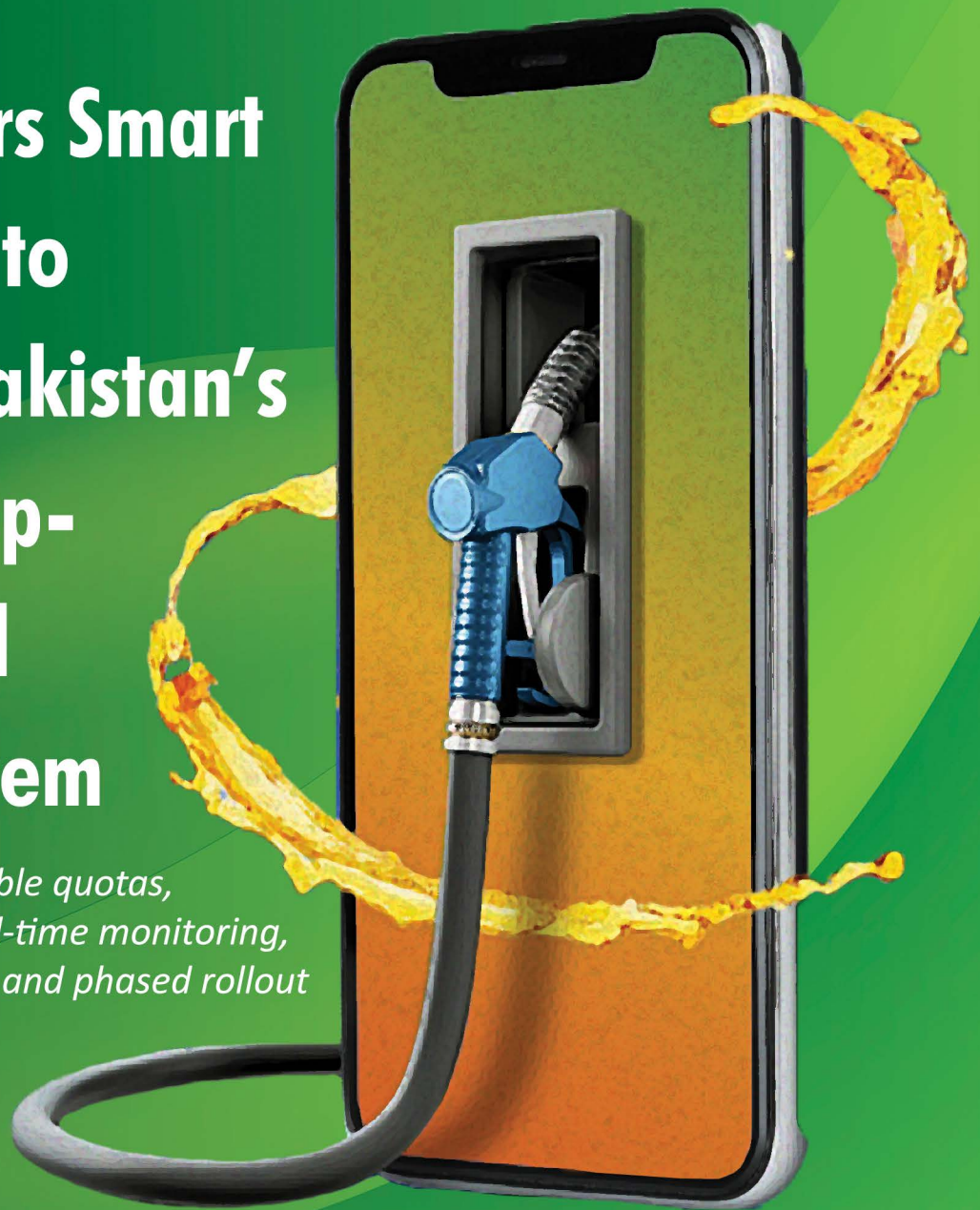




ICMA Offers Smart Initiatives to Improve Pakistan's Mobile-App-Based Fuel Quota System

Low-tech access, flexible quotas, tiered categories, real-time monitoring, district-level controls, and phased rollout



Research and Publications Department

Institute of Cost and Management Accountants of Pakistan

Message from the Chairman, Research and Publications Committee

The global energy crisis has put a heavy strain on Pakistan's economy and everyday citizens. Rising fuel prices make it clear that subsidies need to be smarter, fairer, and better targeted. The government's plan for a Mobile App Based Fuel Quota System is a timely and positive step. The Pakistan Digital Authority has developed the app, which is now in final testing to ensure smooth operations, secure data checks, and accurate quota management.



Our Research and Publications Department at ICMA has studied the system closely. The team has combined lessons from global experiences with Pakistan's local realities. Their work offers practical ways to make the system fair, transparent, and truly useful, especially for motorcycle and rickshaw users, who feel the impact of rising fuel prices the most.

I urge the government to consider these recommendations as the system moves toward launch. With careful planning, inclusive access, and clear management, the app can ensure subsidies reach the people who need them most, cut wasteful spending, and build trust in the system.

