agri. Marketing/Agri. Business/Agri. Industries/Food processing in Haryana", 3rd Agri Leadership Summit, 2018, Rohtak, Haryana.



SONALDE DESAI

Positions Held

- Chair, International Outreach Committee, Population Association of America
- Member, Technical Advisory Committee on Household Surveys, Reserve Bank of India
- Advisory Panel, Luxembourg Income Study
- Tenure and Promotion Review for faculty from several U.S Universities
- Member, Editorial Committee, Population and Development Review, 2017
- Member, Editorial Board, Demography
- Member, Editorial Advisory Board, Studies in Family Planning
- Member, Editorial Advisory Board, Indian Journal of Human Development
- Member, Editorial Board, Journal of South Asian Development
- Member, Editorial Board, Margin—The Journal of Applied Economic Research, NCAER, New Delhi

Lectures/Presentations/Conferences/Seminars

2017

June 6–9: Presenter, Paper on "Inequality in India" at the 2017 Inequality Workshop-Third Annual Workshop sponsored by the CUNY Graduate Center and the Stone Center, New York City.

August 21: Participant in 8th Technical Advisory Committee on Survey (TACS) meeting organised by RBI Mumbai at COB, RBI, Mumbai.



November 9–11: Presented Paper on "Neoliberal Economic Transformation and Rural Elites" at the ISS 43rd All India Sociological Conference on Neo-Liberalism, Consumption and Culture organized by Department of Sociology University of Lucknow, Uttar Pradesh, India.

December 8: Delivered Lecture to the Training Programme on "Advanced Sampling Techniques with Practical Examples from NSSO Surveys, Health Surveys, etc." for officers with 8-10 years of Indian Statistical Service, organised by NSSTA, held in Greater Noida, Uttar Pradesh, India.

December 12: Organised first meeting of the Centre Programme Advisor Panel (CPAP) of the NCAER National Data Innovation Centre (NDIC), Senate Boardroom, the Claridges, New Delhi.

December 12: Organised a panel discussion on "Imagining a Statistical Data Architecture for a 21st Century India", The Claridges, New Delhi.

2018

January 10: Presented, NCAER Brown Bag Seminar on "How Do We Explain Declining Female Work Participation in Rural India", NCAER, New Delhi.

January 12: Participant, Seminar on "Gender, Reproduction and Culture" by Department of Sociology, Delhi School of Economics, Delhi University, New Delhi.

January 12: Organised Brainstorming Session on "Methodologies for Collection of Time Use Data", NCAER, New Delhi.

January 19: Meetings with people at APU, Bangalore and Colloquium Talk on "Changing Family Structures", School of Policy and Governance, Azim Premji University, Bangalore.

March 24: Co-organised Workshop with IFMR on "Kathopakathan, A Conversation about Women's Economic Empowerment", NCAER-NDIC and IFMR-IWWAGE, The Claridges, New Delhi.

SANJIB POHIT

Positions Held

- Associate Editor, Research Journal of Environmental Sciences, Dubai, UAE
- Associate Member, UNCTAD Virtual Institute, Geneva, Switzerland
- · Member, Forum for Global Knowledge Sharing, India

Lectures/Presentations/Conferences/Seminars

2017

April 15. Invited Lecture on "Input-Output Models and Application," Birla Institute of Management Technology, Greater NOIDA, Uttar Pradesh.



April 26: Invited Lectures on "Socio-Economic Impact Assessment: An Overview" and "Defining Socio-Economic Features and Identifying Data Requirement", CSIR–Human Resource Development Centre, Ghaziabad, Uttar Pradesh.

June 17. Comments, Consultation Paper on "Regulatory Principles of Tariff Assessment" issued by TRAI, New Delhi.

August 24. Discussant, Seminar on *State of the Economy Seminar*, NCAER, New Delhi.

November 7: Comments on "Computable General Equilibrium Models versus Optimization Models", Submitted to Mr Anil K Jain and Dr Avik Dutta, Niti Aayog, New Delhi.

September 15: Presentation, "Opportunities for Entrepreneurship and Employment Generation through Bio-diesel Production in India", organised by 16th International Entrepreneurship Forum (IEF) Conference. Theme: Sustainable Entrepreneurship and Economic Development, Kathmandu, Nepal.

October 16: Discussant, Seminar on "Colonial Legacy, Services Trade and LDCs," NCAER, New Delhi.

November 7: Comments on "Computable General Equilibrium Models versus Optimization Models", Submitted to Mr Anil K Jain and Dr Avik Dutta, Niti Aayog, New Delhi.

November 11. Presentation, Malcom Adiseshiah Mid-Year Review of the Indian Economy 2017-18, NCAER, New Delhi.

2018

February 19–20: Discussant, Conference on "Agriculture, 2022–New Initiatives," NASC Complex, Pusa, New Delhi.

March 23. Presentation, "Modelling Low-carbon Economy: Key Issues for India. Expert Dialogue on Modelling for Low-Carbon Economy", presented to European Delegation to India, New Delhi.



ANIL KUMAR SHARMA

Position Held

 Member, Coordinating Committee for Organisation of Research Studies in the Field of Agricultural Economics, Ministry of Agriculture, Government of India, New Delhi

Lectures/Presentations/Conferences/Seminars

2017

June 8: Contributed in the "NCAER Quarterly Review of the Economy" and contributed a chapter on Indian Agriculture, NCAER, New Delhi.

July 11–12: Participated in 14th India Policy Forum organised by NCAER held at India International Centre, New Delhi.



October 31: Participated in NCAER-ADBI-PRI Dialogue Tokyo Dialogue through VC from NCAER, New Delhi.

November 8: Participated in the launch of NCAER book, *The 21st Century: Asia's?* by Rajat Nag, India International Centre, New Delhi.

November 11: Contributed in the Malcolm Adiseshiah Mid-Year Review of the Indian Economy 2017–18 organised by NCAER and IIC and contributed a chapter on Indian Agriculture, India International Centre, New Delhi.

December 7: Participated in a talk by Shanta Devarajan, Senior Director for Development Economics at the World Bank in Washington DC and Non-resident Senior Fellow, NCAER, on "Market Failure, Government Failure, and the Welfare of Poor People", NCAER, New Delhi.

December 12: Participated in a Centre Programme Advisory Panel (CPAP) and Panel Discussion on Imagining a Statistical Data Architecture for a 21st Century India organised by NCAER National Data Innovation Centre (NDIC), The Claridges, New Delhi.

December 15–17: Participated in 19th Neemrana Conference organised by NCAER, NBER, and ICRIER, Neemrana Fort Palace, Neemrana, Rajasthan.

2018

February 9: Participant, The 6th C D Deshmukh Memorial Lecture 2018 by Sir Partha Dasgupta on "Measuring the Wealth of Nations" Frank Ramsey Professor Emeritus of Economics, University of Cambridge, the Nehru Memorial Library Auditorium, Teen Murti, in New Delhi.

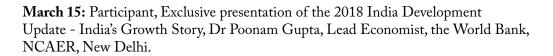
February 10: Participant, Five-Institution Seminar on "The Union Budget 2018-19: Reforms and Development Perspectives", organised by the Centre for Policy Research (CPR), Indian Council for Research on International Economic Relations (ICRIER), India Development Foundation (IDF), National Council of Applied Economic Research (NCAER), and National Institute of Public Finance and Policy (NIPFP), The Leela Palace, New Delhi.

February 12: Contributed in the "NCAER Quarterly Review of the Economy" and contributed a chapter on Indian Agriculture, NCAER, New Delhi.

February 15: Participant, Talk on "Trends in India's Income Distribution" by Dr Surjit S. Bhalla, Senior India Analyst for the Observatory Group, Chairman of Oxus Research & Investments and a member of the Prime Minister's Economic Advisory Council and of NCAER's Governing Body, NCAER, New Delhi.

February 19–20: Participant, "National Conference on Agriculture – 2022" organised by the Ministry of Agriculture and Farmers Welfare as a member of the group on Trade Policy and Export Promotion, NASC Complex, New Delhi.

March 6: Participant, Discussion on "New Approaches to the Financial Inclusion of Small Farmers in India: Some Experimental Results?" by Professor Dilip Mookherjee, NCAER, New Delhi.





KANHAIYA SINGH

Positions Held

- Member, National Capital Region Planning Board, New Delhi
- Member, Pricing Cell for Fixing Minimum Support Price for Minor Forest Product, TRIFED, Ministry of Tribal Affairs, 2013 Onwards
- Member, Editorial Board, Journal of Income and Wealth
- Member, Working Group for Cement Industry, 12th Five Year Plan of India (2012– 13 to 2017–18)
- Life Member, Indian Economic Society
- Life Member, Indian Society of Labour Economics (ISLE)
- Life Member: L/2273/2004-05, The Indian Econometric Society
- Life Member, Indian Association for Research in National Income and Wealth
- Life Member, Uttar Pradesh, Uttarakhand Economic Association

Lectures/Presentations/Conferences/Seminars

2017

August 29: Participant, 7th Meeting of the Pricing Cell for fixation of Minimum Support Price for MFPs covered under the scheme MSP for MFPs, Tribal Cooperative Marketing Development Federation of India Limited (TRIFED), Ministry of Tribal Affairs, New Delhi.

October 6: Participant, Meeting on Strategy for Long-term and Medium-term Growth and Employment, NITI Aayog, New Delhi.

November 6: Interview with Stacy Yu of Phoenix Satellite Television, Hong Kong, on "Current State and Future Prospects of Indian Economy".

November 21: Television Appearance, Lok Sabha TV on "Insight Black Money Crackdown" (English). https://www.youtube.com/watch?v=WyWSGBY3DhM.

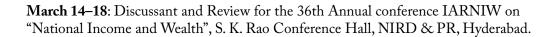
2018

January 1: Interactive Session with Professor Boike Rehbein, Humboldt University, Berlin, Germany, the BPR&D HQs, New Delhi.

February 26: Participant, Meetings of Standing Committee on Industrial Statistics (SCIS), Ministry of Statistics and Programme Implementation, National Statistical Organisation, New Delhi.

March 1: Television Appearance, DD News on "आर्थिक परिदृश्य पर चर्चा", Economic Affairs (Hindi). URL: https://youtu.be/SUEIMO-rkbU.

March 7: Television Appearance, DD News on "चर्चा में: आर्थिक अपराधों पर सरकार सख्त", Economic Affairs, (Hindi). URL: https://www.youtube.com/watch?v=f6kVPf4QvPI.



ANUSHREE SINHA

Positions Held

- Member, National Selection Committee for the 2017–18, U.S. Fulbright–Nehru senior scholar grants at USIEF
- Advisory Board Member of the *Artha Vijnana*, Journal of the Gokhale Institute of Politics and Economics, 2017.



Lectures/Presentations/Conferences/Seminars

2017

April 10–12: Delivered Lecture on "Programme Monitoring and Evaluation in Practice" at Workshop on Programme monitoring and evaluation, Development Monitoring and Evaluation Office, NITI Aayog, New Delhi.

June 19–23: Chair, Session on Impact Analysis: Multipliers and presented a paper, "Health Expenditure by Indian Households: A Gender-aware Input Output Analysis Building" at the 25th International Input-Output Conference and 7th Edition of the International School of I-O Analysis at Atlantic City, New Jersey, USA.

September 13–15: Chair, Session 7: Fiscal Policies, Gender and Distribution at Gender and Macroeconomics Workshop on Theory, Empirics, and Policy by Levy Economics Institute at Convene Conference Center, 101 Park Avenue, New York, USA.

September 13–15: Discussant, Papers in Session 6, "Impact of Economic Policies on Time and Consumption Poverty: Theoretical Framework and Empirical Application" at Gender and Macroeconomics Workshop on Theory, Empirics, and Policy by Levy Economics Institute at Convene Conference Center, 101 Park Avenue, New York, USA.

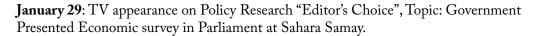
September 13–15: Presented, "Social Accounting Frameworks to Measure Contribution of Women's Work" in session 1: Conceptualizing and Operationalizing the Gender-Macroeconomy Connections at Gender and Macroeconomics Workshop on Theory, Empirics, and Policy by Levy Economics Institute at Convene Conference Center, 101 Park Avenue, New York, USA.

November 7: TV appearance on Policy Research "Editor's Choice", Topic: One year after Demonetisation at Sahara Samay.

December 6–7: Panellist in Session 2, "Presentation of Conference Papers" at the Green Jobs Assessment Institutions Network (GAIN), 3rd International Conference: Just Transition, ILO, Geneva.

2018

January 23–24: Presented, "Performance of Northern Versus Other States under Business Reforms: NCAER Survey Findings" at International Symposium on Competitiveness of North Indian States to Achieve Inclusive Growth, organised by CUTS International, Chandigarh.



February 4: Presented, "Gender-aware Macroeconomic Development: A Social Accounting Framework" at the Gender for Research and Organisational Excellence, 7th Regional Meeting of TTI Remaining Relevant in the Policy World Sustainability Challenges of Think Tanks, BRAC-CDM Savar, Dhaka, Bangladesh.



BORNALI BHANDARI

Lectures/Presentations/Conferences/Seminars

2017

April, July, October 2017 and **January 2018:** Coordination and presentation, NCAER Quarterly Review of the Economy Seminar, NCAER, New Delhi.

