

The Sanctity of Statistics: Unpacking the Illusions in Pakistan's 113th NAC Growth Estimates

Yasir Zada Khan, Nadeem-ul-Haque

"He (Politicians) uses statistics in the same way that a drunk uses lamp posts for support rather than illumination!" – Andrew Lang

"When a measure becomes a target, it ceases to be a good measure." – Charles Goodhart

Introduction

The integrity and reliability of national income statistics are foundational to sound economic policymaking, fiscal planning, and international credibility. In Pakistan, the National Accounts Committee (NAC) is mandated to present GDP estimates that reflect the true state of economic activity across sectors. However, the figures presented in the 113th NAC meeting for FY 2024–25¹ raise methodological and empirical concerns. Despite a visible contraction in key real sectors such as important crops, large-scale manufacturing, and mining, the NAC reports a provisional GDP growth rate of 2.68% and a nominal GDP size of \$411 billion, figures that appear statistically inconsistent with observed sectoral contractions.

This paper reviews the NAC's reported growth estimates and per capita income, using a mix of official data sources, sectoral performance indicators, and established macroeconomic accounting frameworks. The review questions the coherence of the reported figures by focusing on five key areas: (1) inconsistencies between agricultural contraction and reported sectoral growth, (2) implausible volatility in the electricity, gas, and water supply sector, (3) overstatement of industrial growth despite LSM and mining decline, (4) strategic use of minimal GDP revisions to preserve political narratives, and (5) questionable conversion of GDP into dollar terms and per capita income amid currency depreciation and inflation. By dissecting these elements, the paper aims to highlight the growing need for transparency, methodological clarity, and institutional independence in national income accounting in Pakistan.

Methodology

This paper employs a multi-method approach to review the macroeconomic estimates released in the NAC. Our analysis is rooted in the foundational principles of national income accounting, enhanced through triangulation with sectoral data, administrative sources, and empirical cross-checks. The goal is to review whether the reported GDP growth rates, sectoral contributions, and derived macro indicators such as per capita income are internally consistent and empirically plausible.

At the core of this review lies the System of National Accounts (SNA 2008) framework, which guides GDP estimation through the production approach, relying on Gross Value Added (GVA) across agriculture, industry, and services. In line with this, Pakistan's national accounts adopt a Laspeyres-type volume index, using constant prices from the 2015–16 base year to measure real growth. Sectoral contributions to GDP are weighted by their base-year shares, and aggregates are formed through a summation of GVA across subsectors. In this context, we use weight-based arithmetic decomposition to review whether the sectoral performance, as reported by NAC, justifiably aligns with the overall reported GDP growth.

In the absence of micro-level data, we apply basic sensitivity analysis to simulate the potential impact of sub-sectoral changes on aggregate growth. This is particularly useful in checking whether severe contractions in key sectors (e.g., -13.49% in important crops or -1.53% in LSM as provided in the NAC can plausibly be offset by moderate gains elsewhere (e.g., livestock or construction). Sector weights were approximated based on the latest Supply and Use Tables (SUTs), PBS GDP rebasing documents (2022),² and prior National Accounts reports.

To validate nominal GDP figures and dollar-converted aggregates, we review the exchange rate assumptions and inflationary pressures that should logically influence nominal and USD-denominated output. Where exchange rate assumptions are not disclosed, we derive implied exchange rates using official GDP and per capita income figures and test them against the average interbank rate provided by SBP.

This methodology allows us to review not only whether the numbers "add up," but whether they genuinely reflect Pakistan's current economic trajectory. Importantly, we also contextualize the numbers within the political economy of statistical reporting, recognizing that in developing countries, official statistics are often vulnerable to narrative-driven manipulation, especially under fiscal pressure or during IMF program implementation.

1. Inconsistencies in Sectoral Contributions and Aggregate Growth; Discrepancy Between Agriculture Sector Contraction and Reported Aggregate Growth

The NAC has reported a +0.56% growth in agriculture and +2.68% growth in overall GDP for FY 2024-25, while simultaneously reporting a severe contraction of -13.49% in important crops, including -8.91% in Wheat, -15.4% in Maize, -30.7% in Cotton, and -3.88% in Sugarcane, respectively. Also, there is contraction of Cotton Ginning -19.03% reported in 2024-25.

