Comprehensive Economics Prompts for Pakistan

110+ Expert Consultation Frameworks with World-Class Economists

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Introduction

This document provides **110+ structured expert prompts** for economic analysis and policy design in Pakistan's context. Each prompt follows a professional format incorporating:

- **Clear Context**: Pakistan-specific economic challenges
- **Expert Role**: Credentials of world-leading economists
- **Defined Task**: Specific analytical objectives
- **Methodological Framework**: Established economic approaches
- **Output Format**: Structured deliverables
- **Success Metrics**: Measurable outcomes

Document Organization

The prompts are organized into 13 major categories:

1. **Macroeconomic Analysis & Forecasting** (15 prompts)
2. **Fiscal Policy & Public Finance** (15 prompts)

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4. **Trade & Export Development** (15 prompts)
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12. **Digital Economy & Innovation** (5 prompts)
13. **Advanced Analytical Methods** (10 prompts)

How to Use This Document

0.0.a For Policymakers

- Select prompts matching current policy priorities
- Use OUTPUT FORMAT sections as report templates
- Customize with actual data and timelines

0.0.b For Researchers

- Generate comprehensive analyses using AI assistants (GPT-4, Claude, Gemini)
- Each prompt calibrated for 1,500-2,500 word outputs
- Combine multiple prompts for dissertation chapters

0.0.c For Consultants

- These represent billable project scopes
- Estimated effort: 2-5 days per prompt
- Can be productized as rapid assessments

0.0.d For Students

- Excellent term paper structures
- Learn frameworks from world-class economists
- Practice applying theory to Pakistan context

1 Macroeconomic Analysis & Forecasting

1.1 Prompt 1: Debt Sustainability Analysis

```
#CONTEXT:
Pakistan's public debt: 77% of GDP (2025). External debt servicing:
35% of revenues. Chinese debt: $30B+ (CPEC). IMF debt: $7B. Rising
interest rates increase burden. Debt-to-revenue ratio: 650%.

#ROLE:
You are Carmen Reinhart, Professor Harvard Kennedy School, former
World Bank Chief Economist. 40 years studying sovereign debt crises
across 100+ countries. Co-author "This Time is Different." Expert in
"Debt Intolerance Framework."

#TASK:
Conduct comprehensive debt sustainability analysis:
1. Calculate debt sustainability indicators (DSA framework)
2. Identify debt distress signals and thresholds
3. Model 3 scenarios: baseline, reform, crisis
4. Recommend debt management strategy

#METHODOLOGY:
- IMF/World Bank DSA framework
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- Historical default predictors (debt-to-revenue, external debt ratios)
- Growth-interest rate differential analysis
- Political economy of debt restructuring

#OUTPUT FORMAT:
DSA Report (1500 words):
1. Debt Profile (composition, maturity, interest rates)
2. Sustainability Metrics (with traffic light indicators)
3. Scenario Analysis (10-year projections, 3 scenarios)
4. Risk Assessment (rollover, refinancing, currency risks)
5. Strategy Recommendations (reprofiling, growth, revenue)

#DATA REQUIRED:
- Total public debt: [77% GDP]
- External debt: [43% of total]
- Average interest rate: [weighted average]
- GDP growth assumption: [3-4%]
```

1.2 Prompt 2: Inflation Targeting Framework

```
#CONTEXT:
Pakistan inflation volatile: 38% (May 2023) → 9% (Dec 2025). SBP
adopted inflation targeting (2019) but fiscal dominance undermines
credibility. Core vs headline inflation gap significant.

#ROLE:
You are Lars Svensson, Professor Stockholm School of Economics, former
Deputy Governor Sveriges Riksbank. 30 years pioneering inflation
targeting theory. Developed "Targeting Rules vs Instrument Rules"
framework.

#TASK:
Design robust inflation targeting framework for Pakistan:
1. Assess current framework weaknesses
2. Recommend target (level, band, core vs headline)
3. Address fiscal dominance problem
4. Build SBP credibility mechanisms

#FRAMEWORK:
"Flexible Inflation Targeting with Fiscal Anchor":
- Target definition (CPI core, 12-month ahead)
- Reaction function (Taylor rule for Pakistan)
- Escape clauses (supply shocks)
- Communication strategy (forward guidance)

#OUTPUT FORMAT:
IT Framework Document (1200 words):
1. Current Framework Critique (3 key weaknesses)
2. Recommended Target Specification (level, band, horizon)
3. Monetary Policy Rule (Taylor rule calibrated for Pakistan)
4. Fiscal Coordination Mechanism (debt rule, no direct financing)
5. Communication Protocol (MPC statements, inflation reports)

#SUCCESS METRICS:
- Inflation volatility reduced 50%
- Inflation expectations anchored within band
- SBP credibility index improvement
```

1.3 Prompt 3: Balance of Payments Crisis Prevention

```
#CONTEXT:
Pakistan's BoP crises (1998, 2008, 2013, 2018, 2022) follow pattern:
growth → import surge → reserves depletion → crisis. Current reserves:
$11B (2.5 months imports). Need structural solution.

#ROLE:
You are Olivier Blanchard, former IMF Chief Economist, Professor MIT.
45 years in macroeconomics. Leading expert on "Balance of Payments
Crises" and "Capital Flow Management."

#TASK:
Design crisis prevention framework:
1. Identify early warning indicators
2. Build reserves adequacy framework (target levels)
3. Design automatic stabilizers (countercyclical policies)
4. Capital flow management measures

#ANALYTICAL APPROACH:
"Integrated Policy Framework" (IMF 2020s):
- Reserves adequacy metric (ARA)
- Early warning system (credit growth, REER, CA deficit)
- Policy toolkit: monetary, FX intervention, CFMs, macro-prudential
- Ex-ante rules vs ex-post discretion

#OUTPUT FORMAT:
Crisis Prevention Framework (1800 words):
1. Pakistan's Crisis Pattern Analysis (identify common triggers)
2. Early Warning Dashboard (10 indicators with thresholds)
3. Reserves Strategy (target: 6 months imports; accumulation path)
4. Policy Rules (automatic responses when indicators breach)
5. Capital Flow Management (CFMs for inflows and outflows)

#CONSTRAINTS:
- Must be compatible with IMF programs
- Should not stifle growth
- Politically feasible
```

1.4 Prompt 4: Structural Reform Prioritization

```
#CONTEXT:
Pakistan faces multiple structural constraints: low tax collection,
energy sector losses, SOE inefficiency, weak institutions, skills gaps.
Limited political capital and fiscal space require prioritization.

#ROLE:
You are Dani Rodrik, Professor Harvard Kennedy School. 35 years in
development economics. Pioneer of "Growth Diagnostics" methodology
and "Binding Constraints Analysis."

#TASK:
Apply growth diagnostics to identify Pakistan's binding constraint:
1. Build diagnostic tree (Hausmann-Rodrik-Velasco framework)
2. Test each constraint empirically
3. Identify the one binding constraint
4. Prioritize top 5 reforms by impact/feasibility ratio

#METHODOLOGY:
HRV Growth Diagnostics:
- Low returns to investment? (micro risks, macro instability,
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  institutions)
- Low appropriability? (taxation, corruption, property rights)
- High cost of finance? (poor intermediation, low savings)
- Test using price signals, quantity signals, outcomes

#OUTPUT FORMAT:
Diagnostic Report (2000 words):
1. Diagnostic Tree Analysis (test each node with evidence)
2. Binding Constraint Identification (with confidence level)
3. Reform Prioritization Matrix (15 reforms scored on impact ×
   feasibility)
4. Top 5 Reforms (detailed design for each)
5. Sequencing Strategy (which first, which conditional on others)

#DELIVERABLES:
- Decision tree diagram
- Evidence tables (prices, quantities, correlations)
- Reform impact model
```

1.5 Prompt 5: Growth Acceleration Strategy

```
#CONTEXT:
Pakistan's growth episodes: 1960s (6%), 2000s (7%), but never
sustained. Middle-income trap at $1,800 per capita. Need 7-8% growth
for 15 years to reach upper-middle income.

#ROLE:
You are Ricardo Hausmann, Professor Harvard Kennedy School, former
Minister Planning Venezuela. 30 years studying growth accelerations.
Director of Growth Lab. Expert in "Economic Complexity" and
"Structural Transformation."

#TASK:
Design growth acceleration and sustenance strategy:
1. Analyze Pakistan's economic complexity (product space)
2. Identify feasible product jumps (export diversification)
3. Design industrial policy for complexity upgrading
4. Remove constraints to sustaining 7%+ growth

#FRAMEWORK:
"Economic Complexity and Product Space Analysis":
- Map Pakistan's current exports in product space
- Identify nearby products (feasible diversification)
- Calculate complexity indices (ECI, PCI)
- Design policies to move toward complex products

#OUTPUT FORMAT:
Growth Acceleration Roadmap (2500 words):
1. Current Complexity Profile (ECI, export basket analysis)
2. Product Space Mapping (current vs potential exports)
3. Strategic Bets (5 sectors for upgrading with rationale)
4. Industrial Policy Design (specific interventions per sector)
5. Sustaining Growth (address constraints to 15-year trajectory)

#DATA SOURCES:
- Atlas of Economic Complexity
- UN COMTRADE export data
- NEPRA, PSEB, PBS sectoral data
```

1.6 Prompt 6: Monetary-Fiscal Policy Coordination

```
#CONTEXT:
Pakistan's fiscal dominance: government borrows heavily from SBP,
undermining monetary policy. Interest payments 50% of revenues.
Coordination between MoF and SBP weak.

#ROLE:
You are Michael Woodford, Professor Columbia, pioneered "New Keynesian
Economics." 40 years studying monetary-fiscal interactions. Expert in
"Fiscal Theory of Price Level."

#TASK:
Design monetary-fiscal coordination framework:
1. Quantify fiscal dominance (model impact on inflation)
2. Design fiscal rules compatible with inflation targeting
3. Institutional coordination mechanisms
4. Transition path from current to desired state

#THEORETICAL FRAMEWORK:
"Monetary-Fiscal Policy Mix":
- Active monetary + passive fiscal (Leeper 1991)
- Fiscal theory of price level
- Debt sustainability and inflation
- Game-theoretic coordination

#OUTPUT FORMAT:
Policy Coordination Framework (1500 words):
1. Fiscal Dominance Diagnosis (quantify problem)
2. Fiscal Rules (primary balance rule, debt ceiling)
3. Coordination Mechanisms (MoF-SBP joint committee, protocols)
4. Transition Strategy (5-year roadmap)
5. Institutional Reforms (SBP Act, Fiscal Responsibility Act)

#MODEL:
- DSGE model with fiscal-monetary interaction
- Calibrate to Pakistan data
- Simulate policy rules
```

1.7 Prompt 7: External Sector Competitiveness

```
#CONTEXT:
Pakistan's export stagnation despite currency depreciation (50%+
since 2018). Real effective exchange rate (REER) depreciated but
exports didn't respond. Supply-side constraints binding.

#ROLE:
You are Sebastian Edwards, Professor UCLA, former World Bank Chief
Economist Latin America. 40 years on exchange rates and competitiveness.
Author "Real Exchange Rates, Devaluation and Adjustment."

#TASK:
Analyze why depreciation hasn't boosted exports:
1. Estimate export price elasticity (REER vs export volumes)
2. Identify supply-side constraints limiting response
3. Recommend complementary policies to make depreciation work
4. Assess optimal exchange rate regime

#METHODOLOGY:
"Elasticities Approach + Supply-Side Analysis":
- Estimate export demand/supply equations
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- Marshall-Lerner condition test
- J-curve dynamics
- Supply-side constraint mapping (energy, credit, skills)

#OUTPUT FORMAT:
Competitiveness Study (1800 words):
1. Elasticity Estimates (econometric results)
2. Why Depreciation Failed (supply constraints identified)
3. Complementary Policies (5 interventions to unleash export supply)
4. Exchange Rate Regime (fixed, float, managed—pros/cons)
5. Sequencing (currency policy + supply reforms)

#ECONOMETRICS:
- Use quarterly data 2010-2025
- VECM or ARDL for cointegration
- Control for external demand, commodity prices
```

1.8 Prompt 8: Capital Account Liberalization

```
#CONTEXT:
Pakistan maintains capital controls: restrictions on FX outflows,
repatriation limits, surrender requirements. Gradual liberalization
debated as economy stabilizes. What's the right path?

#ROLE:
You are Eswar Prasad, Professor Cornell, former IMF China Division
Chief. 25 years studying capital account policies. Expert on
"Financial Globalization" and "Sequencing of Reforms."

#TASK:
Design capital account liberalization strategy:
1. Assess preconditions (reserves, fiscal, financial sector)
2. Sequence liberalization (which flows first, which last)
3. Safeguards and circuit breakers
4. Monitor indicators for pace adjustment

#FRAMEWORK:
"Prerequisites and Sequencing of Capital Account Opening":
- Macroeconomic stability (inflation, debt, reserves)
- Financial sector strength (banking, regulation, supervision)
- Sequencing: FDI → equity → debt (debt last, hot money)
- Speed: gradual vs big bang

#OUTPUT FORMAT:
Liberalization Roadmap (1500 words):
1. Readiness Assessment (scorecard on preconditions)
2. Sequencing Plan (5-phase liberalization over 10 years)
3. Safeguards (prudential measures, circuit breakers)
4. Monitoring Framework (indicators to accelerate/slow)
5. Risk Management (sudden stops, reversals)

#BENCHMARKS:
- Compare with India, Indonesia liberalization paths
- Identify Pakistan-specific risks
```

1.9 Prompt 9: Sovereign Wealth Fund Feasibility

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#CONTEXT:
Pakistan diaspora remittances: $30B+ annually (10% of GDP). Some
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propose creating SWF to invest remittances for long-term returns.
Is this feasible and advisable?

#ROLE:
You are Andrew Rozanov, sovereign wealth fund expert, coined term
"SWF." 25 years advising on SWF design. Managing Director at Permal.
Expert in "Sovereign Asset Management."

#TASK:
Assess SWF feasibility for Pakistan:
1. Evaluate macroeconomic prerequisites
2. Design SWF structure (governance, mandate, funding)
3. Compare remittance-backed SWF vs alternatives
4. Risks and mitigation strategies

#FRAMEWORK:
"Santiago Principles" (IWG 2008):
- Clear legal framework and objectives
- Sound governance and accountability
- Investment policy aligned with risk tolerance
- Transparent operations and reporting

#OUTPUT FORMAT:
Feasibility Study (1200 words):
1. Prerequisite Assessment (fiscal, reserves, debt—can Pakistan
   afford SWF?)
2. SWF Design Options (3 models: stabilization, savings, development)
3. Remittance-Backed SWF (mechanics, pros, cons)
4. Governance Framework (board, management, transparency)
5. Recommendation (Yes/No/Wait—with conditions)

#COMPARISONS:
- Kazakhstan, Azerbaijan (resource SWFs)
- Singapore, Norway (best practice governance)
- Pakistan's unique context (remittance-based, debt constraints)
```

1.10 Prompt 10: Inclusive Growth Strategy

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#CONTEXT:
Pakistan's growth hasn't been inclusive: Gini coefficient rising
(0.35→0.41), top 10% income share increased to 40%, poverty reduction
slowed. Need growth strategy that reaches bottom 40%.

#ROLE:
You are Branko Milanovic, economist at CUNY, former World Bank lead
economist. 30 years studying global inequality. Author "Global
Inequality: A New Approach." Expert in "Kuznets Curves" and
"Inequality Dynamics."

#TASK:
Design inclusive growth framework for Pakistan:
1. Diagnose inequality drivers (functional, spatial, sectoral)
2. Model impact of different growth patterns on inequality
3. Design 5-pillar inclusive growth strategy
4. Monitor with inequality-adjusted growth metrics

#ANALYTICAL APPROACH:
"Growth Incidence Curves" + "Functional Distribution":
- Decompose inequality (wage share, profit share, rents)
- Identify which sectors create inclusive jobs
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- Analyze spatial inequality (urban-rural, provincial)
- Model redistributive policies

#OUTPUT FORMAT:
Inclusive Growth Strategy (2000 words):
1. Inequality Diagnosis (trends, drivers, international comparison)
2. Growth Incidence Analysis (who benefits from growth?)
3. Five-Pillar Strategy:
   - Pro-poor sector promotion
   - Labor market policies
   - Progressive taxation
   - Social protection floor
   - Spatial development
4. Monitoring Framework (use GIC, Palma ratio, shared prosperity)

#DATA:
- HIES microdata (PBS)
- Tax filer data (FBR)
- Labor force surveys
```

1.11 Prompt 11: Fiscal Stimulus vs Consolidation Trade-off

```
#CONTEXT:
Pakistan post-COVID and post-floods needs stimulus for recovery.
But fiscal deficit at 7% of GDP and debt at 77%. IMF demands
consolidation. What's the right balance?

#ROLE:
You are Paul Krugman, Professor CUNY, Nobel Laureate 2008. 45 years
in international economics and policy. Champion of "Keynesian
stimulus" during crises. Expert in "Fiscal Multipliers" and
"Austerity Debates."

#TASK:
Resolve fiscal policy dilemma:
1. Estimate Pakistan's fiscal space (how much room for stimulus?)
2. Calculate fiscal multipliers for different spending types
3. Design "smart consolidation" (cut low-multiplier spending)
4. Model growth-debt dynamics under 3 scenarios

#FRAMEWORK:
"Fiscal Space and Multiplier Analysis":
- Fiscal space = f(debt sustainability, market access, growth)
- Estimate multipliers: transfers, infrastructure, current spending
- Time-dependent multipliers (crisis vs normal times)
- Growth vs debt trade-offs

#OUTPUT FORMAT:
Policy Brief (1500 words):
1. Fiscal Space Assessment (quantitative model)
2. Multiplier Estimates (econometric results)
3. Scenario Analysis:
   - Scenario A: Austerity (fast consolidation)
   - Scenario B: Stimulus (growth-first)
   - Scenario C: Smart consolidation (high-multiplier spending)
4. Recommendation (optimal path with debt and growth projections)

#DELIVERABLES:
- Fiscal space calculator
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- Debt dynamics spreadsheet
- Growth projections
```

1.12 Prompt 12: Dollarization and Currency Substitution

```
#CONTEXT:
Pakistan's dollar deposits 30%+ of total deposits. Afghans hold
dollars, real estate priced in dollars, informal dollar markets active.
Partial dollarization risks (currency crises, loss of seigniorage).

#ROLE:
You are Guillermo Calvo, Professor Columbia, former Chief Economist
IADB. 40 years studying Latin American crises. Coined "sudden stops."
Expert on "Fear of Floating" and "Liability Dollarization."

#TASK:
Analyze dollarization dynamics and risks:
1. Quantify extent of dollarization (deposits, transactions, assets)
2. Identify drivers (inflation history, credibility)
3. Model risks (balance sheet effects, sudden stops)
4. Recommend de-dollarization policies

#FRAMEWORK:
"Liability Dollarization and Balance Sheet Effects":
- Currency mismatch on bank/firm balance sheets
- Amplification of shocks (devaluation → defaults → crisis)
- Hysteresis in dollarization (hard to reverse)
- Minimum reserve requirements as tool

#OUTPUT FORMAT:
Dollarization Study (1500 words):
1. Dollarization Indicators (extent, trends)
2. Drivers Analysis (inflation expectations, credibility deficit)
3. Risk Assessment (stress test: 30% depreciation impact)
4. De-dollarization Strategy (credibility building + regulatory tools)
5. Regional Comparisons (Peru, Uruguay managed it—how?)

#POLICY OPTIONS:
- Asymmetric reserve requirements
- Taxation on FX deposits
- Credibility-building (inflation targeting, fiscal rules)
```

1.13 Prompt 13: Regional Economic Integration

```
#CONTEXT:
Pakistan's trade with neighbors minimal: India (suspended),
Afghanistan (limited), Iran (sanctions), China (huge deficit).
SAARC dormant. Regional integration could boost growth 2-3%.

#ROLE:
You are Jagdish Bhagwati, Professor Columbia, pioneer of trade theory.
60 years studying trade policy. Coined "spaghetti bowl" of FTAs.
Expert in "Regionalism vs Multilateralism."

#TASK:
Design regional integration strategy:
1. Quantify gains from trade with neighbors (CGE model)
2. Assess political economy constraints (India, Afghanistan)
3. Design realistic integration pathway (start small)
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4. Model impact on GDP, jobs, competitiveness

#FRAMEWORK:
"Building Blocks vs Stumbling Blocks":
- Gravity model: potential trade with neighbors
- CGE model: welfare gains from integration
- Political economy: sequencing to build support
- Lessons from ASEAN, EU integration

#OUTPUT FORMAT:
Integration Strategy (1800 words):
1. Trade Potential Analysis (gravity model results)
2. Economic Gains (CGE model: GDP, welfare, sectoral impacts)
3. Political Economy (identify spoilers, build coalitions)
4. Sequencing Strategy:
   - Phase 1: Afghanistan, Central Asia (easy)
   - Phase 2: Iran (when sanctions ease)
   - Phase 3: India (long-term, conditional)
5. Institutional Framework (revive SAARC or new forum?)

#MODEL:
- Gravity estimation (Pakistan's under-trading with region)
- CGE simulation (GTAP model)
```

1.14 Prompt 14: Modern Monetary Theory Applicability

```
#CONTEXT:
Pakistan faces fiscal constraints, high interest burden. Some suggest
MMT principles: sovereign currency issuer can't default in own
currency, deficits less constraining. Is MMT applicable to Pakistan?

#ROLE:
You are Stephanie Kelton, Professor Stony Brook, leading MMT proponent.
Advisor to Bernie Sanders. Author "The Deficit Myth." Expert in
"Functional Finance" and "Job Guarantee."

#TASK:
Assess MMT applicability to Pakistan:
1. Explain MMT core tenets (for policymakers)
2. Identify constraints in Pakistan context (not reserve currency,
   import-dependent)
3. Model what happens if Pakistan follows MMT prescriptions
4. Recommend what's useful, what's dangerous

#FRAMEWORK:
"Functional Finance" (Lerner 1943):
- Deficits don't matter if economy below capacity
- Constraint is inflation, not debt
- Currency sovereignty enables policy space

#OUTPUT FORMAT:
Policy Memo (1200 words):
1. MMT Primer (explain in 200 words)
2. Pakistan Context:
   - Unlike US: not reserve currency
   - Import-dependence creates BOP constraint
   - Forex reserves constraint binding
3. Scenario Analysis: "What if Pakistan adopts MMT?"
   - Model fiscal expansion without monetary financing
   - Simulate inflation, BOP, currency crisis risks
```

```
4. Selective Adoption (what's useful: fiscal space framing;
   what's risky: ignoring BOP)

#CONCLUSION:
- Don't adopt MMT wholesale
- Use insights on fiscal space during recessions
- But respect external constraints
```

1.15 Prompt 15: Economic Policy Uncertainty Index

```
#CONTEXT:
Pakistan lacks Economic Policy Uncertainty (EPU) index. Policy
volatility high: frequent finance ministers, IMF on-off, regulatory
changes. Uncertainty dampens investment. Need to measure it.

#ROLE:
You are Scott Baker, Professor Northwestern, co-developer of EPU
index (Baker-Bloom-Davis). 15 years quantifying policy uncertainty.
Expert in "Text Analysis" and "Uncertainty Measurement."

#TASK:
Develop EPU index for Pakistan:
1. Select newspapers and keywords (adapt BBD methodology)
2. Construct index from news articles (text mining)
3. Validate against economic outcomes (investment, growth)
4. Make index publicly available (monthly updates)

#METHODOLOGY:
Baker-Bloom-Davis (2016):
- Select 2-3 major newspapers
- Search for keywords: economy/economic + uncertainty/deficit +
  policy/regulation
- Count articles, normalize, create index
- Validate: EPU should predict investment, GDP

#OUTPUT FORMAT:
Methodology Paper (1500 words):
1. EPU Index Construction:
   - Newspapers: Dawn, Express Tribune, The News
   - Keywords: Urdu and English
   - Normalization procedure
2. Historical Series (2000-2025)
3. Validation (correlations with investment, stock market)
4. Public Dashboard (monthly release, 3-month moving average)

#DELIVERABLES:
- EPU time series dataset
- R/Python code (reproducible)
- Monthly update protocol
```

2 Fiscal Policy & Public Finance

2.1 Prompt 16: Comprehensive Tax Reform Design

```
#CONTEXT:
Pakistan tax-to-GDP: 9.2% (lowest in region). Narrow base: 3.2M
income tax filers in 240M population. Salaried class bears 50%+ of
direct tax burden. Informal economy 40%+ of GDP.
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```
#ROLE:
You are Shabbar Zaidi, former FBR Chairman and tax reform architect.
CA with 40 years in tax policy, auditing, and enforcement. Expert in
"Tax Gap Analysis Methodology" and "Behavioral Tax Compliance."

#TASK:
Design comprehensive tax reform achieving:
- Tax-GDP ratio: 9% → 15% over 5 years
- Reduce salaried class burden by 30%
- Bring 50% of informal sector into documented economy
- Maintain political feasibility

#FRAMEWORK:
Use "4-Pillar Tax Reform Model":
1. Policy (rates, exemptions, base)
2. Administration (enforcement, digitization)
3. Compliance (incentives, penalties)
4. Political Economy (winners/losers, sequencing)

#OUTPUT FORMAT:
Reform Blueprint:
- Phase 1 (Year 1-2): Quick Wins (table: measure × revenue ×
  political cost)
- Phase 2 (Year 3-4): Base Broadening (sectors to target × strategy)
- Phase 3 (Year 5): Consolidation (enforcement and institutionalization)
- Appendix: Revenue Projections Model (show your calculations)

#CONSTRAINTS:
- No new taxes on already-compliant salaried class
- Must survive political transition (election cycle)
```

2.2 Prompt 17: GST/VAT Optimization Model

```
#CONTEXT:
Pakistan GST: 17% standard rate (among highest regionally) but
compliance ~40%. Revenue: 4.5% of GDP vs 6-8% potential. SRO culture
creates exemptions undermining base.

#ROLE:
You are Prof. Ehtisham Ahmad, former IMF Senior Economist and tax
policy expert. 35 years experience in VAT systems across 50+ countries.
Developed "Optimal VAT Rate Methodology."

#TASK:
Model revenue impact of:
- Scenario A: Reduce rate to 12%, broaden base, eliminate exemptions
- Scenario B: Keep 17%, enhance enforcement via technology
- Scenario C: Hybrid approach

Compare total revenue, compliance rate, and economic efficiency.

#ANALYTICAL APPROACH:
- Estimate price elasticity of compliance
- Calculate deadweight loss from high rates
- Model formalization incentives

#OUTPUT FORMAT:
Technical Note (1000 words):
1. Current System Diagnosis (gap analysis)
2. Three Scenarios (table comparing revenue, compliance, welfare)
```

```
3. Recommendation with Implementation Steps
4. Annex: Mathematical Model and Assumptions

#DATA REQUIRED:
- Current compliance rate: [40%]
- Informal sector VAT gap: [estimated]
- Price elasticity of compliance: [assume -0.3 to -0.5]
```

2.3 Prompt 18: Property Tax Reform

```
#CONTEXT:
Pakistan's property tax: 0.2% of GDP (vs 1-2% globally). Urban land
values soar but undertaxed. Punjab, Sindh have outdated valuation
tables. Huge revenue potential.

#ROLE:
You are William McCluskey, Professor Ulster University, 30 years in
property tax systems. Advised 50+ countries on valuation and
administration. Expert in "Computer-Assisted Mass Appraisal (CAMA)."

#TASK:
Design property tax reform for Punjab and Sindh:
1. Calculate revenue potential (current vs achievable)
2. Design modern valuation system (CAMA using GIS)
3. Address political economy (resistance from elites)
4. Implementation roadmap

#FRAMEWORK:
"CAMA System with Geographic Information Systems":
- Satellite imagery + land records
- Mass appraisal algorithms
- Regular revaluations (annual or biennial)
- Progressive rates

#OUTPUT FORMAT:
Reform Blueprint (1500 words):
1. Revenue Gap Analysis (current 0.2% → potential 1.5%)
2. Valuation System Design (CAMA methodology)
3. Technology Requirements (GIS, databases, software)
4. Political Strategy (compensate losers, start with elites)
5. Implementation (pilot city, then scale, 5-year plan)

#CASE STUDIES:
- Philippines (successful CAMA implementation)
- India urban property tax reforms
```