2017: Reviewer for Fulbright-Nehru Academic and Professional Excellence Fellowships.

May 26: Participant, Third and Fourth DBT Steering Committee Meetings.

August 28: Meeting for Macroeconomic Discussions with Mr Shotaro Kumagai of the Japan Research Institute Limited.

September 18: Visiting Professor, "Gender Labour Markets: Can India Achieve Its Potential?", Sonoma State University, Mumbai.

September 27: Visiting Professor, "Infrastructure and Indexation", Directorate of Training, Delhi Government.

October 6: Visiting Professor, "Subsidies", Directorate of Training, Delhi Government.

November 5: Coordination and Presentation, "NCAER–IIC Mid-Year Review of the Economy, NCAER, New Delhi.

December 11: Meeting for Macroeconomic Discussions, with Mr Steen Malthe Hansen and Dr Torkild Byg, Ministry of Foreign Affairs, Denmark.

2018

January 3: Visiting Professor, "Macroeconomics and Public Finance", National Academy of Direct Taxes, Nagpur.

January 3 and **22:** Comments on "Consultation Paper on Inputs for Formulation of National Telecom Policy 2018", https://www.trai.gov.in/sites/default/files/NCAER_23012018.pdf.

January 17: Meeting for Macroeconomic Discussions, Mr Koji Kobayashi and Dr Khushboo Khullar of Mizuho Research Institute and Mizhou Bank.

January 17: Participant, Consultation Meeting on "Inputs for formulation of National Telecom Policy 2018", Telecom Regulatory Authority of India, New Delhi.

February 23: Keynote Speaker, Session on "Issues in Economics and Sustainable

Development" at the "International Conference on Business, Economics and Sustainable Development" organised by the Department of Business and Sustainability, TERI University, New Delhi.

March 16: Discussant, Workshop on "Reflections on India's Development: Employment, Education, Empowerment and Health", by NILERD Faculty", New Delhi.

POONAM MUNJAL

Lectures/Presentations/Conferences/Seminars

2017

November 3: Participant, Workshop on Monitoring, Evaluation, Accountability and Learning (MEAL), organised by SDPI, Pakistan, Bangkok.

November 23: Presentation, Ministry of Housing and Urban Affairs on "Impact of Investment in Housing sector on GDP and Employment" submitted in 2014, held to impart at the highest level of government for calculation of prospective employment generation as an impact of PMAY (U).



(Joined on May 1, 2018)

Lectures/Presentations/Conferences/Seminars

2018

- **February 7–9:** Participant, *EvalFest 2018, Visibility, Voice and Value*", organised by Evaluation Community of India, New Delhi.
- February 24–25: Presented, Paper on "Process Evaluation in Community Engagement Intervention 'SALT'" in a Community Engagement and Behaviour Change Communication Session in Urban Health Conference, IIHMR, Delhi.
- March 14–15: Participant, Workshop on "Cost of Inaction on Vaccine Coverage Expansion", The Center for Disease Dynamics, Economics and Policy (CDDEP), New Delhi.

KHURSHEED ANWAR SIDDIQUI

Lectures/Presentations/Conferences/Seminars

2017

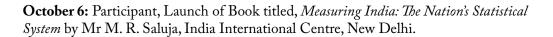
September 8, October 13, December 13, and February 19: Presentations at the office of Development Commissioner (Handlooms) to present the study findings on "Monitoring and Evaluation of Handloom Clusters" and "Impact of the Scheme on the Income and Employment of Weavers", Ministry of Textiles, New Delhi.

July 18: Participant, Workshop on "NCAER's State Investment Potential Index N-SIPI 2017", India International Centre, New Delhi.









2018

February 9: Participant, The 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.



ANUSHA AVYUKT

Lectures/Presentations/Conferences/Seminars

2017

May 2017, January 2018: Participant, "NCAER State of the Economy Seminar", contributed a chapter on "Prices", NCAER, New Delhi.

November 11: Participant, "The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy", contributed a chapter on "Prices in India", organised by NCAER and IIC, IIC, New Delhi.

July 12: Participant, 14th Annual IPF Lecture titled, 'Avoiding the morning-after blues: Building state capability while times are good' delivered by Lant Pritchett, Professor of the Practice of International Development and Faculty Chair at the Kennedy School and Senior Fellow at the Center for Global Development, Imperial Hotel, New Delhi.

2018

February 9: Participant, The 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February 10: Participant, Five-Institute Budget Seminar, "The Union Budget 2018–19: Reforms and Development Perspectives", Leela Palace Hotel, New Delhi.



GIRISH N. BAHAL

Lectures/Presentations/Conferences/Seminars

2017

June 26–29: Presentation on "Employment Guarantee Schemes and Wages in India", International Association of Applied Econometrics (IAAE), Sapporo, Japan.

2018

February 9: Participant, THE 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.



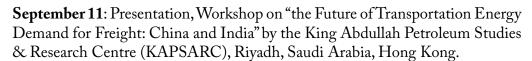
March 24: Participant, Workshop on "Conversation about Women's Economic Empowerment", National Data Innovation Centre (NDIC) at NCAER and Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) at the Institute of Financial Management Research, The Claridges, New Delhi.

SAURABH BANDYOPADHYAY

Lectures/Presentations/Conferences/Seminars

2017

August 19: Participant, Presentation and the Panel Discussion on "Sheer Advancement in Technology in India: Time to Revisit the Luddite Fallacy" in The Economics Summit on "Conventus 2017", International Management Institute, New Delhi.



DEBASIS BARIK

Lectures/Presentations/Conferences/Seminars

2017

September 12: Presented to the NCAER researchers on "Tracking the Migrants (IHDS – 2M) Experience from the Field", NCAER, New Delhi.

September 15: Participant, Meeting on "Connecting about Digital Data Collection Tools" with Mr Maulik Chauhan, Associate Director (India Operations), Survey CTO, Dobility India Pvt Ltd, NCAER, New Delhi.

September 19: Participant, Discussion on "QCI Village Electrification Project" with representatives of Quality Council of India (QCI) and NCAER by Ms Jasmine Luthra (Chairman's Office), Quality Council of India, New Delhi.

October 23: Participant, Workshop on "Measures Development and Validation", organised by GEH (Centre for Gender Equity and Health), Hyatt Regency, New Delhi.

October 29-November 4: Presented in the XXVIII IUSSP International Population Conference on "Economic Status and Adult Mortality in India", Cape Town, South Africa.

December 12: Participant, Panel discussion on "Imagining a Statistical Data Architecture for a 21st Century India", The Claridges, New Delhi.

December 13: Participant, Roundtable discussion on "Determining the Socio-economic Value of Open Government Data in India", by IFMR LEAD and National Informatics Centre, NIC, New Delhi.





2018

January 9: Participant, Brown Bag Seminar on "How Do We Explain Declining Female Work Participation in Rural India" at NCAER, New Delhi.

January 12: Participant, Brainstorming Session on "Methodologies for Collection of Time Use Data", NCAER, New Delhi.

February 27: Participant, Workshop on "Priority Setting in the Health Sector: Practices and Possibilities for India" by IEG and University of York, Institute for Economic Growth, New Delhi.

March 16: Presented Outline of Healthcare Expenditure Survey under Delhi Metropolitan Area Study of National Data Innovation Centre (NDIC-DMAS) to the representatives for Bill and Melinda Gates representatives, NCAER, New Delhi.

March 24: Participant, Workshop with IFMR on "Kathopakathan, A Conversation about Women's Economic Empowerment", organised by NCAER-NDIC and IFMR-IWWAGE, The Claridges, New Delhi.



SOUMYA SUVRA BHADURY

Lectures/Presentations/Conferences/Seminars

2017

May 19: Invited talk, "Has Money Lost Its Relevance? Resolving the Exchange Rate Disconnect Puzzle in Small, Open Economies", Indian Statistical Institute, Delhi.

May 23–24: Invited talk, "Re-evaluating the Relation between Money and Exchange Rate: A Multi-country Analysis", Financial Services Indices, Liquidity and Economic Activity, Bank of England, London.

May 25: Invited talk, "An SVAR Approach to Evaluation of Monetary Policy in India: Solution to the Exchange Rate Puzzles in an Open Economy", London School of Economics India Observatory Event, London.



TARUJYOTI BURAGOHAIN

Lectures/Presentations/Conferences/Seminars

2017

November 14: Participant, Roundtable Panel Discussion on the "State of the Economy: The Way Forward" at Sardar Patel Hall, Indian Institute of Public Administration (IIPA), New Delhi.

2018

February 9: Participant, The 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February 28–March 1: Presented Paper on "Addressing Food Security and Government

Initiatives | at the National Seminar on "Food Security and Rainfed Agriculture in India: Issues, Challenges and Prospects", and Discussant, Seminar on "Food Security and Rainfed Agriculture in India: Issues, Challenges and Prospects", held at MP Institute of

PALLAVI CHOUDHURI

Lectures/Presentations/Conferences/Seminars

Social Science Research, Ujjain, Madhya Pradesh.

2017

July 18–20: Participant, SDPI–IDRC Training Programme on "Monitoring, Evaluation, Accountability, and Learning (MEAL)", UNESCAP, Bangkok, Thailand.

September 13: Participant, United Nations Conclave on "Financial Inclusion", New Delhi.

September 13: Participant, NIC–IFMR Lead Workshop on the "Socio-economic Value of Open Data", New Delhi.

November 11: Participant, "Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2017–18", India International Centre, New Delhi.

2018

February 9: Participant, The 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February 10: Participant, Five-Institute Budget Seminar, "The Union Budget 2018–19: Reforms and Development Perspectives", Leela Palace Hotel, New Delhi.

SANJUKTA DAS

Lectures/Presentations/Conferences/Seminars

2018

February 2: Presented, Paper on, "Whose Right Is It Anyway? Welfare Implications of Food Security Programmes", Seminar at in Indian Statistical Institute (ISI), Delhi.

March 21: Presented, (with Sandhya Garg), Paper in the NCAER Brownbag Seminar, "What Drives Literacy in Villages without Schools: A Study of Indian Villages", NCAER, New Delhi.

SANDHYA GARG

Lectures/Presentations/Conferences/Seminars

2017

September 20–21: Presented Paper on "Public Debt Sustainability under Fiscal Federalism: An Analysis of Indian States", Annual Conference of Italian Society of Public Economics, University of Pavia, Italy.







2018

March 21: Presented (with Sanjukta Das), Paper on "What Drives Literacy in Villages without Schools: A Study of Indian Villages", NCAER, New Delhi.



PRABIR KUMAR GHOSH

Lectures/Presentations/Conferences/Seminars

2017

July 4: Chair, Seminar on "Mobile Data Acquisition". Speakers: Mr Ramakrishnan Selvaraj and Mr Ramesh Gopinath, Etamine PGG India Pvt Ltd, Bengaluru, NCAER, New Delhi.

November 11: Participant, "Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2017–18", India International Centre, New Delhi.

2018

February 9: Participant, The 6th C. D. Deshmukh Memorial Lecture 2018, "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February 15: Participant, Seminar on "Trends in India's Income Distribution" by Surjit S. Bhalla, NCAER, New Delhi.

March 24: participant, Workshop on "Conversation about Women's Economic Empowerment", National Data Innovation Centre (NDIC) at NCAER and Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) at the Institute of Financial Management Research, The Claridges, New Delhi.



CHARU JAIN

Positions Held

- Member of Population Association of America (PAA)
- Member of International Union for the Scientific Study of Population (IUSSP)

Lectures/Presentations/Conferences/Seminars

2017

April 27–29: Presented Poster entitled 'Measuring Educational Attainments, Disparities and Linking Socio-Economic Outcomes: An Inter-State Analysis of Secondary Education in India' at PAA 2017 International Conference, organised by Population Association of America (PAA) held in Chicago, Illinois (USA).

July 20: Delivered Lecture on "Mixed Research Methods: Study on Quality of Education and Its Determinants" at Department of Management, School of Social Science, Indira Gandhi National Open University (IGNOU), New Delhi.

December 24–28: Participated in International Training on "Survey Data Analysis Techniques" organized together by ISER- Nepal and University of Michigan at Chitwan, Nepal from 2017.

2018

January 19: Delivered Lecture on "Mixed Research Methods: Concepts and Application" at Department of Education, School of Social Science, IGNOU, New Delhi.

RAJESH KUMAR JAISWAL

Lectures/Presentations/Conferences/Seminars

2017

April 18: Participant, Meeting of Second Technical Advisory Committee, DI-LRMP Impact Assessment project, NCAER, New Delhi.

April 24, May 5, August 4, August 17, August 25, October 10, December 5, December 11: Participant, meeting with Antara Lahiri, Social Policy Specialist, Mr. K.D. Maiti, Dr Dhirendra Kumar, Dhuwarakha Sriram and Rajesh Patnaik, United Nations Children's Fund India Country Office, Lodi Estate, New Delhi.

May 8: Participant, Meeting with Senior Water and Sanitation Expert, Mr Raghavan (Swatch Bharat Mission), Ms. Shalini, participants from the World Bank (along with Prof D. B. Gupta).

June 14–16: Participant, Training Programme on "Building Capacity for Social Protection: Design and Implementation" by UNICEF at Hotel Claridges, New Delhi.

