

PANJ Newsletter

29 DEC 2024

EDITION #3

PANJ FOUNDATION | WWW.PANJ.ORG.IN



LATEST WRITING

A PUNJABI HOUSEHOLD AND IT'S BIJLI PANI STORY

by Dr Amanpreet Singh Gill & Sehaj Singh

When Greek philosopher Socrates tried to define justice, he asked the question in a gathering of Sophists. *Justice is the interest of the stronger*, said Thrasymachus. Yes, it is. If we look at the justification behind free power to farmers, Thrasymachus' logic is perfect. Big farmers represent the interests of stronger ones in the state. No party can form a government without their support. They are the brokers of power at the grassroots. A large majority of sarpanches are either big farmers or their puppets. Rural folk vote according to their dictate. Punjab politics is basically a village politics accidentally played at the planned city—Chandigarh. Agriculture acts as the mental horizon of policy makers in Punjab. It should be remembered that a big farmer in Punjab is not something like a Zamindar or feudal lord. He is defined by heavily mechanized capital intensive farming.

Contradicting Thrasymachus, Glaucon says that justice is the interest of the weaker. Since weaker people do not have enough strength, they have created the idea of something like justice. In the case of small farmers, this argument is also true. All free farm power is sustained in the name of small farmers. Small farmers shall be driven into further indebtedness and poverty if free power is withdrawn. Justice is making a perfect balance in Punjab where the interests of both stronger and weaker (farmer) is served with free power. Now who is at loss? When a ship sinks, all poor and rich passengers sink together. Rich farmer's children are leaving Punjab. Poor farmer's children are also leaving Punjab.

Current number of Punjab households can fulfill their water needs for 27 years with the same amount of water which is used for producing paddy in just one season. And nothing can stop production of paddy in Punjab if free farm power continues.

Read the complete article [here](http://www.panj.org.in): www.panj.org.in

LATEST OPPORTUNITIES

SENIOR ASSOCIATE: PROGRAM DESIGN DELIVERY

Haqdarshak Empowerment Solutions Pvt. Ltd. Graduate; Work ex: 2-4 Years in rural/community development, project management, or related field. Apply [here](#).

PROJECT LEAD

International Innovation Corps. To work on high-impact projects in New Delhi, Bhubaneswar, and Chandigarh. Application Deadline: 15th January 2025. Apply [here](#).

PROJECT MANAGER

Sunil Patodia Welfare Foundation. Conduct research on government schemes, plan and implement welfare projects, build and maintain relationships with government departments. 2-3 years required. Location: Punjab. Send CVs to: fabil.abdullakutty@arthnirmiti.com.

MUST READS

One of the challenges of economic growth is that it tends to become unequal across countries and within countries. Some regions develop more and faster than others. In the paper '*State Capital and catch up -effect*', authored by *Somdeep Chatterjee and Shubham Ojha*, to overcome these disparities, suggest that the onus of growth and development should be put more on local governments rather than on states in India. They analyse Backward Regions Grant funds (BGRF), a scheme initiated in 2007 by Ministry of Panchayati Raj Institutions. 250 districts were identified and provided grants to increase effectiveness and capabilities of village panchayats. This program was designed to help improve the ability of local governments to provide services (like building schools and roads) and manage development in poorer, less developed areas. By delving into the history of Panchayati Raj systems first as ancient institution, then as Directive principles of state policy and lastly as constitutional mandates, the authors systematically argue in favour of decentralisation of power. To ensure social justice and economic growth through, education, sanitation, health care etc. the local bodies are pitched as useful tools.



The study applies two econometric models: Difference-in-Differences (DiD) and Synthetic Difference-in-Differences (SDiD), to estimate the causal effects of the policy intervention at local government level. It showed that areas that got BGRF grew faster than areas that did not get the grant and it made them easier to 'catch up' on the growth trajectory. The outcome was measured using a proxy of 'Night time lights' for economic activity. The key findings suggested that there

was an increase in night time luminosity in BGRF districts post policy intervention. There was also 2-3% increase in the growth rate of night time lights in BGRF districts. For robustness check, the data was devoid of large values, which did not change the result. Per capita luminosity was tested as an alternative to economic growth and the results stayed the same. Lastly, extending the data period from 1992-2023 (originally 2001-2013), the results stayed consistent making the study more reliable.