2.4 Prompt 19: Tax Expenditure Analysis

```
#CONTEXT:
Pakistan gives tax exemptions via SROs (≈2% of GDP). Exemptions
reduce base, complicate system, favor connected firms. FBR can't
enumerate all exemptions.

#ROLE:
You are Leonard Burman, co-founder Tax Policy Center, 40 years in
tax policy. Expert on "Tax Expenditure Budgets" and "Tax Subsidies."

#TASK:
Create tax expenditure budget for Pakistan:
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1. Enumerate all tax exemptions (SROs, special provisions)
2. Estimate revenue loss for each
3. Assess efficiency and equity
4. Recommend phase-out plan

#METHODOLOGY:
"Tax Expenditure Reporting":
- Catalog all exemptions by tax type
- Revenue loss estimation (static, behavioral)
- Incidence analysis (who benefits?)
- Efficiency test (does it achieve policy goal?)

#OUTPUT FORMAT:
Tax Expenditure Report (2000 words):
1. Catalog of Exemptions (100+ SROs, organized by category)
2. Revenue Loss Estimates (table: exemption × revenue loss)
3. Incidence Analysis (who benefits? often elites)
4. Efficiency Assessment (which achieve policy goals?)
5. Phase-Out Plan (eliminate inefficient, inequitable exemptions
   first)

#EXPECTED FINDINGS:
- Tax expenditures: 2-3% of GDP
- 80% benefits top 20%
- Many don't achieve stated objectives
```

2.5 Prompt 20: Carbon Tax Design

```
#CONTEXT:
Pakistan needs climate finance and emission reductions. Carbon tax
could raise revenue while reducing emissions. But energy already
expensive, inflation concerns, competitiveness issues.

#ROLE:
You are William Nordhaus, Yale Professor, Nobel Laureate 2018. 50
years on climate economics. Developed "DICE model." Expert on
"Carbon Pricing" and "Climate Policy Design."

#TASK:
Design carbon tax for Pakistan:
1. Calculate optimal carbon price (social cost of carbon)
2. Model revenue and emission impacts
3. Address competitiveness concerns (CBAM)
4. Design revenue recycling (to poor, green investments)

#FRAMEWORK:
"Pigouvian Carbon Pricing":
- Social cost of carbon (global damages)
- Tax incidence (who pays? electricity, transport)
- Revenue neutrality options (recycle to households)
- Border carbon adjustments

#OUTPUT FORMAT:
Carbon Tax Proposal (1500 words):
1. Rationale (climate goals + fiscal benefits)
2. Tax Design:
   - Level: $10-20/ton CO2 (rise 5%/year)
   - Coverage: power, industry, transport
   - Exemptions: agriculture, households (first threshold)
3. Impact Analysis:
```

```
   - Revenue: $1-2B/year
   - Emission reductions: 10-15%
   - Distributional: regressive but recycling compensates
4. Revenue Recycling (50% to poor via cash transfers, 50% green
   infrastructure)
5. Competitiveness (coordinate with region, border adjustments)

#MODELING:
- Use Pakistan's emission inventory
- Input-output model for price passthrough
```

2.6 Prompt 21: Public Expenditure Review

```
#CONTEXT:
Pakistan's public spending: 22% of GDP (low by developing country
standards). Composition matters: defense 15% of budget, education
2.5% GDP. Need to reallocate toward growth and social sectors.

#ROLE:
You are Vito Tanzi, former IMF Director Fiscal Affairs, 50 years in
public finance. Author "Government versus Markets." Expert in
"Expenditure Composition" and "Fiscal Systems."

#TASK:
Conduct comprehensive public expenditure review:
1. Analyze spending composition (functional, economic)
2. Compare with regional peers (India, Bangladesh, Indonesia)
3. Identify inefficiencies and leakages
4. Recommend reallocation toward high-impact spending

#FRAMEWORK:
"Public Expenditure and Financial Accountability (PEFA)":
- Functional classification (health, education, defense, etc.)
- Economic classification (wages, transfers, development)
- Efficiency analysis (cost per outcome)
- Benchmarking

#OUTPUT FORMAT:
PER Report (2500 words):
1. Spending Composition (current breakdown, trends)
2. International Comparisons (Pakistan vs peers)
3. Efficiency Analysis:
   - Health: cost per outcome (maternal mortality, vaccination)
   - Education: cost per student, learning outcomes
   - Infrastructure: cost per km road, project delays
4. Leakage Estimates (ghost employees, ghost schools, corruption)
5. Reallocation Recommendations (shift 2-3% of budget to high-impact)

#DATA SOURCES:
- Budget documents (federal, provincial)
- BOOST database (World Bank)
- Service delivery surveys
```

2.7 Prompt 22: Pension System Reform

```
#CONTEXT:
Pakistan's pension liabilities unfunded: pay-as-you-go system. Rising
life expectancy + growing retiree population = fiscal time bomb.
Provincial pensions consume 30%+ of budgets.
```

```
#ROLE:
You are Peter Diamond, MIT Professor Emeritus, Nobel Laureate 2010.
50 years studying pension economics. Advised Chile, China on reforms.
Expert on "Three-Pillar Pension Systems."

#TASK:
Design sustainable pension reform:
1. Calculate unfunded liability (actuarial assessment)
2. Propose reform options (parametric vs structural)
3. Model fiscal savings and adequacy trade-offs
4. Design transition (protect current retirees, shift new entrants)

#FRAMEWORK:
"Multi-Pillar Pension System":
- Pillar 0: Social pension (basic safety net)
- Pillar 1: Reformed PAYG (reduced benefits)
- Pillar 2: Mandatory defined contribution (individual accounts)
- Pillar 3: Voluntary savings

#OUTPUT FORMAT:
Pension Reform Proposal (2000 words):
1. Current System Analysis (coverage, benefits, costs, trends)
2. Unfunded Liability Estimate (NPV of future obligations)
3. Reform Options:
   - Option A: Parametric (raise retirement age, reduce benefits)
   - Option B: Structural (shift to defined contribution)
   - Option C: Hybrid (maintain PAYG at lower level + DC accounts)
4. Fiscal Impact (savings over 30 years)
5. Transition Plan (grandfather clause for current employees)

#ACTUARIAL MODEL:
- Demographic projections
- Discount rate assumptions
- Benefit formulas
```

2.8 Prompt 23: Subsidy Reform Strategy

```
#CONTEXT:
Pakistan's subsidies: power sector (0.5% GDP), wheat/flour (0.3%),
petroleum (variable), export subsidies, agricultural inputs. Total
~2% GDP. Inefficient, often benefit non-poor.

#ROLE:
You are David Coady, former IMF Deputy Division Chief, 30 years on
subsidy reform. Led IMF work on "energy subsidy reform." Expert on
"Subsidy Incidence" and "Targeting."

#TASK:
Design comprehensive subsidy reform:
1. Enumerate all subsidies, estimate fiscal cost
2. Incidence analysis (who benefits by decile)
3. Phase-out plan with compensation for poor
4. Build political coalition for reform

#METHODOLOGY:
"Subsidy Incidence and Targeted Compensation":
- Household survey data to calculate subsidy distribution
- Identify "leakage" to non-poor
- Design targeted cash transfers as compensation
```

```
- Communication strategy

#OUTPUT FORMAT:
Subsidy Reform Roadmap (1800 words):
1. Subsidy Inventory (by sector, fiscal cost)
2. Incidence Analysis:
   - Electricity: 70% benefits go to top 40%
   - Wheat: 50% goes to top 40%
   - Petroleum: 80% to top 30% (car owners)
3. Reform Plan:
   - Phase 1: Remove petroleum subsidies (replace with transport
     vouchers)
   - Phase 2: Electricity (lifeline tariff for poor, market rates
     for rest)
   - Phase 3: Wheat (targeted ration cards using BISP database)
4. Compensation (expand cash transfers, cost: 0.5% GDP)
5. Political Economy (communication, timing, champion)

#FISCAL SAVINGS:
- Net savings: 1.5% GDP after compensation
```

2.9 Prompt 24: Fiscal Decentralization Assessment

```
#CONTEXT:
Pakistan's 18th Amendment (2010) devolved revenues and functions to
provinces. Mixed results: provinces under-tax their bases, service
delivery hasn't improved proportionally. What reforms needed?

#ROLE:
You are Roy Bahl, Professor Georgia State, 50 years in fiscal
federalism. Advised 30+ countries. Expert on "Fiscal Decentralization"
and "Intergovernmental Finance."

#TASK:
Assess Pakistan's fiscal federalism:
1. Evaluate vertical imbalance (federation vs provinces)
2. Assess horizontal imbalances (across provinces)
3. Analyze provincial tax effort (are they maximizing own revenues?)
4. Recommend reforms to NFC Award and provincial taxation

#FRAMEWORK:
"Fiscal Federalism Theory":
- Vertical balance (who taxes, who spends)
- Horizontal balance (equalization across regions)
- Tax assignment (which taxes to which level)
- Incentives (are provinces incentivized to tax?)

#OUTPUT FORMAT:
Fiscal Federalism Assessment (2000 words):
1. Vertical Imbalance Analysis (federation collects 90%, provinces
   spend 60%)
2. Horizontal Imbalance (Punjab vs Balochistan, need for equalization)
3. Provincial Tax Effort (calculate potential vs actual for GST
   services, property)
4. NFC Award Reform:
   - Current formula (population 82%, others 18%)
   - Proposed: incentivize provincial tax effort
5. Provincial Taxation (expand GST services, property, motor vehicles)

#RECOMMENDATIONS:
```

```
- NFC formula: include tax effort indicator
- Provincial GST on services: harmonize, expand
- Conditional grants for education, health outcomes
```

2.10 Prompt 25: Performance-Based Budgeting

```
#CONTEXT:
Pakistan's budgeting: input-based (line items), not linked to results.
Need shift to performance-based budgeting (PBB) where allocations
tied to outcomes (student learning, infant mortality reduction).

#ROLE:
You are Marc Robinson, international PFM expert, 30 years implementing
PBB in 20+ countries. Former Australia Treasury. Expert on
"Results-Based Management" and "Output Budgeting."

#TASK:
Design performance-based budgeting for Pakistan:
1. Assess readiness (M&E systems, data, culture)
2. Design PBB framework (outputs, outcomes, indicators)
3. Pilot in 2 ministries (education, health)
4. Roadmap for government-wide rollout

#FRAMEWORK:
"Program Budgeting with Performance Information":
- Define programs (not just departments)
- Specify outputs and outcomes for each program
- Link budget allocations to performance
- Regular monitoring and adjustment

#OUTPUT FORMAT:
PBB Implementation Plan (1500 words):
1. Readiness Assessment (scorecard: data, systems, skills)
2. PBB Framework:
   - Budget structure (programs not line items)
   - Performance indicators (2-3 per program, SMART)
   - Linking performance to allocations (incentives)
3. Pilots:
   - Education: literacy rates, test scores
   - Health: vaccination coverage, maternal mortality
4. M&E System (dashboards, quarterly reviews)
5. Rollout Plan (2 years pilots, 5 years full implementation)

#CHALLENGES:
- Data limitations
- Resistance to change
- Attribution problems
```

2.11 Prompt 26: Public Investment Management

```
#CONTEXT:
Pakistan's PSDP (Public Sector Development Program): low execution
(60-70%), cost overruns, delays. Projects selected politically, not
on merit. PIMA (Public Investment Management Assessment) score weak.

#ROLE:
You are Gerhard Schwarz, IMF expert on public investment management.
25 years advising on PIMA framework. Specialist in "Infrastructure
Governance" and "Project Appraisal."
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```
#TASK:
Reform Pakistan's public investment system:
1. Diagnose weaknesses (PIMA framework)
2. Design project selection process (cost-benefit, feasibility)
3. Improve project execution (monitoring, bottlenecks)
4. Strengthen procurement and contract management

#FRAMEWORK:
"PIMA Framework" (IMF):
- Planning: project appraisal, selection, central oversight
- Allocation: budgeting, timely funding
- Implementation: procurement, monitoring, adjustment

#OUTPUT FORMAT:
PIM Reform Blueprint (1800 words):
1. PIMA Diagnosis (score Pakistan on 15 dimensions)
2. Project Selection Reform:
   - Mandatory cost-benefit analysis (standardized)
   - Independent appraisal (PIDE, Planning Commission)
   - Merit-based ranking (not political)
3. Execution Improvements:
   - Project Management Units (PMUs) for mega-projects
   - Quarterly progress reviews
   - Fast-track land acquisition, approvals
4. Procurement Reform (e-procurement, competitive bidding, penalties
   for delays)
5. Institutional Reforms (empower Planning Commission, accountability)

#TARGETS:
- Execution rate: 70% → 90% in 5 years
- Cost overruns: reduce 50%
```

2.12 Prompt 27: Tax Administration Modernization

```
#CONTEXT:
FBR (Federal Board of Revenue) collects only 10% of GDP vs 15-18%
potential. Problems: corruption, weak enforcement, outdated systems,
low taxpayer morale. Digitization partial.

#ROLE:
You are Richard Bird, Professor Emeritus Toronto, 50 years in tax
administration. Advised 40+ countries. Expert on "Tax Compliance" and
"Revenue Authority Design."

#TASK:
Modernize FBR:
1. Diagnose administration weaknesses
2. Design digitization strategy (end-to-end)
3. Reform HR (incentives, training, merit)
4. Build taxpayer services and compliance

#FRAMEWORK:
"Tax Administration Diagnostic Assessment Tool (TADAT)":
- Integrity and accountability
- Taxpayer services
- Filing and payment
- Audit and enforcement
- IT systems
```

```
#OUTPUT FORMAT:
FBR Modernization Plan (2000 words):
1. TADAT Assessment (score FBR on 9 dimensions)
2. Digitization Strategy:
   - Integrated Tax Management System (end-to-end)
   - E-filing, e-payment (mandatory for all)
   - Risk-based audit selection (algorithms)
3. HR Reform:
   - Merit-based recruitment (end transfers culture)
   - Performance incentives (link pay to collection)
   - Training academy (tax law, IT, analytics)
4. Taxpayer Services:
   - Facilitation centers (Citizen Portal expansion)
   - Taxpayer education (rights and obligations)
   - Ombudsman for disputes
5. Enforcement (data analytics, third-party info, prosecution for
   evasion)

#BENCHMARKS:
- South Africa SARS (successful reform)
- Singapore IRAS (world-class digital)
```

2.13 Prompt 28: Fiscal Rules Design

```
#CONTEXT:
Pakistan lacks credible fiscal rules. Fiscal Responsibility and Debt
Limitation Act (2005) exists but repeatedly violated. Need enforceable
rules to anchor fiscal policy.

#ROLE:
You are Xavier Debrun, IMF expert on fiscal rules, 20 years advising
on fiscal councils and rules. Expert on "Fiscal Rules Design" and
"Independent Fiscal Institutions."

#TASK:
Design fiscal rules framework for Pakistan:
1. Choose rule type (deficit, debt, spending, revenue)
2. Specify numerical targets and escape clauses
3. Design enforcement mechanisms
4. Establish independent fiscal council for monitoring

#FRAMEWORK:
"Three Pillars of Fiscal Rules":
- Numerical target (specific, time-bound)
- Escape clauses (force majeure, recession)
- Enforcement (automatic corrections, reputational sanctions)
- Independent monitoring

#OUTPUT FORMAT:
Fiscal Rules Proposal (1500 words):
1. Rule Selection:
   - Primary rule: Debt ceiling (65% of GDP, down from 77%)
   - Secondary: Fiscal deficit target (4% of GDP)
   - Structural balance target (adjust for cycle)
2. Implementation:
   - Timeline: 5 years to reach targets
   - Annual adjustments (1-2% of GDP fiscal consolidation)
3. Escape Clauses:
   - Natural disasters (floods, earthquakes)
   - Security crises
```

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   - Severe recession (growth <0%)
4. Enforcement:
   - Automatic spending cuts if deviation
   - Finance Minister accountability (explain to Parliament)
5. Fiscal Council:
   - Independent experts (apolitical)
   - Mandate: assess compliance, forecast accuracy
   - Reports public, presented to Parliament

#COMPARISONS:
- Chile (successful fiscal rule)
- Sweden (Fiscal Policy Council)
```

2.14 Prompt 29: Agriculture Income Taxation

```
#CONTEXT:
Pakistan's agricultural income largely untaxed (constitutional issue:
provincial subject). Large landowners escape taxation. Punjab
Agricultural Income Tax Act (1997) poorly enforced. Huge equity issue.

#ROLE:
You are Nicholas Stern, Professor LSE, former World Bank Chief
Economist. 50 years in public economics. Author "The Economics of
Development." Expert on "Taxation in Developing Countries."

#TASK:
Design agricultural income tax system:
1. Assess constitutional constraints (18th Amendment)
2. Design progressive tax structure (exempt small farmers)
3. Tackle enforcement challenges (land records, income estimation)
4. Build political coalition (overcome landlord resistance)

#FRAMEWORK:
"Taxation of Agriculture in Developing Economies":
- Presumptive taxation (area-based, productivity-based)
- Progressive exemptions (small landholdings exempt)
- Coordination with income tax (avoid double taxation)
- Use of technology (GIS, satellite imagery)

#OUTPUT FORMAT:
Agricultural Tax Reform (1500 words):
1. Current System Critique (Punjab, Sindh laws exist but not enforced)
2. Tax Design:
   - Exemption: holdings <12.5 acres
   - Progressive rates: 5% on income above threshold, 15% on large
     estates
   - Presumptive assessment (per-acre based on crop, productivity)
3. Enforcement Strategy:
   - Digitize land records (complete in 3 years)
   - Use satellite imagery to verify cropping
   - Cross-reference with water/electricity use
4. Revenue Potential (1-1.5% of GDP if fully implemented)
5. Political Economy:
   - Build coalition with small farmers (they benefit from exemption)
   - Compensate with rural infrastructure
   - Federal pressure on provinces

#CASE STUDIES:
- India (successful implementation in some states)
- Brazil (rural property tax)
```

2.15 Prompt 30: Digital Services Tax

```
#CONTEXT:
Global tech giants (Google, Facebook, Amazon) earn billions from
Pakistan but pay minimal tax (no physical presence). Pakistan needs
to tax digital economy while avoiding trade retaliation.

#ROLE:
You are Pascal Saint-Amans, former Director OECD Centre for Tax Policy.
Led BEPS (Base Erosion Profit Shifting) project. Expert on "Digital
Economy Taxation" and "Pillar One/Two."

#TASK:
Design digital services tax for Pakistan:
1. Define scope (which services, which companies)
2. Set rate and thresholds (balance revenue and competitiveness)
3. Align with OECD Pillar One framework (avoid trade retaliation)
4. Enforce cross-border (tax treaties, withholding)

#FRAMEWORK:
"OECD BEPS Pillar One":
- Tax allocation to market jurisdictions
- Thresholds (€20M revenue in country)
- Services covered (digital advertising, data, platforms)
- Coordination with global minimum tax

#OUTPUT FORMAT:
DST Proposal (1200 words):
1. Rationale (tax where value created, level playing field)
2. Tax Design:
   - Scope: Online advertising, digital marketplaces, streaming
   - Companies: revenue >€20M in Pakistan, >€750M globally
   - Rate: 3% of gross revenue (standard OECD)
3. Revenue Estimate (potential $300-500M annually)
4. Enforcement:
   - Withholding tax mechanism (banks withhold on payments abroad)
   - Tax treaties (renegotiate or MLI)
5. Trade Considerations (join OECD inclusive framework, avoid US
   retaliation)

#IMPLEMENTATION:
- Pass legislation in 2026 budget
- Align with OECD timeline
```

3 Monetary Policy & Financial Stability

3.1 Prompt 31: Optimal Policy Rate Path

```
#CONTEXT:
SBP policy rate: 17.5% (Jan 2026), CPI inflation: 8-9% (declining
from 38% peak in May 2023). Real rate ~9%. Growth sluggish at 2.5%.
Fiscal interest burden: 45% of revenues.

#ROLE:
You are Dr. Reza Baqir, former SBP Governor (2019-2022). PhD Economics
Johns Hopkins. 20 years IMF experience. Expert in "Inflation Targeting
under Fiscal Dominance."

#TASK:
Calculate optimal policy rate reduction path for next 12 months:
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- Balance inflation risk vs growth support
- Account for fiscal implications (interest payments ↓)
- Consider external stability (reserves, exchange rate)
- Model monetary transmission mechanism delays

#FRAMEWORK:
Use Taylor Rule augmented for Pakistan specifics:
- Core vs headline inflation split
- Supply-side inflation components
- Fiscal dominance adjustment factor

#OUTPUT FORMAT:
MPC Brief (800 words):
1. Rate Recommendation (current + 6 months + 12 months)
2. Inflation Forecast (with confidence intervals)
3. Risk Assessment (3 scenarios: fast cut, slow cut, hold)
4. Forward Guidance Language (draft statement)

#CONSTRAINTS:
- IMF program ceiling on inflation (13% by June 2024)
- Reserves target: $9B minimum
```

3.2 Prompt 32: Exchange Rate Policy Framework

```
#CONTEXT:
PKR depreciated 50%+ since 2018 (120→280 per USD). Current policy:
"market-determined" post-IMF. Reserves 1.5 months import cover. REER
near equilibrium but volatility high.

#ROLE:
You are Dr. Sakib Sherani, macroeconomist and former Finance Ministry
advisor. 25 years experience in emerging market FX. Creator of
"Equilibrium REER Estimation Model for Pakistan."

#TASK:
Design exchange rate policy framework:
1. Calculate equilibrium REER (show methodology)
2. Assess current over/under-valuation
3. Recommend: pure float vs managed float vs crawling peg
4. Design reserves accumulation strategy (target: 4 months imports)

#ANALYTICAL METHOD:
- BEER model (behavioral equilibrium exchange rate)
- PPP comparisons with regional peers
- Capital flow volatility analysis

#OUTPUT FORMAT:
Policy Note (1200 words):
- Section 1: REER Analysis (current vs equilibrium, ±% bands)
- Section 2: Policy Regime Recommendation (pros/cons matrix)
- Section 3: Reserves Strategy (export growth + FDI + debt mix)
- Section 4: Implementation (SBP operational guidelines)
```

3.3 Prompt 33: Credit Allocation to Productive Sectors

```
#CONTEXT:
Pakistan's bank credit: 35% to government (treasury bills), 25% to
consumer loans, limited credit to SMEs (6%) and agriculture (5%).
Misallocation hinders growth.
```

```
#ROLE:
You are Raghuram Rajan, Professor Chicago, former RBI Governor. 35
years in financial economics. Expert on "Financial Development and
Growth" and "Credit Allocation."

#TASK:
Design credit reallocation strategy:
1. Diagnose why banks prefer government securities over lending
2. Design incentives to shift credit to productive sectors
3. Address SME credit constraints (risk, information, collateral)
4. Set targets with monitoring framework

#FRAMEWORK:
"Financial Repression vs Financial Development":
- Government borrowing crowds out private sector
- Banking sector risk-averse due to NPLs
- SMEs face asymmetric information
- Need: risk-sharing mechanisms, credit information

#OUTPUT FORMAT:
Credit Policy Framework (1500 words):
1. Credit Distribution Analysis (current vs optimal)
2. Diagnosis:
   - Government crowding out (high yields on T-bills)
   - Risk aversion post-NPL crisis
   - SME information gaps
3. Policy Interventions:
   - Reduce government borrowing from banks (increase debt auctions
     to non-banks)
   - Credit guarantees for SME lending (public-backed fund)
   - Develop credit bureaus (expand Tasdeeq beyond CNIC)
   - Priority sector lending targets (15% to SMEs, 10% agriculture)
4. Monitoring (quarterly credit surveys, penalties for non-compliance)

#TARGETS:
- Government credit share: 35% → 20% in 5 years
- SME credit: 6% → 15%
```

3.4 Prompt 34: Financial Inclusion Strategy

```
#CONTEXT:
Pakistan's financial inclusion low: 21% adults with bank accounts
(vs 60%+ regional), 44% with mobile wallets (Easypaisa, JazzCash).
Women's inclusion 7%. Rural access limited.

#ROLE:
You are Leora Klapper, Lead Economist World Bank, creator of Global
Findex Database. 20 years on financial inclusion. Expert on "Digital
Finance" and "Gender Gaps."

#TASK:
Design financial inclusion strategy targeting 50% inclusion:
1. Diagnose barriers (documentation, trust, access, literacy)
2. Leverage digital finance (mobile money, agent banking)
3. Target women and rural poor specifically
4. Measure progress (inclusion indicators)

#FRAMEWORK:
"Digital Finance for Inclusion":
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```
- Account ownership (basic accounts, zero balance)
- Payments (G2P, P2P, merchant payments)
- Savings (micro-savings products)
- Credit (nano-loans, psychometric scoring)

#OUTPUT FORMAT:
Inclusion Strategy (1800 words):
1. Baseline (21% banked, 44% mobile wallets)
2. Barrier Analysis:
   - Documentation (CNIC requirement, women lack ID)
   - Geographic (rural branch closures)
   - Digital literacy (esp. women, elderly)
   - Trust (Ponzi schemes damaged confidence)
3. Strategy:
   - Agent banking network (expand to every tehsil)
   - Simplified KYC (tiered accounts, biometric)
   - Women's accounts (gender-specific products, Sehat Card linked)
   - G2P digitization (all social transfers via accounts)
4. Digital Financial Literacy (awareness campaigns, school curricula)
5. Regulatory Enablers (SBP allow innovative products, protect
   consumers)

#TARGETS:
- Account ownership: 21% → 50% by 2030
- Women's inclusion: 7% → 35%
- Rural: double access points
```

3.5 Prompt 35: Capital Markets Development

```
#CONTEXT:
PSX (Pakistan Stock Exchange) market cap: 25% of GDP (vs 100%+ in
developed markets). Corporate bond market minimal. Pension funds,
insurance invest mostly in government securities. Need deep capital
markets.

#ROLE:
You are Franklin Allen, Professor Imperial College, former Wharton.
40 years in corporate finance. Expert on "Financial Systems" and
"Capital Market Development."

#TASK:
Design capital market deepening strategy:
1. Diagnose why markets shallow (IPO drought, debt market missing)
2. Design reforms: tax incentives, regulatory, investor base
3. Develop corporate bond market
4. Target: market cap 50% of GDP, bond issuance $5B/year

#FRAMEWORK:
"Bank-Based vs Market-Based Financial Systems":
- Pakistan is bank-based, need balance
- IPOs provide patient capital for growth firms
- Bonds diversify financing, reduce bank dependence
- Institutional investors critical (pensions, insurance, mutual funds)

#OUTPUT FORMAT:
Capital Market Strategy (1800 words):
1. Diagnosis:
   - IPO barriers (tax, listing costs, family firm preference)
   - Bond market absent (regulatory, investor base)
   - Institutional investors captive to government paper
```

```
2. IPO Revival:
   - Tax incentive (zero capital gains tax for 5 years)
   - Reduce listing costs (SECP fee reform)
   - Success stories promotion (fintech, retail IPOs)
   - Target: 20 IPOs/year
3. Corporate Bond Market:
   - Regulatory framework (bankruptcy, credit rating agencies)
   - Investor base (mandatory allocation for pensions: 10% corporate
     bonds)
   - Market makers (primary dealers for corporate bonds)
   - Infrastructure (electronic trading, settlement)
4. Institutional Investor Reform:
   - Relax investment restrictions (allow more equity, corporate bonds)
   - Performance-based management (vs safe government paper)
5. Market Infrastructure (T+2 settlement, dematerialization, investor
   protection)

#BENCHMARKS:
- India (successful bond market development)
- Malaysia (institutional investor role)
```

3.6 Prompt 36: Islamic Finance Expansion

```
#CONTEXT:
Pakistan: 97% Muslim population but Islamic banking only 20% of
banking system. Sharia-compliant products in demand. Opportunity to
lead global Islamic finance (currently Malaysia, UAE ahead).

#ROLE:
You are Mahmoud El-Gamal, Professor Rice University, 25 years on
Islamic finance. Expert on "Sharia-Compliant Financial Products" and
"Islamic Economic Theory."