This initiative has the power to transform fuel subsidy management in Pakistan. It can deliver real relief to citizens and create a more transparent, efficient, and accountable system for the future.

Muhammad Yasin, FCMA

Vice President ICMA and
Chairman, Research and Publications Committee

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Executive Summary

Pakistan is under significant pressure on its fuel supply and subsidy regime due to global oil price volatility, geopolitical conflict in the Middle East, and sustained high domestic fuel demand. Traditional blanket fuel subsidies have proven fiscally unsustainable and socially inequitable, often benefiting higher-income users disproportionately while placing a heavy burden on the national budget and foreign exchange reserves.

The government has finalized a mobile-app-based fuel quota system for motorcycles and rickshaws, with plans to extend it to small cars up to 800 cc. This report reviews the quota system, analyzes verified international responses to recent global fuel shocks, and presents practical, Pakistan-specific recommendations to refine the system, protect vulnerable citizens, encourage responsible consumption, and enhance transparency.

Context and Rationale

Global Fuel Market Pressures

The ongoing US-Israel-Iran conflict has disrupted crude oil flows through the **Strait of Hormuz**. This route carries about 20 percent of global seaborne oil trade. The disruption has pushed Brent crude prices above \$100 per barrel and created strong volatility in energy markets. Countries that rely heavily on fuel imports, such as Pakistan, face rising import costs. Pakistan's petroleum imports alone reached around US\$6 billion in FY 2025, putting pressure on foreign exchange reserves and driving up domestic fuel prices. Large subsidy spending has further limited resources for development and social programs. In this context, reforming fuel subsidy mechanisms has become an urgent fiscal priority.



Domestic Consumption Patterns

Fuel demand in Pakistan remains high despite price adjustments. Total petroleum consumption reached 13.17 million metric tonnes (MMT) in July–March FY 2025, with the transport sector using about 80 percent of this fuel (Pakistan Economic Survey 2024-25). Two- and three-wheelers dominate the roads. Motorcycles and scooters make up about 78 percent of registered vehicles, while rickshaws account for around 8 percent (Asian Transport Observatory report). These vehicles are essential for daily transport for low- and middle-income citizens and small business operators. Current subsidies tend to benefit private car owners and wealthier households more than priority groups. The mobile-app-based fuel quota system is designed to **target subsidized fuel more precisely**, reduce waste, and ensure relief reaches those who need it most.

Overview and Roles of Institutions in the Mobile-App Fuel Quota System

System Overview

The government's mobile app based fuel quota system is intended to deliver subsidized fuel in a controlled, transparent, and accountable manner. Key elements of the system include:

Registration: Vehicle owners register with their **Computerised National Identity Card (CNIC)** and vehicle registration number through the designated mobile application.



Quota Allocation: Each registered vehicle is assigned a **specific fuel quota** based on policy guidelines.



Digital Voucher Generation: Users generate **digital fuel vouchers** using the app.



Automated Dispensing: Petrol stations scan or enter the voucher; the system verifies remaining quota and dispenses only the allowed amount.



Dedicated Infrastructure: Retail outlets must use dedicated phones or devices and separate dispensers for subsidized fuel to ensure segregation and accurate tracking.



Retail Support: Oil Marketing Companies (OMCs) will appoint focal persons at station level responsible for operational oversight and complaint handling.



The Ministry of IT and NITB plan to deploy about **24,000 mobile devices** across petrol stations to run the mobile-app fuel quota system, with two devices per station for voucher verification.

Roles of Institutions

Ministry of Information Technology:

Will run the app, manage devices, and provide training and technical support.



Oil and Gas Regulatory Authority (OGRA):

Will check compliance, manage data, and prepare reports.



Ministry of Petroleum:

Will plan fuel supply, handle emergencies, and allocate fuel strategically.



Oil Marketing Companies (OMCs):

Will assign staff at stations to manage operations and customer support.



Key Implementation Challenges

The mobile-app fuel quota system, while technologically advanced, faces several challenges:

- **Infrastructure and Technology:** Retrofitting petrol stations, installing devices, ensuring reliable connectivity, and training staff will require significant resources.
- **Administrative Load:** Managing quotas for millions of vehicles, processing exemptions, and handling emergency requests through the app will need strong administrative support.
- **Data Accuracy and Misuse Risks:** Duplicate registrations, incorrect data entries, and quota transfers across regions could undermine the app's integrity without robust verification.
- **Public Acceptance:** Users may find the app restrictive or hard to use if they are not fully informed.
- **Equity and Accessibility:** Vulnerable or less tech-savvy citizens may face difficulties without low-tech alternatives or support mechanisms.

International Responses to Fuel Shocks

The 2026 Middle East conflict disrupted oil flows through the Strait of Hormuz, causing sharp global fuel price increases. Countries responded with measures such as temporary price controls, fuel rationing, and targeted subsidies to protect consumers. These examples highlight approaches Pakistan can adapt to make its mobile-app fuel quota system more effective and resilient.

Australia

Temporarily reduced fuel excise tax by 50% for three months to lower prices at the pump.