Thus, the research effectively showed that improvements in local public goods particularly education and road infrastructure led to economic growth, reinforcing a strong correlation between infrastructure investment and development. All in all the study highlights the importance of local government capacity building for addressing regional disparities in development. The BGRF scheme activated the increased economic development in 'lagging' behind districts. This has far reaching policy implications as it makes a case for devolution of power and funding to local government bodies strongly. It will help poorer regions to develop faster. The local governments in such regions can provide services like schools, roads, and infrastructure which will ultimately drive economic growth.

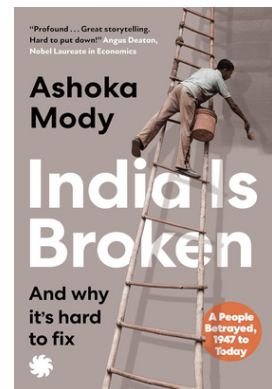
The authors attempt to gauge bureaucratic responses to the growing menace of air pollution caused by crop burning by modeling satellite and administrative data from both India and Pakistan. They assess bureaucratic responses to rising crop burning by focusing on two main factors; a) whether pollution from crop burning is more likely to affect their own (home) jurisdiction, and b) whether pollution is likely to impact neighboring jurisdictions.

[Read the complete publication here](#)

BOOK RECOMMENDATIONS



Whole Numbers and Half Truths by Rukmini S is published by Context 2021



India is Broken : A People Betrayed, 1947 to Today by Ashoka Mody is published by Juggernaut 2023

BUILDING PUNJAB'S SCIENCE, TECHNOLOGY, AND INNOVATION ECOSYSTEM

'FIVE QUESTIONS' WITH DR. JATINDER KAUR ARORA

CHAIRPERSON, ADVISORY BOARD, NORTH REGIONAL S&T CLUSTER; FORMER EXECUTIVE DIRECTOR OF PUNJAB STATE COUNCIL FOR SCIENCE & TECHNOLOGY



Q1. As the former Executive Director of PSCST, you've had a pivotal role in steering Mission Innovate Punjab. In your view, how significantly has this initiative contributed to the state's innovation ecosystem? Additionally where do you see the room for improvement to ensure its long term success?

Ans: The Mission Innovate Punjab has played a key role in synergising the Science Technology & Innovation (STI) ecosystem of the state. Also several new programs got launched such as SHE (Start ups' Handholding & Empowerment) Program for promoting tech-led women based start ups; Setting up of Rural Mileu Accelerator to support start ups, Self Help Groups and Cooperatives working for socio-economic development of rural areas.

The Mission was launched in 2019 and at that time, Punjab was at 11th rank among the major states in the India Innovation Index Ranking Framework . As a result of joint efforts by all stakeholders of the Mission, the state is now at 6th rank as per the latest available ranking of 2021. To ensure further improvement, focussed initiatives are required to align research priorities of institutions and universities in Punjab with grand challenges of the state and unmet technological needs of industry specially MSMEs.

Q2. Unlike Haryana and Himachal Pradesh, Punjab lacks dedicated policies for Biotech, IT or MSMEs. Do you believe Punjab requires these targeted frameworks, or is it charting an alternative path to innovation and growth?

Ans: The Punjab Industrial and Business Development Policy 2022 well covers the sectors like Life Sciences, IT & IT enabled services and Electronic Systems Design Manufacturing, Agri & Food processing, Technical Textiles etc. It also has dedicated section on MSMEs. The State had also given concrete recommendations for inclusion in National Science Technology & innovation Policy. Further, brainstormings are being held to develop Science Technology and Innovation Policy of the state. The framework for developing Intellectual Property Rights Policy of the state is also being chalked out. Furthermore, state specific need based policy level decisions have been taken from time to time. For example paddy straw management being a major challenge, special incentives are being offered to existing industries to switch over to paddy straw fuel based boilers. Also after demonstrating the technology for manufacturing of paddy straw pellets and their use as green fuel, Punjab is the only state which mandated partial replacement of fossil fuel with paddy straw pellets in all brick kilns in the state.

Q3. What is your assessment of STEM education in Punjab? What actionable steps can civil society, the private sector and the Government take to enhance its quality and align it with employment opportunities in the region?