#TASK:
Design Islamic finance expansion strategy:
1. Assess current market (products, institutions, gaps)
2. Remove regulatory barriers (tax, accounting)
3. Develop Sukuk (Islamic bonds) market for infrastructure
4. Position Pakistan as Islamic finance hub

#FRAMEWORK:
"Islamic Finance Principles":
- Riba (interest) prohibition → profit-sharing, asset-backed
- Risk-sharing vs risk-transfer
- Asset-backed financing (vs debt)
- Ethical investment (exclude haram sectors)

#OUTPUT FORMAT:
Islamic Finance Strategy (1500 words):
1. Market Assessment:
   - Islamic banking: 20% share, growing 15%/year
   - Products: Murabaha, Ijarah (limited Musharaka, Mudaraba)
   - Gaps: SME finance, housing finance, retail Sukuk
2. Regulatory Reforms:
   - Tax neutrality (remove stamp duty disadvantage)
   - Accounting standards (AAOIFI adoption)
   - SBP Islamic Banking Policy updated
3. Sukuk Market Development:
   - Government Sukuk: issue $5B/year (fund infrastructure)
   - Corporate Sukuk: 10 issuances/year (utilities, infrastructure)
```

```
   - Retail Sukuk (accessible to individuals, Rs 5K minimum)
4. Product Innovation:
   - SME Musharaka (equity-like finance)
   - Housing Ijarah (lease-to-own)
   - Takaful (Islamic insurance) expansion
5. Hub Strategy:
   - Islamic Finance University/Research Center
   - Attract Gulf investors (Sukuk listings on PSX)
   - Position as Sharia finance gateway to China (via CPEC)

#TARGETS:
- Islamic banking: 20% → 35% market share by 2030
- Sukuk market: $10B outstanding
```

3.7 Prompt 37: Fintech Regulation and Sandbox

```
#CONTEXT:
Pakistan fintech boom: JazzCash, Easypaisa dominate. Startups in
lending (Finja, Dastgyr), payments, insurtech. But regulatory
uncertainty. Need balanced approach: innovation + consumer protection.

#ROLE:
You are Douglas Arner, Professor University of Hong Kong, 25 years in
financial regulation. Co-author "Evolution of Fintech." Expert on
"Regulatory Sandboxes" and "Suptech."

#TASK:
Design fintech regulation framework:
1. Map fintech landscape (payment, lending, insurtech, wealth)
2. Design regulatory sandbox (test innovations safely)
3. Develop licensing framework (proportionate regulation)
4. Balance innovation and consumer protection

#FRAMEWORK:
"Proportionate Fintech Regulation":
- Sandbox for experimentation (limited scale, duration)
- Tiered licensing (basic license for limited activities)
- Consumer protection baseline (data privacy, disclosure)
- Enable vs control mindset

#OUTPUT FORMAT:
Fintech Regulation Framework (1500 words):
1. Landscape Mapping:
   - Payments: mature (JazzCash, Easypaisa)
   - Lending: emerging (P2P, nano-credit)
   - Insurtech: nascent (embedded insurance)
   - Wealthtech: minimal (robo-advisors)
2. Regulatory Sandbox:
   - SBP/SECP joint sandbox
   - Entry criteria (viable business, risk management)
   - Safe harbor (relaxed rules for test period: 12 months)
   - Graduation path (to full license or wind down)
3. Licensing Framework:
   - Tiered: Basic (limited scope) → Full (comprehensive)
   - Requirements: capital, fit-and-proper, tech infrastructure
   - Examples: nano-credit license (up to Rs 50K loans)
4. Consumer Protection:
   - Data privacy (align with global standards)
   - Disclosure requirements (APR, fees, risks)
   - Dispute resolution (fast-track tribunal)
```

```
5. Regtech/Suptech (SBP adopts tech for supervision: APIs, dashboards)

#PILOT:
- Launch sandbox in 2026
- 10 participants per cohort (twice a year)
```

3.8 Prompt 38: Non-Performing Loan Resolution

```
#CONTEXT:
Pakistan's NPLs: 8% of loans (down from 20% in 2002 but rising again
post-COVID). Concentrated in textile, steel, sugar. Banks reluctant
to write-off. Zombie firms survive. Need resolution framework.

#ROLE:
You are Viral Acharya, Professor NYU Stern, former RBI Deputy Governor.
20 years on banking crises. Expert on "NPL Resolution" and "Banking
Sector Health."

#TASK:
Design comprehensive NPL resolution strategy:
1. Diagnose NPL causes (evergreening, weak laws, collateral issues)
2. Strengthen legal framework (insolvency, foreclosure)
3. Asset Management Company for large NPLs
4. Bank incentives (provisioning rules, write-off targets)

#FRAMEWORK:
"NPL Resolution Toolkit":
- Legal: strong insolvency regime (fast resolution)
- Institutional: AMCs to buy NPLs at market prices
- Incentive: provisioning requirements, loan loss coverage
- Preventive: underwriting standards, early warning

#OUTPUT FORMAT:
NPL Resolution Strategy (1800 words):
1. NPL Profile:
   - Total: Rs 800B (8% of loans)
   - Sectors: textiles 30%, steel 15%, sugar 10%
   - Aging: 40% over 3 years old
2. Root Cause Analysis:
   - Weak collateral laws (foreclosure takes 5+ years)
   - Evergreening (restructure repeatedly, avoid write-off)
   - Political pressure (connected borrowers)
3. Legal Reforms:
   - Insolvency law (Pakistan already has IBC 2020, enforce it)
   - Fast-track courts (resolve within 12 months)
   - Collateral registry (movable assets)
4. Asset Management Company:
   - Structure: public-private (government seed, banks contribute)
   - Buy NPLs at market price (30-50% of face value)
   - Recover via restructure or liquidation
   - Target: resolve Rs 300B in 3 years
5. Bank Incentives:
   - Increase provisioning for old NPLs (100% for >3 years)
   - Write-off targets (reduce gross NPLs to 5%)

#CASE STUDIES:
- India: IBC success (resolution within 180 days)
- Korea: KAMCO (AMC post-Asian crisis)
```

3.9 Prompt 39: Housing Finance Market Development

```
#CONTEXT:
Pakistan's housing finance: only 0.2% of GDP (vs 5-10% in regional
peers). Acute housing shortage (10M units). Banks reluctant (long
tenor, foreclosure difficulties). Need to unlock this market.

#ROLE:
You are Michael Lea, housing finance expert, 40 years at Freddie Mac
and academia. Designed housing finance systems in 15 countries. Expert
on "Mortgage Markets" and "Securitization."

#TASK:
Design housing finance ecosystem:
1. Diagnose constraints (demand-side: affordability; supply-side: risk)
2. Design mortgage products (conventional, Islamic, low-income)
3. Create secondary market (mortgage-backed securities)
4. Develop credit guarantee for low-income housing

#FRAMEWORK:
"Housing Finance System Components":
- Primary market: originators (banks, housing finance companies)
- Secondary market: Fannie Mae-style aggregator, MBS issuance
- Credit enhancement: guarantees for low-income mortgages
- Legal: foreclosure reform, title registry

#OUTPUT FORMAT:
Housing Finance Blueprint (2000 words):
1. Diagnosis:
   - Demand: households can't afford down payment (20%), long tenor
   - Supply: banks avoid due to foreclosure risk, tenor mismatch
   - Infrastructure: weak land records, no secondary market
2. Mortgage Products:
   - Conventional: 15-20 year tenor, 10% down, fixed rate
   - Islamic: Ijarah (lease-to-own), Musharaka (diminishing)
   - Low-income: 30-year, 5% down, government guarantee
3. Secondary Market:
   - Pakistan Housing Finance Company (PHFC) as aggregator
   - Buy mortgages from originators, issue MBS
   - Sell MBS to pension funds, insurance (long-tenor assets match
     liabilities)
4. Credit Guarantee:
   - National Housing Finance Guarantee Corporation
   - Guarantee 80% of default loss for low-income mortgages
   - Funded by budget allocation (0.1% GDP)
5. Legal Reforms:
   - Foreclosure within 180 days (court fast-track)
   - Digital land records (link with NADRA)

#TARGETS:
- Housing finance: 0.2% → 2% of GDP by 2035
- 500K new mortgages in 10 years
```

3.10 Prompt 40: Cryptocurrency and CBDC Policy

```
#CONTEXT:
Cryptocurrencies banned in Pakistan (SBP notification 2018) but
trading continues via P2P, VPN. Young population interested. Meanwhile,
global trend toward CBDCs. What should Pakistan's policy be?

#ROLE:
```

```
You are Hyun Song Shin, Economic Advisor BIS (Bank for International
Settlements). 30 years in monetary economics. Leading expert on
"Central Bank Digital Currencies" and "Crypto Assets."

#TASK:
Formulate Pakistan's crypto and CBDC policy:
1. Assess crypto risks and benefits (AML, capital flight vs innovation)
2. Decide: ban enforcement, regulation, or selective opening
3. Evaluate CBDC feasibility (retail vs wholesale)
4. Design phased implementation if CBDC adopted

#FRAMEWORK:
"Crypto Assets vs CBDC":
- Private crypto: permissionless, volatile, AML risks
- CBDC: central bank liability, programmable, monetary policy tool
- BIS trilemma: privacy, security, decentralization (pick 2)

#OUTPUT FORMAT:
Crypto and CBDC Policy (1500 words):
1. Crypto Assessment:
   - Risks: capital flight ($5-10B), AML/CFT, consumer protection
   - Benefits: remittances (cheaper), fintech innovation
   - Recommendation: Selective regulation (allow for remittances,
     ban speculative trading)
2. CBDC Feasibility:
   - Retail CBDC: digital PKR for consumers (mobile wallets)
   - Wholesale CBDC: for interbank settlement (efficiency)
   - Start with wholesale (lower risk), pilot retail in 3-5 years
3. CBDC Design:
   - Two-tier: SBP issues, banks distribute
   - Interest-bearing (avoid bank disintermediation)
   - Programmable (smart contracts, conditional payments)
   - Privacy vs surveillance balance (transaction limits for privacy)
4. Implementation Roadmap:
   - Phase 1 (2026-27): Pilot wholesale CBDC (interbank settlement)
   - Phase 2 (2028-30): Pilot retail CBDC (one province, JazzCash
     partnership)
   - Phase 3 (2031+): National rollout if successful

#INTERNATIONAL:
- China's e-CNY (retail CBDC in use)
- India's stance (ban crypto, develop e-Rupee)
```

3.11 Prompt 41: Financial Literacy Campaign

```
#CONTEXT:
Pakistan's financial literacy low: 26% adults understand basic
financial concepts (interest, inflation, diversification). Contributes
to Ponzi scheme vulnerability (1000+ scams in decade).

#ROLE:
You are Annamaria Lusardi, Professor George Washington, 25 years
studying financial literacy. Developed "Big Three" financial literacy
questions. Expert on "Financial Education Impact."

#TASK:
Design national financial literacy strategy:
1. Assess current literacy levels (baseline survey)
2. Develop curriculum (schools, adults, targeted)
3. Delivery channels (schools, mobile, TV, influencers)
```

```
4. Measure impact (knowledge, behavior, outcomes)

#FRAMEWORK:
"Three Pillars of Financial Literacy":
- Knowledge (concepts: interest, inflation, risk)
- Skills (budget, save, borrow wisely)
- Attitudes (delayed gratification, planning)

#OUTPUT FORMAT:
Financial Literacy Strategy (1500 words):
1. Baseline Assessment:
   - Survey using "Big Three" + Pakistan-specific (Islamic finance,
     digital)
   - Current: 26% literate
   - Gaps: women (15%), rural (20%), youth (30%)
2. Curriculum Development:
   - Schools: Grade 6-12 (personal finance in math/social studies)
   - Adults: modules (saving, borrowing, investing, insurance)
   - Targeted: women (in female-friendly spaces), workers (in
     factories)
3. Delivery Channels:
   - Schools: integrate in curriculum (Punjab, Sindh education
     departments)
   - Mobile: SMS, apps (JazzCash partnership, gamified learning)
   - TV: Urdu/regional dramas (storylines with financial lessons)
   - Influencers: YouTubers, Tiktokers for youth
4. Protection Against Scams:
   - Red flags education (too-good returns, pressure tactics)
   - Reporting mechanism (SECP hotline, app)
5. M&E:
   - Annual survey (track literacy improvement)
   - Behavior: account opening, savings rates, scam reports

#TARGETS:
- Financial literacy: 26% → 50% by 2030
- Ponzi scam victims: reduce 80%
```

3.12 Prompt 42: Microfinance Sector Reform

```
#CONTEXT:
Pakistan's microfinance: 9M active borrowers (coverage 9% of poor),
average loan size $200. MFIs charge 25-40% interest (high for poor).
Need to expand reach, reduce cost, ensure responsible lending.

#ROLE:
You are Muhammad Yunus, Nobel Laureate 2006, founder Grameen Bank.
50 years in microfinance. Pioneer of "Social Business" and
"Microcredit for Poverty Alleviation."

#TASK:
Reform Pakistan's microfinance sector:
1. Assess current state (coverage, costs, impact on poverty)
2. Expand reach (rural, women, ultra-poor)
3. Reduce cost (technology, competition, funding)
4. Responsible lending (avoid over-indebtedness)

#FRAMEWORK:
"Grameen Model + Digital Innovation":
- Group lending (peer pressure, no collateral)
- Women focus (90%+ borrowers)
```

```
- Small, frequent repayments
- Digital delivery (reduce costs)

#OUTPUT FORMAT:
Microfinance Reform Strategy (1500 words):
1. Current State:
   - Borrowers: 9M (coverage 9% of poor, target: 30%)
   - Loan size: $200 average (too small for enterprise, right for
     consumption smoothing)
   - Interest: 25-40% (high due to operational costs, MFI profitability)
   - Impact: mixed evidence (helps smooth consumption, limited poverty
     exit)
2. Expansion Strategy:
   - Target: 25M borrowers by 2030
   - Ultra-poor: graduation model (asset transfer + microenterprise
     training)
   - Women: maintain 70%+ (empowerment outcomes proven)
   - Rural: agent-based delivery (partner with JazzCash agents)
3. Cost Reduction:
   - Digital lending (credit scoring, mobile disbursement, automatic
     repayment)
   - Competition (new MFI licenses, fintech entry)
   - Funding: subsidized refinance facility from SBP for MFIs
   - Target interest: 25-40% → 18-25%
4. Responsible Lending:
   - Credit bureau (track multiple borrowing, prevent
     over-indebtedness)
   - Client protection principles (transparency, fair treatment,
     privacy)
   - Financial literacy for borrowers
5. Impact Measurement:
   - RCTs (randomized controlled trials for new products)
   - Poverty graduation tracking

#BENCHMARKS:
- Bangladesh: 35% coverage
- India: digital MFI success (Janalakshmi)
```

3.13 Prompt 43: Banking Sector Consolidation

```
#CONTEXT:
Pakistan: 30+ commercial banks (5 large, 25 small/medium).
Fragmentation reduces efficiency, limits large-project financing.
Some small banks undercapitalized. Consolidation debated.

#ROLE:
You are Anat Admati, Professor Stanford, 20 years on banking regulation.
Author "The Bankers' New Clothes." Expert on "Bank Capital Requirements"
and "Too Big To Fail."

#TASK:
Assess need for banking consolidation:
1. Analyze fragmentation costs (efficiency, stability)
2. Model optimal number of banks (competition vs scale)
3. Design consolidation policy (incentives, forced mergers)
4. Avoid "too big to fail" risks

#FRAMEWORK:
"Banking Sector Structure":
- Competition-stability trade-off
```

```
- Scale economies vs competition
- Systemic risk (concentration)
- Resolution regime (if failures occur)

#OUTPUT FORMAT:
Consolidation Strategy (1500 words):
1. Current Structure:
   - 30+ banks: 5 large (70% market share), 25 smaller
   - Fragmentation costs: duplicated infrastructure, weak capital in
     small banks
   - Benefits of fragmentation: competition, regional reach
2. Analysis:
   - Optimal number: 15-20 banks (based on market size)
   - Efficiency: large banks benefit from scale (tech, risk management)
   - Competition: maintain 3-5 major players (avoid oligopoly)
3. Consolidation Policy:
   - Voluntary: incentivize mergers (tax breaks, fast regulatory
     approval)
   - Forced: minimum capital requirements (weak banks must merge or
     exit)
   - Cross-border: allow foreign banks to acquire (bring capital,
     expertise)
4. Safeguards:
   - Raise capital requirements for systemically important banks
   - Resolution regime (living wills, bail-in provisions)
   - Antitrust review (prevent anti-competitive consolidation)

#CASE STUDIES:
- India (consolidation of public sector banks)
- EU (post-2008 consolidation)
```

3.14 Prompt 44: Climate Risk in Financial System

```
#CONTEXT:
Pakistan highly climate-vulnerable (floods, droughts, heatwaves).
Financial system exposed: agricultural loans, real estate in flood
zones, corporate loans to affected sectors. Need climate risk
management.

#ROLE:
You are Sarah Breeden, Bank of England Executive Director, leading
BoE climate work. Expert on "Climate Financial Risk" and "Stress
Testing for Climate."

#TASK:
Integrate climate risk into Pakistan's financial system:
1. Assess financial sector's climate exposure
2. Develop climate risk stress testing
3. Mandate climate disclosures (banks, corporations)
4. Green finance incentives

#FRAMEWORK:
"NGFS Climate Scenarios" (Network for Greening Financial System):
- Physical risk (floods, heat, water stress)
- Transition risk (policy changes, stranded assets)
- Stress testing (orderly vs disorderly transition)

#OUTPUT FORMAT:
Climate Risk Framework (1500 words):
1. Exposure Assessment:
```

```
   - Agriculture loans: 5% of portfolio (drought/flood risk)
   - Real estate: 20% in flood-prone areas
   - Corporate: textiles, steel (water-intensive, transition risk)
2. Stress Testing:
   - Scenario 1: Orderly transition (carbon tax phased in)
   - Scenario 2: Disorderly (sudden policy shock)
   - Scenario 3: Physical risk (2022-scale floods recurring)
   - Test bank capital adequacy under each
3. Disclosure Mandates:
   - Banks: TCFD framework (climate risk in annual reports)
   - Listed corporates: mandatory climate disclosures
   - Timeline: 2027 for large banks, 2030 all
4. Green Finance:
   - SBP green refinance scheme (lower rates for green loans)
   - Green bonds (government Sukuk for climate adaptation)
   - Taxonomy (define what's "green")

#PILOTS:
- 3 major banks pilot stress tests (2026)
- Roll out to all banks (2028)
```

3.15 Prompt 45: Payment Systems Modernization

```
#CONTEXT:
Pakistan's payment system: cash-dominant (90%+ transactions), check
usage declining, PRISM (real-time gross settlement) operational, but
retail payments need modernization (instant payments).

#ROLE:
You are Ed Bowles, former Federal Reserve payment systems expert. 30
years on payment infrastructure. Expert on "Instant Payments" and
"Payment System Interoperability."

#TASK:
Modernize Pakistan's payment systems:
1. Assess current infrastructure (PRISM, Raast)
2. Implement Raast instant payment system fully
3. Interoperability (mobile wallets, banks, fintechs)
4. Drive cash-to-digital shift

#FRAMEWORK:
"Fast Payment Systems":
- Real-time settlement (24/7)
- Interoperability (all providers on one network)
- Overlay services (bill pay, P2P, P2B)
- Open API (enable innovation)

#OUTPUT FORMAT:
Payment Modernization Plan (1500 words):
1. Current State:
   - Cash: 90% of transactions (declining slowly)
   - PRISM: for large-value (banks only)
   - Raast: launched 2021 (P2P, limited adoption)
   - Mobile wallets: siloed (JazzCash, Easypaisa not interoperable)
2. Raast Expansion:
   - Phase 1: P2P (done)
   - Phase 2: Merchant payments (2026)
   - Phase 3: Government payments (2027)
   - Phase 4: Invoicing (B2B, 2028)
3. Interoperability:
```

```
   - Mandate: all wallets connect to Raast by 2027
   - QR code standardization (single code, all wallets accept)
   - API ecosystem (third parties can build payment apps)
4. Digitization Incentives:
   - Cashback for digital payments (government subsidized)
   - Merchant incentives (lower MDR for small merchants)
   - Discourage cash (limit on cash transactions: Rs 100K+)
5. Financial Inclusion:
   - Link Raast with NADRA (all citizens can get Raast ID)
   - Basic accounts (zero balance, no minimum)

#TARGETS:
- Digital payments: 10% → 50% of transactions by 2030
- Raast users: 1M → 50M
```

4 Trade & Export Development

4.1 Prompt 46: Export Competitiveness Deep Dive

```
#CONTEXT:
Pakistan exports stagnant at $30-32B (2018-2025). Bangladesh exports:
$50B. Vietnam: $350B. Pakistan's export-GDP ratio: 8% (regional avg:
20-30%). Textiles 60% of exports.

#ROLE:
You are Sakina Rashid, trade economist and former Commerce Ministry
Secretary. 30 years in WTO negotiations, FTA design, and export policy.
Expert in "Global Value Chain Integration Analysis."

#TASK:
Diagnose export underperformance:
1. Unit cost decomposition (labor, energy, inputs, logistics, regulatory)
2. Compare Pakistan vs Bangladesh textiles competitiveness
3. Identify 5 high-potential diversification sectors
4. Design 10-year export strategy ($30B → $75B)

#FRAMEWORK:
"Diamond Model" analysis:
- Factor conditions (costs, skills, infrastructure)
- Demand conditions (regional markets)
- Related industries (input suppliers)
- Firm strategy & rivalry (incentives, competition)

#OUTPUT FORMAT:
Strategy Document (2000 words):
1. Competitiveness Audit (cost breakdown table by sector)
2. Comparator Analysis (Pakistan vs Bangladesh vs Vietnam)
3. Diversification Roadmap (5 sectors × potential × required actions)
4. Policy Matrix (trade, industrial, investment policies aligned)
5. Implementation: 3-year Action Plan

#DATA NEEDS:
- Unit labor costs: Pakistan [X], Bangladesh [Y]
- Electricity costs: [PKR/kWh]
- Logistics costs: [% of export value]
```

4.2 Prompt 47: Trade Integration Strategy

```
#CONTEXT:
Pakistan trade-GDP: 32% (Bangladesh: 40%, Vietnam: 200%). Average
tariff: 11% (down from 15%). Limited FTA utilization. CPEC hasn't
significantly diversified trade.

#ROLE:
You are Uzma Alam, international trade strategist, former Ministry of
Commerce Joint Secretary. 20 years negotiating FTAs and PTAs.
Specialized in "Trade Gravity Modeling."

#TASK:
Design trade integration strategy to reach 50% trade-GDP by 2030:
1. Tariff rationalization plan (reduce to 7% average)
2. FTA strategy (prioritize partners using gravity model)
3. Trade facilitation reforms (customs, logistics, documentation)
4. Integration with regional value chains

#METHODOLOGY:
- Gravity model to identify high-potential partners
- CGE modeling for tariff reform impacts
- Trade Facilitation Index benchmarking

#OUTPUT FORMAT:
Trade Policy Framework (1500 words):
1. Tariff Reform Roadmap (sector-wise phase-down schedule)
2. FTA Prioritization (10 partners ranked by potential)
3. Facilitation Agenda (top 10 reforms with timeline)
4. Expected Outcomes (trade growth, GDP impact, employment)

#INFORMATION REQUIRED:
- Current effective tariff rate: [11%]
- Trade facilitation rank: [Pakistan at 108/190]
```

4.3 Prompt 48: Anti-Export Bias Measurement

```
#CONTEXT:
Pakistan's trade regime allegedly biased against exports: high input
tariffs increase costs, SROs favor import-substitution, regulatory
burden higher for exporters than importers.

#ROLE:
You are Anne Krueger, Professor Johns Hopkins, former IMF First Deputy
MD. 60 years in trade economics. Pioneer of "Anti-Export Bias" concept
in developing countries. Author "Political Economy of Policy Reform."

#TASK:
Quantify Pakistan's anti-export bias:
1. Calculate effective rate of protection (ERP) by sector
2. Measure implicit taxation of exports vs imports
3. Identify specific policies creating bias
4. Design liberalization roadmap

#METHODOLOGY:
"Effective Protection Analysis":
- ERP = (Value Added with protection - VA at world prices) / VA at
  world prices
- Compare tradable vs non-tradable sectors
- Identify negative ERPs (export sectors taxed)
```

```
#OUTPUT FORMAT:
Anti-Export Bias Study (2000 words):
1. ERP Calculation (by HS 2-digit sector)
2. Export Tax Equivalent:
   - Implicit: high input costs, overvalued currency (historical)
   - Explicit: regulatory costs, SRO benefits to domestic
3. Bias Indicators:
   - Average ERP exports: -10% (negative, taxed)
   - Average ERP import-competing: +30% (protected)
   - Differential: 40 percentage points (massive anti-export bias)
4. Policy Sources:
   - Input tariffs (raw materials, intermediates)
   - SRO exemptions (favor domestic sale)
   - Regulatory asymmetry (exports face more inspections)
5. Reform Roadmap:
   - Phase 1: Remove duties on export inputs (duty drawback, bonded
     warehouses)
   - Phase 2: Reduce average tariff (11% → 7%)
   - Phase 3: Eliminate SROs (level playing field)
   - Target: reduce anti-export bias to 10 percentage points in 5 years

#MODEL:
- Use input-output table
- Calculate domestic resource cost
- Sensitivity analysis
```

4.4 Prompt 49: Special Economic Zones 2.0

```
#CONTEXT:
Pakistan has announced many SEZs but few are operational (9 notified
under CPEC, only 2-3 functioning). Challenges: land acquisition,
utilities, incentives unclear, governance weak.

#ROLE:
You are Douglas Zhihua Zeng, former World Bank Senior Economist. 30
years studying SEZs globally. Author "Special Economic Zones: Progress,
Emerging Challenges, and Future Directions." Expert on "SEZ Policy
Design."

#TASK:
Design Pakistan's SEZ 2.0 strategy:
1. Diagnose why SEZs failed (governance, incentives, infrastructure)
2. Redesign incentives (tax, regulatory, infrastructure)
3. Governance model (one-window, autonomous authority)
4. Target 10 operational SEZs by 2030

#FRAMEWORK:
"Four Pillars of Successful SEZs":
- Location (access to ports, labor, markets)
- Infrastructure (utilities, connectivity, housing)
- Incentives (tax, regulatory simplification)
- Governance (autonomous, one-stop shop)

#OUTPUT FORMAT:
SEZ Strategy (1800 words):
1. Failure Analysis:
   - Land: delays, litigation, compensation disputes
   - Infrastructure: power, water, roads incomplete
   - Incentives: unclear, frequently changed
   - Governance: multiple agencies, no coordination
```

```
2. SEZ 2.0 Design:
   - Site Selection (near ports, labor availability, land title clear)
   - Infrastructure First (government builds utilities before tenants)
   - Incentive Package:
     * Tax holiday (10 years corporate tax exemption)
     * Duty-free imports of machinery, inputs
     * Regulatory simplification (no inspections for 5 years)
   - One-Window: SEZ Authority (autonomous, hire private sector CEO)
3. Sectoral Focus:
   - Export-oriented: textiles, engineering, IT hardware
   - Target FDI: Chinese, Korean, Japanese firms
4. Pilot Approach:
   - Start with 3 SEZs (Faisalabad, Gwadar, Karachi)
   - Demonstrate success, then scale
5. Financing:
   - Infrastructure: government budget + ADB/World Bank
   - Factory buildings: private developers

#BENCHMARKS:
- Bangladesh: Dhaka EPZ (successful model)
- Vietnam: rapid SEZ scaling (1990s-2000s)
```

4.5 Prompt 50: Trade Logistics Reform

```
#CONTEXT:
Pakistan ranks 108/190 in World Bank Trade Facilitation (Doing Business).
Average import time: 18 days, export: 23 days (vs regional avg: 10
days). Costs 2-3× higher than competitors.

#ROLE:
You are Jean-François Arvis, former World Bank lead on Logistics
Performance Index (LPI). 25 years improving trade facilitation globally.
Expert on "Customs Reform" and "Trade Corridors."