Philippines

Declared a national energy emergency to enable rapid fuel procurement, distribution, and price monitoring.



Sri Lanka

Reintroduced QR coded fuel rationing and adopted a four day workweek for public institutions to conserve energy.



Bangladesh

Implemented supply adjustments and unsecured import waivers (e.g., for diesel) to meet demand.



South Korea & Regional Asia

Allocated emergency budget support and price relief measures to cushion consumers.



Japan & G7

Coordinated strategic oil reserve releases and shared energy market data to stabilize prices.



United Kingdom

Enhanced monitoring of fuel stocks and issued advisories on temporary shortages.



Germany & France

Provided targeted support for vulnerable households and essential sectors without broad untargeted fuel subsidies.



Malaysia

Evaluated long term subsidy reforms in response to mounting global price pressures.



These examples show that **targeted support, transparent monitoring, and strategic management** are essential for effective fuel policy during supply disruptions.

ICMA Recommendations for Strengthening the Fuel Quota System

Inclusive Access for All Users

Not all motorcycle and rickshaw owners have access to smartphones or internet. Implement **USSD and SMS channels** in addition to the mobile app so users with basic phones can check quotas and generate vouchers.

This ensures equitable access across socio economic groups.



Supported Registration Drives

Many citizens may face difficulties registering their vehicles online. Deploy **district level registration teams** in partnership with NADRA, Excise & Taxation Departments, and local administrations to verify CNICs and vehicle ownership in person. This improves data accuracy and reduces exclusion.



Flexible Quota Utilization

Fuel needs vary day to day for riders and small businesses. Introduce a **carry forward mechanism** allowing unused quota to be rolled over within a week or month. This gives users flexibility without increasing overall quota consumption.



Tiered Quota Categories

Design quota tiers based on verified usage needs:

- **Essential service riders** such as delivery workers and health service providers.
- **Commercial transport operators** including rickshaw and small taxi drivers.
- **Daily personal commuters** for routine travel.
- **Occasional users** with lower fuel needs.

Tiered quotas ensure fairness by aligning allocation with actual fuel requirements.



Real Time Digital Tracking

Deploy a **centralized monitoring dashboard** for fuel dispensed at all stations. Real time data can detect irregularities early, guide quota adjustments by region, and support supply planning.



Emergency Override Protocols

Establish verified processes for **emergency fuel requests** — for example, medical or disaster related travel — with clear eligibility criteria and audit trails to prevent misuse.



Region Linked Quota Assignments

Link quotas to the **vehicle's registered district** to prevent cross region quota misuse. Local quota allocation also helps district authorities manage localized variations in supply and demand.



Public Awareness Campaigns

Educate the public through **TV, radio, social media, and local languages** about how the quota system works, how to register, how to generate vouchers, and how to seek support. Clear communication builds trust and encourages compliance.



Centralized Complaint and Support Channels

Set up dedicated **hotlines, SMS support, and in app help desks** with defined response timelines to handle questions, complaints, and system issues efficiently.



Incentives for Responsible Usage

Encourage fuel efficiency by offering **bonus credits or small rewards** to users who consistently stay below their quota. Recognition and incentives promote conservation without punitive measures.



Phased Rollout and Evaluation

Implement the system in stages:

- **Pilot Phase (3 months):** Test in selected districts with diverse populations.
- **Expansion Phase (6 months):** Extend to major urban centers and primary commercial routes.
- **National Rollout (12 months):** Full implementation with ongoing monitoring, evaluation, and refinement based on user feedback and usage data.



Integration with Broader Transport Planning

Coordinate quota planning with **public transport initiatives, urban mobility strategies, and delivery sector planning** to optimize fuel use and reduce unnecessary trips.



Periodic Review and Adjustment

Establish a **quarterly policy review process** to evaluate quota effectiveness, monitor fuel demand trends, and adjust allocations and system features as market conditions evolve.



Conclusion

Pakistan is considering a mobile app based fuel quota system to manage subsidies more fairly. The system is expected to ensure support reaches vulnerable citizens, reduce waste, and promote responsible fuel use. Motorcycles and rickshaws, used by most low and middle income commuters and small businesses, are likely to benefit the most.

The proposed system would work through digital registration, voucher generation, checking fuel quotas digitally, and dedicated devices at petrol stations. The Ministry of IT, OGRA, Ministry of Petroleum, and Oil Marketing Companies would provide oversight and support to ensure smooth operations.

ICMA's recommendations on inclusive access, supported registration, flexible and tiered quotas, emergency protocols, public awareness, real time monitoring, and phased rollout can make the system practical, fair, and accountable.

Global experience shows that targeted support, transparent monitoring, and strategic planning are key to managing fuel price shocks and protecting vulnerable populations. Coordinated reserve releases, tax adjustments, emergency measures, and rationing mechanisms have proven effective elsewhere and provide lessons for Pakistan.

With careful planning, phased implementation, and continuous monitoring, Pakistan can establish a resilient and inclusive fuel management system. This system could protect citizens, optimize fuel use, reduce fiscal pressure, and transform fuel subsidy management for the future.

Acknowledgement

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