July 3: Participant, Meeting with Amol Kulkarni, Senior Policy Analyst, CUTS International, Jaipur, Deputy Head, C-CIER.

July 5: Participant, Third Technical Advisory Committee Meeting, DI-LRMP Impact Assessment Project, NCAER, New Delhi.

July 12: Participant, 14th Annual IPF Lecture titled 'Avoiding the morning-after blues: Building state capability while times are good' delivered by Lant Pritchett, Professor of the Practice of International Development and Faculty Chair at the Kennedy School and Senior Fellow at the Center for Global Development, Imperial Hotel, New Delhi.

July 20: Participant, Meeting on Education Indicators with Dr Nidhi Sabharwal, Professor, National University of Education Planning and Administration, New Delhi.

November 9: Participant, Meeting with Antara Lahiri, Social Policy Specialist, United Nations Children's Fund India Country Office, New Delhi, and Prof Michael Samson, Director, Economic Policy Research Institute, Cape Town, South Africa.

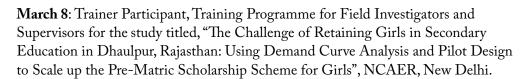
December 16: Participant, Meeting with Ashish Mukherjee, Vice President – Social & Economic Empowerment, IPE Global Limited, IPE Global House, New Delhi.

2018

January 23–24: Participant, International Symposium on "Competitiveness of North Indian States to Achieve Inclusive Growth" held at Hotel J.W. Marriott, Chandigarh.

January 31, February 2, February 14: Participant, Meeting with Mr Ashish Mukherjee, Vice President – Social & Economic Empowerment, Mr Soumen Bagchi, and Mr Subir Kole, IPE Global Limited, IPE Global House, New Delhi.





March 9: Led the Team on a visit to the village 'Raoli Kalan' (Muradnagar, Ghaziabad) for pre-testing of Household Questionnaire for the study titled, "The Challenge of Retaining Girls in Secondary Education in Dhaulpur, Rajasthan: Using Demand Curve Analysis and Pilot Design to Scale up the Pre-Matric Scholarship Scheme for Girls".



LAXMIJOSHI

Lectures/Presentations/Conferences/Seminars

2017

April 13: Presenter, Agriculture Outlook and Situation Analysis for Food Security – New Proposal for 2017–2020 by NCAER", Ministry of Agriculture and Farmers Welfare, Krishi Bhawan, New Delhi.

May 30: Presenter, NCAER: India's Agricultural Outlook and Prospects; Price Forecasting of Essential Commodities in 65th Inter Ministerial Committee to Review the Prices of Essential Commodities at Ministry of Consumer Affairs, Food and Public Distribution, Department of Consumer Affair, New Delhi.

June 12: External Expert, an Area Advisory Board Meeting for UG programme for the stream of Agricultural Economics, Industrial Economics and Development Economics at Amity School of Economics, Amity University, NOIDA, Uttar Pradesh.

July 7: Presenter, 67th Inter Ministerial Committee to Review the Prices of Essential Commodities at Ministry of Consumer Affairs, Food and Public Distribution, Department of Consumer Affairs, New Delhi.

September 11–12: Presenter, Price Forecasting of Essential Commodities in Expert Meeting on Agricultural Markets, Price Data Visualization and Early Warning System, FAO, New Delhi.

October 26: Presenter, Agriculture Outlook Report presentation prepared for the Department of Animal Husbandry, Dairying and Fisheries, Krishi Bhawan, New Delhi.

2018

March 23: Presenter, Development of Assured and Remunerative Marketing Opportunities in a Policy Dialogue on Innovations in Ensuring Remunerative Prices (MSP) to Farmers: Challenges and Strategies, organized by IFPRI, at Development of Assured and Remunerative Marketing Opportunities at NASC Complex, Pusa, New Delhi.

PRERNA PRABHAKAR

Lectures/Presentations/Conferences/Seminars

2017

April 5–6: Presented the ongoing work on impact assessment of Digital India-Land Records Modernisation Programme (DI-LRMP) at the India Land and Development Conference (ILDC) 2017, New Delhi.

April 29: Participant, Focus Group Discussion (FGD) with district revenue department officials, headed by the Deputy Commissioner of Shimla, Himachal Pradesh (as a part of DI-LRMP Impact Assessment in Himachal Pradesh).

June 24–25: Presented paper titled "Land Tenure and Agriculture Productivity: Case of India and China", at second India China Think Tanks Forum, Beijing, China.

April 2017 to September 2017: Presented the project work progress at the Technical Advisory Committee (TAC) meetings and Round Table discussion for the DI-LRMP Impact Assessment study.

October 31: Discussant, Session titled "Connecting India: Implications for Infrastructure, Digital, and Urban Development" at the NCAER-ADBI-PRI Tokyo Dialogue, Tokyo, Japan.

November 13: Presented Himachal Pradesh Impact Assessment Findings at the report release event for the DI-LRMP Impact Assessment Study, New Delhi.

December 27: Participant, Workshop to discuss issues pertaining to the World Bank's assessment of India on the "Registering Property" indicator of Ease of Doing Business (EoDB) index, organised by Department of Industrial Policy and Promotion (DIPP), New Delhi.

2018

February 20: Presented DI-LRMP Impact Assessment Synthesis Findings at Second India Land and Development Conference (ILDC), New Delhi.

February 26: Presented paper titled "Issues in Land Records Digitization: Current Status of Digitization in India and the Challenges" at National Workshop on "Land Records Management: Institutional Challenges and Issues", organised by Centre for Rural Studies, Lal Bahadur Shastri National Academy of Administration, Mussoorie.

March 23: Participant, Roundtable session to discuss the rise of trade protectionism in general and India as well as other countries' response to US's recent decision to increase tariffs on steel and aluminium, organised by Korean Embassy, New Delhi.

DEVENDER PRATAP

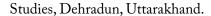
Lectures/Presentations/Conferences/Seminars

2017

April 10–11: Invited for two days lecture series on "Input-Output (I/O) Modelling and Multiplier Analysis" at Department of Economics, University of Petroleum and Energy







November 11: Participant and Chapter Contributor, "Services" for Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2017–18", India International Centre, New Delhi.



OM PRAKASH SHARMA

Lectures/Presentations/Conferences/Seminars

2017

June 8: Participant, 9th Annual G20 Conference on, "Re-imagining Globalisation", organised by Indian Council for Research on International Economic Relations (ICRIER), India Habitat Centre, New Delhi.

July 18: Participant, Workshop on "NCAER's State Investment Potential Index N-SIPI 2017", India International Centre, New Delhi.

October 6: Participant, Book Launch titled, "Measuring India: The Nation's Statistical System" by Mr. M. R. Saluja, India International Centre, New Delhi.

November 8: Participant, Book Launch, titled, "The 21st Century: Asia's?" by Mr. Rajat M. Nag, India International Centre, New Delhi.

November 11: Participant, "Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2017–18", India International Centre, New Delhi.

November 13: Participant, Workshop on "Digital India–Land Records Modernisation Programme", India International Centre, New Delhi.

November 14: Participant, Book release, titled, "India Development Report 2017", India Gandhi Institute of Development and Research, India International Centre, New Delhi.

November 17: Participant, Interaction session on "Industry Interaction on the 11th Ministerial Conference of the World Trade Organization (WTO)", Confederation of Indian Industry, addressed by Smt Rita Teaotia, Secretary, Department of Commerce and Mr J. S. Deepak, Ambassador and Permanent Representative of India to the WTO, Hotel Taj Palace, New Delhi.

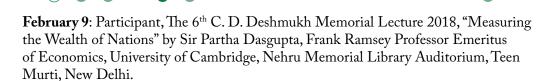
December 7: Participant, Conference on "Market Failure, Government Failure, and the Welfare of Poor People" NCAER, New Delhi.

2018

January 11: Participant, Seminar on "Impact of Micronutrient Fortification of Midday Meals: Evidence from a Randomized Control Trial in Keonjhar, Odisha", NCAER, New Delhi.

January 17: Participant, Seminar on "PRIndex: A Global Indicator of Citizens' Perceptions of Property Rights" NCAER, New Delhi.

January 19: Participant, Seminar on "Impact of SEZs on Poverty and Human Wellbeing in Undivided Andhra Pradesh" by Dr Aradhna Aggarwal, NCAER, New Delhi.



February 10: Participant, Five-Institute Budget Seminar, "The Union Budget 2018–19: Reforms and Development Perspectives", Leela Palace Hotel, New Delhi.

February 15: Participant, Seminar on "Trends in India's Income Distribution" by Dr Surjit S. Bhalla, NCAER, New Delhi.

March 6: Participant, Seminar on "New Approaches to the Financial Inclusion of Small Farmers in India" NCAER, New Delhi.

March 24: Participant, Workshop on "Conversation about Women's Economic Empowerment", National Data Innovation Centre (NDIC) at NCAER and Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) at the Institute of Financial Management Research, The Claridges, New Delhi.

ANJALI TANDON

Lectures/Presentations/Conferences/Seminars

2017

May 16: Participant, Seminar on "Energy Induced Technological Changes in Indian Economy", NCAER, New Delhi.

July 25: Delivered lecture at the 43rd Advance Professional Programme in Public Administration, "Energy Induced Technological Changes in Indian Economy", Indian Institute of Public Administration, New Delhi.

September 8: Delivered lecture at the Training Programme for Indian Revenue Service Officers, "NCAER's State Investment Potential Index: N-SIPI 2017", Indian Institute of Public Administration, New Delhi.

DINESH KUMAR TIWARI

Lectures/Presentations/Conferences/Seminars

2017

July 18: Participant, Workshop on "NCAER State Investment Potential Index (N-SIPI), 2017" at India International Centre, New Delhi.

September 12: Co-presented, Seminar on "Discussion on the Recent IHDS Migration Survey", NCAER, New Delhi.

September 19: Organised Discussion and collaboration meeting on "QCI Village Electrification Project" by Ms Jasmine Luthra (Chairman's Office), Quality Council of India, NCAER, New Delhi.

September 9: Delivered lecture on "Village Data Collection" to the survey teams of IPE Global, invitation of University of Manchester, Patna, Bihar.





October 10: Participant, "EMERGE Workshop on Measures Development and Validation", Hyatt Regency, Delhi.

October 31: Participant, Meeting with IFMR project lead Ms Sharon Buteau, Executive Director and Dr Shilpa Pandit for potential collaboration for NDIC-DMAS study, NCAER, New Delhi.

November 13: Participant, Launch of "Pilot Impact Assessment of the Digital India Land Records Modernisation Programme (DI-LRMP)" by NCAER at the India International Centre, New Delhi.

December 7: Participant, Seminar on "Market Failure, Government Failure, and the Welfare of Poor People" by Shantayanan Devarajan, World Bank, NCAER, New Delhi.

2018

January 19: Participant, Seminar on "Impact of SEZs on Poverty and Human Wellbeing

in Undivided Andhra Pradesh" by Aradhna Aggarwal, NCAER, New Delhi.

February 9: Participant, 6th C. D. Deshmukh memorial Lecture on "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

February, 15: Participant, Seminar on "Trends in India's Income Distribution" by Surjit S. Bhalla, NCAER, New Delhi.

March 6: Participant, Seminar on "New Approaches to the Financial Inclusion of Small Farmers in India" by Dr Dilip Mookherjee, Boston University, NCAER, New Delhi.

March 16: Presented, Outline of "Delhi Metropolitan Area Study of National Data Innovation Centre (NDIC-DMAS)", NCAER, New Delhi.

March 24: Participant, Workshop with IFMR on "Kathopakathan, A Conversation about Women's Economic Empowerment" organised by NCAER-NDIC and IFMR-IWWAGE, The Claridges, New Delhi.



K.S.URS

Lectures/Presentations/Conferences/Seminars

2017

July 12: Participant, 14th Annual IPF Lecture titled 'Avoiding the morning-after blues: Building state capability while times are good' delivered by Lant Pritchett, Professor of the Practice of International Development and Faculty Chair at the Kennedy School and Senior Fellow at the Center for Global Development, Imperial Hotel, New Delhi

July 18: Participant, Workshop on "NCAER State Investment Potential Index (N-SIPI), 2017" at India International Centre, New Delhi.

November 8: Participant, Book Launch, titled, "The 21st Century: Asia's?" by Mr. Rajat M. Nag, India International Centre, New Delhi.



November 13: Participant, Report launch on "Pilot impact Assessment of the Digital India Land Records Modernisation Programme (DI-LRMP)" by NCAER at the India International Centre, New Delhi.

2018

January 19: Participant, Seminar on "Impact of SEZs on Poverty and Human Wellbeing in Undivided Andhra Pradesh" by Dr. Aradhna Aggarwal, NCAER, New Delhi.

February 9: Participant, 6th C. D. Deshmukh Memorial Lecture on "Measuring the Wealth of Nations" by Sir Partha Dasgupta, Nehru Memorial Library Auditorium, Teen Murti, New Delhi.

March 22: Participant, Presentation on "SEZs and Place-based Development Policies", Ms Shree Ravi from Boston University, followed by a Brainstorming Session.