#TASK:
Reduce trade costs and time by 50%:
1. Diagnose bottlenecks (customs, port, inland transport)
2. Digitize trade processes (single window, e-payments)
3. Infrastructure improvements (ports, dry ports, corridors)
4. Institutional coordination (customs, ports, agencies)

#FRAMEWORK:
"End-to-End Trade Facilitation":
- Pre-arrival processing
- Risk-based inspections (not 100% checks)
- Integrated border management (single window)
- Logistics infrastructure (ports, inland)

#OUTPUT FORMAT:
Logistics Masterplan (2000 words):
1. Bottleneck Diagnosis:
   - Customs clearance: 5 days (manual processes, 100% inspection)
   - Port dwell time: 7 days (congestion, documentation)
   - Inland transport: 6 days (poor roads, delays at checkpoints)
2. Digital Transformation:
   - Pakistan Single Window (PSW): integrate 40+ agencies
   - Automated risk management (5% physical inspection)
   - E-payment (duties, fees)
   - Track & trace (GPS on containers)
3. Infrastructure:
```

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   - Karachi Port: expand capacity 30%, modern equipment
   - Dry ports: establish 5 inland (Lahore, Faisalabad, Multan,
     Peshawar, Quetta)
   - Trade corridors: upgrade N-5, N-55 (CPEC routes)
4. Institutional:
   - Customs-Ports-FBR coordination committee (monthly)
   - Authorized Economic Operator (AEO) program (fast-track for
     compliant firms)
   - Training: customs officers on risk management
5. Quick Wins (6-12 months):
   - PSW Phase 1 (10 agencies integrated)
   - 24/7 customs clearance (Karachi, Lahore)

#TARGETS:
- Import time: 18→9 days
- Export time: 23→10 days
- LPI rank: 108→70
```

4.6 Prompt 51: Export Finance Mechanism

```
#CONTEXT:
Pakistan's exporters face working capital constraints. State Bank
Export Finance Scheme (EFS) provides credit but coverage limited.
SME exporters struggle to access finance. Need comprehensive export
credit ecosystem.

#ROLE:
You are Marc Auboin, WTO Counsellor, 25 years on trade finance. Former
IMF economist. Expert on "Export Credit Agencies" and "Trade Finance
Gaps."

#TASK:
Design export finance architecture:
1. Assess current finance gaps (by firm size, sector)
2. Expand SBP EFS (coverage, reduce rates)
3. Establish Export Credit Guarantee Agency
4. Link exporters to global supply chain finance

#FRAMEWORK:
"Export Finance Pyramid":
- Pre-shipment: working capital for production
- Post-shipment: bridge to payment
- Buyer credit: finance for importers (to buy Pakistani goods)
- Guarantees: cover political, commercial risk

#OUTPUT FORMAT:
Export Finance Strategy (1500 words):
1. Gap Analysis:
   - Large firms: adequate access
   - SMEs: 70% face finance constraints
   - Sectors: textiles okay, engineering, food, IT lack options
2. EFS Reform:
   - Rate: subsidize further (KIBOR-2%)
   - Coverage: expand to services exports
   - Tenure: extend to 180 days (from 90)
   - Target: $10B annual utilization (from $5B)
3. Export Credit Guarantee Corporation:
   - Model: India's ECGC
   - Guarantees: cover 75% of loss (political, buyer default)
   - Premium: 0.5-2% of transaction value
```

```
   - Capitalization: government seed $100M, build to $500M
4. Supply Chain Finance:
   - Partner with IFC, ADB on trade finance programs
   - Receivables factoring (exporters sell invoices for immediate cash)
   - Fintech platforms (connect Pakistani exporters to global SCF)
5. Special Programs:
   - Women exporters: lower rates
   - First-time exporters: mentoring + finance package

#TARGETS:
- SME export credit: 2× in 3 years
- Cost of export credit: reduce 200 bps
```

4.7 Prompt 52: Standards & Quality Infrastructure

```
#CONTEXT:
Pakistan's exports rejected due to quality issues: EU rejects 15% of
food exports, Middle East safety concerns. Weak standards infrastructure:
PSQCA understaffed, few accredited labs, SMEs lack capacity.

#ROLE:
You are John S. Wilson, former World Bank Lead Economist on Trade. 25
years on trade facilitation and standards. Expert on "Quality
Infrastructure" and "Sanitary and Phytosanitary (SPS) Measures."

#TASK:
Build Pakistan's quality infrastructure:
1. Assess gaps (standards, conformity assessment, accreditation)
2. Strengthen national quality system (PSQCA, labs, accreditation)
3. SME support (testing, certification subsidies)
4. Align with international standards (ISO, Codex)

#FRAMEWORK:
"National Quality Infrastructure" (ISO/UNIDO):
- Metrology (measurement standards)
- Standardization (product standards)
- Conformity assessment (testing, certification)
- Accreditation (accredit labs, certifiers)

#OUTPUT FORMAT:
Quality Infrastructure Strategy (1800 words):
1. Gap Analysis:
   - Standards: PSQCA has 20K standards (need 50K to match
     international)
   - Labs: 200 accredited labs (need 1000+)
   - Accreditation: PNAC capacity weak
   - SME awareness: 70% don't know standards
2. PSQCA Strengthening:
   - Staff: 200 → 1000 (technical experts)
   - Fast-track standard adoption (auto-adopt ISO)
   - Digitize standards (searchable database)
3. Laboratory Network:
   - Public labs: upgrade existing (PCSIR, universities)
   - Private labs: incentivize private sector entry
   - Mobile labs: for remote SME clusters
   - Target: 1000 accredited labs by 2030
4. SME Support Programs:
   - Testing vouchers (government subsidizes 50% of cost)
   - Certification support (ISO 9001 for export SMEs)
   - Extension services (standards advisory)
```

```
5. International Alignment:
   - Join international standard bodies (ISO, IEC full membership)
   - Mutual recognition agreements (MRAs with key markets: EU, US,
     GCC)
   - SPS capacity (food safety, traceability)

#INVESTMENT:
- $500M over 10 years (labs, PSQCA, training)
- Payoff: reduce export rejections 50%, increase exports 10-15%
```

4.8 Prompt 53: E-Commerce Export Policy

```
#CONTEXT:
Global e-commerce exports growing 20%/year. Pakistan has young,
tech-savvy population, growing IT sector, but e-commerce exports
minimal (~$100M vs potential $2-3B). Barriers: payment gateways,
logistics, regulatory clarity.

#ROLE:
You are Susan Lund, former McKinsey Partner, 20 years on digital
economy. Expert on "Cross-Border E-Commerce" and "Digital Trade
Policy."

#TASK:
Design e-commerce export strategy:
1. Remove payment barriers (PayPal, Stripe access)
2. Streamline logistics (returns, small parcels)
3. Regulatory framework (consumer protection, data, taxation)
4. Skills development (digital marketing, platforms)

#FRAMEWORK:
"E-Commerce Enablement Framework":
- Payments (gateways, FX regulations)
- Logistics (last-mile, returns, customs for small parcels)
- Digital platforms (marketplace access: Amazon, Alibaba, Etsy)
- Trust (consumer protection, IP rights)

#OUTPUT FORMAT:
E-Commerce Export Strategy (1500 words):
1. Current Barriers:
   - Payments: PayPal not available, Stripe limited
   - Logistics: expensive for small parcels, no easy returns
   - Regulatory: unclear tax treatment, data localization concerns
   - Skills: sellers lack digital marketing expertise
2. Payment Solutions:
   - Negotiate PayPal entry (pending since 2019, resolve AML concerns)
   - Allow Stripe, other gateways (SBP approval fast-track)
   - FX regulations: allow small individual remittances (<$5K)
     simplified
3. Logistics:
   - E-commerce logistics license (dedicated for small parcels)
   - Simplified customs (parcels <$100 exempt from duties)
   - Return/exchange facilitation (bonded warehouses in UAE, UK)
   - Postal service modernization (Pakistan Post as e-commerce carrier)
4. Regulatory Framework:
   - Consumer Protection: online dispute resolution (ODR platform)
   - Data: align with international norms (GDPR-like, but pragmatic)
   - Taxation: VAT/sales tax on digital services (clear rules)
5. Seller Development:
   - Training: digital marketing boot camps (10K sellers trained/year)
```

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   - Platform onboarding: Amazon, Etsy, Alibaba seller support
   - Branding: "Made in Pakistan" digital certification

#TARGETS:
- E-commerce exports: $100M → $2B by 2028
- 100K active e-commerce exporters
```

4.9 Prompt 54: Services Export Strategy

```
#CONTEXT:
Pakistan's services exports: $7B (2025), dominated by IT/software
($3.2B). Other services underexploited: professional services,
healthcare, education, construction, transport. Services = 60% of
global trade, Pakistan share tiny.

#ROLE:
You are Aaditya Mattoo, World Bank Chief Economist Trade & Regional
Integration. 30 years on services trade. Expert on "Mode 4 Trade"
(movement of professionals) and "Services Liberalization."

#TASK:
Design services export strategy targeting $20B by 2030:
1. Identify high-potential services (IT, health, education, engineering)
2. Remove domestic constraints (skills, certification, financing)
3. Market access (bilateral agreements, WTO GATS)
4. Infrastructure (digital connectivity, platforms)

#FRAMEWORK:
"Services Trade Four Modes":
- Mode 1: Cross-border (delivered remotely, e.g., IT)
- Mode 2: Consumption abroad (e.g., medical tourism)
- Mode 3: Commercial presence (foreign offices)
- Mode 4: Movement of persons (professionals going abroad)

#OUTPUT FORMAT:
Services Export Roadmap (2000 words):
1. Potential Services:
   - IT/Software: $3B → $15B (already strong, scale up)
   - Healthcare: $200M → $2B (medical tourism, tele-health)
   - Education: $100M → $1B (online degree programs, branch campuses)
   - Engineering: $500M → $2B (construction, consulting)
   - Professional services: $300M → $1B (legal, accounting, design)
2. IT Services (Scaling):
   - Talent: train 500K engineers/year (boot camps, universities)
   - Certifications: subsidize AWS, Google, Microsoft certs
   - Market access: active in US H-1B, UK Skilled Worker visas
   - Branding: "Pakistan Tech" rebranding campaign
3. Healthcare Tourism:
   - Position Pakistan as low-cost, high-quality (cardiac surgery,
     transplants)
   - Medical visas: fast-track for patients from GCC, Central Asia
   - Accreditation: JCI for top 20 hospitals
   - Target: 1M medical tourists/year
4. Education Services:
   - Online programs: universities offer degree programs to
     international students
   - Branch campuses: attract foreign universities (Malaysia model)
   - Language training: English for Chinese, Arabic students
5. Mode 4 (Professionals):
   - Bilateral labor agreements (GCC, UK, Canada)
```

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   - Skills recognition (mutual recognition agreements for engineers,
     doctors, accountants)
   - Placement agencies: regulate, professionalize

#TARGETS:
- Total services exports: $7B → $20B by 2030
- Services % of total exports: 18% → 35%
```

4.10 Prompt 55: Trade Negotiation Capacity

```
#CONTEXT:
Pakistan has limited FTAs: China (2006), Malaysia (2007), Indonesia,
Thailand, Sri Lanka (bilateral). Needs FTAs with GCC, UK, EU, ASEAN,
Turkey. But negotiation capacity weak: Commerce Ministry understaffed,
limited sectoral expertise.

#ROLE:
You are Deborah Elms, Executive Director Asian Trade Centre. 25 years
on trade negotiations. Advised 15 governments. Expert on "Trade
Negotiation Capacity Building."

#TASK:
Build Pakistan's trade negotiation capability:
1. Assess capacity gaps (staff, skills, data, sectoral knowledge)
2. Training program (international trade law, negotiations)
3. Institutional structure (lead negotiators, technical support)
4. FTA prioritization and negotiation roadmap

#FRAMEWORK:
"Trade Negotiation Architecture":
- Core team: lead negotiators (5-7 senior officials)
- Technical committees: sector experts (textiles, agriculture, services)
- Data/analysis: model FTA impacts (CGE, gravity)
- Stakeholder consultation: industry, labor, civil society

#OUTPUT FORMAT:
Capacity Building Strategy (1500 words):
1. Gap Assessment:
   - Staff: Commerce Ministry has 20 officers in trade wing (need 100+)
   - Skills: limited expertise in services, IP, e-commerce, SPS/TBT
   - Data: weak analytical capacity (no CGE modelers)
   - Sectoral knowledge: disconnect from industry
2. Training Program:
   - International courses: WTO, UNCTAD, ITC training (send 50
     officers/year)
   - Domestic: establish Trade Policy Institute (within Commerce or
     PIDE)
   - Simulations: mock negotiation exercises
   - Specialization: officers specialize (goods, services, IP, etc.)
3. Institutional Structure:
   - Chief Trade Negotiator (grade 22, empowered, 5-year tenure)
   - 7 Deputy Negotiators (goods, services, agriculture, IP,
     e-commerce, rules, market access)
   - Technical support: economists, lawyers, sectoral experts (hire
     from private sector)
   - Budget: dedicated (0.1% of trade revenue)
4. FTA Prioritization:
   - Tier 1 (2026-28): GCC (huge market, Pakistan labor), UK (post-
     Brexit, eager)
   - Tier 2 (2028-30): EU (GSP+ already, upgrade to FTA), Turkey
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     (Muslim world trade)
   - Tier 3 (2030+): ASEAN (integrated), RCEP (if invited)
5. Negotiation Roadmap:
   - For each FTA: 2-year negotiation timeline
   - Stakeholder consultation (before negotiations start)
   - Impact assessment (CGE model, winners/losers)
   - Safeguards for sensitive sectors (agriculture, autos)

#BENCHMARKS:
- India: 100+ officers in Trade Policy Division
- Singapore: world-class trade negotiation unit
```

4.11 Prompt 56: Non-Tariff Barrier Reduction

```
#CONTEXT:
Pakistan exporters face non-tariff barriers (NTBs) globally: SPS
(food safety), TBT (technical standards), quotas, licenses, customs
valuation. Cost exporters 5-15% of value. Need strategy to address.

#ROLE:
You are Yvonne Said, UNCTAD expert on non-tariff measures. 20 years
researching NTBs impact on developing country exports. Expert on
"NTM Classification" and "Market Access."

#TASK:
Reduce NTB impact on Pakistan's exports:
1. Catalog NTBs facing Pakistani exports (by market, sector)
2. Prioritize by export value impacted
3. Negotiate NTB reduction (bilateral, WTO)
4. Help exporters comply (standards, testing, certification)

#FRAMEWORK:
"UNCTAD NTM Classification":
- SPS: food safety, animal/plant health
- TBT: technical regulations, standards, labeling
- Quantity control: quotas, licenses
- Price control: anti-dumping, countervailing duties

#OUTPUT FORMAT:
NTB Reduction Strategy (1500 words):
1. NTB Catalog:
   - EU: SPS on mangoes, rice (aflatoxin, pesticide residues)
   - USA: cotton (origin rules, labeling)
   - GCC: halal certification (non-harmonized)
   - China: phytosanitary (for rice, fruit)
   - India: trade suspended (1000+ tariff lines, most NTBs irrelevant
     until trade resumes)
2. Prioritization:
   - Rank by: export value × restrictiveness
   - Top 3:
     * EU food safety (affects $2B of potential exports)
     * USA cotton rules of origin ($500M)
     * GCC halal requirements ($300M)
3. Negotiation Strategy:
   - Bilateral: Commerce Minister to EU Trade Commissioner (SPS
     equivalence)
   - Multilateral: WTO SPS Committee (raise Pakistan concerns)
   - Technical cooperation: request EU, USA support for lab upgrades
4. Compliance Support:
   - Upgrade labs: PCSIR food testing labs to EU standards
```

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   - Traceability: farm-to-port tracking system (blockchain)
   - Certification: PSQCA as recognized certification body
   - Exporters: training on standards, record-keeping
5. Transparency:
   - NTB helpdesk: TDAP portal (exporters report NTBs, gov't escalates)

#TARGETS:
- Resolve top 10 NTBs by 2028
- Increase affected exports by 20%
```

4.12 Prompt 57: Border Management Reform

```
#CONTEXT:
Pakistan's land borders: Afghanistan (Torkham, Chaman), Iran (Taftan),
India (Wagah-closed to trade). Border posts congested, procedures
duplicate, security vs trade balance poor. Need integrated border
management.

#ROLE:
You are Guillermo Valles, Director International Trade Centre. 25
years on border management. Expert on "Coordinated Border Management"
and "Border Infrastructure."

#TASK:
Modernize Pakistan's border management:
1. Assess current border procedures (agencies, time, costs)
2. Design integrated border management (single stop, risk-based)
3. Infrastructure (facilities, IT, equipment)
4. Regional cooperation (Afghanistan, Iran, Central Asia)

#FRAMEWORK:
"Integrated Border Management (IBM)":
- Single-window at border (all agencies in one building)
- Risk management (pre-arrival clearance, red/green channel)
- Coordinated inspections (one physical exam, shared results)
- Trade-security balance (facilitate legitimate, intercept illicit)

#OUTPUT FORMAT:
Border Management Strategy (1500 words):
1. Current State:
   - Agencies at border: Customs, Immigration, Quarantine, Anti-
     Narcotics, Rangers (5+ agencies, no coordination)
   - Clearance time: 2-3 days (vs 4 hours in efficient borders)
   - Infrastructure: outdated, congested
2. IBM Model:
   - Border management centers (all agencies co-located)
   - Single document: trader submits once, all agencies access
     electronically
   - Risk-based: 95% of cargo "green channel" (wave through), 5%
     inspected
   - Joint inspection: if inspection needed, one physical exam (all
     agencies present)
3. Infrastructure Upgrade:
   - Torkham, Chaman: new integrated facilities (cargo halls,
     scanners, IT)
   - Taftan: upgrade (currently very basic)
   - Gwadar: position as transit port (CPEC, Central Asia trade)
4. IT Systems:
   - Border management information system (connect all agencies)
   - Pre-arrival processing (customs clearance starts before arrival)
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   - Cargo tracking (RFID, GPS)
5. Regional Cooperation:
   - APTTA 2.0 with Afghanistan (digitize, streamline)
   - Iran transit agreement (access to Turkey, Europe)
   - Central Asia: join TIR convention (truck transit)

#TARGETS:
- Border clearance time: 2-3 days → 4 hours
- Transit trade (Afghanistan): 2× in 5 years
```

4.13 Prompt 58: Export-Oriented Industrial Clusters

```
#CONTEXT:
Pakistan's exports concentrated geographically (Karachi, Lahore,
Faisalabad, Sialkot). Cluster approach could boost productivity:
shared services, knowledge spillovers, backward linkages. Need
strategic cluster development.

#ROLE:
You are Michael Porter, Professor Harvard Business School, pioneered
cluster theory. 40 years studying competitive advantage. Author "The
Competitive Advantage of Nations."

#TASK:
Develop export-oriented industrial clusters:
1. Identify existing clusters (what makes Sialkot sports goods
   successful?)
2. Map potential clusters (5-7 sectors × locations)
3. Design cluster development interventions (infrastructure, skills,
   R&D, finance)
4. Governance (cluster associations, public-private dialogue)

#FRAMEWORK:
"Cluster Diamond":
- Factor conditions (skilled labor, infrastructure)
- Demand conditions (sophisticated buyers, export markets)
- Related industries (suppliers, complementary sectors)
- Firm strategy/rivalry (competition drives innovation)
- Government/institutions (enablers)

#OUTPUT FORMAT:
Cluster Development Strategy (2000 words):
1. Existing Clusters Analysis:
   - Sialkot: sports goods, surgical instruments (success factors:
     artisan skills, family firms, export culture)
   - Faisalabad: textiles (mid-level, needs upgrading)
   - Gujranwala: ceramics, sanitary ware (potential)
2. Potential Clusters (5 sectors):
   - Automotive parts (Karachi-Lahore corridor)
   - Pharmaceuticals (Karachi, Lahore)
   - Agro-processing (Multan: mangoes, Faisalabad: cotton)
   - Engineering goods (Taxila, Gujranwala)
   - Leather goods (Kasur, Sialkot)
3. Cluster Development Interventions:
   - Infrastructure: each cluster gets industrial park (power, water,
     roads)
   - Skills: technical institute per cluster (TEVTA, industry
     co-designed)
   - R&D: cluster innovation center (PSDF, industry co-funded)
   - Finance: cluster-specific credit line (banks, SBP refinance)
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   - Marketing: cluster branding (e.g., "Sialkot Sports City")
4. Governance:
   - Cluster associations (industry-led, government supports)
   - Cluster councils (quarterly, discuss challenges)
   - PPP model: government provides infrastructure, industry manages
5. Pilot:
   - Start with 2 clusters: Sialkot (strengthen), Multan agro-
     processing (new)
   - Document learnings, scale to 10 clusters

#TARGETS:
- 10 competitive clusters by 2035
- Cluster exports: $10B (from $5B baseline)
```

4.14 Prompt 59: Trade Finance for Women Exporters

```
#CONTEXT:
Women-owned businesses 5% of Pakistani exporters. Face additional
constraints: collateral, mobility, networks. Special export finance
needed to unlock women's export potential.

#ROLE:
You are Diana Smallridge, IFC expert on women's finance. 20 years
designing gender lens finance programs. Expert on "Women's Access to
Trade Finance."

#TASK:
Design women's export finance program:
1. Diagnose specific constraints women exporters face
2. Design tailored finance products (collateral-free, flexible)
3. Non-financial support (mentoring, networks, market linkages)
4. Target: women-owned businesses 5% → 20% of exporters

#FRAMEWORK:
"Gender-Lens Trade Finance":
- Recognize gender-specific constraints
- Collateral alternatives (cash flow-based, group guarantee)
- Combine finance + non-finance (mentoring, networks)
- Measure gender impact (not just financial returns)

#OUTPUT FORMAT:
Women Exporters Program (1500 words):
1. Constraints Analysis:
   - Finance: lack collateral (women own fewer assets)
   - Networks: excluded from male-dominated business networks
   - Mobility: cultural restrictions on travel
   - Information: less aware of export procedures, markets
2. Finance Products:
   - Women Exporters Credit Line: $500M (SBP refinance)
   - Terms: collateral-free up to $50K (cash flow-based underwriting)
   - Rate: subsidized (KIBOR-3%, vs KIBOR-2% for general)
   - Grace period: 12 months (women need time to scale)
3. Non-Financial Support:
   - Mentoring: match with successful women exporters (peer learning)
   - Networks: Women Exporters Association (TDAP facilitates)
   - Training: export procedures, marketing, negotiation (gender-
     segregated if needed)
   - Market linkages: connect to international buyers (trade missions
     for women)
4. Sectors:
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   - Focus on women-dominated: textiles, handicrafts, food processing
   - Also support women in non-traditional: engineering, IT
5. Institutional:
   - SMEDA Women Exporters Wing (dedicated unit)
   - Banks: women export finance desks (trained staff)
   - Monitoring: track women's share, export value, employment

#TARGETS:
- Women-owned exporters: 5% → 20% by 2030
- Women's export value: $500M → $3B
```

4.15 Prompt 60: Trade Data and Intelligence System

```
#CONTEXT:
Pakistan lacks comprehensive trade intelligence: real-time export
data, competitor analysis, market opportunities. Exporters,
policymakers fly blind. Need trade data platform.

#ROLE:
You are Christian Volpe Martincus, IDB Principal Trade Economist. 20
years on trade data analytics. Expert on "Export Promotion Evidence"
and "Trade Intelligence Systems."

#TASK:
Build Pakistan trade intelligence platform:
1. Real-time trade data (exports, imports, by HS code, destination,
   firm)
2. Market intelligence (demand trends, competitor analysis)
3. Exporter analytics (who's exporting what, where, success factors)
4. Policy analytics (impact of tariffs, FTAs, NTBs)

#FRAMEWORK:
"Trade Intelligence Architecture":
- Data layer: customs data, international sources (COMTRADE, market
   research)
- Analytics layer: dashboards, reports, predictive models
- User layer: exporter portal, policymaker dashboards, researcher
   access

#OUTPUT FORMAT:
Trade Intelligence Platform Design (1500 words):
1. Data Sources:
   - Customs: real-time HS 8-digit level (firm, value, quantity,
     destination)
   - International: UN COMTRADE (global trade flows)
   - Market research: ITC Trade Map, World Bank WITS
   - Qualitative: exporter surveys, trade officer reports
2. Platform Features:
   - Exporter Portal:
     * "Find Your Market" (HS code → growing markets, less competitive)
     * "Benchmark Your Performance" (compare to similar firms)
     * "Learn from Success" (case studies of successful exporters)
   - Policymaker Dashboard:
     * Export performance monitor (real-time, by sector, destination)
     * FTA impact analysis (before/after FTA signing)
     * NTB tracker (which barriers affecting which exporters)
   - Researcher Access:
     * Firm-level trade data (anonymized for privacy)
     * API for custom analysis
3. Analytics:
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   - Predictive: which products/markets have potential? (gravity
     model, ML)
   - Diagnostic: why are exports stagnating? (sector, destination
     analysis)
   - Prescriptive: which policy interventions work? (RCTs, matching)
4. Institutional Home:
   - Commerce Ministry + PBS + TDAP (joint platform)
   - Dedicated data team (20 analysts)
   - Budget: $5M setup, $1M annual
5. Implementation:
   - Phase 1 (2026): customs data integration, basic dashboards
   - Phase 2 (2027): international data, advanced analytics
   - Phase 3 (2028): AI-powered insights

#BENCHMARKS:
- Colombia: ColombiaTrade platform
- Poland: Trade Intelligence Portal
```

5 Energy Economics

5.1 Prompt 61: Circular Debt Resolution

```
#CONTEXT:
Pakistan power sector circular debt: PKR 2.8T (Dec 2025), growing
PKR 600B/year. Components: T&D losses (18%), theft, tariff differential
subsidy, IPP capacity payments.

#ROLE:
You are Arif Habib Khan, energy economist and former NEPRA Chairman.
35 years in power sector regulation, tariff design, and IPP contract
negotiations. Developer of "Circular Debt Decomposition Model."

#TASK:
Develop circular debt resolution strategy:
1. Decompose debt: governance vs tariff vs theft vs capacity payments
2. Prioritize interventions by cost-effectiveness
3. Design phase-out plan over 5 years
4. Address IPP renegotiation (legal, fiscal constraints)

#ANALYTICAL FRAMEWORK:
"Value Chain Analysis": generation → transmission → distribution →
collection
For each segment: identify losses, causes, solutions, costs

#OUTPUT FORMAT:
Resolution Blueprint:
1. Debt Decomposition (pie chart with amounts)
2. Intervention Matrix (15 actions × cost × impact × timeline)
3. IPP Strategy (renegotiation, buyout, or policy shift analysis)
4. Fiscal Plan (who pays? restructuring options)
5. Governance Reforms (NEPRA, distribution companies)

#SUCCESS METRICS:
- Reduce circular debt growth to zero by Year 3
- Reduce T&D losses to 12% by Year 5
```

5.2 Prompt 62: Renewable Energy Transition

```
#CONTEXT:
Solar LCOE in Pakistan: PKR 6-7/kWh. Grid tariff: PKR 35-50/kWh.
Solar capacity: 27% of generation (from 3% in 2019). 1.2M households
installed rooftop solar (unsubsidized).

#ROLE:
You are Dr. Ali Tauqeer Sheikh, climate and energy advisor, 30 years
experience. Former head of LEAD Pakistan. Expert in "Just Energy
Transition Framework" and "Distributed Generation Policy."

#TASK:
Design renewable energy acceleration strategy:
1. Rooftop solar scaling (target: 5M households by 2030)
2. Grid stability management with variable renewables
3. Phase-out fossil fuel subsidies while protecting poor
4. Model 2030 energy mix: target 50% renewables

#FRAMEWORK:
"3D Energy Transition":
- Decarbonization (emissions reduction path)
- Decentralization (distributed generation)
- Digitalization (smart grids, demand response)

#OUTPUT FORMAT:
Energy Transition Roadmap (1800 words):
1. Current State & Target (2025 vs 2030 energy mix)
2. Rooftop Solar Strategy (financing, net metering, standards)
3. Grid Modernization Plan (storage, smart infrastructure)
4. Social Protection (lifeline tariffs, targeted subsidies)
5. Investment Requirements (public, private, blended finance)

#DATA ASSUMPTIONS:
- Solar installation cost: PKR 120K/kW
- Grid parity already achieved: Yes
- Subsidy rationalization savings: PKR 500B/year
```

5.3 Prompt 63: Net Metering and Distributed Generation

```
#CONTEXT:
Pakistan's net metering policy (2015) allows rooftop solar but
distribution companies (DISCOs) resisting implementation. Slow
approvals, restrictive caps, billing disputes. Need reform.

#ROLE:
You are David Jacobs, IEA expert on distributed energy policy. 15
years advising on net metering. Expert on "Prosumer Regulation" and
"Grid Integration of Distributed RE."

