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LATEST WRITING

THE NEED TO REASSESS URBANISATION AND HOUSING IN PUNJAB

by Avishi Saini and Aryaman Setia

“Punjab has experienced incremental yet inorganic urbanisation over the past few decades, driven largely by rapid developments in urban housing and real estate.”

Punjab is experiencing a shift from an agrarian society to more of an urban-based society. According to the 2011 census, about 37.49% of Punjab's population (10.39 million people) lived in urban areas of a total population of 27.70 million. This trend continued with the urban population rising to 38.2% between 2011 and 2015. Projections indicate that urbanization will accelerate even further, with an estimated 45.5% of Punjab's population residing in urban areas between 2031 and 2035. This shift offers exciting opportunities for growth but also brings significant challenges.

Scholars have provided a series of reasons for rapid urbanization in Punjab, including a shift towards modernization and a general shift away from agricultural mode of livelihoods. Mahey and Tripathi (2016) give intriguing statistics in support. The share of agriculture in total GDP in Punjab was 48% in 1950-51 and has reduced to 19% in 2014-15. On the other hand, the percentage share of urbanization in Punjab has increased from 28% in 1981 to 38 % in 2011. Clearly, establishing and studying whether a correlation amongst these variables exists might provide more insights. Furthermore, the state is now slowly emerging as the hub of IT (Information Technology) and BPO (Business Process Outsourcing) industries. This has led to more people moving from rural areas to the cities.

Singh and Singh (2014) explain that the New Economic Policy of 1991 played a major role in this transition as it encouraged people to move to cities for better opportunities. Many were attracted by improved infrastructure, education, and job prospects. However, this rapid urban growth has also put pressure on urban housing and infrastructure. This highlights the need of planning the cities well and introducing better policies to support the rising urban population.

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

LATEST OPPORTUNITIES

PUNJAB YOUTH LEADERS PROGRAM (PYLP)

By Sanjhi Sikhiya; two-year, full-time leadership development program for individuals with strong leadership potential. Must have: Bachelors degree and individual must be under 30 years of age as of June 2025. Apply [here](#).

EMPLOYMENT AND SKILLING PUBLIC POLICY RESEARCHERS

With Future of India Foundation; Candidates should have 2+ years of experience in public policy or development economics, strong Stata/R skills, strong communication skills, and the ability to work independently. Remote work possible; travel for on-ground research when necessary. Apply [here](#).

MUST READS

A thorough and perceptive examination of India's petroleum subsidy reforms highlights the clever balancing of price, taxes, and subsidies. Anil K. Jain's paper, "*A Fine Balance: Lessons from India's Experience with Petroleum Subsidy Reforms*," published in *Energy Policy Journal*, Elsevier, provides a comprehensive overview of India's reform process in the petroleum industry from 2014 to 2017. This period was characterized by a significant decline in global oil prices, which provided a unique opportunity for the Indian government to reassess and reform its subsidy policies. The policy changes, which reduced petroleum subsidies from \$24.6 billion in 2012–13 to \$1.16 billion in 2016–17, are discussed alongside their effects on the government, oil corporations, and consumers.



Fig. 1. Price of crude oil (Indian Basket) (in US \$/barrel). Note: Price of 2017–2018 is upto 31 May. The graph only tracks yearly average prices and movements between time-periods are not tracked.
Source: Ministry of Petroleum and Natural Gas (2017), P.50.

The paper is structured around three core objectives: identifying the components of India's petroleum subsidy reforms, analysing the balancing of stakeholder interests, and deriving lessons applicable to other developing countries. It emphasizes the challenges of setting new retail pricing in a free market and dividing the benefits between the government and oil firms. Notably, it highlights the crucial role of the three government-owned Oil Marketing Companies (OMCs) that oversee the retailing of key petroleum products and ensure the availability of subsidised goods.

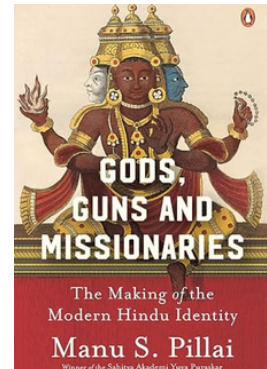
The author employs qualitative and quantitative methods to analyse fiscal data, policy documents, and stakeholder impacts. Techniques such as comparing financial indicators before and after the reforms, examining subsidy arrangements and their alignment with stakeholder priorities, and using graphical representations to illustrate trends in oil prices, taxes, and fiscal outcomes are central to the study. The relationship between state-level VAT and central excise taxes is highlighted, with the central government emerging as the primary beneficiary of the reforms. Pricing reform forms a cornerstone of the policy changes, with the gradual decontrol of fuel prices in October 2014 marking a significant milestone. Monthly price increases for kerosene and LPG were introduced to align them with market trends.