RESEARCH ANALYSTS



Mr Asrar Alam



Dr Palash Baruah



Dr Ruchi Jain



Mr Ajaya Kumar Sahu



Ms Rohini Sanyal



Ms Jaya Koti



The NCAER family

Staff and Resources

The NCAER Team

As of March 31, 2018

Regular Research Staff

Dr Shekhar Shah, Director-General

Dr Rajesh Chadha, Senior Research Counsellor

Dr Anil Kumar Sharma, Secretary and Head, Operations

Ms Akansha Dubey, Special Assistant to the Director-General (until August 2017)

Ms Anwesha Pandey, Special Assistant to the Director-General (from January 2018)

Senior Fellows

Dr Rajesh Chadha Dr Sonalde Desai

Dr Sanjib Pohit

Dr Anil Kumar Sharma

Dr Kanhaiya Singh Dr Anushree Sinha

Fellows

Dr Bornali Bhandari Dr Poonam Munjal

Mr Khursheed Anwar Siddiqui

Associate Fellows

Dr Anusha Avyukt

Dr Girish Nath Bahal

Dr Saurabh Bandyopadhyay

Dr Debasis Barik

Dr Soumya Suvra Bhadury

Dr Tarujyoti Buragohain

Dr Pallavi Choudhuri

Dr Sanjukta Das

Ms Sandhya Garg

Associate Fellows (cont'd)

Mr Prabir Kumar Ghosh

Dr Charu Jain

Dr Rajesh Kumar Jaiswal

Dr Laxmi Joshi

Dr Prerna Prabhakar

Mr Devender Pratap Mr Om Prakash Sharma

Dr Anjali Tandon

Dr Dinesh Kumar Tiwari

Mr K. S. Urs

Research Analysts

Mr Asrar Alam

Dr Palash Baruah

Dr Ruchi Jain

Mr Ajaya Kumar Sahu

Ms Rohini Sanyal

Project Analyst

Ms Jaya Koti

Non-resident, visiting and other research staff

Prof Kaushik Basu, Cornell University

Prof Jagdish Bhagwati, Columbia University

Prof Anil B. Deolalikar, University of California, Riverside

Prof Stefan Dercon, Oxford University

Prof Shantayanan Devarajan, World Bank

Prof Jeffrey Hammer, Princeton University

Prof Ravi Kanbur, Cornell University

Prof Karthik Muralidharan, University of California, San Diego

Prof Raghuram Rajan, University of Chicago

Prof Tarun Ramadorai, University of Oxford

Prof M. Govinda Rao, Former Member, 14th Finance Commission and NIPFP

Prof T. N. Srinivasan, Yale University

Distinguished Fellow

Mr Rajat M. Nag

Senior Consultants/Advisors

Prof Amaresh Dubey Prof Devendra B. Gupta Dr Prem S. Vashishtha

Consultants

Dr Gautam Kumar Das Ms Monisha Grover

Research Associates

Ms Madhura Chowdhuri Mr Neerad Deshmukh Mr Yashpal

Administrative Staff

Dr Anil Kumar Sharma Secretary and Head, Operations

Section Heads

Ms Sheena Gujral, HR Mr Rabi Narayan Panda, Finance Mr Rakesh Kumar Srivastava, IT Ms Sudesh Bala, Director-General's Office

Ms Shilpi Tripathi, Library

Editor

Ms Anupma Mehta

Senior Executives

Ms Sangita Chaudhary
Mr Ajay Gupta
Mr Pradeep Singh
Mr Girish Chander Khulbe
Dr Dalip Kumar
Mr Ravindra Sadashiv Landge
Mr Rajendra Kumar Lenka
Mr Budh Singh

Executives

Ms Shalini Aggarwal Mr Surinder Kumar
Mr Khurshid Ahmed Ms Deepa. S.
Mr Vinod Kumar Gupta Mr Niraj Kumar Singh
Mr Prem Prakash Joshi Mr Satyender Singh
Mr Ram Kumar Mr Gauravh Tandon
Mr Vipin Kumar Mr Ritesh Kumar Tripathi

Short-term administrative staff

Mr Virendra Bahadur Ms Khushvinder Kaur Mr Ram Belas Ms Shashi Singh Ms Poonam Dhawan Mr N. J. Sebastian

Director-General's Office



Shekhar Shah



Akansha Dubey (until August 2017)



Anwesha Pandey (from January 2018)



Sudesh Bala



Sangita Chaudhary



Rohini Sanyal

Secretary and Section Heads



Anil K. Sharma



Sudesh Bala



Sheena Gujral



Rabi Narayan Panda



Rakesh Srivastava



Shilpi Tripathi



NCAER Research Staff



NCAER Administrative Staff



Composition of Regular and Short-term Research Staff as of March 31, 2014–2018

I. Regular	2014	2015	2016	2017	2018
Director-General	1	1	1	1	1
Senior Fellows	6	6	6	6	6
Special Assistant to DG	-	1	1	1	1
Fellows	3	3	2	1	3
Associate Fellows	17	15	17	21	19
Research Analysts	10	8	7	5	5
Project Analyst	1	1	1	1	1
Subtotal	38	35	35	36	36
II. Other					
Distinguished Fellow, Senior Consultants/Senior Advisors	5	10	10	7	4
Consultants	8	7	7	4	2
Research Associates	5	3	7	7	3
Subtotal	18	20	24	18	9
Total (I-II)	56	55	59	54	45

Composition of Regular and Short-term Research Staff as of March 31, 2018

	A1	All Research Staff			PhDs		
	Total	Male	Female	Male	Female		
Regular	36	19	17	12	13		
Short-term	9	8	1	4	-		
Total	45	27	18	16	13		

Administrative Staff

Composition of Regular and Short-term Administrative Staff as of March 31, 2014–2018

I. Regular	2014	2015	2016	2017	2018
1. Section Heads	6	6	4	4	5
2. Level 4	1	1	1	1	1
3. Level 3	14	12	11	14	12
4. Level 2	9	8	10	12	12
Subtotal	30	27	26	31	30
II. Short-term	4	7	6	7	6
Total (I-II)	34	34	32	38	36

$Composition\ of\ Regular\ and\ Short-term\ Administrative\ Staff\ as\ of\ March\ 31,2018$

	All Support Staff			
	Total	Male	Female	
Regular	30	23	7	
Short-term	6	3	3	
Total	36	26	10	

Administrative Resources

NCAER Library and Information Services

The NCAER Library continues to evolve and deliver new richness in digital content in order to meet the information needs of the NCAER faculty and to support learning and research.

The NCAER Library, set up in 1956, is one of India's premier research libraries in applied economics. It is a storehouse of knowledge in every sense of the term, having provided constant research support for more than 60 years to NCAER's researchers as well as to policymakers, and researchers and readers from across the globe. For over five decades, the NCAER Library has been building carefully crafted collections of books, reports and other documents.

The Library continues to take the lead role in digital preservation within the Institution by ensuring the safeguarding of its valuable digital assets. The Library invested in the Open Source Software, DSpace having migrated its digital collection to DSpace 5.4 XMLUI interface, which preserves and enables easy and open access to all types of digital content including text, images, and moving images. The initial phase of preservation focused on documents, especially reports, published by the institution, and has now moved on to born digital and digitised collections from Special Collections of the Library. The Library is working towards ensuring the sustainable preservation of the digitised objects created by NCAER; a unique collection of reports, videos, photographs and audio files by developing and embedding digital preservation practices within the library and across the institution.

During 2017–18, the Library added about 600 documents, bringing its collection to approximately 32,000

volumes, over 34,100 government reports and 16,000 other documents. The NCAER Library subscribes to about 250 journals and databases like Prowess, CaPex and Economic Outlook. Access to e-journals is on the increase and access to back-file collection through Science Direct and JSTOR is also available. The Library digitised NCAER's extensive collection of published and unpublished reports, as also a series of Indian journals that are a part of the Library's invaluable document collection. As of March 31, 2018, 10 lakh digital pages have been uploaded on the digital repository.

The Library continues to expand its online journal collection giving users quick access to the latest publications. The Library now provides subscription-based access to over 1000 journals through the online databases and offers online access to 17 international and 12 Indian journals through e-subscriptions. Further, as a part of the Library's continued conservation initiatives, a number of documents of special collections were restored after an assessment of their physical condition.

While libraries will always constitute the backbone of research institutions, the current information environment has changed radically. The advent of the World Wide Web and development of commercial search engines have enabled unprecedented access to information. Digitisation has had a dramatic impact on the significance and utilisation of traditional library collections. Physical journals have been replaced with their online counterparts and many of them are now available through databases. The NCAER Library is working towards developing and implementing new strategic plans, underlining and reinforcing the shift from libraries as collections to librarians as contributors



Shilpi Tripathi *Head*



B Ramesh



Shalini Aggarwal



Ram Belas

to learning and research. In the context of the changing reading habits and information needs of the researchers, the Library will develop new models of acquisitions and collection management, adopting innovative practices within the limited budget available, which would include consolidation of services (package subscriptions for journals), demanddriven acquisitions, efficient collection space management and increased electronic interaction.

It is also important to mention the

parting of the NCAER Library from its home for the last six decades as it moved to temporary quarters in view of the construction of the new NCAER India Centre. However, with the construction on the new Centre on the verge of completion, the Library will be reincarnated with a contemporary look soon. Our focus in the coming years will therefore be on rolling out the Library's service and infrastructure initiatives supporting open access, implementing new systems for digital preservation, and facilitating easy access to research data.

NCAER Finance

NCAER's Finance Group is placed at the intersection of all research and administrative activities at NCAER, reporting directly to the Director-General and functionally to the Head of Operations. The functions it performs include financial management, treasury, budgeting, payments, control, planning, auditing, and risk-mitigation. It is also responsible for managing NCAER's corpus and all its multi-year research grants. The Finance Group is the primary contact point for NCAER's statutory auditor, S. P. Chopra and Co.

The onset of project management and civil construction work at the NCAER India Centre led to a substantial expansion of the Finance Group's responsibilities, entailing a continuous review of all running bills of the contractor and the project management

company, along with those supporting the Director-General and the Head of Operations in the course of their management of the NIC project. Already working closely with the Projects Office, the Group envisages increased interaction with the latter to streamline information flows relating to NCAER research activities and to provide management dashboard information on NCAER's ongoing and prospective research projects and activities.

The Finance Group plays a nodal role in NCAER's work on building an enterprise resource management system to bring its various research and administrative functions on a digital ERP platform that would allow for better management, control, and reporting functions across all of NCAER's activities.



Rabi Narayan Panda, *Head*



Ajay Gupta



Dalip Kumar



Vinay Kumar Sharma



Pradeep Singh

NCAER Human Resources



Sheena Gujral, Head



Girish Khulbe



Niraj Kumar Singh

- At NCAER we value our people and firmly believe that it is our human resources that help us achieve and sustain a competitive edge in the think-tank space in India and beyond. The primary goal of NCAER's HR team is to create unique work opportunities in economic policy research and a rewarding and invigorating work environment for the staff.
- The HR team spearheads high-impact initiatives catering to the unique needs and focus areas of the organisation and its members. It foresees an increased impetus in the following areas in the times to come:
- New interim grades and rationalisation of titles to facilitate staff growth as well as the creation of functional titles that emphasise the specific roles rather than levels, particularly for research staff.

- A comprehensive review of HR
 policies and procedures to make
 them consistent with modern
 practices. Ernst and Young (E&Y)
 have audited our HR processes and
 are assisting us in incorporating
 superior people practices as part of
 our HR agenda.
- A new performance management system geared towards achieving both individual and team results, honest performance feedback, career planning and growth, which is importantly, closely linked to compensation rewards.

The road ahead is challenging, beckoning us with its potential and promise to usher in wide-ranging changes. Our objectives and plans for the future would help us strengthen and redefine NCAER's culture and values. The HR team is committed to move forward along this path of transformation.



Gauravh Tandon

NCAER Publications

The Publications Unit of NCAER is the fulcrum for the dissemination of its outreach activities and comprises a vital link connecting the NCAER faculty to researchers, policymakers, the private sector, the media, and citizens both in India and abroad. The Unit is responsible for the assembly, designing, copy editing, translation, printing and production of all the books, journals, project reports, monographs, working papers, newsletters, reprints, and miscellaneous brochures brought out by NCAER.

The Unit directly handles the sales of NCAER publications, both online through NCAER's website, and through booksellers. The Unit is also responsible

for the printing and production of the various detailed questionnaires required for many of the surveys conducted by NCAER throughout the year.

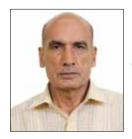
In 2017–18, the Unit produced one book, five reports, five working papers, and eleven other publications.

The Unit also published the annual editions of the India Policy Forum and The Malcolm S. Adiseshiah Mid-Year Review of the Indian Economy 2016–17, four issues of the NCAER quarterly refereed international journal, The Journal of Applied Economic Research, "Margin", and four issues of the quarterly journal, Artha Suchi.

For more information please e-mail us at publ@ncaer.org or infor@ncaer.org



Anupma Mehta *Editor*



Jagbir S. Punia *Coordinator*

Rakesh Srivastava, Head



Bijay Chouhan Data Manager



Praveen Sachdeva



Rajendra Kumar Lenka



Ritesh Kumar Tripathi

NCAER Information Technology

Rapid changes in technology are fuelling the demand for constant updation of Information Technology to ensure speedy delivery of services, optimisation of costs and access to quick solutions. In addition, the information technology available to staff at NCAER is also expected to keep pace with the constant growth and evolution of the institution.