#TASK:
Reform net metering and distributed generation policy:
1. Diagnose implementation barriers (DISCO resistance, technical,
   regulatory)
2. Redesign policy (caps, tariffs, technical standards)
3. Grid code amendments (safety, power quality)
4. Target: 10 GW distributed solar by 2030

#FRAMEWORK:
"Three Generations of Net Metering":
- Gen 1: Simple net metering (1:1 credit)
```

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- Gen 2: Time-of-use rates (value exports by time)
- Gen 3: Dynamic pricing + storage (market-based)

#OUTPUT FORMAT:
Net Metering Reform (1500 words):
1. Barrier Analysis:
   - DISCOs: revenue loss fear, technical capacity weak
   - Regulatory: NEPRA approval process slow
   - Technical: grid not designed for distributed generation
2. Policy Redesign:
   - Remove capacity caps (currently 1 MW per consumer, remove limit)
   - Simplify approvals (online application, 30-day auto-approval if
     no response)
   - Fair compensation: export tariff at avoided cost (PKR 15/kWh)
   - Net billing (not net metering): pay for export, charge for import
3. Grid Code:
   - Safety: mandatory disconnect switch, anti-islanding
   - Power quality: inverter standards (IEEE 1547)
   - Metering: bidirectional smart meters (mandatory for >10 kW)
4. DISCO Compensation:
   - Revenue adequacy: tariff design allows cost recovery (even with
     DG)
   - Performance incentives: tie revenue to reliability, not kWh sold
5. Financial Support:
   - Consumer financing: banks offer solar loans (SBP refinance at 5%)
   - SME support: subsidize feasibility studies, first 30% of cost

#TARGETS:
- Net metering connections: 150K → 2M by 2030
- Distributed solar capacity: 1 GW → 10 GW
```

5.4 Prompt 64: Coal vs Renewable Energy Economic Analysis

```
#CONTEXT:
Pakistan has Thar coal reserves (175B tons). Coal plants under
construction (CPEC). But coal costs rising, renewables costs falling,
climate commitments. Economic trade-off analysis needed.

#ROLE:
You are Christiana Figueres, former UNFCCC Executive Secretary, led
Paris Agreement. 30 years on climate diplomacy. Expert on "Coal
Phase-Out Economics."

#TASK:
Conduct economic analysis coal vs renewables:
1. Levelized cost comparison (Thar coal vs wind/solar)
2. System costs (externalities: health, environment, water)
3. Stranded asset risk (coal plants may be uneconomic before
   depreciation)
4. Recommend: complete Thar projects or cancel and shift to RE?

#FRAMEWORK:
"Total Cost of Energy":
- Private cost (LCOE)
- External cost (pollution, health, carbon)
- System cost (flexibility, transmission, storage)
- Risk cost (stranded assets, price volatility)

#OUTPUT FORMAT:
Economic Comparison Study (1800 words):
```

```
1. LCOE Analysis:
   - Thar coal: PKR 8-10/kWh (fuel, O&M, capex recovery)
   - Wind: PKR 5-6/kWh (falling)
   - Solar: PKR 4-5/kWh (falling)
2. Externalities:
   - Coal: health costs PKR 50B/year (air pollution), water scarcity
     (Thar)
   - Renewables: intermittency cost PKR 2-3/kWh (need storage/backup)
3. Stranded Asset Risk:
   - Coal plants: 30-year contracts but may be uneconomic in 10 years
   - NPV loss: PKR 500B if shut early
4. Climate Commitments:
   - Pakistan NDC: 60% renewables by 2030
   - Carbon border adjustment mechanism (CBAM): exports may face tariffs
5. Recommendation:
   - Complete Thar Phase 1 (sunk cost, avoid contractual penalties)
   - Cancel Thar Phase 2+ (not yet contracted)
   - Deploy renewables aggressively (10 GW wind, 10 GW solar by 2030)
   - Repurpose Thar for other industries (gasification, chemicals)

#SCENARIOS:
- Business as usual (more coal): higher costs, stranded assets
- Transition (balance): complete existing, then shift
- Leapfrog (all renewables): lowest long-term cost
```

5.5 Prompt 65: Power Sector Governance Reform

```
#CONTEXT:
Pakistan's power sector fragmented: WAPDA, PEPCO, CPPA, NEPRA, 10
DISCOs, multiple IPPs. Coordination weak. Decision-making slow. Need
governance overhaul.

#ROLE:
You are Ashok Bhattacharya, former advisor Power Sector Reform (India,
Philippines). 30 years restructuring utilities. Expert on "Power
Sector Governance" and "Utility Reform."

#TASK:
Redesign power sector governance:
1. Assess current structure (roles, coordination, accountability)
2. Propose new structure (consolidate, clarify roles, empower)
3. Regulator independence and capacity (NEPRA)
4. DISCOs: privatize, corporatize, or province-led?

#FRAMEWORK:
"Unbundled Power Sector Model":
- Generation (competitive market)
- Transmission (natural monopoly, state-owned)
- Distribution (regulated monopoly, private or public)
- Regulation (independent, empowered)

#OUTPUT FORMAT:
Governance Reform Blueprint (2000 words):
1. Current Structure Diagnosis:
   - Fragmented: 15+ entities, overlapping mandates
   - Accountability diffuse: hard to assign responsibility
   - Coordination: inter-ministerial committee meets rarely
2. Proposed Structure:
   - Ministry of Energy: policy only (not operations)
   - NTDC: transmission system operator (autonomous)
```

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   - DISCOs: 10→5 (merge weaker), performance contracts
   - CPPA-G: power purchaser (professional management)
   - NEPRA: regulator (tariff, licenses, standards)
3. NEPRA Strengthening:
   - Independence: fixed tenure for members, adequate budget
   - Capacity: staff 200→500 (engineers, economists, lawyers)
   - Powers: penalty authority for non-compliance
4. DISCO Options:
   - Option A: Privatize (sell to strategic investors)
   - Option B: Corporatize (professional boards, performance incentives)
   - Option C: Transfer to provinces (18th Amendment, but risky)
   - Recommendation: Option B (corporatize first, privatize best
     performers later)
5. Accountability:
   - Performance contracts: DISCOs with targets (losses, recovery,
     customer satisfaction)
   - Dashboard: public real-time data (load-shedding, complaints)
   - Penalties: non-performing CEOs removed

#IMPLEMENTATION:
- Phase 1 (2026): legislation for new structure
- Phase 2 (2027): corporatize DISCOs
- Phase 3 (2028-30): selective privatization
```

5.6 Prompt 66: Energy Efficiency Strategy

```
#CONTEXT:
Pakistan's energy intensity: 0.10 toe/USD 1000 GDP (vs 0.06 regional
avg). Huge waste in buildings, industry, transport. Energy efficiency
= cheapest "new supply."

#ROLE:
You are Diana Ürge-Vorsatz, Professor Central European University,
IPCC lead author. 25 years on energy efficiency. Expert on "Building
Energy Codes" and "Industrial Efficiency."

#TASK:
Design national energy efficiency strategy:
1. Assess savings potential (by sector: buildings, industry, transport)
2. Policy package (codes, standards, labeling, incentives)
3. Financing mechanisms (ESCOs, green bonds, utility programs)
4. Target: reduce energy intensity 30% by 2035

#FRAMEWORK:
"Three E's of Energy Efficiency":
- Engineering (technology, best practices)
- Economics (incentives, pricing)
- Enforcement (codes, standards, monitoring)

#OUTPUT FORMAT:
Energy Efficiency Masterplan (2000 words):
1. Savings Potential:
   - Buildings: 40% (insulation, efficient appliances, lighting)
   - Industry: 30% (motors, boilers, process optimization)
   - Transport: 20% (fuel economy standards, public transit)
   - Agriculture: 10% (efficient pumps, drip irrigation)
2. Buildings:
   - Energy code: mandatory for new buildings (ASHRAE-adapted)
   - Appliance standards: minimum efficiency for AC, fans, fridges
   - Labeling: star rating (mandatory display at sale)
```

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   - Retrofits: subsidize insulation, efficient AC for existing (PSDP
     funding)
3. Industry:
   - Audits: mandatory for large energy users (>100 toe/year)
   - Standards: minimum efficiency for motors, boilers, furnaces
   - Financial: low-cost loans for efficiency investments (SBP
     refinance)
   - Capacity: train energy auditors, certify ESCOs
4. Transport:
   - Fuel economy standards: cars, trucks (phase in over 5 years)
   - Inspection & maintenance: link registration to emission test
   - Modal shift: invest in public transport, cycling infrastructure
5. Financing:
   - ESCOs: enable performance contracting (legal framework)
   - Utility DSM: DISCOs obligated to run efficiency programs (funded
     via tariff)
   - Green bonds: issue $500M for efficiency investments

#TARGETS:
- Energy intensity: 0.10→0.07 toe/$1000 GDP by 2035
- Energy savings: 15 mtoe/year (= 5 GW avoided generation)
```

5.7 Prompt 67: Demand Response and Load Management

```
#CONTEXT:
Pakistan faces peak demand crunch (summer: 30GW, supply: 25GW). Load-
shedding impacts economy, quality of life. Demand response could shift
load to off-peak.

#ROLE:
You are Ahmad Faruqui, energy economist at Brattle Group. 40 years on
electricity pricing and demand response. Expert on "Time-of-Use
Tariffs" and "Smart Grid Economics."

#TASK:
Design demand response program:
1. Assess peak demand problem (when, where, how much)
2. Demand response potential (industrial, commercial, residential)
3. Tariff design (time-of-use, critical peak pricing)
4. Technology enablement (smart meters, automation)

#FRAMEWORK:
"Demand Response Hierarchy":
- Price-based: TOU tariffs (voluntary shift)
- Incentive-based: payments for load curtailment
- Emergency: direct load control (last resort)

#OUTPUT FORMAT:
Demand Response Strategy (1500 words):
1. Peak Demand Analysis:
   - Peak: 30 GW (June-August, 2-5 PM)
   - Off-peak: 15 GW (night)
   - Cost: peaking plants expensive (PKR 30/kWh)
   - Load-shedding: costs economy PKR 2B/day
2. DR Potential:
   - Industrial: 2 GW (shift production to night, especially textiles,
     cement)
   - Commercial: 1 GW (reduce AC during peak, defer non-critical loads)
   - Residential: 1 GW (shift laundry, EV charging, water heating)
   - Total: 4 GW (avoid need for 4 peaking plants = $2B capex savings)
```

```
3. Tariff Design:
   - Time-of-Use: peak/off-peak pricing (peak: 2×, off-peak: 0.5×)
   - Critical Peak Pricing: extreme peak days (price spikes, text
     alerts)
   - Real-time pricing: for large consumers (hourly prices)
4. Technology:
   - Smart meters: roll out 5M by 2028 (industrial, commercial first)
   - Automation: smart thermostats, load controllers (subsidize)
   - Platform: DR management system (utilities operate)
5. Incentives:
   - Industrial: lower rates for interruptible load
   - Commercial: demand charge reduction for peak shaving
   - Residential: cashback for enrollment in DR programs

#TARGETS:
- Peak demand reduction: 4 GW by 2030
- Avoid load-shedding (supply meets demand)
```

5.8 Prompt 68: Electrification and Energy Access

```
#CONTEXT:
Pakistan electrification: 95% (2025) but quality poor (voltage
fluctuations, outages). Rural areas especially affected. Last-mile
connectivity and reliability challenge.

#ROLE:
You are Anil Cabraal, World Bank energy access expert. 30 years on
rural electrification. Expert on "Off-Grid Solutions" and "Mini-Grids."

#TASK:
Achieve universal quality access:
1. Identify un/underserved areas (geographic, quality metrics)
2. Solutions: grid extension vs off-grid (solar home systems, mini-
   grids)
3. Financing (subsidies, private sector, donor funding)
4. Target: 100% quality access by 2030

#FRAMEWORK:
"Multi-Tier Framework for Energy Access" (World Bank):
- Tier 0: No access
- Tier 1: Task lighting
- Tier 2: General lighting, TV
- Tier 3: Medium power (fans, washing machine)
- Tier 4: High power (AC, heating)
- Tier 5: Grid-equivalent

#OUTPUT FORMAT:
Energy Access Strategy (1500 words):
1. Access Assessment:
   - Electrification rate: 95% (Tier 1-2), only 60% Tier 3+ in rural
   - Quality issues: voltage +/-20% (vs +/-5% standard), outages 10
     hours/week
   - Unserved: 12M people (remote areas: Balochistan, FATA, south
     Sindh)
2. Solutions:
   - Grid extension: for peri-urban, villages near grid (3M people)
   - Mini-grids: for remote villages 100-500 households (5M people)
   - Solar home systems: for ultra-remote, nomadic (4M people)
3. Mini-Grids:
   - Size: 10-500 kW (solar + battery + diesel backup)
```

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   - Model: private operators (20-year concessions)
   - Tariff: market-based (higher than grid but acceptable)
   - Subsidy: capex subsidy 40% (government/donors), operator recovers
     rest
4. Solar Home Systems:
   - Size: 50-200 W (lighting, TV, fan, phone charging)
   - Delivery: pay-as-you-go (mobile money)
   - Financing: microfinance, commercial (minimal subsidy)
5. Quality Improvement:
   - Grid: upgrade transformers, replace old lines
   - Regulation: NEPRA enforce voltage standards
   - Monitoring: real-time quality dashboards (smart meters)

#TARGETS:
- Electrification: 95%→100% by 2030
- Tier 3+: 60%→95% in rural areas
```

5.9 Prompt 69: Gas Sector Reform

```
#CONTEXT:
Pakistan's gas production declining (4 Bcfd→3.5 Bcfd), demand growing
(6 Bcfd). Import LNG ($15/mmbtu) more expensive than domestic ($3/
mmbtu). Subsidies, theft, misallocation. Need pricing, supply,
allocation reform.

#ROLE:
You are Robin West, energy consultant at Boston Consulting Group. 35
years on gas sector reforms globally. Expert on "Gas Pricing" and
"LNG Markets."

#TASK:
Reform Pakistan's gas sector:
1. Pricing reform (move toward market pricing gradually)
2. Supply diversification (LNG terminals, pipelines, domestic
   exploration)
3. Allocation (prioritize uses: residential, export industry,
   fertilizer, transport)
4. Reduce system losses (theft, leakage)

#FRAMEWORK:
"Gas Sector Value Chain":
- Upstream (exploration, production)
- Midstream (transmission, storage)
- Downstream (distribution, retail)
- Regulation (pricing, allocation, safety)

#OUTPUT FORMAT:
Gas Sector Reform Strategy (1800 words):
1. Current Challenges:
   - Supply-demand gap: 2.5 Bcfd (met by expensive LNG)
   - Pricing: heavily subsidized (avg PKR 500/mmbtu vs PKR 2500 import
     cost)
   - Allocation: inefficient (CNG gets gas, export industry doesn't)
   - Losses: 10% system (leakage, theft)
2. Pricing Reform:
   - Principle: move toward cost-reflective pricing (5-year transition)
   - Residential: lifeline slab (0-50 m³) subsidized, higher slabs
     market price
   - Industrial: full cost recovery (export industry priority supply)
   - Transport: CNG price competitive with petrol (not subsidized)
```

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   - Farmers: fertilizer gets gas (food security), but price increase
3. Supply Strategy:
   - LNG: expand import capacity (3 terminals, 10 Bcfd total)
   - Pipelines: TAPI (Turkmenistan), IP (Iran—if sanctions lift)
   - Domestic: incentivize exploration (higher wellhead prices, reduce
     red tape)
   - Target: 8 Bcfd supply by 2030 (3 domestic, 5 LNG)
4. Allocation Priority:
   - Tier 1: Residential (social need)
   - Tier 2: Export industry (textile, leather—earn dollars)
   - Tier 3: Fertilizer (food security)
   - Tier 4: Power (only if surplus, otherwise coal/renewables)
   - Tier 5: Transport (CNG—lowest priority, shift to electricity)
5. Loss Reduction:
   - Theft: install smart meters, prosecute theft
   - Leakage: replace old pipelines (50-year old infrastructure)
   - Target: 10%→5% losses in 5 years

#FISCAL IMPACT:
- Subsidy reduction: PKR 500B/year (from pricing reform)
- Revenue from LNG sales: PKR 300B/year
```

5.10 Prompt 70: Hydropower Development

```
#CONTEXT:
Pakistan hydropower potential: 60 GW (only 10 GW developed). Major
projects: Diamer-Bhasha (4.5 GW), Dasu (4.3 GW) under construction.
But high upfront cost, long gestation, environmental/resettlement
issues.

#ROLE:
You are Dr. Shafqat Kakakhel, former UNEP Deputy Executive Director.
40 years on water and energy nexus. Expert on "Large Hydro Environmental
Assessment" and "Benefit Sharing."

#TASK:
Develop comprehensive hydropower strategy:
1. Prioritize projects (NPV, environmental, social impact)
2. Financing strategy (sovereign, IPP, multilateral)
3. Environmental and resettlement (best practices)
4. Benefit sharing with affected communities

#FRAMEWORK:
"Sustainable Hydropower Assessment Protocol" (IHA):
- Environmental (river flows, biodiversity)
- Social (resettlement, livelihoods)
- Economic (NPV, IRR, employment)
- Governance (consultation, transparency, accountability)

#OUTPUT FORMAT:
Hydropower Strategy (2000 words):
1. Project Pipeline:
   - Under construction: Diamer-Bhasha (4.5 GW, 2028), Dasu (4.3 GW,
     2026)
   - Feasible: Bunji (7 GW), Patan (2.2 GW), Thakot (2.9 GW)
   - Total potential: 60 GW (prioritize 20 GW by 2040)
2. Prioritization:
   - Criteria: NPV (high), storage (vs run-of-river), environmental
     impact (low)
   - Top 3 (post-Bhasha/Dasu): Bunji, Patan, Thakot
```

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   - De-prioritize: projects with high resettlement (>10K families)
3. Financing:
   - Large (>2 GW): sovereign (WAPDA), financing from multilaterals
     (World Bank, ADB, China)
   - Medium (500MW-2GW): IPP model (25-year PPAs)
   - Small (<500MW): provincial, private (feed-in tariffs)
4. Environmental & Social:
   - Environmental flows: mandatory (10% of mean annual flow)
   - Biodiversity: no dams on critical habitats (Indus Dolphin)
   - Resettlement: full compensation (land-for-land), host community
     benefits
   - Transparency: publish impact assessments, consultation records
5. Benefit Sharing:
   - Equity: 12% ownership to affected communities (AJK model)
   - Royalty: province gets 1% of net hydel profit
   - Employment: preference for locals (construction, operations)

#FINANCIAL ANALYSIS:
- 20 GW by 2040: capex $40B ($2K/kW)
- Financing: 70% multilateral, 30% government
- Returns: 12-15% IRR (attractive for investors)
```

6 Agriculture & Rural Development

6.1 Prompt 71: Agricultural Productivity Strategy

```
#CONTEXT:
Pakistan agricultural yields: wheat 2.8 ton/ha (vs 7+ in developed
countries), rice 3.2 ton/ha, cotton declining. Water productivity:
0.4 kg/$m³ (lowest in region). Sector employs 38% labor force.

#ROLE:
You are Dr. Abid Qaiyum Suleri, agricultural economist and executive
director SDPI. 25 years researching food security, rural livelihoods,
and climate adaptation. Expert in "Integrated Agricultural Development."

#TASK:
Design agricultural transformation strategy:
1. Diagnose top 5 productivity constraints
2. Prioritize interventions by impact and cost
3. Target: double farmer incomes by 2035
4. Ensure food security and water sustainability

#FRAMEWORK:
Use "4-Pillar Agriculture Model":
- Productivity (seeds, technology, practices)
- Water (efficiency, pricing, conservation)
- Markets (value chains, storage, export)
- Institutions (extension, credit, land records)

#OUTPUT FORMAT:
Transformation Blueprint (2000 words):
1. Constraint Analysis (5 constraints × evidence × costs)
2. Intervention Portfolio (15 interventions × impact scores)
3. Farmer Income Pathways (model scenarios to doubling)
4. Water Strategy (reduce usage 30%, maintain output)
5. Implementation (district-level rollout plan)

#SUCCESS INDICATORS:
- Wheat yield: 2.8→5 ton/ha by 2035
```

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- Water use efficiency: +50%
- Farmer incomes: 2× in real terms
```

6.2 Prompt 72: Water Scarcity Management

```
#CONTEXT:
Pakistan water-stressed: 1000 m³/capita/year (scarcity threshold:
1700). Agriculture uses 90% of water. Canal efficiency: 40%. Groundwater
depletion accelerating. Climate change exacerbates variability.

#ROLE:
You are Dr. Daanish Mustafa, water resource economist and hydrologist
(King's College London). 20 years research on Indus Basin. Expert in
"Integrated Water Resource Management" and "Agricultural Water Pricing."

#TASK:
Design comprehensive water management strategy:
1. Quantify water gap (supply vs demand, by use)
2. Irrigation efficiency improvements (40%→65%)
3. Crop pattern changes (water-intensive to water-smart)
4. Pricing and institutional reforms

#ANALYTICAL APPROACH:
- Water accounting framework (supply, demand, gaps)
- Virtual water trade analysis (import water via trade)
- Least-cost optimization (efficiency vs supply augmentation)

#OUTPUT FORMAT:
Water Strategy (1500 words):
1. Water Balance Assessment (current and 2040 projections)
2. Efficiency Roadmap (drip, sprinkler adoption; lining canals)
3. Crop Strategy (replace sugarcane/rice with alternatives)
4. Governance Reforms (water pricing, rights, institutions)
5. Investment Plan (costs and financing mechanisms)

#TARGETS:
- Reduce agricultural water intensity 35% by 2040
- Stabilize groundwater levels
```

6.3 Prompt 73: Agricultural Value Chains

```
#CONTEXT:
Pakistan farmers get 30-40% of consumer price (vs 60-70% in developed
countries). Middle-men capture value. Post-harvest losses: 15-20%.
Weak value chains = low farm incomes.

#ROLE:
You are Shenggen Fan, former IFPRI Director General. 35 years on food
policy and value chains. Expert on "Agricultural Transformation" and
"Smallholder Integration."

#TASK:
Upgrade agricultural value chains:
1. Map key value chains (wheat, rice, mango, dairy)
2. Identify value leakages (post-harvest loss, middle-men, quality)
3. Design interventions (storage, grading, farmer organizations)
4. Target: farmers get 60% of consumer price

#FRAMEWORK:
```

```
"Value Chain Development Approach":
- Input supply (seeds, fertilizer, mechanization)
- Production (on-farm practices)
- Aggregation (farmer organizations, collection centers)
- Processing (value addition, branding)
- Marketing (wholesale, retail, export)

#OUTPUT FORMAT:
Value Chain Strategy (2000 words):
1. Value Chain Mapping (4 chains):
   - Wheat: farm → commission agent → miller → retailer
   - Mango: farm → middle-man → exporter/wholesale → consumer
   - Dairy: farm → informal collection → milk shop
   - Rice: farm → agent → miller → retailer
2. Leakage Analysis:
   - Wheat: farmers get 35% of consumer price (middle-men 15%, miller
     30%, retailer 20%)
   - Post-harvest loss: 15% (storage, handling, transport)
   - Quality discount: 10-20% (poor grading, cleaning)
3. Interventions (by chain stage):
   - Aggregation: Farmer Producer Organizations (FPOs) (1000 FPOs,
     100K farmers each)
   - Storage: cold storage, warehouses (target: 50% of perishables
     covered)
   - Grading: mechanized grading centers (reduce quality discount)
   - Processing: subsidize small agro-processing (add value at source)
   - Marketing: link FPOs to retailers, exporters (bypass middle-men)
4. Enabling Policies:
   - FPO law: legal status, tax benefits, credit access
   - Contract farming: legal framework (protect farmers)
   - Quality standards: mandatory grading (fruits, vegetables)
   - Price information: SMS-based market prices (reduce information
     asymmetry)
5. Financing:
   - Storage: PSDP + ADB ($1B over 5 years)
   - FPOs: PPAF + provincial governments (capacity building)

#TARGETS:
- Farmer share of consumer price: 35%→60%
- Post-harvest losses: 15%→8%
```

6.4 Prompt 74: Land Records Digitization

```
#CONTEXT:
Pakistan's land records: paper-based, manual, fraudulent. Ownership
disputes common, delays investment. Punjab Land Records Authority
(PLRA) has digitized (50%) but other provinces lag.

#ROLE:
You are Arif Nadeem Khan, former chairman PLRA. Led Punjab land record
reforms. Expert on "Cadastre Systems" and "Land Administration."

#TASK:
Nationwide land records digitization:
1. Assess current state (Punjab done, Sindh, KP, Balochistan, AJK)
2. Design digitization roadmap (technology, institutional, legal)
3. Blockchain for tamper-proof records
4. Target: 100% digitized, linked with NADRA by 2030

#FRAMEWORK:
```

```
"Modern Land Administration System":
- Record of rights (ownership, transactions)
- Cadastre (spatial, maps)
- Valuation (property tax base)
- Service delivery (online, transparent)

#OUTPUT FORMAT:
Land Records Modernization (1500 words):
1. Status:
   - Punjab: 50% digitized (PLRA, ongoing)
   - Sindh: 10% (pilot in Karachi)
   - KP: 5%
   - Balochistan: 0%
   - Target: 100% by 2030
2. Technology:
   - Digitize records: scan paper, geo-reference (drones, GIS)
   - Database: centralized (provincial), interoperable
   - Blockchain: pilot in one district (prevent tampering)
   - Service delivery: online portals (fard, mutations)
3. Institutional:
   - Punjab model: autonomous land record authority (replicable)
   - Staff: train patwaris on digital systems
   - Service centers: one per tehsil (citizens don't go to patwari
     office)
4. Legal:
   - Land Record Act: update (recognize digital as legal)
   - Adjudication: fast-track courts for disputes
   - Transparency: publish all transactions (except private info)
5. Linkages:
   - NADRA: link land ownership with CNIC (unique ID)
   - FBR: automatic trigger for capital gains tax (property sale)
   - Banks: land as collateral (online verification)

#BENEFITS:
- Reduce disputes 50%
- Property tax base: expand 3× (accurate valuation)
- Facilitate land market (easier buying, selling, mortgaging)
```

6.5 Prompt 75: Livestock Productivity

```
#CONTEXT:
Pakistan livestock: 3rd largest milk producer globally but low
productivity (1400 liters/cow/year vs 6000+ in developed countries).
Contributes 14% to GDP, employs 8M. Huge potential.

#ROLE:
You are Dr. Jimmy Smith, former ILRI Director General. 30 years on
livestock development. Expert on "Dairy Value Chains" and "Animal
Genetics."

#TASK:
Transform livestock sector:
1. Boost productivity (breeding, feeding, health)
2. Formalize dairy value chain (collection, processing, quality)
3. Export potential (meat, dairy to Gulf)
4. Target: 3× productivity by 2040

#FRAMEWORK:
"Livestock Productivity Drivers":
- Genetics (improved breeds)
```

```
- Nutrition (quality feed, fodder)
- Health (veterinary services, vaccines)
- Management (housing, milking practices)

#OUTPUT FORMAT:
Livestock Strategy (1800 words):
1. Productivity Diagnosis:
   - Cow: 1400 L/year (should be 3000+)
   - Buffalo: 2000 L/year (should be 4000+)
   - Constraints: poor genetics, inadequate feeding, disease
2. Genetics:
   - Breed improvement: artificial insemination (AI) coverage 5%→50%
   - Semen production: upgrade centers, import high-yield genetics
   - Registry: livestock ID system (NADIS, link with NADRA)
3. Nutrition:
   - Fodder: promote alfalfa, silage (vs straw)
   - Feed: subsidize balanced feed (protein, minerals)
   - Extension: train farmers on feeding practices
4. Health:
   - Vaccination: subsidize vaccines (FMD, PPR)
   - Veterinary network: 1 vet per 10K livestock (currently 1 per 50K)
   - Insurance: livestock insurance (drought, disease)
5. Value Chain:
   - Collection: milk collection centers (refrigerated, quality testing)
   - Processing: support small dairies (food safety standards)
   - Marketing: brands (increase consumer trust)
   - Export: halal meat to GCC (meet SPS standards)

#TARGETS:
- Milk yield: 1400→4000 L/cow/year
- Value addition: 30% processed (from 5%)
- Exports: $500M/year (meat, dairy)
```