The interests of three major stakeholders are carefully balanced in the study. The government achieved significant fiscal gains through prudent planning and fiscal discipline, emerging as the primary beneficiary. Oil Marketing Companies (OMCs) also benefited substantially; their profits tripled between 2013–14 and 2016–17, and their debt levels fell by 41% during 2014–15. However, upstream companies experienced stagnation in profitability due to program limitations. While the paper underscores the stability of retail prices for gasoline and diesel, it could delve deeper into the socioeconomic impacts of rising LPG prices on marginalised groups. Noteworthy welfare initiatives, such as the Pradhan Mantri Ujjwala Yojana (PMUY), which expanded LPG coverage, address issues of fairness and energy access.

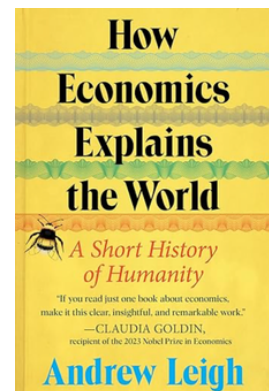
The key findings focus on taxation, subsidy, and pricing reforms. The stepwise approach to subsidy reduction underscores the value of incremental policy changes in minimising social backlash and ensuring stakeholder buy-in. The use of technology-driven systems like Direct Benefit Transfer for LPG (DBT-L) demonstrates the importance of targeted subsidies in enhancing the efficiency of welfare programs. Despite these achievements, the lack of a long-term pricing policy remains a significant gap. However, the shift towards market-driven pricing signals India's intention to align its energy sector with international standards. The study offers limited analysis of the geopolitical factors influencing India's energy policies and does not adequately examine the environmental consequences of petroleum reforms. Its replicability is hindered by insufficient methodological transparency. Future studies should explore the ecological implications of subsidy reductions and fossil fuel consumption, as well as the broader socioeconomic impacts of energy reforms. Long-term policy frameworks could also be analysed to provide a more holistic perspective. Despite these limitations, the study remains a valuable resource for academics and policymakers seeking to understand and replicate India's reform process.

[Read the complete publication here](#)

BOOK RECOMMENDATIONS



Gods, Guns and Missionaries: The Making of the Modern Hindu Identity by Manu S. Pillai is published by Penguin Random House India 2024



How Economics Explains the World: A Short History of Humanity by Andrew Leigh is published by Mariner Books 2024

CROP INSURANCE AND GROUNDWATER DEPLETION IN PUNJAB

‘FIVE QUESTIONS’ WITH DR. HARDEEP SINGH

ASSISTANT PROFESSOR, IIT JAMMU



Q1. How can the Pradhan Mantri Fasal Bima Yojana (PMFBY) be tailored to address Punjab’s unique challenges of groundwater depletion, particularly in regions dominated by water-intensive crops like paddy?

Ans: Punjab government did not participate in floating PMFBY among the farmers when the scheme was introduced in 2016. However, Punjab government has recently shown interest in implementing PMFBY for different crops. Taking into consideration this initiative of the Punjab government to implement PMFBY, in one of our papers, Kaur et al. (2024), we tried to assess the implications of PMFBY for the cotton farmers that might help to address Punjab’s unique challenges. The study finds that the PMFBY in its current format may not be sufficient to offset the losses incurred because of crop failure due to pest attacks in the case of cash crops such as cotton, for Malwa region of Punjab. The PMFBY requires some modifications in the premium rate and level of indemnity to cover the losses of agricultural households, especially in the case of cash crops. Modifying PMFBY according to the needs of the farmers will help promote crops other than paddy and can further help address groundwater depletion problems.

Q2. With the PM-KUSUM scheme promoting solar irrigation pumps, how can Punjab balance the benefits of renewable energy with the risks of exacerbating groundwater overextraction?

Ans: Punjab government has introduced the PM-KUSUM scheme to supply 20k solar pump sets to farmers at subsidized rates to reduce dependence on diesel, ensure energy and water security, and minimize environmental pollution. While this transition supports sustainability and lowers the cost of production, it also worsens Punjab’s groundwater depletion situation by making water extraction cheaper and more accessible. The government can link solar pump subsidies to efficient irrigation techniques such as drip/sprinkle irrigation systems. The government can also introduce extra incentives for farmers growing less water-intensive crops. Real-time monitoring of groundwater uses and pricing mechanisms for excess water withdrawal can discourage the overuse of water for irrigation purposes. Constructing canals wherever possible, along with the PM-KUSUM scheme, can promote less groundwater usage besides saving electricity. Solar buy-back programs can be a pathbreaking initiative to move farmers away from excess irrigation. Promoting solar-powered micro irrigation systems can help optimize water use while harnessing renewable energy.