Notably as in 2022-23, Wheat accounts for 9.0% of agricultural value addition and 2.2% of GDP, Cotton contributes 2.9% to agricultural value addition and 0.7% to GDP, Sugarcane represents 3.5% of agricultural value addition and 0.8% of GDP, and Maize contributes 2.9% to agricultural value addition and 0.7% to GDP.³

Given that these four crops are typically the largest contributors to agricultural Gross Value Added (GVA), ranking among the top global producers of wheat, sugarcane, and cotton,⁴ and have deep forward linkages to agro-based industry, this reported sectoral and aggregate growth presents a contradiction.⁵ If this level of crop collapse exists, shouldn't forward-linked sectors (flour mills, ginning, sugar) also reflect industrial contraction? But industrial growth is reported at +4.77%.

Even allowing generous growth in livestock +4.72%, forestry +3.03%, and fishing +1.42%, the aggregate agriculture growth of +0.56% is arithmetically dubious without highly unconventional weights or residual adjustments, none of which are disclosed.

While livestock accounts for over 60% of agricultural GVA, its reported 4.72% growth is based on fixed growth assumptions, not fresh enumeration or real-time administrative data. According to the Pakistan Economic Survey 2022–23, livestock figures rely on projections using base-year data from the Livestock Census 2006, with no recent national enumeration since. Moreover, the growth rates are interpolated or extrapolated using constant rates for cattle, buffalo, sheep, goat populations, and derived production from milk, meat, and poultry. The data on livestock is mostly based on estimates and not on direct surveys.

This creates reliability issues for policy purposes.⁶ Pakistan's livestock statistics are now 15+ years outdated. The use of such backward-looking projections in GDP accounts undermines credibility."

Thus, the livestock growth rate of +4.72% is likely mechanically smoothed, and not responsive to shocks like flood-related livestock mortality in 2022 (not fully absorbed in 2023-24 base), fodder shortages and disease outbreaks (especially Lumpy Skin Disease in cattle), feed and medicine inflation due to import restrictions etc.

Therefore, while +4.22% growth in livestock having share of 61.08% in agriculture contributes +2.88 percentage points to agriculture. It may be assumed that this contribution may not be empirically robust.

Despite livestock's growth, forward-linked industries (e.g., dairy, meat processing, leather) show no corresponding boom. Similarly, Cotton Ginning with -19.03% growth is a subsector straddling agriculture and manufacturing. If cotton production is down -30.7%, the cotton value chain, including textiles and exports, should also suffer. Yet, LSM reports growth in textiles +2.15% and apparel +7.62%, which is contradictory.

Additionally, even with 3.03% growth in forestry having share of 2.26% in agriculture and 1.42% growth in fisheries having share of 1.30% in agriculture, their contributions to agricultural growth are +0.77 percentage points and +0.02 percentage points respectively. Together: +0.09 percentage points, not material enough to offset any serious crop contraction.

Despite the arithmetic feasibility of the reported +0.56%, the magnitude of the crop sector collapse makes this growth rate highly suspect unless the livestock figures are based on extraordinary, yet undocumented, productivity gains. This reinforces the concern that statistical smoothing or residual balancing may have been employed to support a politically palatable recovery narrative, rather than reflect genuine economic performance.

2. Electricity, Gas & Water Supply (EGWS) Sector: Implausibly Volatile Growth; Contradictory Trends in EGWS Sector Estimates

According to the NAC press release and 2024-25 National Accounts Report⁷ the Q1 2024–25 EGWS growth was revised downward from +1.37% to -2.30%, in the Q2 2024–25 EGWS growth was revised from +7.71% to -3.40%, and in the 3rd quarter (Q3) 2024-25 EGWS growth was -7.72% and attributed to the decrease in output of IPPs (Thermal) and Hydro. Yet, annual EGWS growth is reported as +28.88%.