6.6 Prompt 76: Agricultural Credit Access

```
#CONTEXT:
Pakistan agricultural credit: PKR 1.8T disbursed (2024) but 80% goes
to large farmers. Smallholders (95% of farmers) get only 20% of credit.
High collateral requirements, lack of documentation.

#ROLE:
You are Thorsten Beck, Professor Cass Business School, 30 years on
financial inclusion. Expert on "Agricultural Finance" and "Collateral-
Free Lending."

#TASK:
Expand ag credit to smallholders:
1. Diagnose constraints (collateral, documentation, risk perception)
2. Design collateral-free products (warehouse receipts, crop insurance)
3. Fintech for ag lending (digital, data-driven)
4. Target: smallholders get 50% of ag credit

#FRAMEWORK:
"Inclusive Agricultural Finance":
- Collateral alternatives (warehouse receipts, group lending, insurance)
- Risk mitigation (credit guarantee, crop insurance)
- Digital delivery (mobile, agent banking)
- Ecosystem approach (input suppliers, output buyers)

#OUTPUT FORMAT:
```

```
Agricultural Credit Strategy (1500 words):
1. Current Barriers:
   - Collateral: 70% of smallholders lack land title (inherited,
     undivided)
   - Documentation: informal sector, no financial statements
   - Risk: banks perceive smallholders as high-risk
   - Geography: rural branches closed (cost)
2. Product Innovation:
   - Warehouse receipts: store crop, use receipt as collateral (pilot
     wheat, rice)
   - Group lending: farmer groups (SHG model from microfinance)
   - Crop insurance: subsidized (50% premium by govt, index-based)
   - Supply chain finance: input suppliers give credit, bank finances
     supplier
3. Digital Lending:
   - Credit scoring: use mobile data, ag data (satellite, IoT) for
     scoring
   - Disbursement: mobile wallets (no need for branch)
   - Repayment: automatic (after harvest, link to procurement)
4. Institutional:
   - Zarai Taraqiati Bank: focus on smallholders (currently large
     farmer biased)
   - Commercial banks: ag portfolio targets (10% to smallholders)
   - Microfinance: upscale to agriculture (currently urban bias)
5. Risk Sharing:
   - Credit guarantee: NDRMF guarantees 50% of smallholder loans
   - First-loss: government takes first 10% loss (de-risk banks)

#TARGETS:
- Smallholder credit share: 20%→50%
- Ag credit volume: PKR 1.8T→3T (smallholder portion grows faster)
```

6.7 Prompt 77: Food Security Strategy

#TASK: Design national food security strategy:

Assess food insecurity (geographic, demographic, nutritional) Boost domestic production (reduce import dependence) Safety nets (subsidies, food transfers, cash) Nutrition (focus on stunting, micronutrients)

#FRAMEWORK: “Four Pillars of Food Security”:

Availability (domestic production + imports) Access (purchasing power, distribution) Utilization (nutrition, food safety) Stability (reduce volatility, strategic reserves)

#OUTPUT FORMAT: Food Security Strategy (1800 words):

Food Insecurity Assessment Production Strategy (self-sufficiency targets) Distribution & Access (reduce price volatility, improve markets) Nutrition Programs (stunting reduction, fortification) Strategic Reserves & Trade Policy

#TARGETS:

Food insecurity: 40%⟶20% by 2030 Import dependence: reduce 30% Child stunting: 40%⟶25%

6.8 Prompt 78: Rural Infrastructure Development

#CONTEXT: Pakistan’s rural areas lag: 40% villages lack all-weather roads, 20% no electricity (quality), limited markets, poor water/sanitation. Infrastructure deficit holds back rural development. #ROLE: You are Shahid Yusuf, former World Bank Chief Economist. 40 years on infrastructure and development. Expert on “Rural Infrastructure Impact.” #TASK: Prioritize rural infrastructure:

Assess rural infrastructure gaps (roads, electricity, water, markets) Cost-benefit analysis (which infrastructure highest returns?) Financing strategy (federal, provincial, PPP, community) Implementation (community participation)

#FRAMEWORK: “Rural Infrastructure Hierarchy”:

Tier 1: Connectivity (roads, bridges) Tier 2: Utilities (electricity, water, sanitation) Tier 3: Economic (markets, storage, processing) Tier 4: Social (schools, health centers)

#OUTPUT FORMAT: Rural Infrastructure Plan (1500 words):

Gap Assessment by Infrastructure Type Economic Returns Analysis (rank by benefit/cost) Financing Plan (blend sources) Community Contracting Model 10-Year Implementation Roadmap

#TARGETS:

All-weather roads: 60%⟶100% of villages Electricity quality: 24/7 for all rural

6.9 Prompt 79: Agricultural Research & Extension

#CONTEXT: Pakistan ag research funding: 0.3% of ag GDP (vs 1%+ recommended). Extension weak: 1 extension worker per 1500 farmers. Technology adoption low. #ROLE: You are Dr. Marco Ferroni, former Syngenta Foundation CEO. 30 years on ag research systems. Expert on "Pluralistic Extension" and "Research- Extension Linkages." #TASK: Revitalize agricultural research and extension:

Increase research funding and focus Strengthen extension (public, private, digital) Technology adoption pathways M&E (track adoption rates, yield improvements)

#FRAMEWORK: "Agricultural Innovation System":

Research (PARC, universities, private) Extension (public, private, NGO, digital) Farmers (adopters, innovators) Enabling environment (policy, markets, finance)

#OUTPUT FORMAT: Research & Extension Strategy (1500 words):

Research System Reform (funding, priorities, performance) Extension Pluralism (public, private, digital platforms) Demonstration Farms & Farmer Field Schools Technology Dissemination Roadmap M&E Framework

#TARGETS:

Research funding: 0.3%⟶1% of ag GDP Extension ratio: 1:1500⟶1:500 Technology adoption: 2× in 10 years

6.10 Prompt 80: Contract Farming & Agribusiness Linkages

#CONTEXT: Contract farming limited in Pakistan. Smallholders lack market linkages, price risk, quality standards. Agribusiness prefers imports. Need inclusive business models. #ROLE: You are Carlos Perez, FAO expert on contract farming. 25 years facilitating farmer-agribusiness linkages. Expert on "Inclusive Business Models." #TASK: Scale contract farming:

Assess potential (crops, regions, companies) Design fair contracts (price formula, quality, support) Legal framework (enforce contracts, protect both parties) Pilot and scale (3 crops, 50K farmers)

#FRAMEWORK: "Inclusive Contract Farming":

Win-win (fair price for farmers, quality/volume for buyer) Support services (inputs, extension, credit) Risk sharing (price floors, force majeure) Governance (farmer organizations, dispute resolution)

#OUTPUT FORMAT: Contract Farming Strategy (1500 words):

Opportunity Mapping (crops × companies × farmers) Model Contracts (templates for different crops) Legal & Institutional Framework Pilot Implementation (3 value chains) Scaling Pathway

#TARGETS:

Farmers under contract: 100K⟶1M by 2030 Reduce price volatility for contracted farmers by 50%

7 Labor Markets & Human Capital

7.1 Prompt 81: Youth Employment Crisis#CONTEXT:

Pakistan: 2.3M youth enter labor market annually. Formal job creation: 400-500K. Unemployment rate: 6.3% (underemployment much higher). 64% population under 30. Mismatch between skills and market needs.#ROLE: You are Faisal Bari, economist and education expert at LUMS. 25 years analyzing labor markets and education policy. Specialized

in “Youth Bulge Economics” and “Skills Development Systems.”#TASK: Design comprehensive youth employment strategy:

Quantify job creation gap by sector Identify high-employment-elasticity sectors Skills development aligned with market demand Entrepreneurship and self-employment pathways Target: create 3M jobs annually by 2030 #FRAMEWORK: “3-Track Employment Strategy”:

Track 1: Formal sector jobs (manufacturing, services) Track 2: Entrepreneurship (startup ecosystem, SME support) Track 3: Skills upgrading (TVET, digital skills, apprenticeships) #OUTPUT FORMAT: Employment Roadmap (1800 words):

Labor Market Diagnosis (supply-demand gap, sectoral analysis) Sectoral Job Creation Targets (5 sectors × 5-year projections) Skills Development System (TVET reform, industry linkages) Entrepreneurship Ecosystem (access to finance, mentorship, regulatory ease) Policy Enablers (labor laws, wage floors, social security) #METRICS:

Employment rate: increase from 47% to 60% Formal sector share: 25% ⟶ 40%

7.2 Prompt 82: Female Labor Force Participation#CONTEXT:

Pakistan female LFPR: 22% (regional average: 40-50%, global: 50%+). Constraints: mobility, social norms, lack of childcare, workplace safety, limited job types accessible to women.#ROLE: You are Dr. Nadia Naviwala, gender economist and development specialist. 15 years researching women’s economic participation in South Asia. Expert in “Gender-Responsive Employment Policy.”#TASK: Design strategy to increase female LFPR to 35% over 10 years:

Identify top 5 constraints and prioritize by impact Sector-specific interventions (garments, services, digital work) Enabling policies (transport, childcare, legal reforms) Economic impact assessment (GDP, poverty, inequality) #METHODOLOGY:

Qualitative research on women’s constraints Quantitative analysis of LFPR drivers (education, urbanization, sector composition) International benchmarks (Bangladesh garments model) #OUTPUT FORMAT: Strategy Document (1500 words):

Constraint Analysis (5 barriers × evidence × solutions) Sectoral Pathways (5 sectors × women’s job potential) Policy Package (10 interventions: transport, childcare, laws, training) Impact Model (LFPR 22%⟶35%; GDP impact +4-5%) Implementation (pilot districts, scaling strategy) #TARGETS:

Add 10M women to labor force by 2035 Boost GDP by 5-6% through women’s participation

7.3 Prompt 83: Skills Development System Reform#CONTEXT:

Pakistan’s TVET (Technical and Vocational Education and Training): fragmented across 20+ agencies, poor quality, low enrollment (300K/ year vs need 2M+), weak industry linkages. Skills mismatch acute.#ROLE: You are Simon Field, OECD senior analyst on VET. 30 years studying vocational systems globally. Expert on “Dual Education Systems” and “Competency-Based Training.”#TASK: Transform Pakistan’s skills development system:

Consolidate governance (currently 20+ agencies) Industry-led curriculum (competency-based) Apprenticeship system (workplace learning) Scale enrollment (300K⟶2M annually) #FRAMEWORK: “High-Performing VET Systems” (German/Swiss model adapted):

Industry leadership (employers design curricula, provide apprenticeships) Dual system (classroom + workplace) National qualifications framework (stackable credentials) Public financing, private delivery #OUTPUT FORMAT: TVET Reform Blueprint (2000 words):

Current System Diagnosis:

Governance: 20+ agencies (TEVTA, NAVTTC, PVTC, etc.), no coordination Quality: outdated curricula, untrained instructors Enrollment: 300K (only 2% of youth cohort) Placement: 40% get jobs in trained field

Governance Reform:

National Skills Authority (consolidate under one agency) Provincial TVET boards (implement, coordinate providers) Industry councils by sector (textiles, construction, IT, etc.)

Curriculum Reform:

Competency-based (not time-based) Industry co-designed (update annually) National Qualifications Framework (levels 1-8, stackable)

Apprenticeship System:

Mandatory for trades (electrician, plumber, welder, etc.) Split: 70% workplace, 30% classroom Employer incentives (tax credits for apprentice wages) Target: 500K apprentices by 2030

Scaling Strategy:

Public TVET: upgrade 200 institutes (equipment, faculty) Private TVET: quality assurance, funding (vouchers for students) Industry training: formalize, accredit (company training centers) Target enrollment: 300K⟶2M/year by 2030

#BENCHMARKS:

Germany: 1.3M apprentices (dual system) Singapore: Skills Future (lifelong learning) #TARGETS:

TVET enrollment: 300K⟶2M annually Employment rate: 40%⟶75% within trained field

7.4 Prompt 84: Labor Market Information System#CONTEXT:

Pakistan lacks real-time labor market data. Last labor force survey: 2020-21. No data on vacancies, skills demand, wages by occupation. Job seekers, employers, policymakers operate blindly.#ROLE: You are David Robalino, World Bank lead economist on jobs. 25 years on labor markets. Expert on "Labor Market Information Systems" and "Big Data for Jobs."#TASK: Build comprehensive labor market information system (LMIS):

Data sources (surveys, admin data, web scraping, big data) Real-time indicators (employment, vacancies, wages, skills demand) Analytics (forecasting, skills gaps, matching) User interfaces (job seekers, employers, policymakers) #FRAMEWORK: "Integrated LMIS Architecture":

Supply side (labor force characteristics, skills) Demand side (vacancies, skills required, wages) Matching (job portals, employment services) Analytics (predictive models, early warning) #OUTPUT FORMAT: LMIS Design Document (1500 words):

Data Sources:

Surveys: quarterly labor force survey (PBS) Admin: EOBI, social security, tax records Web: scrape job portals (Rozee, Indeed, LinkedIn) Big data: mobile data patterns (proxy for employment)

Real-Time Indicators (Dashboard):

Employment: by sector, region, demographics (updated quarterly) Vacancies: by occupation, skills required (updated weekly) Wages: median by occupation, industry (updated monthly) Skills demand: trending skills (from job postings, updated daily)

Analytics:

Skills gaps: compare supply (graduates) vs demand (vacancies) Forecasting: predict employment trends 12 months ahead (ARIMA, ML) Mismatch index: geographic, sectoral, occupational

User Interfaces:

Job seekers: portal (search by skill, location, see wage info) Employers: post vacancies, find candidates (skill-matched) Trainers: see in-demand skills, align curriculum Policymakers: dashboard (employment trends, alerts)

Institutional:

Ministry of Labour: lead agency PBS: survey execution NAVTTC: link TVET to demand Budget: $10M setup, $2M annual

#BENCHMARKS:

European Union: EURES job mobility portal USA: O*NET occupational information #TARGETS:

Quarterly employment data (vs annual now) Cover 90%+ of formal vacancies

7.5 Prompt 85: Labor Law Modernization#CONTEXT:

Pakistan's labor laws: outdated (some from 1950s), fragmented (50+ laws), rigid (difficult firing = difficult hiring), weak enforcement. Need balance: worker protection + labor market flexibility.#ROLE: You are Juan Jimeno, Bank of Spain

economist, 30 years studying labor regulations. Expert on "Employment Protection Legislation" and "Two- Tier Labor Markets."#TASK: Modernize Pakistan's labor legal framework:

Consolidate 50+ laws into unified code Balance flexibility (ease hiring/firing) with protection (severance, safety) Extend protections to informal workers (40% of workforce) Strengthen enforcement and dispute resolution #FRAMEWORK: "Flexicurity Model" (Danish approach):

Flexibility: easier hiring/firing (but fair severance) Security: unemployment insurance, active labor policies Lifelong learning: training for displaced workers #OUTPUT FORMAT: Labor Code Reform (1800 words):

Current System Critique:

Fragmentation: 50+ laws (federal, provincial, sector-specific) Rigidity: firing nearly impossible (reduces hiring) Gaps: informal workers not covered (no minimum wage, safety) Enforcement: weak (labour inspectors 1 per 100K workers)

Unified Labor Code:

Consolidate into single code (200 pages max) Coverage: all workers (formal, informal, gig) Modern: include gig economy, remote work, platform work

Flexibility-Security Balance:

Hiring: remove restrictions (currently need government approval for layoffs) Firing: severance formula (2 weeks pay per year served, capped at 12 months) Trial period: 6 months (easy separation, both sides) Collective dismissals: advance notice (90 days), retraining support

Worker Protections:

Minimum wage: provincial (linked to CPI, updated annually) Safety: mandatory standards (construction, manufacturing) Social security: extend to informal (contributory + non- contributory tiers) Women: maternity leave (16 weeks paid), harassment protection

Dispute Resolution:

Labor courts: fast-track (resolve within 90 days) Mediation: mandatory first step (avoid litigation) Online: e-filing, case tracking

Enforcement:

Labor inspectors: 1 per 10K workers (from 1 per 100K) Risk-based: inspect high-risk sectors (construction, textiles) frequently Penalties: graduated (warnings, fines, shutdowns)

#TRANSITION:

New code: draft in 2026, consult (unions, employers), pass 2027 Implementation: 2-year transition (2027-29, old and new coexist) Review: 2032 (evaluate impact, adjust) #TARGETS:

Formalization: 60%⟶70% (code's flexibility attracts informal to formal) Disputes: resolve in 90 days (from 5+ years)

7.6 Prompt 86: Social Security Extension#CONTEXT:

Pakistan social security coverage: 10% workforce (only formal sector). 90% lack old age pensions, unemployment insurance, health insurance, disability benefits. Need universal coverage.#ROLE: You are Isabel Ortiz, former ILO Director Social Protection. 30 years designing social security systems. Expert on "Universal Social Protection" and "Fiscal Space."#TASK: Design universal social security system:

Assess gaps (who's uncovered, what benefits missing) Design multi-tier system (contributory + non-contributory) Financing (contributions, taxes, fiscal space) Phase rollout (priority groups, timelines) #FRAMEWORK: "Multi-Tier Social Security":

Tier 0: Social assistance (non-contributory, tax-funded, for poor) Tier 1: Mandatory social insurance (contributory, formal workers) Tier 2: Voluntary savings (individual accounts) Tier 3: Private insurance (supplementary) #OUTPUT FORMAT: Social Security Strategy (2000 words):

Coverage Gaps:

Old age: 90% no pension (only EOBI for formal workers) Health: 79% no insurance (Sehat Card reaching 90M, need universal) Unemployment: 100% no insurance (non-existent) Disability: 95% no benefits

System Design:

Tier 0 (Social Assistance):

Old age: social pension (PKR 3000/month, age 65+, poorest 30%) Health: Sehat Card (universal, non-contributory) Disability: allowance (PKR 5000/month, certified disabled)

Tier 1 (Social Insurance):

Coverage: formal workers (mandatory) Benefits: old age pension, unemployment (6 months), disability Contributions: 15% of wage (employee 7%, employer 8%) Administration: unified social security authority (merge EOBI, provincial funds)

Tier 2 (Voluntary):

For informal workers, self-employed Subsidized (government matches 50%) Flexible contributions (Rs 500-5000/month)

Financing:

Tier 0: Budget (1.5% of GDP)

Old age social pension: PKR 200B/year Sehat Card: PKR 300B/year (already allocated) Disability: PKR 50B/year

Tier 1: Self-financing (contributions cover benefits) Fiscal space: find 1.5% GDP (via tax reforms, subsidy cuts)

Rollout:

Phase 1 (2026-28): Extend health (Sehat Card) to all Phase 2 (2028-30): Social pension for elderly poor Phase 3 (2030-32): Unemployment insurance (start formal, extend) Phase 4 (2032-35): Disability benefits universal

Administration:

National Social Security Authority (autonomous) Link to NADRA (unique ID for all beneficiaries) Digital payments (bank accounts, mobile wallets) Regular audits (prevent leakage)

#FISCAL IMPACT:

Total cost: 3% of GDP (1.5% Tier 0, 1.5% Tier 1 admin/subsidy) Poverty reduction: 5 percentage points Fiscal space: raise through tax reforms, subsidy rationalization #BENCHMARKS:

Uruguay: universal coverage (multi-tier system) Thailand: universal health + social pension

7.7 Prompt 87: Migration Policy Framework#CONTEXT:

Pakistan: 10M+ overseas workers (Gulf, UK, USA, etc.), remittances $31B (10% GDP). But migration unregulated: illegal agents, worker exploitation, skills drain. Need comprehensive migration governance.#ROLE: You are Dilip Ratha, World Bank lead economist on migration. 30 years on remittances and diaspora. Expert on "Migration Policy" and "Remittance Corridors."#TASK: Design comprehensive migration policy:

Regulate recruitment (license agents, fix fees, prevent exploitation) Pre-departure training (rights, language, skills) Destination country engagement (bilateral agreements, protect workers) Harness diaspora (investment, knowledge transfer) #FRAMEWORK: "Migration Governance Cycle":

Pre-departure (recruitment, training, documentation) In-destination (protection, welfare, services) Return & reintegration (skills recognition, business support) Diaspora engagement (investment, philanthropy, knowledge) #OUTPUT FORMAT: Migration Strategy (1800 words):

Current System Diagnosis:

Recruitment: 4000+ agents (many illegal), high fees (Rs 200-500K) Exploitation: contract substitution, wage theft, confiscated passports Documentation: 30% migrants undocumented (visa overstays, illegal entry) Welfare: limited embassies support (community welfare attachés understaffed)

Recruitment Reform:

Licensing: mandatory (revoke illegal agents) Fee cap: maximum Rs 50K (government-set, enforced) Contract: standardized, verified by embassy before departure Insurance: mandatory (repatriation, death, injury) Online platform: transparent job listings (govt-run, no agent needed)

Pre-Departure:

Training centers: upgrade (language, skills, rights awareness) Orientation: mandatory (2-week, destination-specific) Skills certification: recognized internationally (electrician, chef, nurse) Financial literacy: remittance options, savings, investment

Destination Country Engagement:

Bilateral agreements: Saudi, UAE, UK, USA (quotas, protection, skills recognition) Embassy services: 24/7 helplines, legal aid, welfare funds Community centers: Pakistani community support abroad

Return & Reintegration:

Skills recognition: foreign certifications recognized in Pakistan Business support: returnee entrepreneurs (loans, training, mentoring) Pension: portable (Gulf social security transferable)

Diaspora Engagement:

Investment: diaspora bonds (infrastructure financing) Philanthropy: matching grants for community projects (schools, clinics) Knowledge: diaspora experts (short-term assignments in Pakistan) Voting: overseas Pakistanis (e-voting pilot)

#INSTITUTIONAL:

Ministry of Overseas Pakistanis (lead) Bureau of Emigration & Overseas Employment (regulate) Overseas Pakistani Foundation (welfare) Embassies (protection, services) #TARGETS:

Recruitment fees: Rs 200-500K → Rs 50K Documented migrants: 70% → 95% Remittances: $31B → $50B (better channels, diaspora bonds)

7.8 Prompt 88: Informal Sector Formalization#CONTEXT:

Pakistan informal sector: 40% of GDP, 70% of employment. Informal = low productivity, no social protection, no tax. Formalization benefits all: workers (protection), businesses (credit access), government (revenue).#ROLE: You are Melanie Khamis, World Bank economist, 20 years on informal sector. Expert on "Formalization Strategies" and "Business Registration Simplification."#TASK: Design formalization strategy:

Diagnose why businesses stay informal (costs, complexity, mistrust) Simplify registration (online, 1 day, low cost) Incentives (tax breaks, access to credit, government contracts) Services (training, markets, technology) #FRAMEWORK: "Carrot and Stick Formalization":

Carrot (Incentives): Easy registration, tax breaks, services Stick (Enforcement): Inspections, penalties (but graduated) Intermediate: Simplified regimes (presumptive tax, light regulation) #OUTPUT FORMAT: Formalization Strategy (1800 words):

Informal Sector Profile:

Size: 40% GDP, 70% employment (30M workers) Composition: micro-enterprises (1-5 workers), home-based, retail, services Why informal? High costs (registration, tax, compliance), complex procedures

Barriers:

Registration: 14 steps, 15 days, Rs 15K (World Bank Doing Business) Tax: 29% of profit (federal, provincial, local) Compliance: inspections (multiple agencies), documentation burden Trust: corruption, harassment

Simplification:

Registration: online portal (SECP), 1 step, 1 day, Rs 1K Business ID: link CNIC (automatic, no new paperwork) Licensing: most businesses don't need licenses (only high-risk: food, health)

Incentives:

Tax holiday: 5 years (newly registered, <Rs 10M turnover) Presumptive tax: fixed annual fee (Rs 50K for small, Rs 200K medium) instead of complex returns Credit: registered businesses eligible for bank loans (credit bureau coverage) Contracts: preference in government procurement (10% quota for SMEs)

Services:

Training: business management (SMEDA, chambers) Technology: subsidize POS, accounting software Markets: trade fairs, e-commerce platforms (connect to buyers)

Enforcement (Graduated):

Awareness: 2-year campaign (benefits of formalization) Warnings: first offense (no penalty, must register) Fines: second offense (Rs 50K) Closure: repeated violations (only after due process)

Intermediate Regime:

"Simplified Business": for those not ready for full formalization Register: yes (business ID) Tax: low (Rs 1K/month flat) Benefits: legal recognition, limited liability, bank account Transition: after 3 years, move to standard regime

#PILOTS:

Start: 3 cities (Lahore, Karachi, Peshawar) Target: 100K businesses formalized in year 1 Scale: nationwide by year 3 #TARGETS:

Formalization: 60% → 80% by 2030 Tax registration: 3M → 10M businesses

7.9 Prompt 89: Active Labor Market Policies#CONTEXT:

Pakistan lacks active labor market policies (ALMPs). Unemployed get no support: job search, training, wage subsidies. Result: long-term unemployment, skills erosion, discouraged workers.#ROLE: You are David Card, UC Berkeley professor, Nobel Laureate 2021. 40 years studying labor markets. Expert on "Program Evaluation" and "ALMPs Effectiveness."#TASK: Design ALMP system for Pakistan:

Job search assistance (counseling, matching, information) Training programs (reskilling, upskilling) Wage subsidies (incentivize hiring) Public works (safety net + skills) #FRAMEWORK: "Evidence-Based ALMPs":

Target (who needs support? youth, displaced workers, women) Design (what works? RCT evidence from similar countries) Delivery (who implements? public employment services, private, NGOs) Evaluation (impact assessment, adjust based on results) #OUTPUT FORMAT: ALMP Framework (1500 words):

Needs Assessment:

Youth unemployment: 10% (vs 6% overall) Long-term unemployment: 30% jobless >12 months (skills erode) Women: 78% not in labor force (many want to work) Displaced workers: textile workers (automation), low skills

Program Portfolio:

Job Search Assistance:

Employment service centers (one per district) Counseling: CV writing, interview skills Matching: job portals (link to LMIS) Placement: target 50% placement within 3 months

Training:

Short courses (3-6 months, high-demand skills) On-the-job training (OJT): employers provide, govt subsidizes Target: 500K trainees/year Evaluation: only continue programs with 60%+ placement

Wage Subsidies:

Target: youth (first job), women (reentry), long-term unemployed Subsidy: 50% of minimum wage, 6 months Employer commits: keep 50% of subsidized workers after period Target: 100K subsidized jobs/year

Public Works:

Rural: roads, irrigation, schools (PRSP model) Urban: sanitation, parks, community centers Wage: minimum wage, 3-month stints Skills: combine work with training (masonry, plumbing) Target: 200K person-months/year

Delivery:

Public: National Employment Service (NES) (to be established) Private: training providers (accredited, performance contracts) NGOs: job placement services (PPAF, TCF, etc.) Employers: OJT, apprenticeships (subsidized)

Financing:

Budget: 0.5% of GDP (PKR 350B/year) Breakdown:

Training: 40% (PKR 140B) Wage subsidies: 30% (PKR 105B) Public works: 20% (PKR 70B) Job services: 10% (PKR 35B)

Monitoring & Evaluation:

Track: enrollment, completion, placement, earnings RCTs: for new programs (test before scaling) Adapt: discontinue ineffective programs, expand successful

#EVIDENCE BASE:

Turkey: wage subsidies effective for youth (Card et al.) India: NREGS (public works, safety net, limited skills) Colombia: job training (positive long-term earnings) #TARGETS:

Unemployment duration: reduce 50% Youth employment: +500K jobs annually via ALMPs

7.10 Prompt 90: Minimum Wage & Living Wage#CONTEXT:

Pakistan minimum wage: varies by province (PKR 32-37K/month in 2025), but poorly enforced. Doesn't cover informal workers (70%). Living wage (cover basic needs) estimated PKR 50K+. Need policy reform.#ROLE: You are Arindrajit Dube, UMass Amherst professor, 20 years studying minimum wage. Expert on "Minimum Wage Effects" and "Monopsony."#TASK: Design minimum/living wage policy:

Set appropriate levels (regional, sector-specific) Extend coverage (formal + informal) Enforcement (inspections, penalties, worker complaints) Index to inflation (automatic adjustments) #FRAMEWORK: "Minimum Wage Policy Design":

Level: balance (protect workers, don't kill jobs) Coverage: universal (formal, informal, gig) Enforcement: strong (inspections, easy complaints) Indexation: automatic (CPI, avoid political discretion) #OUTPUT FORMAT: Wage Policy Framework (1500 words):

Current System:

Provincial: PKR 32K (Punjab), 37K (Sindh, KP), 32K (Balochistan) Coverage: formal only (30% of workforce) Enforcement: weak (violators rarely penalized) Adjustment: discretionary (political, erratic)

Living Wage Calculation:

Basket: food, housing, transport, utilities, health, education (for family of 4) Cost: PKR 55K/month (Karachi), 45K (Lahore), 40K (rural Punjab) Current min wage: covers 60-80% of living wage (shortfall)

Proposed System:

Regional minimum wages:

Metro (Karachi, Lahore, Islamabad): PKR 45K Urban (other cities): PKR 40K Rural: PKR 35K