Q3. What role can state-level groundwater management policies play in complementing crop insurance schemes to promote sustainable farming practices in Punjab?

Ans: Around 60% of the total irrigated land in India uses groundwater. India extracts around 251 km³/year of groundwater, accounting for 1/4th of the world’s groundwater extraction (NGWA, 2019). India’s western and peninsular regions contain 85% of the nation’s over-exploited groundwater blocks. Governments across northwestern regions can start promoting mixed cropping to protect the water resources and increase soil fertility. Maharashtra has promoted intercropping and agro-forestry systems to protect natural resources while reducing risks of crop failure. Punjab and Haryana have set a threshold of 11th June before which the farmers cannot start transplanting rice except the direct seeded rice. However, more comprehensive measures are needed. Crop insurance plays an important role in changing cropping patterns. Punjab has recently agreed to participate in the PMFBY. Giving subsidies on the premiums of crops might encourage the farmers to cultivate these crops.

‘FIVE QUESTIONS’ WITH DR. HARDEEP SINGH

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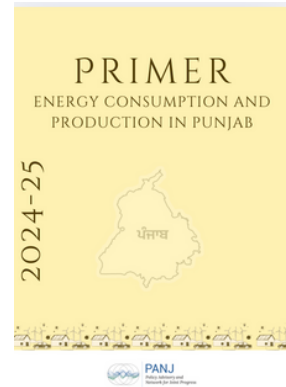
Q4. How can linking crop insurance premiums to water-use efficiency and encouraging cultivation of less water-intensive crops mitigate Punjab’s groundwater depletion crisis?

Ans: It is well-reported that the groundwater extraction rate in Punjab is 165% of the recharge rate, making it one of the most over-exploited aquifers in India. Modifying PMFBY schemes to incorporate water-use efficiency criteria for deciding premiums might be a key factor in improving water-use efficiency. By doing this, Punjab can address its groundwater depletion while ensuring the long-term sustainability of its agricultural sector. Lower premiums for water-efficient practices, such as drip irrigation, incentivize farmers to reduce water usage. Moreover, linking premiums to electricity use for agricultural operations can further help conserve groundwater resources. Similarly, shifting from water-intensive crops (i.e., rice) to less water-intensive crops (i.e., millets and pulses) can help reduce groundwater demand while conserving soil quality and enhancing yield stability. As the Punjab government has recently agreed to be part of the PMFBY, creating awareness among the farmers about this scheme’s potential benefits might help them transition from traditional agricultural practices.

Q5. What are the key challenges in raising awareness among Punjab’s farmers about sustainable groundwater usage and crop insurance benefits, and how can these be addressed effectively?

Ans: The Punjab government has been reluctant to implement PMFBY (2016). This hesitation to implement insurance programs has contributed to low awareness among farmers about the potential benefits of these insurance products. The Punjab government has recently shown interest in being part of PMFBY. Along with this, over time, the policies implemented by the state government have encouraged the overexploitation of groundwater resources. For instance, PM-KUSUM, if not properly implemented, can promote groundwater usage by making water extraction cheaper and more accessible. Given all this, many farmers in Punjab lack access to up-to-date and accurate information about sustainable groundwater usage and crop insurance options. Leveraging mobile technology and SMS alerts can be one of the pathbreaking initiatives in this direction. Moreover, farmers may not be aware of the use of less water-intensive crops. Conducting hands-on training and demonstrations in the field to showcase water-efficient technologies can help in this direction. It is often observed in Punjab that farmers are reluctant to change their traditional cultivation practices, such as rice cultivation, which are deeply ingrained in their culture. Providing financial incentives or subsidies to promote water-efficient practices or crops might be a breaking point to save water resources. From different household surveys, it is found that crop insurance schemes can be difficult to understand, leading to lower adoption rates. Providing region-specific guidance and simplifying insurance policies can encourage farmers to participate in insurance programs. Additionally, establishing local help desks to support farmers can further help in addressing these challenges.

READ OUR LATEST PRIMER



This edition presents the current state of affairs of Punjab’s installed capacity across different sources of energy, regulatory landscape, and data analysis on tariffs and consumption trends. Read [here](#).

Read our previous editions [here](#).



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