Ans: The human resource generation in STEM needs to be strengthened right from the base itself. At secondary school level, only about 20% students enrol for STEM education in the state, which is quite low. The major underlying reasons include lack of awareness regarding career opportunities in STEM, lesser focus on hands-on experiential learning and students studying in Punjabi medium finding it difficult to study STEM subjects in English. The, key actionable steps on the part of State Government include i) Strengthening of infrastructure for quality education of STEM specially in Government schools, ii) development of bilingual resource material, iii) ensuring availability and exposure of science teachers. The Civil Society organisations could also play a role in inculcating scientific temper among masses.

'FIVE QUESTIONS' WITH DR. JATINDER KAUR ARORA

CHAIRPERSON, ADVISORY BOARD, NORTH REGIONAL S&T CLUSTER; FORMER EXECUTIVE DIRECTOR OF PUNJAB STATE COUNCIL FOR SCIENCE & TECHNOLOGY

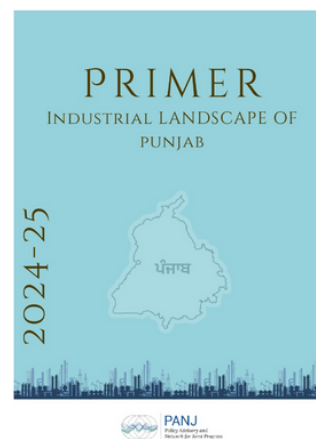
Q4. The Centre for Technology, Innovation and Economic Growth (CTIER) report highlights Punjab's low R& D Expenditure despite having 8 hi-tech , knowledge intensive R&D Centres. In your opinion, which sector - public or private is driving innovation and research in the state, and how can this momentum be expanded ?

Ans: The Gross Domestic Expenditure on R & D (GERD) as percentage of GDP of our country as a whole is quite low. It is 0.67% whereas that of countries like USA and China is 3.5% and 2.4% respectively. However, in the next 5 years, the recently formed Anusandhan National Research Foundation (ANRF) envisions to mobilise 72% of its financial resources from private sector. As such, the lack of clarity in accounting of R&D expenditure in industry and academia also leads to difficulty in bottom-up data consolidation, hence, exact statistics on R&D Expenditure are still not available. As per publication by Department of Science & Technology, Government of India R&D expenditure in Punjab was Rs 697.02 Crore in 2020-21 which is the third highest, after Gujarat and UP. A lot of efforts are being made in Punjab to enhance competitiveness of industry through technological interventions. For example Punjab State Council for Science & Technology (PSCST) and Technology Enabling Centre (TEC) of Punjab University are jointly assessing the R&D expenditure of tech-intensive industries of the state, mapping their requirements and connecting relevant knowledge institutions with them for providing the R&D support. Also, the consistent technological hand-holding being provided by PSCST results in sizeable investment on cleaner production by MSMEs every year.

Q5. Looking ahead, where do you envision Punjab's Science and Technology landscape in the next decade, particularly research and employment. What policy recommendations would you suggest for the state's administration and its people to foster this vision?

Ans: Punjab is already taking lead on many fronts. A North Regional Science and Technology Cluster has been formed with support of Principal Scientific Advisor to GoI. It is being steered by 2 premiere institutions in Punjab: Punjab University and IIT Ropar. I have recently accepted the responsibility to be the Chairperson of Advisory Board of this first Regional Cluster of India. The cluster will provide access to best of infrastructure, expertise and training to the STEM students. Also the incubation network comprising 32 incubators will strengthen the tech based startups leading to employment opportunities. Further, to make STI, the fulcrum of development in true sense, the State Government should mandate all development departments as well as district administrations to identify at least two key socio-economic challenges each every year so that real time solutions to address the same could be offered. This strength can be augmented manifolds if key knowledge institutions adopt at least one cluster each and adoption of 10 villages by each institution in its vicinity can spur tech based innovations for sustainable livelihood generation.

READ OUR LATEST PRIMER



This edition talks about existing setup, presents comparison of different states on performance and spend of municipalities, and urbanisation in Punjab. Read [here](#).

Read our previous editions [here](#).

Contact: Jkarora20@gmail.com



info@panj.org.in | [panjfoundation](http://panjfoundation.org) | PANJ Foundation