Let's assume if each quarter contributes roughly 25% of annual output, as is standard in national accounts, then the cumulative output for Q1 to Q3 amounts to only 71.6% of the previous year's total. To reach the claimed annual growth of +28.88%, Q4 output would have to grow by approximately 129% compared to the same quarter of the previous year, i.e. more than doubling in a single quarter. This level of expansion is statistically infeasible in a capital-intensive, regulated sector like EGWS, particularly given the absence of any corresponding public investment surge, infrastructure rollout, or operational data from NEPRA or the Quantum Index of Electricity Generation to support such a spike. The discrepancy strongly suggests either residual adjustments or smoothing techniques have been applied, raising serious concerns about data transparency and reliability in the national accounts.

The sector's performance is further questioned given the persistent structural challenges highlighted in NEPRA's State of Industry Report 2024,⁸ which cites a circular debt reaching Rs2.393 trillion by June

2024, exacerbated by high transmission and distribution losses and inadequate revenue recovery. Moreover, the World Bank's April 2025 Pakistan Development Update⁹ projects only modest economic growth, underscoring the absence of significant sectoral reforms. These factors collectively suggest that the reported EGWS growth may not reflect actual economic improvements but could instead result from statistical anomalies or methodological inconsistencies.

3. Industry Growth of +4.77% Lacks Basis in LSM and Mining Trends

The NAC has reported a 4.77% growth in Pakistan's industrial sector for FY 2024–25. On paper, this growth appears to stem from strong performances in electricity, gas and water supply (EGWS: +28.88%), construction (+6.61%), small-scale manufacturing (+8.81%), and slaughtering (+6.34%). However, a closer look at the data shows that this industrial expansion lacks credible support, particularly when its two largest subcomponents, i.e. Large-Scale Manufacturing (LSM) and Mining & Quarrying, either contracted or showed only marginal growth.

Manufacturing sector, which makes up approximately 65% of the industrial sector, from which Large-Scale Manufacturing is contributing around 45%,¹⁰ posted a decline of -1.53% for FY 2024–25. This decline is consistent with monthly and quarterly data published by the Pakistan Bureau of Statistics, as the overall Large Scale Manufacturing sector has shown a growth of -1.90 percent during (July-February) of 2024-25 when compared with the same period of last year. Furthermore, The LSM output decreased by 3.51% for February 2025 when compared with February 2024 and 5.90% when compared with January 2025. The LSM output decreased by 3.81 % for November, 2024 when compared with November 2023 and 1.19% when compared with October 2024.¹¹ According to the Quarterly National Accounts Report 2024-25, LSM remained weak having -0.84% growth in Q1, -2.65% growth in Q2 and -0.89% growth in Q3.

Meanwhile, Mining and Quarrying, which typically comprises 10–12% of the industrial sector, declined by -3.38% during FY 2024–25. The sector struggled with persistent challenges, including weak global commodity prices and local operational disruptions, particularly in oil and gas extraction. Despite isolated improvements in coal and limestone extraction, these gains were insufficient to counter the broader downward pull from crude oil and natural gas production. This directly contradicts the broader industrial recovery narrative.

The supposed positive drivers of growth, i.e. Construction and EGWS also present serious credibility issues. Construction growth of +6.61% is attributed to increased public and private investment, yet Public Sector Development Program (PSDP) utilization remained below 50% of allocated funds by Q3. One of the key justifications offered for the reported 6.61% growth in Pakistan's construction sector in FY 2024–25 is an increase in public development expenditure. However, this claim is contradicted by actual fiscal performance. According to official Planning Commission data, the government spent only Rs424 billion, less than 40% of the revised Rs1.1 trillion Public Sector Development Programme (PSDP) allocation, during the first nine and a half months of the fiscal year. Under the Finance Ministry's own release strategy, 60% of PSDP funds should have been utilized by this point, meaning a shortfall of at least Rs260 billion. Critical infrastructure sectors like the National Highway Authority (NHA) and the Power Division reported spending of just 33% and 53% of their respective annual allocations. Particularly in provinces and the merged districts of Khyber Pakhtunkhwa, regions heavily reliant on public investment, spending remained as low as 20–23% of allocations. In this context of severe underutilization, the official claim of

construction-led industrial revival appears economically unsound and statistically inflated.¹² Additionally, Private construction has been constrained by high interest rates (policy rate above 20%), inflationary pressures, and a sharp drop in cement. Construction activity was likely to remain subdued without significant fiscal support, which did not materialize in FY 2024–25.