The designing and implementation of NCAER's IT strategy is a key part of NCAER's plans for 2020. In this context, the major initiative taken by the NCAER IT Centre over the last year was to implement the state-of-the-art IT infrastructure set-up at the new NCAER India Centre (NIC). After extensive discussions and planning along with our technology advisors—Infosys and NIIT—the NIC IT Project was successfully implemented with minimal disruption for the following technologies:

- Network LAN: The objective of putting the LAN network in place was to provide 10g backbone fibre-based connectivity between the existing building and the new building using Cisco 3850 as core switches connecting to all Cisco 3650 as access switches.
- WLAN: Deployment of Cisco Wireless controller (5520 model) and the core switches provides seamless Wireless connectivity to the entire building through Cisco wireless access points (2702 and 2802) to ensure better bandwidth and signal coverage, and Wireless controller in High Availability mode to prevent any downtime for this service.
- Voice over Internet Protocol (VoIP) Facility: Cisco IP

- telephony solutions have been implemented to offer VoIP facilities using Cisco IP phones (8865, 8841 models), voice gateways, and LAN/ WAN infrastructure for complete VoIP deployment.
- Video Conferencing: The use of Cisco (SX20 and SX80 models) and Polycom (Group 700 and 500 models) video conferencing equipment enabled NCAER to connect more than 200 workshops/conferences/ meetings during the previous year with both small and large groups of people, regardless of their physical locations.
- CCTV Surveillance: In order to augment the safety and security of the entire NCAER campus and to facilitate efficient network utilization, a significant number of high-end video surveillance IP cameras (Bullet and Dome cameras) have been installed and placed at strategic points.

High-end Servers:

• Installation of four high-end Cisco servers with the latest MS 2016 Windows server Datacenter Edition as an operating system, has helped us to enhance the existing capability of network security server strength and the back-up of critical servers, as also to make our systems more efficient and robust enough to withstand internal and external abuse or attack.

The new IT infra set-up at NIC will thus facilitate increased functionality and efficiency among NCAER staff.

In addition to prioritising the implementation of the NIC IT infrastructure project, the NCAER



IT Centre delivered on other projects to meet the technology needs of researchers and administrative staff at the institution. These initiatives are briefly delineated below.

The IT Centre is ensuring the availability and reliability of high bandwidth for NCAER's research community. It is presently using 100 Mbps of Internet-leased line connectivity from the National Knowledge Network (NKN), and a 50 Mbps 1:1 leased line provided by Tata Communications. This arrangement ensures a sound back-up mechanism and uninterrupted Internet access.

The IT Centre also manages NCAER's website that is widely accessed by website visitors across the world. NCAER's communication and outreach programme also depends on support from the IT Centre.

By incorporating the latest econometric software, that is, STATA, E-Views, and SPSS, the NCAER IT Centre also provides timely, effective and collaborative IT services, solutions and strategies to assist NCAER researchers in achieving their targets and goals.

For more information, please email us at helpdesk@ncaer.org.

NCAER General Services



Sheena Gujral, Acting Head



Ravindra Sadashiv Landge



Vinod Kumar Gupta

NCAER's General Services Group is responsible for the installation and maintenance of physical facilities and equipment at NCAER.

The Group also provides full logistical, hospitality, catering, security, and travel services support to NCAER staff, including for all NCAER events at and outside NCAER and for all associated transport logistics.

The Group's functioning is vital to the smooth operation of literally all aspects of the administrative working of NCAER. This has become particularly important during the major construction phase of the NCAER India Centre as NCAER prepares for its new campus equipped with world-class facilities and substantial automation that will also

usher in changes in the way the staff would work in the new environment. The Group plays a vital role in ensuring the security of the NCAER premises, again particularly important during the NIC construction phase.

A major challenge for the Group in the coming year will be to help the Head of Operations and other Section Heads manage the move from the existing NCAER building to the new buildings and ensuring that the move is done with the least disruption to staff productivity. The next challenge will be to help manage the refurbishment of the existing NCAER building and eventually the distribution of staff and services across all three buildings of the new campus.



Prem Prakash Joshi



Vipin Kumar



Budh Singh



Ram Kumar



Satyender Singh





Surinder Kumar



Annual Accounts 2017–18

MANAGEMENT REPORT ON THE FINANCIAL ACCOUNTS FOR 2017–18

The Management of the National Council of Applied Economic Research has the responsibility for preparing the accompanying financial statements and for their integrity and objectivity. The annual accounts have being prepared in accordance with generally accepted accounting standards, applied on a consistent basis, and there are no material departures.

Management has taken proper and sufficient care, to the best of its knowledge and ability, for the maintenance of adequate accounting records for safeguarding the assets of NCAER and for preventing and detecting fraud and other irregularities. The financial statements include amounts that are based on the Management's best estimates and judgements. Management has also prepared other information in the Annual Report and is responsible for its accuracy and consistency with the financial statements.

S.P. Chopra & Co., independent auditors, appointed by the Governing Body and approved by the General Body, have audited the NCAER's 2017–18 financial statements. Management has made available to the auditors all of NCAER's financial records and related data, as well as the minutes of the General Body and Governing Body meetings. Furthermore, Management believes that all representations made to the auditors during their audit were valid and appropriate.

NCAER's Management has established a system of internal controls in order to carry on the business of NCAER in an orderly and efficient manner, ensure adherence to management policies, safeguard assets and secure, as far as possible, the completeness and accuracy of records that provide reasonable assurance as to the integrity and reliability of financial statements. The system of controls also provides for appropriate division of responsibility. Management periodically monitors the internal controls for compliance and their adequacy. The existing internal controls are also supplemented through an appropriate management reporting system.

Management also recognises its responsibility for fostering a strong ethical culture in NCAER so that its affairs are conducted according to the highest standards of personal and corporate accountability. This responsibility is characterised and reflected in NCAER's code of conduct, which includes the need for ensuring open communication within NCAER; avoiding potential conflicts of interest and compliance with all domestic and foreign laws, including those relating to financial disclosure and the confidentiality of proprietary information.

New Delhi August 28, 2018 Shekhar Shah Director-General

VALUE OF SPONSORED PROJECTS 2014–15 TO 2017–18

	Year	Value of p brought f from the p year	orward	Value of a projects reduring the	eceived	Projects complete the year	d during	Projects of forward to year	carried o the next
		No.	Rs lakh	No.	Rs lakh	No.	Rs lakh	No.	Rs lakh
	Financial Year 2017-18	5	4,747.48	5	2,466.76	8	2,049.87	2	5,164.37
	Financial Year 2016-17	8	4,370.16	8	1,643.21	11	1,265.89	5	4,747.48
,	Financial Year 2015-16*	15	3,725.22	11	1,671.83	18	1,026.89	8	4,370.16
	Financial Year 2014-15*	22	4,297.70	14	1,957.64	21	2,530.12	15	3,725.22

^{*} Including previous projects handled by the former CMCR.

Note : Self-sponsored research projects funded by NCAER $% \left(x\right) =\left(x\right) +\left(x\right) +\left($



FINANCIAL ANALYSIS 2008-09 TO 2017-18

(Rs in lakhs)

Particulars	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018
Project Revenues	1,893.28*	1,692.15*	1,913.09*	1,895.35*	2,044.17	1,382.80	1,248.78	1,554.83	1,563.65	1,294.39
Interest on Investments	239.63	73.33	84.37	100.29	101.85	222.77	309.89	278.12	212.58	217.64
Sale of Publications**	2.60	-	-	-	-	-	-	-	-	-
Others	64.22	34.06	73.26	9.24	67.04	37.08	54.39	18.68	5.85	45.21
Total Revenue	2,199.73	1,799.54	2,070.72	2,004.88	2,213.06	1,642.65	1,613.06	1,851.63	1,782.08	1,557.24
Salary Cost^	1,589.94	1,268.12	1,364.31	1,360.37	1,372.25	980.89	908.95	1,031.42	1,100.74	1,308.43
Non-Salary Cost	435.48	348.84	506.77	558.12	630.12	494.17	411.97	495.32	446.12	402.39
Depreciation	45.97	41.41	45.95	54.49	60.94	60.68	67.76	61.80	62.16	41.90
Total Expenditure	2,071.39	1,658.37	1,917.03	1,972.98	2,063.31	1,535.74	1,388.68	1,588.54	1,609.02	1,752.72
Surplus/Deficit	128.35	141.17	153.69	31.90	149.75	106.91	224.38	263.09	173.06	(195.48)
Surplus to Total Revenue	5.8%	7.8%	7.4%	1.6%	6.8%	6.5%	13.9%	14.2%	9.7%	-12.6%
Salary to Project Revenue	84.0%	74.9%	71.3%	71.8%	67.1%	70.9%	72.8%	66.3%	70.4%	101.1%
Corpus Fund	1,036.79	1,063.49	1,091.19	1,120.00	2,651.18	2,761.23	2,873.47	2,982.43	3,086.17	3,187.31
Other Grant Funds	3.30	3.30	3.30	3.30	3.30	4,750.00	6,802.34	7,170.58	7,497.74	7,737.54
Investments	1,041.73	1,068.43	1,098.44	1,126.14	2,627.24	2,658.42	2,802.24	2,920.95	3,002.73	3,108.73

Notes:

 $^{^{\}ast}$ Includes revenue of Rs 989.80 lakh, Rs 644.04 lakh, Rs 640.65 lakh & Rs 113.51 lakh from the Handloom Project in 2008-09, 2009-10, 2010-11 and 2011-12, respectively.

[^] Includes payments to external sub-contractors for field data collection.

^{**} Proceeds from Sale of Publications shown netted against expenditures on NCAER's Publications and Reports in years after 2008-09.

ACTUAL INCOME & EXPENDITURE, 2014–15 TO 2017–18 AND BUDGET 2018–19

(Rs in lakhs)

	0	1.1 131041	3D / 1 1 1		(Rs in lakhs)
PARTICULARS	Cons	olidated NCAI	ER (including (CMCR for 201	
	2014-15	2015-16	2016-17	2017-18	Budget 2018-19
INCOME	1	2	3	4	5
Research Activities	964.67	1,256.04	1,324.39	1,041.33	1,707.40
Grants - Think Tank Initiative	284.11	298.79	239.26	253.06	150.49
Membership & Subscription	0.55	0.90	1.70	-	4.00
Interest (on Investments, Saving Bank, Income Tax Refund)	295.32	278.12	212.58	217.64	201.80
Provision for estimated loss on incomplete projects written back *	53.74	-	-	27.38	-
Other Income	19.72	22.13	9.01	17.83	20.00
TOTAL	1,618.11	1,855.98	1,786.94	1,557.24	2,083.69
EXPENDITURE					
NCAER Staff Salaries & Allowances	613.80	636.08	693.61	769.03	830.56
Payment for Leave Encashment	26.90	20.02	37.02	37.12	40.00
Payment for Gratuity Expenses	20.13	10.45	17.26	81.28	34.53
Survey/Data Gathering	43.54	147.78	164.30	271.78	353.31
Payment to Analysts/Professionals	197.70	178.01	175.83	134.12	174.36
Travelling & Conveyance	79.64	84.02	86.66	77.85	81.74
Publications & Reports	5.61	4.45	5.04	2.14	3.20
Rent, Rates & Taxes	3.26	3.35	3.85	4.51	4.96
Postage, E-Mail & Website Expenses	7.93	6.51	7.96	7.67	11.50
Telephone & Fax Expenses	7.08	6.01	5.77	5.76	6.34
Stationery & Printing	27.86	42.28	28.82	22.87	26.30
Repairs & Maintenance	50.63	52.59	25.52	38.17	47.71
Periodicals & Journals	37.24	51.71	52.31	59.06	62.02
Entertainment Expenses	2.07	2.56	2.43	3.49	3.83
Car Running & Maintenance Expenses	5.85	5.17	2.44	2.78	3.47
Interest on Bank Overdraft	0.36	-	-	-	-
Payment to Auditors	1.87	1.54	2.10	2.18	2.40
Depreciation on Fixed Assets	67.76	61.80	62.16	41.90	37.71
Legal & Professional Expenses	4.75	4.86	2.04	2.23	2.24
Maintenance of Computers & Stat. Lab. Charges	17.32	16.68	23.92	22.67	27.20
Interest and Finance Charges	2.93	1.19		-	-
Miscellaneous Expenses	2.51	2.22	3.58	3.84	4.22
Workshop & Seminar	63.61	105.12	50.17	44.10	55.13
Staff Development Expenses - Advertisement, Recruitment & Training Expenditure	2.53	4.50	1.67	9.76	10.25
Staff Welfare Expenses - (including Employee Insurance Policies)	6.89	13.35	12.72	15.10	18.87
Water & Electricity	67.44	66.23	67.78	75.68	90.82
Amount Written Off	2.60	50.14	7.54	4.97	14.36
Amortisation of Premium on Investments	0.53	0.53	0.51	0.14	0.14
Estimated Cost of Incomplete Projects *	-	1.94	34.44	- 0.17	5.00
Insurance Expenses	2.17	2.31	1.20	0.45	1.50
Prior Period Expenses	1.53	0.31	0.65	0.43	1.00
Provision for Doubtful Receivables / Other Advances	6.66	1.90	27.42	-	1.50
Library Relocation Charges	4.81	5.36	5.86	6.45	7.10
Service Tax / GST expense	6.04	1.33	1.12	5.47	6.00
Interest on service tax	2.18	0.59	0.18	0.09	0.00
	4.18	0.39	0.18	0.09	15.00
Shifting charges from existing building to new building TOTAL	1,393.73	1,592.89	1 612 00	1,752.72	15.00
		1	1,613.88		1,984.27
Surplus / (Deficit)	224.38	263.09	173.06	(195.48)	99.42

^{*} Provision item.