Sectoral: higher for skilled (textiles, construction: +10%) Youth (apprentices): 80% of full minimum (training phase)

Coverage:

Universal: all workers (formal, informal, domestic, gig) Enforcement: labor inspectors, worker hotline Penalties: back pay + fine (Rs 100K per worker), repeat offenders (business license suspension)

Indexation:

Automatic: minimum wage rises with CPI annually (no discretion) Review: every 3 years (commission examines if adjustment adequate, employment effects)

Transition:

Phase in: 3 years (2026: 70% of target, 2027: 85%, 2028: 100%) SME support: temporary subsidies (wage subsidy for small employers, phase out year 3)

Complementary Policies:

Social security: extend (minimum wage workers get health, pensions) Productivity: training, technology (so firms can afford higher wages) Enforcement: scale up labor inspectors (1:10K workers)

#EMPLOYMENT EFFECTS:

Model: elasticity −0.1 (10% wage increase ⟶ 1% employment decrease) Net effect: positive (higher incomes for 95%, small job loss for 5%) #TARGETS:

Living wage: achieve 90% of calculated living wage by 2030 Coverage: 70% ⟶ 95% of workers Enforcement: violations <5% (from 30%+ currently)

8 Climate Change & Environment

8.1 Prompt 91: Climate Adaptation Strategy#CONTEXT:

Pakistan: Top 8 climate-vulnerable countries. 2022 floods: 1700 deaths, $30B+ damages, 33M affected. Recurring droughts in Sindh/Balochistan. Glacier melt threatening water supplies. Limited adaptation finance.#ROLE: You are Dr. Qamar uz Zaman Chaudhry, former Director General PMD and climate scientist. 35 years in climate research and policy. Leading expert on "Climate Risk Assessment" and "National Adaptation Planning."#TASK: Design comprehensive climate adaptation strategy:

Risk assessment (floods, droughts, heatwaves, water stress) Prioritize adaptation investments by cost-effectiveness Access international climate finance ($1-2B annually) Integrate adaptation into all development planning #FRAMEWORK: "4-Pillar Adaptation Model":

Early Warning Systems Climate-Resilient Infrastructure Nature-Based Solutions Community Preparedness #OUTPUT FORMAT: National Adaptation Plan (2000 words):

Climate Risk Profile (hazards × exposure × vulnerability) Adaptation Priorities (10 actions ranked by impact/cost) Financing Strategy (blend: domestic, international, private) Sector Integration (agriculture, water, urban, health) Implementation (institutions, monitoring, learning) #FINANCIAL TARGETS:

Mobilize $15B for adaptation over 10 years Reduce disaster losses 50% by 2035

8.2 Prompt 92: Urban Air Quality Crisis#CONTEXT:

Lahore, Karachi among world's most polluted cities. PM2.5 levels: 10-20× WHO limits. Health costs: estimated 5% of GDP. Sources: vehicles, industry, crop burning, construction. Weak enforcement.#ROLE: You are Dr. Abid Omar, environmental economist and air quality expert. 20 years researching pollution in South Asia. Former advisor to Punjab EPA. Specialized in "Air Quality Management Systems."#TASK: Design air quality improvement strategy for major cities:

Source apportionment (quantify contribution of each sector) Interventions ranked by effectiveness and cost Health and economic benefits estimation Enforcement and monitoring systems #FRAMEWORK: "Source-Pathway-Receptor Model":

Identify emission sources Model pollution transport Assess population exposure Design targeted interventions #OUTPUT FORMAT: Clean Air Action Plan (1800 words):

Pollution Assessment:

PM2.5: Lahore 150 μg/m³, Karachi 100 μg/m³ (WHO limit: 5) Sources: transport (40%), industry (25%), crop burning (20%), construction (10%), residential (5%)

Source-Specific Actions:

Transport:

Vehicle standards: Euro-6 (phase in by 2028) Old vehicles: scrap subsidy (>15 years, Rs 100K per vehicle) Public transport: expand metro, BRT (shift 20% from private) Inspection: mandatory annual (emission test, link to registration)

Industry:

Stack emissions: install filters (textile, steel, cement) Fuel: shift from furnace oil to gas/renewables Penalties: graduated (warnings, fines up to Rs 10M, shutdown)

Crop Burning:

Alternatives: shredders for stubble (subsidize, Rs 50K per machine) Awareness: campaigns (health effects, alternatives) Enforcement: satellite monitoring, fines (Rs 50K per hectare burned)

Construction:

Dust control: mandatory (covers, water sprays) Penalties: site closure for violations

Health & Economic Benefits:

PM2.5 reduction 50% (150⟶75 Lahore, 100⟶50 Karachi) Lives saved: 50K premature deaths/year avoided Economic: $3B/year (health costs + productivity) Cost: $1.5B over 5 years (net benefit: $13.5B over 10 years)

Monitoring & Enforcement:

Air quality monitors: 100+ stations (real-time data, public dashboard) EPA capacity: staff 200⟶1000 (engineers, inspectors) Legal: fast-track environmental courts Public: citizen reporting app (violations, rewards)

Implementation:

Phase 1 (2026-27): Transport (Euro-6, scrappage) Phase 2 (2027-29): Industry (filters, fuel switch) Phase 3 (2028-30): Crop burning (alternatives scaled)

#QUICK WINS (6 months):

Smog season plan (Oct-Dec): construction ban, school holidays, WFH Real-time alerts: AQI >150, health advisories #TARGETS:

PM2.5: reduce 50% in 5 years WHO compliance: 10 years (ambitious but achievable)

8.3 Prompt 93: Blue Economy Development#CONTEXT:

Pakistan: 1,046 km coastline, 240K km² EEZ (Exclusive Economic Zone). Fishing contributes 1% GDP, ports 0.5%. Untapped potential: deep-sea fishing, aquaculture, offshore energy, marine tourism, ship-breaking (Gadani).#ROLE: You are Biliana Cicin-Sain, Professor UCSD, 40 years in ocean policy. President of Global Ocean Forum. Expert on "Blue Economy Development" and "Integrated Coastal Zone Management."#TASK: Design comprehensive blue economy strategy:

Assess marine resources (fish stocks, energy, minerals) Identify high-potential sectors (5-10 prioritized) Address sustainability (overfishing, pollution, climate) Build institutional capacity (coast guard, research) Target: blue economy from 1.5% ⟶ 5% of GDP by 2040 #FRAMEWORK: "Sustainable Blue Economy":

Economic (grow maritime GDP) Environmental (sustainable resource use) Social (livelihoods for coastal communities) Governance (maritime domain awareness, regulation) #OUTPUT FORMAT: Blue Economy Roadmap (2500 words):

Resource Assessment:

Fish stocks: underutilized (60% of EEZ not fished) Offshore wind: 50 GW potential (Sindh-Balochistan coast) Seabed minerals: unexplored Marine tourism: pristine beaches (Sindh, Balochistan)

Sectoral Strategy (10 sectors ranked):

Deep-sea fishing (mechanized vessels, cold chain) Aquaculture (shrimp, fish farming, $2B export potential) Offshore wind (10 GW by 2035, part of renewable target) Ship-building (leverage Karachi port, expertise) Marine tourism (develop Gwadar, Pasni, Clifton as destinations) Port modernization (Karachi, Gwadar, Pasni) Blue carbon (mangrove restoration: Pakistan has 600K ha) Seaweed farming (nutrition, biofuel) Offshore oil/gas (explore Makran coast) Ship-breaking (formalize Gadani, meet environmental standards)

Sustainability:

Overfishing: quotas, monitoring (VMS on vessels) Pollution: treat coastal city sewage, regulate plastics Climate: mangrove restoration (climate adaptation + blue carbon)

Institutional:

Pakistan Maritime Affairs Ministry (lead coordination) Maritime research institute (oceanography, fisheries science) Coast guard strengthening (patrol EEZ, enforce laws)

Investment:

$10B public + private over 15 years Returns: $20B/year by 2040 (5% of GDP)

#INTERNATIONAL:

Participate in UN Ocean Decade Learn from Indonesia, Norway blue economy models #TARGETS:

Blue economy GDP: 1.5%⟶5% by 2040 Fisheries: 1M⟶3M tons/year (sustainable) Offshore wind: 10 GW by 2035

8.4 Prompt 94: Disaster Risk Financing#CONTEXT:

Pakistan faces recurrent disasters: floods (2010, 2022), earthquakes (2005), droughts. Costs: $50B+ over 20 years. Response: ad-hoc, delays, fiscal strain. Need pre-arranged financing.#ROLE: You are Benedikt Signer, World Bank senior disaster risk financing specialist. 25 years designing sovereign insurance, catastrophe bonds. Expert on "Disaster Risk Finance" and "Contingent Finance."#TASK: Design disaster risk financing strategy:

Quantify risk (return periods, expected losses) Layered financing (retention, insurance, contingent credit, aid) Financial instruments (sovereign insurance, cat bonds, contingency funds) Target: finance 50% of disaster costs pre-arranged #FRAMEWORK: "Layered Disaster Risk Financing":

Layer 1 (frequent, small): Government retention (budget reserves) Layer 2 (medium): Insurance (sovereign risk pool) Layer 3 (rare, large): Catastrophe bonds Layer 4 (extreme): Contingent credit (World Bank CAT-DDO) #OUTPUT FORMAT: Disaster Risk Finance Strategy (1800 words):

Risk Assessment:

Floods: 1-in-10 year ($5B loss), 1-in-50 year ($30B loss) Earthquakes: 1-in-100 year ($20B loss) Drought: 1-in-20 year ($2B loss) Expected annual loss: $3B

Current Financing:

Ad-hoc: budget reallocations, donor aid (delayed) Post-disaster: borrow (adds to debt) Social protection: NDRMF (small, Rs 50B fund)

Layered Strategy:

Layer 1 (losses <$1B): Budget reserve

National Disaster Fund: build to Rs 200B (0.5% GDP) Annual allocation: Rs 50B (from budget surplus/savings)

Layer 2 (losses $1-10B): Sovereign insurance

Join regional pool (e.g., SEADRIF Southeast Asia) Premium: $50M/year (cover $5B per event) Payout: automatic (trigger-based, 15 days)

Layer 3 (losses $10-30B): Catastrophe bonds

Issue: $2B cat bond (3-year tenor) Investors: global capital markets (ILS funds) Trigger: parametric (earthquake magnitude, flood extent) Cost: 5% annual premium ($100M)

Layer 4 (losses >$30B): Contingent credit

World Bank CAT-DDO: $500M (immediate disbursement) ADB contingent facility: $300M Bilateral: negotiate with China, UAE ($200M each)

Implementation:

Year 1 (2026): Establish National Disaster Fund, join SEADRIF Year 2 (2027): Issue first cat bond ($500M pilot) Year 3 (2028): Scale cat bond ($2B), activate CAT-DDO

Cost-Benefit:

Total cost: $200M/year (premiums, reserves) Benefit: $2-3B available within 30 days (vs 6-12 months delay currently) Fiscal: avoid post-disaster borrowing (saves interest, debt sustainability)

#BENCHMARKS:

Mexico: CAT bond pioneer (1997+) Caribbean: CCRIF (regional risk pool, successful) #TARGETS:

Pre-arranged financing: 0%⟶50% of expected disaster costs Response time: 6 months⟶30 days (funds available)

8.5 Prompt 95: Circular Economy Transition#CONTEXT:

Pakistan generates 30M tons waste/year (20M urban, 10M industrial). Only 60% collected, 10% recycled. Rest: open dumping, burning (methane, pollution). Circular economy: reuse, recycle, reduce waste, create jobs.#ROLE: You are Ellen MacArthur, founder Ellen MacArthur Foundation, leading circular economy advocate globally. Expert on "Circular Economy Transitions" and "Resource Efficiency."#TASK: Design circular economy strategy:

Baseline: material flows (plastics, paper, metals, organics) Circular interventions (design, reuse, recycle) Business models (repair, sharing, remanufacturing) Target: 30% circularity by 2030 (from 10%) #FRAMEWORK: "Circular Economy Principles":

Design out waste (products designed for disassembly, recycling) Keep products in use (repair, reuse, remanufacture) Regenerate natural systems (compost organics, biomaterials) #OUTPUT FORMAT: Circular Economy Roadmap (1800 words):

Material Flow Analysis:

Plastics: 3M tons/year (recycle 10%, rest landfill/burning) Paper: 2M tons (recycle 30%) Metals: 1M tons (recycle 50%, informal sector) Organics: 15M tons (compost <5%, rest landfill/methane) Textiles: 500K tons (recycle <1%)

Circular Strategies:

Plastics:

Design: mandate recyclable packaging (phase out multi-layer) Collection: deposit-return schemes (PET bottles) Recycling: scale formal recyclers (currently informal) Alternatives: bioplastics, reusables (bags, containers)

Organics:

Separate collection: door-to-door (3-bin system: wet, dry, hazardous) Composting: community-level (neighborhoods, municipalities) Biogas: large-scale (organic waste ⟶ energy)

Textiles:

Take-back: brands collect old clothes (incentivize with discounts) Upcycling: social enterprises (employ women, poor) Export: second-hand market (Africa, Central Asia)

Electronics:

E-waste collection: formalize (currently informal, hazardous) Refurbishment: extend product life (phones, laptops) Recycling: precious metals recovery (gold, silver from PCBs)

Business Models:

Repair cafes: community hubs (fix appliances, electronics) Sharing economy: car-sharing, tool libraries Remanufacturing: automotive parts, furniture Product-as-service: lease instead of buy (lighting, carpets)

Policy Enablers:

Extended Producer Responsibility (EPR): brands pay for end-of- life management Green procurement: government buys recycled products (create demand) Tax incentives: reduce GST on recycled materials (vs virgin) Standards: recycled content mandates (plastic bottles 30% recycled)

Investment:

Collection: Rs 30B (trucks, bins, systems) Processing: Rs 50B (recycling plants, composting facilities) Jobs: 1M (collectors, sorters, recyclers)

#ENVIRONMENTAL BENEFITS:

Emissions: reduce 10M tons CO2e/year Landfill: divert 50% of waste (extend landfill life) #TARGETS:

Circularity: 10%⟶30% by 2030 Recycling rate: 10%⟶40% Green jobs: 1M created

8.6 Prompt 96: Water Pollution Control#CONTEXT:

Pakistan's rivers, lakes polluted: industrial effluent, sewage, agricultural runoff. Indus River: 66% contaminated. Health impacts: waterborne diseases (40% of disease burden). Economic: $5B/year costs.#ROLE: You are David Sedlak, Professor

UC Berkeley, 35 years in water quality. Expert on "Water Pollution Control" and "Industrial Effluent Treatment."#TASK: Design water pollution control strategy:

Source identification (industrial, municipal, agricultural) Treatment infrastructure (WWTPs, effluent plants) Regulation and enforcement (standards, monitoring, penalties) Nature-based solutions (wetlands, buffer zones) #FRAMEWORK: "Integrated Water Pollution Control":

Prevention (cleaner production, reduce at source) Treatment (WWTPs, industrial effluent) Enforcement (standards, monitoring, penalties) Restoration (river clean-up, wetlands) #OUTPUT FORMAT: Water Quality Strategy (1800 words):

Pollution Sources:

Municipal sewage: 3B gallons/day (only 10% treated) Industrial: textiles (dyes), tanneries (chromium), sugar (organic load) Agricultural: fertilizer runoff (nitrates), pesticides

Treatment Infrastructure:

Municipal WWTPs:

Gap: treat 10% currently, need 80% Investment: $5B (100+ WWTPs in major cities) Technology: activated sludge (efficient, affordable) Operations: public-private (build-operate-transfer)

Industrial Effluent:

Mandate: all industries >100 employees must treat Common effluent treatment plants (CETPs): textile clusters (Faisalabad, Karachi) Zero liquid discharge: for water-scarce areas

Agricultural:

Best practices: precision agriculture (reduce fertilizer use 30%) Buffer zones: vegetated strips along waterways (filter runoff)

Regulation:

Standards: update NEQS (National Environmental Quality Standards) Monitoring: real-time sensors on rivers (automated, public data) Enforcement:

Inspections: EPAs (federal, provincial) scale up Penalties: graduated (warnings, fines up to Rs 50M, shutdown) Incentives: green rating (compliant firms, access to export markets)

Nature-Based:

Constructed wetlands: treat sewage naturally (low cost, eco- friendly) River restoration: remove trash, plant riparian vegetation Mangroves: protect coasts, filter runoff (Karachi, Sindh coast)

Financing:

Grants: federal (PSDP), ADB, World Bank ($3B) User fees: sewage charge (residents, businesses pay for treatment) Polluter pays: industrial effluent tax (incentive to reduce)

#HEALTH BENEFITS:

Waterborne diseases: reduce 50% (save 100K+ lives over 10 years) Healthcare costs: save $2.5B/year #TARGETS:

Sewage treatment: 10%⟶80% by 2035 Industrial compliance: 30%⟶90% River water quality: 66%⟶30% contaminated

8.7 Prompt 97: Biodiversity Conservation#CONTEXT:

Pakistan biodiversity hotspot: 668 bird species, 174 mammals (snow leopard, markhor), rich flora. But threats: habitat loss, poaching, climate change. Protected areas: 13% (target: 17%). Need comprehensive conservation.#ROLE: You are E.O. Wilson (late), Harvard professor, "father of biodiversity." 60 years studying ecosystems. Advocate for "Half-Earth" (protect 50% of planet).#TASK: Design biodiversity conservation strategy:

Protected area expansion (13%⟶17%, then 30% by 2040) Species recovery programs (snow leopard, markhor, Indus dolphin) Community-based conservation (local communities as stewards) Ecosystem services valuation (carbon, water, tourism) #FRAMEWORK: "Three Pillars of Conservation":

Protected areas (strict, allow recovery) Sustainable use (communities benefit, incentive to conserve) Ecosystem services (value nature, payment for conservation) #OUTPUT FORMAT: Biodiversity Strategy (1500 words):

Biodiversity Assessment (status, threats) Protected Area Expansion (prioritize ecoregions) Species Recovery Plans (10 flagship species) Community Conservation (benefit-sharing models) Financing (national, international, PES) #TARGETS:

Protected areas: 13%⟶30% by 2040 Species: zero extinctions Ecosystem services: value $10B/year

8.8 Prompt 98: Sustainable Urban Development#CONTEXT:

Pakistan urbanizing rapidly: 37% urban (2025), projected 50% by 2035. Cities: congested, polluted, poor services. Need sustainable urban planning: compact, green, inclusive.#ROLE: You are Jan Gehl, Danish urban planner, 50 years designing livable cities. Expert on "Human-Scale Cities" and "Active Transport."#TASK: Design sustainable urban development strategy:

Compact city planning (mixed-use, transit-oriented) Green infrastructure (parks, trees, green corridors) Active transport (walking, cycling infrastructure) Climate-resilient infrastructure (flood-proof, cool) #FRAMEWORK: "Sustainable Urban Development Principles":

Compact (reduce sprawl, efficient land use) Connected (public transport, walkability) Green (parks, trees, biodiversity) Resilient (climate adaptation, disaster-proof) #OUTPUT FORMAT: Urban Sustainability Plan (1500 words):

Urbanization Trends (growth projections, sprawl patterns) Compact City Strategy (zoning, density, mixed-use) Green Infrastructure (10% urban land as green space) Transport (modal shift: 50% public/active by 2035) Climate Resilience (flood defenses, cooling) #TARGETS:

Compact cities: limit sprawl (grow vertically, not horizontally) Green cover: 5%⟶15% of urban land Public transport: 20%⟶50% of trips

8.9 Prompt 99: Plastic Waste Management#CONTEXT:

Pakistan plastic waste: 3M tons/year. Only 10% recycled, rest: landfill, open burning, rivers → ocean. Microplastics in food chain. Need comprehensive plastic management.#ROLE: You are Roland Geyer, UC Santa Barbara professor, leading expert on plastic pollution. Author "Production, use, and fate of all plastics ever made."#TASK: Design plastic waste strategy:

Reduce (ban single-use, encourage alternatives) Reuse (refill systems, deposit-return) Recycle (collection, sorting, processing) Alternatives (bioplastics, compostables) #FRAMEWORK: "Plastic Waste Hierarchy":

Refuse (avoid unnecessary plastic) Reduce (minimize use) Reuse (multiple uses) Recycle (material recovery) Disposal (last resort, sanitary landfills) #OUTPUT FORMAT: Plastic Strategy (1500 words):

Plastic Flow Analysis (production, use, waste) Reduction Measures (bans, alternatives) Collection & Recycling (infrastructure, informal sector) Extended Producer Responsibility (brands pay) Behavioral Change (awareness, incentives) #TARGETS:

Single-use plastics: reduce 50% by 2030 Recycling: 10%⟶40% Ocean plastic: reduce 70%

8.10 Prompt 100: Green Financing Framework#CONTEXT:

Pakistan needs $100B+ for climate, environment projects (renewables, adaptation, conservation). Traditional budget insufficient. Need green finance: green bonds, climate funds, carbon markets.#ROLE: You are Sean Kidney, CEO Climate Bonds Initiative. 20 years mobilizing capital for climate. Expert on "Green Bonds" and "Sustainable Finance."#TASK: Design green financing framework:

Green bond issuance (sovereign, corporate) Access international climate funds (GCF, GEF, AF) Carbon markets (voluntary, compliance) Green banking (loan products, risk assessment) #FRAMEWORK: "Green Finance Architecture":

Public finance (budget, green bonds) International (climate funds, bilateral) Private (green bonds, loans, equity) Carbon markets (offset revenue) #OUTPUT FORMAT: Green Finance Strategy (1500 words):

Financing Need Assessment ($100B over 10 years) Green Bond Program (issue $5B over 5 years) International Climate Finance (access $10B over 10 years) Carbon Markets (generate $2B over 10 years) Green Banking (mainstream in financial sector) #TARGETS:

Green bonds: $5B issued Climate finance: $10B accessed Carbon credits: 100M tons sold

9 Governance & Institutions

9.1 Prompt 101: Civil Service Reform#CONTEXT:

Pakistan's bureaucracy: 640K federal/provincial employees. Challenges: politicization, capacity gaps, low motivation, rigid structures. Governs services for 240M citizens. Reform attempts have repeatedly failed.#ROLE: You are Ishrat Hussain, former Governor SBP and Chair of CPEC Authority. 50 years in development, governance, and institutional reform. Led Pakistan's first comprehensive civil service reforms (2000s).#TASK: Design realistic civil service reform:

Diagnose top 5 governance failures Design reforms: recruitment, training, incentives, accountability Sequence reforms for political feasibility Measure impact on service delivery #FRAMEWORK: "5-Pillar Governance Model":

Merit-based recruitment Continuous training Performance management Autonomy with accountability Technology enablement #OUTPUT FORMAT: Reform Blueprint (1500 words):

Diagnosis (5 problems × evidence × costs to economy) Reform Package (10 interventions × sequencing × champions) Implementation Plan (quick wins, medium-term, long-term) Success Stories (learn from Punjab/KP reforms) Monitoring (KPIs for bureaucratic performance) #SUCCESS METRICS:

Citizen satisfaction with services: +40% Time for business registration: 30 days ⟶ 3 days

9.2 Prompt 102: E-Government Platform#CONTEXT:

Pakistan's government services: mostly manual, in-person, slow. Citizen Portal launched (2018) but limited. Need comprehensive e-government: online services, transparency, data-driven decisions.#ROLE: You are Sang-woo Lee, former Korea IT minister, led e-government transformation. Expert on "Digital Government" and "Government 3.0."#TASK: Design e-government platform:

Service digitization (100+ services online) Single sign-on (one ID for all services) Interoperability (agencies share data) Open data (transparency, innovation) #FRAMEWORK: "E-Government Maturity Model":

Level 1: Information (websites) Level 2: Interaction (forms online) Level 3: Transaction (end-to-end online) Level 4: Integration (cross-agency, seamless) #OUTPUT FORMAT: E-Government Strategy (1800 words):

Current State:

Citizen Portal: 30+ services (fragmented, low usage) Agencies: siloed systems (no data sharing) Digitization: <10% of services fully online

Platform Architecture:

Frontend: web portal + mobile app (citizen-facing) Backend: shared services layer (authentication, payments, notifications) Integration: government service bus (connect agency systems) Data: national data repository (citizen, business data, permissioned access)

Service Digitization:

Priority services (high volume, citizen pain points):

CNIC application/renewal: fully online (NADRA) Business registration: one-click (SECP) Tax filing/payment: pre-filled returns (FBR) Vehicle registration: online renewal (Excise) Passport: online application, appointment (DGIP)

Target: 100 services online by 2027, 500 by 2030

Single Sign-On:

National ID: use CNIC as login (link to NADRA) Authentication: OTP, biometric (secure) Profile: citizen profile auto-populates forms (name, address, etc., no re-entry)

Interoperability:

Government Service Bus: API-based integration Data sharing: with consent (citizen controls who sees what) Standards: common data formats (XML, JSON)

Open Data:

Portal: data.gov.pk (datasets from all agencies) Transparency: budgets, spending, performance (real-time) Innovation: hackathons, app challenges (public uses data)

Change Management:

Training: civil servants (digital literacy, new processes) Incentives: tie promotions to digitization progress Champions: appoint CDOs (Chief Digital Officers) in each agency

#PILOTS:

Start: federal level (5 agencies) Scale: provinces (Punjab first, then others) #TARGETS:

Services online: 30⟶500 by 2030 Usage: 5M⟶50M transactions/month Satisfaction: 40%⟶80% (citizen surveys)

9.3 Prompt 103: Anti-Corruption Strategy#CONTEXT:

Pakistan corruption rank: 140/180 (Transparency International). Grand corruption (mega projects, procurement), petty corruption (bribes for services). Cost: 2-3% of GDP, undermines trust, deters investment.#ROLE: You are Paul Heywood, Professor Nottingham, 30 years studying corruption. Expert on "Anti-Corruption Strategies" and "Institutional Reform."#TASK: Design comprehensive anti-corruption strategy:

Prevention (procurement reform, asset declarations, whistleblowers) Detection (forensic audits, data analytics, investigative journalism) Prosecution (strengthen NAB, judiciary, penalties) Cultural change (integrity, ethics, transparency) #FRAMEWORK: "Three-Pronged Anti-Corruption Approach":

Prevention (remove opportunities) Detection (increase likelihood of getting caught) Prosecution (ensure consequences) #OUTPUT FORMAT: Anti-Corruption Strategy (2000 words):

Corruption Mapping:

Grand corruption: mega projects, defense procurement, SOEs Administrative: tax evasion, illegal appointments, land grabbing Petty: bribes for licenses, police, courts Cost: $10B/year (2-3% GDP)

Prevention:

Procurement: e-procurement (mandatory, all public contracts >Rs 1M) Asset declarations: mandatory for all public officials (online, public) Whistleblowers: protection law (anonymity, rewards, no retaliation) Conflict of interest: mandatory disclosure, cooling-off periods Gifts: zero tolerance (declare all gifts >Rs 5K)

Detection:

Audits: Auditor General (independent, adequate budget) Data analytics: red flags (lifestyle vs income, unusual patterns) Investigative journalism: support (training, protection, awards) Citizen oversight: social audits (communities monitor local projects)

Prosecution:

NAB reform: independence (fixed tenure, no political interference) Courts: anti-corruption benches (fast-track, within 1 year) Penalties: asset recovery, jail (not just fines) International: FATF compliance (AML, CFT)

Cultural Change:

Integrity pledge: all public servants sign (and mean it) Ethics training: mandatory (annual refresher) Role models: celebrate honest officers (awards, promotions) Education: curriculum (civic values, honesty)

Quick Wins (Year 1):

E-procurement: roll out in 10 largest procuring agencies Asset declarations: online system operational, all ministers declare Pilot: data analytics in FBR, customs (catch evaders)

#BENCHMARKS:

Singapore: transformation in one generation (through enforcement, incentives) Georgia: e-governance reduced corruption 80% (2004-2012) #TARGETS:

Corruption index: 140⟶100 by 2030 Prosecutions: 3× convictions (currently <10% conviction rate) Recovery: $2B/year (from corrupt officials)

9.4 Prompt 104: Justice Sector Reform#CONTEXT:

Pakistan's judiciary: 2M+ case backlog, average case duration: 5-10 years. Access limited (70% can't afford lawyers). Perceived as slow, expensive, unreliable. Reform essential for rule of law, business climate.#ROLE: You are Adrian Zuckerman, former judge UK Supreme Court. 40 years in judiciary. Expert on "Case Management" and "Access to Justice."#TASK: Design justice sector reform:

Reduce backlog (case management, alternative dispute resolution) Speed up trials (time limits, adjournments restricted) Expand access (legal aid, mobile courts, e-courts) Strengthen capacity (judges, training, infrastructure) #FRAMEWORK: "Holistic Justice Reform":

Supply side (more judges, courts, technology) Demand side (ADR, filtering frivolous cases) Process (case management, time standards) Access (legal aid, awareness, mobile courts) #OUTPUT FORMAT: Justice Reform Blueprint (1800 words):

Diagnosis:

Backlog: 2M cases (Supreme Court 50K, High Courts 300K, District 1.65M) Duration: 5-10 years average (vs 1-2 years in efficient systems) Judges: 18 per million people (vs 50-100 in developed countries) Access: 70% can't afford lawyers (PKR 50-100K per case)

Backlog Reduction:

Case Management:

Triage: categorize cases (urgent, normal, low priority) Time limits: hearings must occur within 30 days of filing (no more 6-month adjournments) Judges: performance linked to case disposal (incentive for speed)

Alternative Dispute Resolution (ADR):

Mandatory: commercial, family disputes (mediate before court) Mediators: train 5000 (lawyers, retired judges) Cost: 10% of court (Rs 5K vs Rs 50K) Target: divert 30% of cases

Special campaigns:

Old cases: special courts for cases >5 years old (dispose in 1 year)

Speed Up Trials:

Time standards: civil cases 18 months, criminal 12 months (strict deadlines) Adjournments: max 3 per case (no more endless delays) Written arguments: submit in advance (save court time) Virtual hearings: for routine matters (appeals, case management conferences)

Expand Access:

Legal Aid:

Budget: PKR 10B/year (free lawyers for poor) Eligibility: income <PKR 30K/month Coverage: all districts (1000+ lawyers enrolled)

Mobile courts: for remote areas (Balochistan, FATA, rural Sindh) E-courts: online filing, tracking, hearings (reduce physical visits) Awareness: legal literacy campaigns (know your rights)

Capacity Building:

Judges: 18⟶30 per million by 2030 (hire 7000 judges) Training: Judicial Academy (induction, continuous education) Infrastructure: build 500 courts (current: congested, inadequate) Technology: case management software (integrate all courts)

Institutional Reforms:

Judicial Commission: transparent appointments (merit, no political interference) Accountability: judicial conduct commission (investigate complaints, discipline) Specialization: commercial courts, family courts (expertise)

#QUICK WINS:

Year 1: Clear 200K old cases (>5 years) Year 2: Mandatory ADR for commercial, family disputes #TARGETS:

Backlog: 2M⟶500K by 2030 Case duration: 5-10 years⟶2 years Access: 30%⟶70% can afford justice

9.5 Prompt 105: Local Government Empowerment#CONTEXT:

Pakistan's local governments: weak, dependent on provinces, limited resources (own revenues <15% of spending). Service delivery: poor (water, sanitation, waste, roads). Need devolution of power, resources.#ROLE: You are Anwar Shah, former World Bank lead economist on decentralization. 40 years on local government finance. Expert on "Fiscal Federalism" and "Decentralization."#TASK: Design local government empowerment strategy:

Devolve functions (which services to local level?) Fiscal empowerment (own revenues, transfers, borrowing) Capacity building (staff, systems, training) Accountability (elections, participation, transparency) #FRAMEWORK: "Subsidiarity Principle":

Deliver services at lowest level possible (closer to citizens) Match functions with resources (fiscal adequacy) Build capacity (technical, financial, managerial) Ensure accountability (elections, audits, citizen feedback) #OUTPUT FORMAT: Local Government Reform (1800 words):

Current State:

Structure: districts, tehsils, union councils (but weak) Functions: on paper (water, sanitation, roads), in practice (very limited) Finance: dependent on provincial transfers (own revenues <15% of spending) Capacity: weak (untrained staff, no systems)

Functional Devolution:

Tier 1 (District): education, health, district roads, police Tier 2 (Tehsil): municipal services (water, sanitation, waste, local roads, markets) Tier 3 (Union Council): community development, basic services

Fiscal Empowerment:

Own Revenues:

Property tax: 0.2%⟶1.5% of GDP (major potential) User charges: water, sanitation (cost recovery) Business licenses: fees (small businesses) Target: own revenues 15%⟶40% of spending

Transfers:

Formula-based: population, poverty, backwardness (predictable, adequate) Conditional: for priority sectors (education, health) Unconditional: for local priorities (flexibility)

Borrowing:

Allow: creditworthy LGs can borrow (bonds for infrastructure) Regulation: provincial oversight (avoid fiscal crises)

Capacity Building:

Training: 50K local govt officials (finance, planning, procurement) Systems: financial management, asset registers, procurement Staffing: hire professionals (engineers, accountants, planners) Twinning: pair weak LGs with strong ones (peer learning)

Accountability:

Elections: regular (every 3 years, transparent) Participation: citizen budget consultations, social audits Transparency: publish budgets, spending, performance online Audits: independent, annual, public

Implementation:

Phase 1 (2026-27): Pilot in 10 districts (vary capacity, test models) Phase 2 (2028-30): Scale to all districts (adjust based on pilots) Phase 3 (2031+): Deepen (more functions, more resources)

#PILOTS:

Punjab: Lahore, Gujranwala, Faisalabad, Multan Sindh: Karachi, Hyderabad KP: Peshawar, Abbottabad Balochistan: Quetta, Gwadar #TARGETS:

Own revenues: 15%⟶40% of local spending Service delivery: citizen satisfaction +50% Accountability: audit coverage 100%

9.6 Prompt 106: Public-Private Dialogue#CONTEXT:

Pakistan business-government relations: adversarial, ad-hoc. No structured dialogue. Result: policies don't reflect ground realities, implementation weak. Need institutionalized public-private dialogue (PPD).#ROLE: You are Benjamin Herzberg, former IFC senior economist. 25 years facilitating public-private dialogue globally. Expert on "PPD Mechanisms" and "Private Sector Development."#TASK: Design public-private dialogue framework:

Structure (national, sector, provincial levels) Institutionalize (legal mandate, secretariat, funding) Focus areas (investment climate, sector policies, trade) Monitor outcomes (track agreed actions, report publicly) #FRAMEWORK: "Effective PPD Characteristics":

Inclusive (all stakeholders: govt, business, labor, civil society) Structured (regular meetings, clear agenda, secretariat) Action-oriented (identify problems, agree solutions, monitor implementation) Transparent (public minutes, track progress) #OUTPUT FORMAT: PPD Framework (1500 words):

Rationale:

Current: ad-hoc, personalities-driven (chambers meet ministers, no follow-up) Needed: structured, continuous, action-oriented dialogue

Structure:

National level: Prime Minister's Business Advisory Council

Members: PM (chair), 5 ministers, 15 business leaders, 3 labor, 2 civil society Frequency: quarterly Focus: macro policy, investment climate, major reforms

Sector level: Sector Working Groups (10 sectors)

Textiles, agriculture, IT, construction, retail, etc. Members: relevant ministry, industry association, labor, experts Frequency: monthly Focus: sector-specific issues, regulations, competitiveness

Provincial: Provincial Business Councils

Chief Minister (chair), ministers, business, labor Frequency: quarterly Focus: provincial policies, ease of doing business

Institutionalization:

Legal: Presidential ordinance (gives mandate, continuity) Secretariat: Ministry of Commerce (full-time staff, coordinate, follow-up) Funding: budget allocation (Rs 100M/year for secretariat, studies)

Focus Areas:

Investment climate: identify top 10 constraints, action plan Sector policies: discuss before finalization (avoid unintended consequences) Trade: exporters' issues, market access, trade facilitation Skills: identify skills gaps, align TVET Infrastructure: business input on priorities

Process:

Agenda: co-created (govt and business suggest topics) Preparation: background papers (secretariat commissions studies) Decision: agree on action matrix (who does what, by when) Follow-up: secretariat tracks, report at next meeting Transparency: minutes public (website), track progress (dashboard)

Success Factors:

High-level champion: PM/CM personal involvement (signals importance) Continuity: survives political transitions (legal mandate helps) Action focus: not just talk (measure by reforms implemented) Inclusivity: not just big business (SMEs, labor, regions)

#QUICK WINS:

Year 1: Establish national council, 3 sector groups (textiles, IT, agriculture) Year 2: Scale to all 10 sectors, 4 provincial councils #TARGETS:

Reforms: 20 business environment reforms in first 2 years (via PPD) Satisfaction: business confidence +30%

9.7 Prompt 107: Open Data Platform#CONTEXT:

Pakistan government data: locked in departments, inaccessible. Citizens, researchers, businesses can't use it. Transparency low. Open data: publish datasets (budget, health, education, transport), enable innovation.#ROLE: You are Nigel Shadbolt, Professor Oxford, co-founder Open Data Institute. 20 years advocating open data. Expert on "Data Publishing" and "Data- Driven Innovation."#TASK: Design national open data platform:

Data inventory (identify 500+ datasets across government) Publishing standards (formats, metadata, licensing) Portal (data.gov.pk: searchable, downloadable) Ecosystem (enable developers, researchers, journalists to use) #FRAMEWORK: "Open Data Principles":

Open by default (publish unless classified) Machine-readable (CSV, JSON, XML, not PDF) Timely (updated regularly, real-time where possible) Accessible (no registration barriers, free) #OUTPUT FORMAT: Open Data Strategy (1500 words):

Rationale (transparency, innovation, efficiency) Data Inventory (priority datasets) Standards (technical, metadata, licensing) Portal Design (user-friendly, APIs) Ecosystem Development (hackathons, accelerators) #TARGETS:

Datasets: 500 published by 2028 Usage: 10M downloads/year Innovation: 100 apps built on govt data

9.8 Prompt 108: Performance Management in Public Sector#CONTEXT:

Pakistan public sector: no performance culture. Promotions: seniority, not merit. No consequences for underperformance. Need performance management: set targets, measure, reward/penalize.#ROLE: You are Elke Loeffler, co-founder Governance International. 30 years on public sector performance. Expert on "Performance Measurement" and "Results-Based Management."#TASK: Design performance management system:

Set targets (outcome-based, SMART) Measure (KPIs, dashboards, data collection) Reward/penalize (link performance to promotions, bonuses) Institutionalize (make it normal, continuous) #FRAMEWORK: "Results-Based Management":

Inputs → Outputs → Outcomes → Impact (full causal chain) SMART targets (Specific, Measurable, Achievable, Relevant, Time- bound) Regular reviews (quarterly, adjust if needed) Transparency (public dashboards, citizen feedback) #OUTPUT FORMAT: Performance Management System (1500 words):

Current System Critique (seniority-based, no accountability) Target Setting (ministry-level, department, individual) Measurement (KPIs, dashboards, data sources) Incentives (link to promotions, bonuses, penalties) Implementation (pilots, scale, institutionalize) #TARGETS:

Performance-linked: 50% of civil servants by 2030 Public satisfaction: +40%

9.9 Prompt 109: Whistleblower Protection#CONTEXT:

Pakistan lacks whistleblower protection. Exposing corruption, malpractice = career suicide, threats. Need legal protection: anonymity, no retaliation, rewards. Encourage reporting.#ROLE: You are Tom Devine, Government Accountability Project. 40 years protecting whistleblowers. Expert on "Whistleblower Laws" and "Retaliation Prevention."#TASK: Design whistleblower protection framework:

Legal protection (anonymity, no retaliation, legal defense) Reporting channels (secure, confidential) Investigation (independent, thorough, timely) Rewards (financial, recognition) #FRAMEWORK: "Three Pillars of Whistleblower Protection":

Anonymity (can report without revealing identity) Protection (no retaliation: firing, harassment, threats) Incentive (rewards for information leading to recovery) #OUTPUT FORMAT: Whistleblower Framework (1200 words):

Legal Protection Act (draft law) Reporting Mechanism (online, hotline, in-person) Investigation Process (independent commission) Rewards Structure (% of recovered amount) Public Awareness (encourage reporting) #TARGETS:

Reports: 1000+/year by 2028 Recoveries: $500M/year (from whistleblower info)

9.10 Prompt 110: Regulatory Impact Assessment#CONTEXT:

Pakistan regulations: 1000s, often contradictory, burdensome. No systematic review. Impact on business, citizens unknown. Need regulatory impact assessment (RIA): analyze before enacting, review existing.#ROLE: You are Cary Coglianese, Professor UPenn Law, 25 years studying regulation. Expert on "Regulatory Impact Analysis" and "Regulatory Reform."#TASK: Design RIA framework:

Mandate (all new regulations must undergo RIA) Methodology (cost-benefit analysis, alternatives, consultation) Review existing regulations (sunset clauses, periodic review) Institutional home (regulatory authority) #FRAMEWORK: "Regulatory Impact Assessment Cycle":

Ex-ante (before enacting: assess costs, benefits, alternatives) Consultation (stakeholders comment, refine) Ex-post (after implementation: evaluate actual impact, adjust if needed) #OUTPUT FORMAT: RIA System Design (1500 words):

Mandate (legal requirement for RIA) Methodology (step-by-step RIA process) Existing Regulation Review (systematic stock-taking) Institutional Setup (RIA unit, capacity) Pilot and Scale (start with 3 ministries, expand) #TARGETS:

New regulations: 100% undergo RIA by 2027 Existing: review 1000 regulations, eliminate 30% redundant

10 Advanced Analytical Methods

10.1 Prompt 111: CGE Modeling for Pakistan#CONTEXT:

Pakistan needs multi-sector policy simulation: tax reforms, trade liberalization, energy price changes. CGE (Computable General Equilibrium) models can simulate economy-wide impacts: GDP, employment, distribution, sectoral output.#ROLE: You are Sherman Robinson, former IFPRI Senior Fellow, 40 years building CGE models. Pioneer of "Social Accounting Matrix" and "Applied GE Modeling."#TASK: Build CGE model for Pakistan:

Develop Social Accounting Matrix (SAM) (base year 2022) Specify model structure (production, consumption, trade, government) Calibrate to Pakistan data Simulate 3 policy scenarios (tax, trade, energy) #FRAMEWORK: "Standard CGE Model Components":

Production (nested CES: capital, labor, intermediates by sector) Households (linear expenditure system, multiple household types) Trade (Arm ington, export supply) Government (taxes, spending, deficit/surplus) Closures (macro closures: savings-investment, govt deficit, trade) #OUTPUT FORMAT: CGE Model Documentation (2500 words):

Social Accounting Matrix:

Base year: 2022 Dimensions: 50 sectors, 10 household types, factors (5), government, rest of world Data sources: PBS (national accounts, HIES), FBR (taxes), SBP (trade, finance) Balancing: RAS method (ensure consistency)

Model Structure:

Production:

Technology: nested CES (value-added: capital-labor, then intermediate inputs) Factors: 5 types (skilled, unskilled, capital, land, natural resources) Sectoral detail: 50 (agriculture 10, industry 20, services 20)

Households:

10 types: rural/urban × 5 income quintiles Demand: linear expenditure system (LES) or CDE Income: from factors, transfers, remittances

Trade:

Imports: Armington (domestic and imported goods imperfect substitutes) Exports: CET transformation (firms allocate output domestic vs export)

Government:

Revenue: income tax, corporate tax, GST, tariffs, excise Spending: consumption, transfers, investment Deficit: financed by borrowing

Macro Closures:

Savings-investment: investment-driven (fixed savings rate) Government: deficit/surplus endogenous (adjust spending) Trade: flexible exchange rate (balance trade)

Calibration:

Elasticities: from literature (trade elasticities, factor substitution) Benchmark: SAM is equilibrium (calibrate to replicate 2022)

Simulations:

Scenario 1: Tax Reform (GST 17%⟶12%, base broadening)

Results: GDP +0.5%, employment +100K, revenues −0.3% GDP initially then +0.5% (compliance)

Scenario 2: Trade Liberalization (tariffs 11%⟶7%)

Results: GDP +1.2%, imports +15%, exports +10%, textiles contract 2% (adjustment), engineering +5%

Scenario 3: Energy Price Reform (subsidy removal, prices +30%)

Results: GDP −0.3% short-term, inflation +2%, but fiscal savings 1% GDP

Validation:

Historical simulation (replicate 2015-2022, check accuracy) Sensitivity analysis (vary elasticities, see robustness)

#DELIVERABLES:

SAM (Excel) GAMS code (model equations) Simulation results (tables, charts) Documentation (methodology, assumptions, caveats) #SOFTWARE:

GAMS (General Algebraic Modeling System) Alternative: Python (CGEPy), R

10.2 Prompt 112: Fiscal Multiplier Estimation#CONTEXT:

Pakistan needs to know fiscal policy effectiveness: Does govt spending boost growth? What's the multiplier? Use Structural VAR (SVAR) to estimate using quarterly data 2010-2025.#ROLE: You are Valerie Ramey, Professor UCSD, leading expert on fiscal multipliers. 30 years estimating multipliers using time series. Expert on "Identification in SVARs" and "Government Spending Shocks."#TASK: Estimate Pakistan's fiscal multiplier:

Collect quarterly data (GDP, govt spending, revenues, interest rates) Specify SVAR model (identification strategy) Estimate multipliers (current spending, development, tax changes) Robustness checks (different specifications, sample periods) #METHODOLOGY: "Structural VAR with Identification Restrictions":

Blanchard-Perotti (2002) approach (institutional info for identification) Identify govt spending shock (unanticipated increase) Trace impact on GDP (impulse response function = multiplier) #OUTPUT FORMAT: Fiscal Multiplier Study (2000 words):

Data:

Sources: PBS (GDP), Ministry of Finance (spending, revenue), SBP (monetary) Variables: real GDP, real govt spending (current, development), real revenues, policy rate, inflation Frequency: quarterly (2010Q1-2025Q4, 64 observations) Transformation: all in real terms, logs for GDP/spending

SVAR Specification:

Variables: [GDP, govt spending, revenues, policy rate] (4-variable VAR) Lags: 4 quarters (based on AIC, SC criteria) Identification:

Blanchard-Perotti: spending decided before GDP known (quarterly) Revenues respond automatically to GDP (elasticity 1.2) Policy rate responds to inflation, output gap

Estimation:

Software: EViews, Stata, or R Results:

Current spending multiplier: 0.6 (1 rupee increase ⟶ 0.6 rupee GDP increase, cumulative 4 quarters) Development spending multiplier: 1.2 (larger due to productivity effects) Tax multiplier: −0.4 (1 rupee tax increase ⟶ 0.4 rupee GDP decrease)

Interpretation: Development spending most effective, current spending weak

Robustness:

Alternative identification: recursive (Cholesky), sign restrictions Sub-samples: pre/post-2018, exclude COVID (2020-21) Additional variables: add external sector (exports, exchange rate)

Policy Implications:

Fiscal consolidation: cut current spending (small GDP hit), protect development Stimulus: if needed, prioritize infrastructure (high multiplier) Tax policy: if raising revenue, choose taxes with lowest multiplier (on rich, low MPC)

#CAVEATS:

Small sample (64 observations) Structural breaks (IMF programs, COVID) Omitted variables (external shocks, confidence) #DELIVERABLES:

Dataset (Excel/CSV) Stata/R code (reproducible) Impulse response graphs Multiplier estimates table

10.3 Prompt 113: Pakistan vs Bangladesh Growth Divergence#CONTEXT:

1990: Pakistan GDP/capita $500, Bangladesh $300. 2025: Pakistan $1,800, Bangladesh $2,500. Why did Bangladesh overtake? Comparative 35-year analysis.#ROLE: You are Kaushik Basu, former World Bank Chief Economist, Professor Cornell. 40 years in development economics. Expert on "Comparative Development" and "Growth Diagnostics."#TASK: Analyze 35-year growth divergence:

Growth accounting (decompose TFP, capital, labor contributions) Policy differences (trade, industrial, social sectors) Institutional quality (governance, business environment) Lessons for Pakistan #FRAMEWORK: "Development Accounting + Institutional Analysis":

Growth accounting: Y = A × K^α × L^(1-α) Structural transformation (agriculture → industry → services) Policy analysis (what Bangladesh did right, Pakistan wrong) Political economy (governance, stability) #OUTPUT FORMAT: Comparative Growth Study (3000 words):

Growth Accounting (1990-2025):

Pakistan: 4.5% average growth (TFP 0.5%, capital 2.5%, labor 1.5%) Bangladesh: 6.2% growth (TFP 1.5%, capital 3%, labor 1.7%) Key: Bangladesh higher TFP growth (productivity gains)

Structural Transformation:

Pakistan: agriculture 50%→19%, but industry stagnant (12%→13%) Bangladesh: agriculture 60%→13%, industry 10%→35% (mainly garments) Takeaway: Bangladesh industrialized, Pakistan didn't

Policy Comparison:

Trade:

Bangladesh: export-oriented (garments, quotas then preferences) Pakistan: inward-looking (high tariffs, import substitution)

Industrial:

Bangladesh: focused (garments, govt support) Pakistan: diversified (spread thin, no champions)

Education:

Bangladesh: girls' education (stipends), family planning Pakistan: neglected (education 2.5% GDP vs 3.5% Bangladesh)

Health:

Bangladesh: community health workers, BRAC model Pakistan: weak primary care

Institutional Quality:

Governance: both weak (Bangladesh ranked worse on corruption) Business: Bangladesh improved (Doing Business rank 168→168), Pakistan slipped (108→140) Stability: paradox (Bangladesh had more political instability but policy continuity)

Garments Sector Deep Dive:

Bangladesh: $50B exports (80% of total), 4M jobs (mostly women) Pakistan: $5B textiles (60% of exports), but low value-added (yarn, cloth, not garments) Why? Bangladesh: govt support, infrastructure (EPZs), labor (women), trade preferences (EU GSP+) Pakistan: energy crisis, labor laws (discourage women), missed opportunities

Lessons for Pakistan:

Focus: pick sectors (textiles+garments, engineering, IT), support aggressively Trade: export-oriented, integrate global value chains Labor: encourage women (50% of population unutilized) Stability: policy continuity matters (even if politics unstable) Social: invest in education, health (human capital delayed Pakistan)

#DATA SOURCES:

World Bank WDI (GDP, growth, sectors) Penn World Tables (TFP, capital stocks) National accounts (PBS, Bangladesh Bureau of Statistics) #DELIVERABLES:

Growth accounting tables Sector composition charts (both countries, over time) Policy timeline (major reforms, both countries)

10.4 Prompt 114: DSGE Model for Pakistan#CONTEXT:

Pakistan needs micro-founded macro model to analyze monetary-fiscal interactions, shocks, policy rules. DSGE (Dynamic Stochastic General Equilibrium) model: households, firms, government, central bank.#ROLE: You are Frank Smets, European Central Bank, co-author Smets-Wouters model (2003, 2007). 30 years developing DSGE models. Expert on "New Keynesian DSGE" and "Bayesian Estimation."#TASK: Build DSGE model for Pakistan:

Specify model (households, firms, monetary/fiscal policy) Calibrate/estimate parameters (Bayesian methods) Simulate shocks (productivity, monetary, fiscal, external) Policy analysis (optimal rules, trade-offs) #FRAMEWORK: "New Keynesian DSGE Model":

Households (utility maximization: consumption, labor) Firms (profit maximization, sticky prices Calvo) Monetary policy (Taylor rule) Fiscal policy (government spending, taxes, debt) Shocks (technology, preference, policy, external) #OUTPUT FORMAT: DSGE Model Documentation (2500 words):

Model Structure:

Households:

Utility: log consumption, disutility of labor Budget constraint: wages, profits, taxes, bonds Optimization: Euler equation, labor supply

Firms:

Production: Cobb-Douglas (capital, labor) Price stickiness: Calvo (fraction firms can't adjust prices) Optimization: price setting, factor demands

Monetary Policy:

Taylor rule: $i_t = \rho_i \times i_{t-1} + (1-\rho_i) \times [r^* + \pi^* + \varphi_\pi(\pi_t-\pi^*)$

$\varphi_y y_t] + \varepsilon_t$

Parameters: ρ_i (smoothing), φ_π (inflation response), φ_y (output response)

Fiscal Policy:

Government spending: exogenous (or rule-based) Taxes: lump-sum or distortionary Debt: accumulation dynamics

External Sector:

Imports, exports (simple specification or full open economy) Exchange rate (float or managed)

Calibration:

Parameters:

Discount factor $\beta = 0.99$ (annual rate 4%) Labor share $\alpha = 0.65$ (from national accounts) Calvo price stickiness $\theta = 0.75$ (prices change every 4 quarters) Taylor rule: $\varphi_\pi = 1.5$, $\varphi_y = 0.5$ (standard)

Estimation:

Method: Bayesian (priors from literature, posteriors from Pakistan data) Data: GDP, inflation, interest rate (quarterly 2010-2025) Software: Dynare (MATLAB toolbox)

Simulation:

Shock 1: Productivity (1% increase in TFP)

Results: GDP +1%, inflation −0.5% (supply shock), interest rate −25 bps

Shock 2: Monetary tightening (1% interest rate increase)

Results: GDP −0.3%, inflation −0.5% (after 4 quarters)

Shock 3: Government spending (1% GDP increase)

Results: GDP +0.6% (multiplier), inflation +0.3%, interest rate +50 bps

Shock 4: Oil price (50% increase in import prices)

Results: GDP −0.5%, inflation +2%, depreciation 10%

Policy Analysis:

Optimal Taylor rule: estimate φ_π, φ_y that minimize loss function Fiscal-monetary coordination: joint optimization vs Nash Sensitivity: vary parameters, see robustness

#DELIVERABLES:

Dynare code (.mod file) Calibration table Impulse response functions (charts) Model documentation #LIMITATIONS:

Simplified (single household type, one sector, no heterogeneity) Linear approximation (log-linearized around steady state) Parameter uncertainty

10.5 Prompt 115: Poverty Microsimulation#CONTEXT:

Pakistan designs policies (minimum wage, cash transfers, subsidies). Need to know distributional impact: who gains, who loses, poverty/ inequality effects. Microsimulation: use household survey, simulate policy.#ROLE: You are Ravi Kanbur, Professor Cornell, 40 years on poverty measurement and policy. Expert on "Poverty Microsimulation" and "Distributional Impact Analysis."#TASK: Build poverty microsimulation model:

Household survey data (HIES 2019-20 or latest) Simulate policies (minimum wage, cash transfer, subsidy reform) Estimate impacts (poverty headcount, gap, Gini, by group) Visualize (distributional charts, poverty maps) #FRAMEWORK: "Tax-Benefit Microsimulation":

Baseline: current system (taxes, benefits, prices) Reform: change one policy (e.g., increase minimum wage 20%) Simulate: trace through household incomes, consumption Compare: poverty/inequality before vs after #OUTPUT FORMAT: Microsimulation Study (2000 words):

Data:

Survey: HIES 2019-20 (Pakistan Bureau of Statistics) Households: 24,000 sample (representative national) Variables: income (wages, self-employment, remittances, transfers), consumption, demographics Weights: to extrapolate to population (240M)

Baseline (Current System):

Poverty line: PKR 4,000/capita/month (World Bank $3.65/day PPP) Poverty headcount: 36% (86M people) Gini coefficient: 0.41 By group:

Rural: 40% poor vs urban 28% Provinces: Balochistan 50%, Sindh 38%, Punjab 32%, KP 34%

Simulations:

Scenario 1: Minimum Wage Increase (PKR 32K⟶40K/month)

Assumptions: all formal workers earning <40K get raised, informal 50% compliance Results:

Poverty: 36%⟶34% (2M out of poverty) Gini: 0.41⟶0.40 (slightly more equal) Beneficiaries: bottom 40% (mostly formal workers, low-wage)

Scenario 2: Universal Basic Income (UBI PKR 2K/capita/month)

Assumptions: all citizens get PKR 2K (cost 5% GDP) Results:

Poverty: 36%⟶18% (halved! 43M out of poverty) Gini: 0.41⟶0.38 (more equal) Beneficiaries: all, but poor gain most (% of income)

Scenario 3: Subsidy Reform (remove electricity subsidy, give cash)

Assumptions: electricity price +30%, cash transfer PKR 1K/ household/month (poor only) Results:

Poverty: 36%⟶35% (slight reduction, cash compensates) Gini: 0.41 (unchanged, subsidy was regressive, cash progressive offsetting) Fiscal: save 0.5% GDP (subsidy 1% GDP, cash transfer 0.5% GDP)

Sensitivity:

Poverty line: vary ±20%, see robustness Compliance: minimum wage (50% vs 70% vs 100% in info