Similarly, as previously discussed, the EGWS sector reportedly grew by 28.88%, its weight in industrial GVA is around 8–10%, meaning its absolute contribution to industrial growth is limited, about +2.6 percentage points at most. Meanwhile, the first three quarters of FY 2024–25 showed negative growth in EGWS: -2.30% in Q1, -3.40% in Q2, and -7.72% in Q3. For the annual figure to be accurate, Q4 would need to have posted over 129% growth, a statistically improbable turnaround with lack of corresponding evidence of record infrastructure expansion or energy production improvements.

Even summing all contributions (EGWS, construction, small-scale manufacturing), the numbers don't add up to +4.77% unless either the sectoral weights have been revised without disclosure, or unexplained residuals are driving up the headline figure. This is particularly problematic because the PBS and NAC have not released any detailed breakdowns or methodological notes explaining how these aggregates were computed.

In short, the reported industrial growth of 4.77% contradicts the actual performance of its major components. LSM and mining, which together make up nearly 75–80% of the industrial base, were either stagnant or in decline. The supposed offsetting growth in EGWS and construction lacks investment justification and operational verification. Without transparent disclosure of weights, base effects, and residual adjustments, the industrial sector's reported expansion appears more like statistical optimism than an accurate reflection of Pakistan's economic reality.

4. Base Effects and Revisions Used Strategically: A Statistical Illusion of Recovery

The NAC reported only marginal adjustments to Pakistan's annual GDP growth rates, i.e. raising FY2022–23's figure from -0.22% to -0.21%, and FY2023–24's from +2.50% to +2.51%. These changes, each just 0.01 percentage points, amount to less than PKR 12 billion in a PKR 114 trillion economy, at an exchange rate of 278 PKR/USD, and raise questions about the statistical rigor of national accounts adjustments.

In practice, such minute revisions are rare in national income accounting. Across most developing economies, GDP revisions between provisional and final estimates typically fall in the range of 0.2 to 1.0 percentage points, due to evolving data maturity, updates to deflators, improved estimation techniques, and backward linkages from revised sectoral outputs.^{13,14} By contrast, Pakistan's 0.01% revision appears mechanical rather than data-driven, especially considering the substantial sectoral shifts recorded in the same NAC meeting.

These curiously tiny adjustments also invite scrutiny from a political economy perspective. As Morten Jerven (2013) explains in *Poor Numbers*, GDP revisions in low- and middle-income countries often serve narrative goals, such as showing recovery or maintaining investor confidence, especially around sensitive political moments or during IMF programme negotiations.¹⁵ In this case, the NAC's finalization of FY2022–23's contraction at -0.21%, rather than the earlier -0.22% or -0.17+%, subtly downplays the economic underperformance of the previous government, while nudging FY2023–24's recovery figure to +2.51% from +2.50%, just in time for policy reviews and upcoming fiscal planning.

Equally concerning is the strategic use of base effects. While base effects, comparing current growth to a low or high baseline year, are valid in econometrics, they can also be used to obscure reality. By keeping FY2022–23's contraction marginal at -0.21%, the NAC has essentially manufactured a “bad base year” that amplifies growth in FY2023–24 and FY2024–25, especially in sectors like Electricity, Gas & Water Supply (EGWS), which posted a headline-grabbing +28.88% growth. This pattern mirrors refers what Jerven refers to as “defensive revisions”, minor adjustments made not to improve accuracy, but to maintain an image of macroeconomic stability or policy success.^{16,17}