31-F, Connaught Place New Delhi- 110 001

Tel: 91-11-23313495-6-7 Fax: 91-11-23713516 ICAI Regn.No. 000346N Web Site: www.spchopra.in E-mail: spc1949@spchopra.in

Independent Auditor's Report

To

The Members of National Council of Applied Economic Research, New Delhi

Report on the Financial Statements

We have audited the accompanying financial statements of National Council of Applied Economic Research, New Delhi (the 'Council'), which comprise the Balance Sheet as at March 31, 2018 and the Income and Expenditure Account for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

The Management of the Council is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Council in accordance with the accounting principles generally accepted in India, the Accounting Standards issued by the Institute of Chartered Accountants of India and the relevant provisions of the Societies Registration Act, 1860 and The Income Tax Act, 1961 (the 'Acts'). This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Acts for safeguarding the assets of the Council and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We have taken into account the provisions of the Acts, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Acts and the Rules made thereunder. We conducted our audit in accordance with the Standards on Auditing and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those

(Contd.)

Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Council's preparation of the financial statements that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing opinion on the effectiveness of the Council's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Management of the Council, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the financial statements are prepared, in all material respects, in accordance with the Acts, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (i) in the case of the Balance Sheet, of the state of affairs of Council as at March 31, 2018; and
- (ii) in the case of the Income and Expenditure Account, of the Deficit for the year ended on that date.

For S.P. CHOPRA & CO.

Chartered Accountants Firm ICAI Regn. No. 000346N

Sanjiv Gupta

Place: New Delhi Partner
Dated: 28th August, 2018 M. No. 083364

BALANCE SHEET AS OF 31st MARCH, 2018

Particulars	Schedule No.	As of 31st March, 2018	As of 31st March, 2017
		Rs	Rs
SOURCES OF FUNDS			
Corpus	1	318,730,546	30,861,6546
Reserves	2	141,929,985	161,477,888
Grant Funds (Restricted/Specific Purpose)	3	773,754,303	749,774,211
Total		1,234,414,834	1,219,868,645
APPLICATION OF FUNDS			
Fixed Assets	4	23,839,436	26,750,766
Capital Work-in-Progress	5	490,238,062	389,299,522
Investments	6	310,872,545	300,273,252
Net Current Assets	7	409,437,023	503,503,670
Miscellaneous Expenditure "(Premium on Investments - to the extent not written off or adjusted)"		27,768	41,435
Total		1,234,414,834	1,21,98,68,645
Significant Accounting Policies and Notes to the Accounts	14		

Schedules 1 to 14 form an integral part of the Accounts.

sd/-	sd/-	sd/-	sd/-
Rabi N. Panda	Anil K. Sharma	Shekhar Shah	Nandan M. Nilekani
Controller and	Secretary & Head,	Director General	President
Head of Finance	Operations		

As per our report of even date attached For S. P. Chopra & Co. Chartered Accountants ICAI Regn. No.000346N

sd/-

Sanjiv Gupta

Partner

M. No. 083364

Place: New Delhi

Dated: 28th August, 2018

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2018

Particulars	Schedule No.	Current Year	Previous Year
		Rs	Rs
INCOME			
Membership Subscription		-	170,000
Receipts from:			
- Research Activities		104,133,180	132,439,197
- Think Tank Initiative Project		25,305,887	23,926,125
Interest	8	21,764,193	21,258,332
Other Receipts	9	4,520,383	684,710
Total		155,723,643	178,478,364
EXPENDITURE			
Employees' Remuneration and Benefits	10	90,253,124	76,061,380
Survey / Data Gathering		27,177,519	19,651,631
Travelling & Conveyance		7,784,844	8,666,347
Payment to Analysts/ Professionals		13,412,363	14,361,506
Cost of Publications	11	213,577	2,88,339
Interest & Finance Charges	12	9,006	18,447
Administration and Other Expenses	13	32,217,755	35,858,016
Amortisation of Premium on Investments		13,667	50,848
Depreciation		4,189,691	6,215,500
Total		175,271,546	161,172,014
(Deficit) / Surplus for the Year		(19,547,903)	17,306,350
Less: Transferred to Capital Assets Fund		-	7,066,667
Add: Surplus brought forward from earliar year		71,443,820	61,204,137
Surplus carried over to Reserves		51,895,917	71,443,820
Significant Accounting Policies and Notes to the Accounts	14		

Schedules 1 to 14 form an integral part of the Accounts.

sd/sd/sd/-Rabi N. Panda Anil K. Sharma Shekhar Shah Nandan M. Nilekani Secretary & Head, Director General President Controller and Head of Finance **Operations**

As per our report of even date attached For S. P. Chopra & Co.

Chartered Accountants ICAI Regn. No.000346N

sd/-

Sanjiv Gupta

Partner

M. No. 083364

Dated: 28th August, 2018

Place: New Delhi



Schedule 1 - Corpus

Particulars	As of 1 st April, 2017	Add: Grant/ Corpus fund received during the year	Add: Interest for the year	Less: Interest transferred to Income & Expenditure Account	Interest Ploughed back to Corpus Fund	As of 31st March, 2018
	Rs	Rs	Rs	Rs	Rs	Rs
Corpus – 1						
Ford Foundation Grant -1993	8,075,779	-	-	-	-	8,075,779
Government of India Grant -1994-95	9,550,000	-	-	-	-	9,550,000
General Fund	16,323,017	-	2,584,167	2,584,167	-	16,323,017
Total Corpus-1	33,948,796	-	2,584,167	2,584,167	-	33,948,796
Corpus -2						
Sir Ratan Tata Trust Grant- 1997	9,075,000	-	711,143	640,143	71,000	9,146,000
Corpus -3						
A. Ford Foundation Grant - 2002	44,240,750	-	3,462,021	1,730,021	1,732,000	45,972,750
B. Matching contribution received (against Ford Grant) from :						
Canadian International Development Agency	8,000,000	-	-	-	-	8,000,000
Government of India Grant -2002-03	6,500,000	-	-	-	-	6,500,000
Reserve Bank of India	7,500,000	-	-	-	-	7,500,000
Interest on matching contributions ploughed back	19,705,000	-	3,398,773	1,698,773	1,700,000	21,405,000
Subtotal for matching contributions for Ford Grant	41,705,000	-	3,398,773	1,698,773	1,700,000	43,405,000
Total Corpus-3 (A+B)	85,945,750	-	6,860,794	3,428,794	3,432,000	89,377,750
Corpus – 4						
Government of India Grant- 2012-2013	179,647,000		13,221,775	6,610,775	6,611,000	186,258,000
Grand Total	308,616,546	-	23,377,879	13,263,879	10,114,000	318,730,546

Note: Refer to Note No. 4 of Schedule - '14'.

Schedule 2 - Reserves

Particulars	A 31 st Mar	s of ch, 2018	As 31 st Mar	s of ch, 2017
	Rs	Rs	Rs	Rs
Capital Assets Fund (Note):				
As per last Accounts	90,034,068		82,967,401	
Add : Transferred from Income & Expenditure Account	-	90,034,068	7,066,667	90,034,068
Surplus as per Income & Expenditure Account		51,895,917		71,443,820
Total		141,929,985		161,477,888

Note: Refer to Note No. 2 of Schedule - '14'.

Schedule 3 - Grant Funds (Restricted / Specific Purpose)

Grant	Total Grant Received	As of 31st March, 2018	As of 31st March, 2017
	Rs	Rs	Rs
2020 Capital Campaign Grant (Nilekani Gift)	500,000,000	609,611,657	585,631,565
MOF Specific Purpose Infrastructure Grant 2013-14	150,000,000	164,142,646	164,142,646
Total		773,754,303	749,774,211

Note: Refer to Note No. 5 of Schedule - '14'.

Schedule 4 - Fixed Asset

									<i>†</i>)	(Amount in Rs.)
		GROSS	GROSS BLOCK			DEPREC	DEPRECIATION		NETB	NET BLOCK
Description	As of 1st April, 2017	Additions	Sale/ Adjustment	As of 31st March, 2018	As of 1st April, 2017	For the year 2017-18	Sale/ Adjustment	As of 31st March, 2018	As of 31st March, 2018	As of 31st March, 2017
Tangible assets										
Land (Leasehold)	49,330	1	I	49,330	1	1	ı	1	49,330	49,330
Building	1,536,037	1	I	1,536,037	885,184	16,271	1	901,455	634,582	650,853
Electric Installations	2,666,562	1	1,642,004	1,024,558	2,209,052	25,973	1,444,222	790,803	233,755	457,510
Diesel Generator Set	443,820	1	443,820	ı	421,629	ı	421,629	1	1	22,191
Statistical & Laboratory	270,156	-	ı	270,156	256,648	ı	-	256,648	13,508	13,508
EDP System	42,007,941	245,000	ı	42,252,941	39,024,097	416,636	-	39,440,733	2,812,208	2,983,844
Office Equipments	15,496,439	57,710	8,200	15,545,949	8,297,770	1,077,133	7,484	9,367,419	6,178,530	7,198,669
Air Conditioner & Refrigerators	5,128,726	1	ı	5,128,726	3,597,116	153,161	ı	3,750,277	1,378,449	1,531,610
Library Books	15,775,240	951,609	ı	16,726,849	9,832,756	689,409	-	10,522,165	6,204,684	5,942,484
Motor Car	3,514,976	-	-	3,514,976	1,074,315	488,132	-	1,562,447	1,952,529	2,440,661
Motor Bike	1	126,000	1	126,000	1	25,200	1	25,200	100,800	1
Furniture & Fixtures	8,337,107	_	1	8,337,107	6,427,717	190,939	_	6,618,656	1,718,451	1,909,390
Misc. Fixed Assets	226,148	_	1	2,26,148	214,841	1	_	214,841	11,307	11,307
Intangible Assets										
Computer Software	10,581,835	118,731	1	10,700,566	7,042,426	1,106,837	-	8,149,263	2,551,303	3,539,409

Schedule 5 - Capital Work-in-Progress

26,750,766

23,839,436 26,750,766

81,599,907 79,283,551

1,873,335 351,558

4,189,691 6,215,500

79,283,551 73,419,609

 2,094,024
 105,439,343

 475,503
 106,034,317

1,499,050 7,066,667

106,034,317 99,443,153

Current Year's Total
Previous Year's Total

(
Particulars	As of 31st March, 2018	As of 31st March, 2017
	Rs	Rs
Opening Balance	389,299,522	289,319,113
Add: Additions during the year	100,938,540	103,277,973
Less : Capitalized during the year	-	3,297,564
Total	490,238,062	389,299,522

Note: Refer to Note No. 9 of Schedule -'14'.

Schedule 6 - Investments

			Corpus Kelated Investments	d Investments				E
			Corp	Corpus – 3			Investment	10tal as of
Description	Corpus-1	Corpus-2	Ford Grant	Matching Contribution	Corpus-4	Total	from own Funds	2018
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
LONG TERM INVESTMENTS (UNQUOTED)								
A. FIXED DEPOSITS								
- Housing Development Finance Corporation	7,948,000	4,221,000	11,266,000	21,845,000	I	45,280,000	1,580,000	46,860,000
- PNB Housing Finance Limited	5,160,000	170,000	1,300,000	1,300,000	1	7,930,000	50,000	7,980,000
- LIC Housing Finance Limited	8,466,000	4,385,000	8,645,000	8,865,000	ı	30,361,000	159,000	30,520,000
- Canara Bank	-	-	-		7,700,000	7,700,000	1	7,700,000
- State Bank of India	-	-	-	-	5,000,000	5,000,000	2,690,912	7,690,912
- Oriental Bank of Commerce	-	-	-	-	5,050,514	5,050,514	-	5,050,514
- Corporation Bank	-	-	-	-	3,146,024	3,146,024	-	3,146,024
- ICICI Bank	1	-	-	-	100,000,084	100,000,084	-	100,000,084
- IDFC Bank	1	224,000	4,317,500	7,344,997	52,279,514	64,166,011	-	64,166,011
B. BONDS								
- 7.5% Govt. of India - 2034	1	-	1,200,000	1,200,000	ı	2,400,000	1	2,400,000
- 8.70% Power Finance Corp. Ltd - 2020	6,985,000	1	1	1	ı	6,985,000	1	9,985,000
- 8% Saving Taxable Bonds - SBI	1	75,000	16,712,000	1,682,000	6,905,000	25,374,000	-	25,374,000
Current Year	3,15,59,000	9,075,000	43,440,500	42,236,997	180,081,136	306,392,633	4,479,912	310,872,545
Previous Year	3,15,59,000	9,000,000	41,728,500	40,554,997	172,950,843	295,793,340	4,479,912	300,273,252



Schedule 7 - Net Current Assets

Particulars		As of 31 st March, 2018		As of 31 st March, 2017	
	Rs	Rs	Rs	Rs	
CURRENT ASSETS					
Cash & Bank Balances					
Cash in Hand (inclusive of Postage Stamps)	38,305		57,273		
Balances with Scheduled Banks:					
- Savings Accounts (Including Rs. 659,844 in FCRA - INR Account)	7,984,905		90,784,270		
- Margin Money -Deposits against Bank Guarantees	5,741,778		6,409,306		
- Fixed Deposits					
- 2020 Capital Campaign Grant	302,582,641		379,596,355		
- NCAER Working Fund	48,488,802		45,692,346		
- Others	91,709,746		7,000,000		
- Current Accounts	12,485,302		27,306,037		
Cheque in Hand	1,027,827	470,059,306	9,310	556,854,897	
Interest Accrued but not due on investments and other deposits		24,271,017		17,196,699	
Receivable from Research Activities				<u> </u>	
(Unsecured)					
- Considered Good	5,361,082		5,780,473		
- Considered Doubtful	2,741,936		2,741,936		
	8,103,018		8,522,409		
Less: Provision for Doubtful Receivables	2,741,936	5,361,082	2,741,936	5,780,473	
Research Work in Progress	2,7 11,750	6,787,225	2,7 11,700	4,115,447	
Publications / Reports		1,189,559		985,143	
(As physically verified, valued and certified by the Management)		1,107,337		703,110	
Advances & Deposits					
(Unsecured - considered good)					
- Advances to Staff	115,836		22,750		
- TDS Recoverable	20,268,707		17,514,650		
- TCS Recoverable	11,323		11,323		
- Prepaid Expenses	3,199,421		3,522,314		
- Deposits	995,567		945,567		
- Other Advances	1,229,110	25,819,964	114,536	22,131,140	
Total Current Assets	1,227,110	533,488,153	111,550	607,063,799	
LESS: CURRENT LIABILITIES		333,100,133		001,003,177	
Advance - Research Activities		48,141,623		44,575,077	
Creditors for Expenses		12,607,317		1,902,027	
Liabilities towards Construction of Campus/Office Building		5,830,307		4,114,945	
Retention Money		19,069,828		17,665,895	
Provision for Estimated Loss on Incomplete Research Activities		1,115,882		3,853,465	
Provision for Leave Encashment		14,116,380		12,541,003	
Provision for Gratuity premium payable to LIC		8,128,090		1,726,323	
		· · ·			
Provision for Interest on Infrastructure loan		9,657,534		9,657,534	
Other Liabilities		5,384,169		7,523,860	
Total Current Liabilities		124,051,130 409,437,023		103,560,129	

Schedule 8 - Interest

Particulars		Current Year		Previous Year
	Rs	Rs	Rs	Rs
On Investments:				
- Corpus	23,377,879		24,028,408	
Less : Interest Ploughed back to Corpus Fund (Note-1)	10,114,000		10,374,000	
	13,263,879		13,654,408	
- Others	343,036	13,606,915	372,751	14,027,159
On Fixed Deposits with Banks:				
- 2020 Capital Campaign Grant (Note-2)	23,980,092		32,715,776	
Less: Interest Ploughed back to Grant Funds	(23,980,092)		(32,715,776)	
	-		-	
- NCAER Working Fund	3,670,680		457,342	
- Others	2,481,515	6,152,195	2,486,859	2,944,201
On Saving Bank		2,005,083		3,121,169
On Income Tax Refund				1,165,803
	Total	21,764,193		21,258,332

Note-1: Refer Schedule - '1'.

Note-2: Refer to Note No. 5.a of Schedule - '14'.

Schedule 9 - Other Receipts

Particulars	Current Year	Previous Year
Particulars	Rs	Rs
Liabilities / Provisions no longer required written back	1,191,692	263,157
Royalty on Sale of Journals	269,494	270,115
Estimated Loss on Incomplete Research Activity written back (net)	2,737,583	-
Miscellaneous Receipts	121,403	85,880
Profit on Sale / Disposal of Fixed Assets	200,211	65,558
Total	4,520,383	684,710

Schedule 10 - Employees' Remuneration and Benefits

Particulars	Current Year	Previous Year
Farticulars	Rs	Rs
Salaries & Allowances	64,520,198	58,494,324
Gratuity	8,128,090	1,726,323
Payment to Temporary / Casual Workers	7,554,202	6,355,722
Contribution to Provident Fund & Pension Fund etc.	4,828,945	4,510,874
Leave Encashment	3,711,850	3,702,286
Staff Welfare Expenses	1,509,839	1,271,851
Total	90,253,124	76,061,380



Schedule 11 - Cost of Publications / Reports

Particulars	Current Year	Previous Year
	Rs	Rs
Opening Stock	985,143	775,202
Add: Printing, Editing & Translation Expenses	430,693	504,160
	1,415,836	1,279,362
Less: Recoveries from sale/subscription	(12,700)	(5,880)
Closing Stock	(1,189,559)	(985,143)
Total	213,577	288,339

Schedule 12 - Interest & Finance Charges

Particulars	Current Year	Previous Year
	Rs	Rs
On Service Tax, GST and TDS etc.	9,006	18,447
Total	9,006	18,447

Schedule 13 - Administration and Other Expenses

D 1	Current Year		Previous Year	
Particulars	R	ls	R	ls
Rent, Rates & Taxes		450,860		385,298
Water & Electricity		7,568,387		6,777,844
Stationery & Printing		2,287,297		2,882,301
Postage, Telegram & Telephones		1,342,695		1,372,883
Repairs & Maintenance		1,325,166		969,445
Watch and Ward Expenses		2,492,017		1,582,513
Periodicals & Journals		5,906,433		5,230,890
Computer services		2,266,721		2,391,548
Legal & Professional Expenses		222,660		203,887
Seminars & Workshops		4,410,376		5,017,375
Vehicle Running & Maintenance		277,638		244,165
Entertainment Expenses		348,505		242,713
Auditor's Remuneration		-		-
- Audit Fee	165,000		150,000	
- Certification Fee	52,690	217,690	59,800	209,800
Staff Development Expenses		338,074		103,976
Advertisement		638,011		62,782
Prior Period Expenses (Net)		7,753		64,920
Provision for Doubtful Receivable/Other Advances		-		2,741,936
Estimated Loss Provided on Incomplete Research Activity		-		3,444,480
Receivables/Other amounts written off (Net of provision)		497,064		753,672
Library Relocation Charges		645,356		585,794
Service Tax /GST Expense		546,604		112,243
Insurance Expenses		44,764		119,652
Miscellaneous Expenses		383,683		357,899
Total		32,217,755		35,858,016

Schedule–14: Accounting Policies and Notes to the Accounts for the year ended 31st March, 2018

A. SIGNIFICANT ACCOUNTING POLICIES:

1. Basis of preparation of the Financial Statements:

The accompanying financial statements are prepared under the historical cost convention in accordance with Generally Accepted Accounting Principles in India ("GAAP") and on a going concern basis.

2. Use of Estimates:

The preparation of financial statements in conformity with "GAAP" in India requires the Management to make estimates and assumptions that affect the reported amount of assets and liabilities on the date of financial statements and the reported amount of revenues and expenses during the reporting period. The difference between actual results and estimates are recognised in the period in which the results are known/materialised.

3. Revenue Recognition:

- i) Income & Expenditure are recognized on an accrual basis except income pertaining to self-sponsored activities, subscription to Journals and membership subscriptions, which are accounted for on a receipt basis.
- ii) Receipts from Research Activities:
 - a) Revenue from Research Activities is recognized in proportion to the costs incurred on the activity (including cost of associated computers, equipment etc. purchased from activity funds) assuming that the costs incurred represent the corresponding progress on the Research Activity.
 - b) The difference, if any, between the contract value of the Research Activities and the revenue recognised as stated in para (a) above is recognised when the activity is completed.
 - c) Where the cost incurred is not in proportion to the progress of work, for revenue recognition actual progress, as estimated by the project team leader is taken into account.
 - d) Provision for expected overruns, if any, on incomplete Research Activities are recorded in the period in which the overruns are likely based on current estimates.
 - e) The Cost incurred on Research Activities is ascertained by applying daily or hourly rates for research staff at different levels to their actual time spent on the activity, plus direct cost of the project and the cost of common facilities and other overheads, as determined from time to time.

4. Grants:

Grants from government, other public and private entities and individuals received as a contribution to NCAER with conditions that restrict utilisation of the principal amount of grant are credited to the "Corpus Account". Grants received

to support recurring or non-recurring expenses are recognised as income in the year of receipt. Grants partially or wholly related to acquisition/construction of fixed assets are treated as 'Grant Funds (Restricted / Specific Purpose)' and are recognised as Income on a systematic basis over the useful life of the related asset.

5. Investments:

Long-term investments are primarily meant to be held over long-term period and are valued at cost. Provision is made when in the Management's opinion there is a decline, other than temporary, in the carrying value of such investments. Current investments are valued at cost or net realizable value, whichever is less. For unquoted interest-bearing bonds, the premium paid at the time of acquisition is amortized over the remaining period to the date of maturity of the bonds.

6. Fixed Assets:

- i. Fixed assets are accounted for on a historical cost basis, inclusive of all incidental and installation costs less the accumulated depreciation and impairment loss, if any.
- ii. Depreciation is provided on written-down value basis at rates shown below, retaining 5% of the original cost of the assets as residual value.

Fixed Assets	Rate (%)
Building	2.50
Electric Installation, EPABX System, Air Conditioners & Refrigerators, Library Books and Furniture & Fixture	10.00
Office Equipment	15.00
Diesel Generator Set, Statistical laboratory, and Motor Car	20.00
EDP Systems	40.00
Miscellaneous fixed Assets	25.00

- iii. Software that is not an integral part of related hardware is treated as an intangible asset and amortized over a period of five years (on a straight line basis) or its licence period, whichever is less.
- iv. In the case of additions to fixed assets during the year, depreciation is charged for the full year, and in the case of sale or deletion, no depreciation is charged in the year of sale / deletion.

7. Retirement Benefits:

- i. Gratuity to employees is funded through a Trust, which in turn has entered into a Group Gratuity Scheme with LIC of India. The liability is paid or provided based on actuarial valuation as determined by LIC under this scheme.
- ii. Contribution towards Provident Fund is recognised on the basis of the amount paid or payable by NCAER for the period during which services are rendered by the employee.
- iii. Liability for leave encashment is provided for on the basis of actuarial valuation.

8. Stock of Publications:

The stock of unsold publications is valued at cost, net of provision for old, slow and non-moving stock.

9. Borrowing Cost:

Borrowing costs that are allocated to the acquisition or construction of qualifying assets are capitalised as part of the cost of such assets. A qualifying asset is one that necessarily takes substantial period of time to get ready for intended use. All other borrowing costs are recognised as an expense in the period in which they are incurred.

10. Foreign Currency Transactions:

Transactions in foreign currencies, covering current assets and current liabilities, are accounted for at the exchange rates prevailing on the date transaction takes place. Gains and losses arising out of subsequent fluctuations in the exchange rates at the time of settlement are adjusted in the Income & Expenditures account under the respective head of account. Transactions that remain unsettled at the year-end are translated at year-end/contract rate.

B. NOTES TO ACCOUNTS:

- 1. Balances in the accounts of receivables, sundry creditors and other parties are subject to confirmation/reconciliation. The impact, if any, subsequent to the reconciliation will be taken in the year the confirmation/reconciliation is carried out, which in the view of the management will not be material.
- 2. Reserves include 'Capital Assets Fund', which represents amounts appropriated over the years towards fixed assets of NCAER. However, due to non-availability of Surplus during the current year, no amount has been transferred to the said Fund.
- 3. Foreign exchange variation gain (net) amounting to Rs. 62.69 lakhs (previous year, net gain: Rs. 11.47 lakhs) has been debited/credited to the respective heads.
- 4. Corpus in "Schedule 1" includes as under:

Corpus-1: The Ford Foundation gave an endowment grant of US\$ 250,000 (Rs. 8,075,779) in the year 1993, for publications, faculty development and other core activities. As per the terms and conditions of the grant, NCAER was to raise funds on a 1:1 basis as a matching requirement. NCAER raised this within the stipulated time through matching contributions from the Government of India.

Corpus-2: The Sir Ratan Tata Trust granted Rs.75 Lakhs in the year 1997 to enhance NCAER's library services. As per terms and conditions of this Grant, 10% of the interest earned on this Corpus fund, along with the unutilized amount of income, is to be ploughed back into the Corpus every year, a condition that is complied with every year.

Corpus-3: The Ford Foundation granted an endowment grant of US \$ 5,00,000 (Rs. 24,302,750) in the year 2002 for institutional support. As per the terms and conditions of the grant, 50% of interest earned during the year is to be ploughed back into the Corpus every year. As per the revised terms and conditions, NCAER was to raise 1:1 matching contributions, which it did within the stipulated time with matching contributions from the Canadian International Development Agency, Government of India, and the Reserve Bank of India.