More troubling is the discrepancy between sectoral and aggregate revisions. The same NAC release reported sizeable adjustments in key subsectors, i.e. Agriculture in FY2023–24 was revised from +6.18% to +6.40%, Industry from -1.65% to -1.37%, Human health from +5.99% to +3.34%. Transport & storage from +2.12% to +1.51%. In any standard aggregation framework (e.g., Laspeyres index), these sectoral changes, especially in high-weight sectors like agriculture and industry, should result in more than a 0.01 percentage point shift in the GDP growth rate. Unless perfectly offsetting adjustments were made across dozens of subcomponents (with no explanation provided), this suggests either manipulated sectoral weights or undisclosed statistical residuals were used to flatten out net changes.

It's important to present transparent reconciliation tables, clearly showing how sectoral revisions aggregate into overall GDP figures.^{18,19} Unfortunately, no such reconciliation was provided in the NAC. In an economy with over 1,000 monitored development projects, widespread sectoral variation, and fragile macroeconomic fundamentals, the idea that all changes magically cancel out to yield a 0.01% net revision strains statistical credibility.

5. Per Capita Income and GDP Size: Dollar Value Dubious

The NAC reported Pakistan's GDP at current market prices as Rs. 114.7 trillion, translating to approximately \$411 billion USD. This suggests a nominal GDP growth in USD of about 10.57% compared to the previous fiscal year. Additionally, the per capita income is reported at \$1,824 or Rs. 509,174.

The implied exchange rate used in this calculation is approximately Rs. 279.15 per USD. However, during FY 2024–25, the Pakistani Rupee experienced significant volatility, with the interbank average exchange rate hovering around Rs. 290.6 per USD, and open market rates often exceeding Rs. 295. This discrepancy raises concerns about the accuracy of the reported GDP in USD terms. Using a more realistic average exchange rate would result in a lower GDP figure in USD, potentially overstating the economic performance when using the Rs. 279.15 rate. A report by a research think tank claims the IMF's market-based exchange rate policy has kept the US dollar significantly overvalued against the Pakistani rupee by about 24% (Rs 67) over the past two years, trading at Rs 278 instead of a real value of Rs 211.5. This overvaluation, the firm argues, has worsened inflation and increased the country's debt burden by forcing higher interest rates – suggesting inflation could have turned to deflation and debt repayments could have been slashed by trillions of rupees had the rupee been at its estimated real value.²⁰

While the nominal GDP shows a substantial increase, it's essential to consider the inflationary context. Consumer Price Index (CPI) inflation during FY 2024–25 remained between 21–26%, according to the Pakistan Bureau of Statistics. Despite this high inflation, the real GDP growth is reported at only 2.68%. This disparity suggests that the nominal GDP growth is primarily driven by inflation rather than actual increases in production or services.

The reported per capita income of \$1,824 assumes a population of approximately 225.3 million. However, according to the 2023 Census, Pakistan's population was 241.5 million, growing at an estimated rate of 2% annually. This would place the mid-FY 2024–25 population around 246 million. Using this updated population figure, the per capita income would be approximately \$1,609, indicating a significant overstatement in the reported figures.

Conclusionary Remarks

The 113th NAC press release projects a narrative of cautious optimism, suggesting a recovering economy amid challenging conditions. However, a close inspection of the data, methodologies, and macroeconomic context reveals troubling inconsistencies. From the masking of crop sector collapse under livestock-led growth, to the exaggerated recovery in energy and construction sectors, and the strategic smoothing of GDP revisions, the estimates raise significant questions about the statistical credibility and governance of Pakistan's national accounts system. Moreover, the conversion of GDP into dollar terms appears to be based on a selectively applied exchange rate and outdated population assumptions, further undermining trust in the reported per capita income.

In an era where data-driven governance is indispensable, the legitimacy of economic statistics cannot be compromised by narrative management. It is imperative that Pakistan's statistical institutions adopt internationally accepted practices of transparent methodology disclosure, cross-institutional reconciliation, and independent audit of sensitive aggregates like GDP. Without these reforms, national accounts risk becoming tools of short-term messaging rather than long-term planning, a cost the country can ill afford.