- Corpus-4: Government of India, following the announcement made in the Budget 2012, released a Corpus Fund of Rs. 1,500 lakhs during 2012-13. As per the terms of sanction, the Corpus Fund is to be kept intact and the income / interest accrued from investment of the corpus fund may be utilised by NCAER to carry out research and other related activities in the field of economics and other fields consistent with NCAER's Memorandum of Association subject to certain compliances to be met from time to time. 50 % of the interest earned during the year, has been ploughed back to the Corpus, as considered appropriate by the management.
- 5. Grant Funds (Restricted / Specific Purpose) in "Schedule 3" include as under:
 - a. 2020 Capital Campaign Grant (Nilekani Gift)

A grant of Rs. 50 crore was received for the purpose of increasing NCAER's endowment to be utilized for establishment of the NCAER India Centre Campus and new research and knowledge capabilities at NCAER. 100% of the interest of Rs. 239.80 lakhs (Previous Year: Rs. 327.16 lakhs) earned during the year through placement of unused grant balances in fixed deposits with banks / housing finance companies has been ploughed back to the Grant Fund as considered appropriate by the management.

- b. MOF Specific Purpose Infrastructure Grant 2013-14
 Government of India released a non-recurring grant-in-aid of Rs. 1500 lakhs for the purposes of construction of the new Campus / Office Building. Interest of Rs. 141.43 lakhs earned through placement of unused grant balances in fixed deposits with banks in the earlier year/s, had been ploughed back to the Grant Fund in terms of the condition of the sanction.
- 6. a. The income of NCAER is exempt under Section 10(21) of the Income Tax Act, 1961, in view of its being approved by Government of India, vide their Gazette Notification dated 22.12.2010 as an organisation partly engaged in research activities under Section 35(1) (ii) of the Income Tax Act, 1961, w.e.f. 01.04.2002 (Assessment Year 2003-04) under the category of 'Other Institution'. As NCAER has fulfilled all the conditions laid down under Section 10(21), accordingly no provision for income tax is considered necessary for the current year.
 - b. The income tax assessment has been completed up to the assessment year 2015-16, wherein the income of NCAER has been held to be exempted under Section 35(1)(ii) of Income Tax Act, 1961. In respect of Assessment Years 2016-17 and 2017-18, NCAER is of the view that, as it is approved under Section 35(1) (ii), and its activities are within the ambit of Section 2(15) of Income Tax Act, 1961, exemption will be available for these years under Section 10(21), hence no provision for Income tax for these years is required to be made in the accounts.
- 7. NCAER has complied with the applicable mandatory Accounting Standards issued by the Institute of Chartered Accountants of India except accounting of certain income as per the accounting policy No. 3 (i) which are being accounted on receipt basis. The said policy of accounting of income on receipt basis is being followed by NCAER consistently.

- 8. In the opinion of the Management, Current Assets and Loans and Advances as of 31.03.2018 have a value on realization in the ordinary course of business at least equal to the amount at which they are stated in the Balance Sheet as of that date, and that all the known and ascertained liabilities and all the accrued income and expenses relating to the year ended on 31.03.2018 have been duly provided / accounted for in these Accounts.
- 9. Capital Work-in-Progress under Schedule-'5' includes the 'Pre-Operative/ Construction Expenditure Pending Allocation' as under:

	Amour	nt (Rs.)
Particulars	As of 31.03.2018	As of 31.03.2017
Interest paid on Infrastructure loan	27,141,034	27,141,034
Architect/ Consultants Fees/ Building Upgradation fees/ Soil testing/ MCD fees etc.	55,558,955	47,977,462
Printing & Stationery	126,356	110,263
Travelling & Conveyance	796,994	783,972
Watch and Ward Expenses	755,376	-
Miscellaneous Expenses	355,711	185,612
	84,734,426	76,198,343
(Less):		
Interest earned on investment of unutilised amount of the loan money	(60,045,901)	(60,045,901)
Net amount pending for allocation	24,688,525	16,152,442

10. The services provided by NCAER are taxable under the Service Tax Act (1994) with effect from July, 2012 onwards and also under Goods and Service Tax Act, 2017 (GST), which has replaced the Service Tax Act from July, 2017 onwards. Accordingly, NCAER has levied Service Tax / GST on the invoices raised to their sponsors and availed CENVAT / Input credit of the Service Tax / GST paid on the input services used for providing the taxable services and for the modernisation of its new Campus / erection of Office Building based on an expert opinion obtained from a Chartered Accountant which was obtained when the Service Tax was applicable, considering that the same principle which were applicable to then Service Tax shall now be applicable on GST.

11. Employee Benefits:

- (a) General description of the defined benefit scheme:
 - **Gratuity**: Payable on separation @ 15 days pay for each completed year of service to eligible employees who render continuous service of 3 years or more.
 - Leave Encashment: Payable on encashment during the service or on separation as per the policy to the eligible employees who have accumulated earned leaves.
- (b) Other disclosures as required under AS-15 (Revised 2005) on "Employee Benefits" in respect of defined benefit obligations are as under:-

(i) Expenses recognised in Income & Expenditure Account

Particulars	Gratuity (Rs.)		Leave Encashment (Rs.)	
	2017-18	2016-17	2017-18	2016-17
Current Service Cost	797,225	749,542	1,500,888	1,323,993
Interest cost on benefit obligation	1,504,755	1,355,928	924,272	795,505
Expected return on plan assets	(1,387,787)	(945,117)	-	-
Net actuarial (Gain) / Loss recognised in the year	7,213,897	565,970	1,286,690	1,582,788
Amount to be recognised in Income & Expenditure Account	8,128,090	1,726,323	3,711,850	3,702,286
Amount recognised in Income & Expenditure Account	8,128,090	1,726,323	3,711,850	3,702,286

ii) Change in the present value of the Defined Benefit Obligation

Particulars	Gratuity (Rs.)		Leave Encashment (Rs.)	
	2017-18	2016-17	2017-18	2016-17
Present Value of obligation at the beginning of year	18,809,445	16,949,102	12,541,003	9,943,814
Interest cost	1,504,755	1,355,928	924,272	795,505
Current Service Cost	797,225	749,542	1,500,888	1,323,993
Benefits Paid	(218,212)	(811,097)	(2,136,473)	(1,105,097)
Net actuarial (Gain) / Loss on obligation	7,213,897	565,970	1,286,690	1,582,788
Present value of the defined benefit at the end of year	28,107,110	18,809,445	14,116,380	12,541,003

iii) Change in the fair value of plan assets

Particulars	Gratuity (Rs.)		Leave En (R	cashment s.)
	2017-18	2016-17	2017-18	2016-17
Fair Value of Plan assets at the beginning of year	17,083,122	16,127,609	-	-
Expected return on plan assets	1,387,787	945,117	-	-
Contribution	1,726,323	821,493	2,136,473	1,105,097
Benefits Paid	(218,212)	(811,097)	(2,136,473)	(1,105,097)
Fair value of plan assets at the end of year	19,979,020	17,083,122	-	_

iv) The amount recognised in the Balance Sheet

Year	Present Value of obligation at the end of year (Rs.)	Fair Value of Plan assets at the end of year (Rs.)	Difference i.e. Assets/ (Liabilities) (Rs.)	Net Assets / (Liability) recognised in the balance Sheet (Rs.)				
Gratuity								
2013-14	(15,025,129)	12,776,021	(2,249,108)	(2,249,108)				
2014-15	(15,029,260)	12,909,254	(2,120,006)	(2,120,006)				
2015-16	(1,69,49,102)	1,61,27,609	(8,21,493)	(8,21,493)				
2016-17	(1,88,09,445)	1,70,83,122	(17,26,323)	(17,26,323)				
2017-18	(2,81,07,110)	1,99,79,020	(81,28,090)	(81,28,090)				
Leave Encashment								
2013-14	(8,029,924)	-	(8,029,924)	(8,029,924)				
2014-15	(9,693,218)	-	(9,693,218)	(9,693,218)				
2015-16	(99,43,814)	-	(99,43,814)	(99,43,814)				
2016-17	(1,25,41,003)	-	(1,25,41,003)	(1,25,41,003)				
2017-18	(1,41,16,380)	-	(1,41,16,380)	(1,41,16,380)				

(v) Actuarial Assumptions:

Principal assumptions used for actuarial valuation are as under:

	Gratuity		Leave Encashment		
	2017-18	2016-17	2017-18	2016-17	
Method used	Projected unit credit method				
Discount rate	7.50%	8.00%	7.73%	7.37%	
Salary Escalation	6.00%	7.00%	5.00%	5.00%	
Mortality Rate	LIC (2006-08)		IALM (2006-08)		
Withdrawal rate up to 30/44	3%/2%/1%				
and above 44 years					
Rate of return on plan assets	8%	8.15%	-	-	

12. The previous year's figures have been regrouped / rearranged wherever considered necessary.

Signatures to Schedules '1' to '14' of the Accounts

sd/- sd/- sd/- sd/
Rabi N. Panda Anil K. Sharma Shekhar Shah Nandan M. Nilekani

Controller and Secretary & Head Director-General President

Head of Finance Operations

For S.P. CHOPRA & CO.

Chartered Accountants Firm ICAI Regn. No. 000346N

sd/-

Sanjiv Gupta

Partner

M. No. 083364

Place: New Delhi Dated: 28th August, 2018

Abbreviations and Acronyms

ADB Asian Development Bank
ANU Australian National University
BCI Business Confidence Index
BES Business Expectations Survey
BMGF Bill and Melinda Gates Foundation
CAG Comptroller and Auditor General

CAPI Computer Assisted Personal Interviewing

CDDEP Centre for Disease Dynamics Economics and Policy

CEPA Centre for Poverty Analysis

CESC Calcutta Electric Supply Corporation
CII Confederation of Indian Industry
CLR Computerisation of Land Records
CPAP Centre Programme Advisor Panel

CPR Centre for Policy Research

CRCS Centre Registrar of Cooperative Societies
CSIR Council of Scientific & Industrial Research

CSO Central Statistics Office
DBT Direct Benefit Transfer

DFID Department for International Development

DGIS Directorate-General for International Cooperation, Netherland

DI-LRMP Digital India Land Record Modernisation Programme

DIPP Department of Industrial Policy and Promotion

DMAS Delhi Metropolitan Area Survey

ECRC Economic and Social Research Agency

EoDB Ease of Doing Business

EPW Economic and Political Weekly
FAO Food and Agriculture Organisation

FDI Foreign Direct Investment FGD Focus Group Discussion

FICCI Federation of Indian Chambers of Commerce and Industry

GAAP Government Accounting Standard Advisory
GAIN Green Jobs Assessment Institutions Network

GASAB Government Accounting Standards Advisory Board

GDP Gross Domestic Product GEH Gender Equity and Health

GVA Gross Value Added

HDFC Housing Development Finance Corporation

IAAE International Association of Applied Econometrics

IAPS Institute of Asia and Pacific Studies
ICAR Indian Council of Agricultural Research

ICICI Industrial Credit and Investment Corporation of India

ICSSR Indian Council of Social Science Research

ICRIER Indian Council for Research on International Economic Relations

ICT Information and Communication Technology

IDF India Development Foundation

IDFC Infrastructure Development Finance Company
IDRC International Development Research Centre

IEF International Entrepreneurship Forum

IEG Institute of Economic Growth

IFPRI International Food Policy Research Institute
IGIDR Indira Gandhi Institute of Development Research

IGNOU Indira Gandhi National Open University

IHC India Habitat Centre

IHDS India Human Development Survey

IIC India International Centre

IIPA Indian Institute of Public AdministrationILDC India Land and Development Conference

ILFS Infrastructure Leasing & Financial Services Limited

IMF International Monetary Fund

IPE Infrastructure Professionals Enterprise

IPF India Policy Forum

ISBF Indian School of Business and Finance

ISI Indian Statistical Institute

ISLE Indian Society of Labour Economics

ITC International Training Centre

IUSSP International Union for the Scientific Study of Population IWWAGE Initiative for What Works to Advance Women and Girls in the

Economy

JICA Japan International Cooperation Agency
JAER The Journal of Applied Economic Research

KAPSARC King Abdullah Petroleum Studies & Research Centre

LERO Labour Economics Research Observatory

MEAL Monitoring, Evaluation, Accountability, and Learning

MGNREGA Mahatma Gandhi National Rural Employment Guarantee Act

MPK Marginal Product of Capital
MSCS Multi-State Cooperative Societies

NABARD National Bank for Agriculture and Rural Development

NARS National Agricultural Research System

NBER National Bureau of Economic Research (Cambridge, MA)

NCAER National Council of Applied Economic Research NCDC National Cooperative Development Corporation

NDA National Democratic Alliance

NDDB National Dairy Development Board NDIC National Data Innovation Centre

NERO National Economic Research Organisations

NIC NCAER India Centre

NIIT National Institute of Information Technology
NIPFP National Institute of Public Finance and Policy
NITI National Institution for Transforming India

NKN National Knowledge Network

NLRMP National Land Records Modernisation Programme

NSDI National Spatial Data Infrastructure

N-SIPI NCAER-State Investment Potential Index

NSRD National Skills Research Division

OECD Organisation for Economic Cooperation and Development

PAA Population Association of America

PAFTAD Pacific Trade and Development Conference

PCI Political Confidence Index
PDS Public Distribution System
PRI Policy Research Institute, Japan

QCI Quality Council of India

QRE Quarterly Review of the Economy

RBI Reserve Bank of India

REDS Rural Economic and Demographic Survey

RIS Research Information Systems

RTM Real Time Mirror
SBI State Bank of India

TSA Tourism Satellite Accounts

TTI Think-Tank Initiative



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