¹ PRESS RELEASE (20th May 2025), NATIONAL ACCOUNTS COMMITTEE MEETING

https://www.pbs.gov.pk/sites/default/files/press_releases/2025/Press_release_for_113th_NAC_Meeting.pdf

² In early 2022, Pakistan Bureau of Statistics (PBS) completed the rebasing of GDP data, shifting the base year from 2005-06 to 2015-16.

³ Pakistan Economic Survey 2022–23. Ministry of Finance.

⁴ FAOSTAT: Country Profile – Pakistan. Food and Agriculture Organization of the United Nations.

⁵ Baig, I. A., Ullah, S., Nasir, S., & Rehman, W. U. (2022, June). Impact of major public policies on cotton production in Pakistan. In 2ND RASTA conference, 1st & Thursday 2nd June 2022, Marriott Hotel, Islamabad, Pakistan.

⁶ Punjab's Strategic Approach to CPEC for Livestock Sector Development – The Urban Unit. Discourse 2025-01, Policy and Research, Pakistan Institute of Development Economics

⁷ Q3 2024-25 National Accounts Government of Pakistan, Ministry of Planning, Development and Special Initiatives, PAKISTAN BUREAU OF STATISTICS

https://www.pbs.gov.pk/sites/default/files/national_accounts/qna/publications/QNA%20release%202024-25%20Q3.pdf

⁸ NEPRA's State of the Industry Report 2024,

<https://www.nepra.org.pk/publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202024.pdf>

⁹ World Bank's Pakistan Development Update, April 2025, Reimagining a Digital Pakistan.

<https://thedocs.worldbank.org/en/doc/e414b36ae736660edf8f0f3cb597b1e9-0310012025/original/Pakistan-Development-Update-Report-April-2025-FINAL.pdf>

¹⁰ Table 1.4, Chapter 10, Growth & Investment, Pakistan Economic Survey 2023-24.

https://www.finance.gov.pk/survey/chapter_24/1_growth.pdf#page=13.48

¹¹ Abrar. O. (April 16, 2025). Jul-Feb FY25: LSM sector contracts 1.90pc. bRecorder.

<https://www.brecorder.com/news/40357908>

¹² Rana. S. (April 18, 2025). PSDP spending fails to go beyond 40%, Coalition govt spends hardly Rs424 billion. The Express Tribune. <https://tribune.com.pk/story/2540661/psdp-spending-fails-to-go-beyond-40>

¹³ Branchi, M., Dieden, C., Haine, W., Horwáth, C., Kanutin, A., & Kezbere, L. (2007). *Analysis of revisions to general economic statistics* (No. 74). ECB occasional paper.

¹⁴ Ahmad, N., Bournot, S., & Koechlin, F. (2004, October). Revisions to quarterly GDP estimates: a comparative analysis for seven large OECD Countries. In *OECD Paper presented at OECDONS Workshop, Assessing and improving statistical quality—Revisions Analysis for the National Accounts* (pp. 7-8).

¹⁵ Jerven, M. (2013). *Poor numbers: how we are misled by African development statistics and what to do about it*. Cornell University Press.

¹⁶ BAKER, D. (2024). The Economy After GDP Revisions. *CounterPunch*.

¹⁷ Kurtz, M. J., & Schrank, A. (2007). Growth and governance: A defense. *The Journal of Politics*, 69(2), 563-569.

¹⁸ Jacobs, J. P., Sarferaz, S., Sturm, J. E., & van Norden, S. (2022). Can GDP measurement be further improved? Data revision and reconciliation. *Journal of business & economic statistics*, 40(1), 423-431.

¹⁹ Allen, R., Tang, V., Aziz, I., Maate, R., & Seeds, P. Fiscal Transparency Evaluation Update.

²⁰ IMF Conditions Keep Dollar Overvalued, Fueling Inflation in Pakistan. Tola Associates, December 5, 2024.

<https://tolaassociates.com/imf-conditions-keep-dollar-overvalued-fueling-inflation-in-pakistan/>