



TECHNOLOGY FEATURE Industry Analysis / Talent & Policy Report / Research Communication

Is Pakistan Ready to Export AI, or Just the Talent That Builds It Abroad?

Pakistan's National AI Policy talks about sovereign models and export revenue; meanwhile roughly 11,000 engineers left the country for work in a single year, and the industry's own leaders warn that AI training budgets risk turning into brain-drain subsidies unless retention is built in from day one.

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Introduction

In February 2026, Islamabad issued its National AI Policy and, alongside it, the Islamabad Artificial Intelligence Declaration — language deliberately built around the idea of "sovereign AI," where model weights, training data, and inference infrastructure sit inside Pakistan and generate dollar export revenue rather than merely consuming it. It is an ambitious, arguably overdue framing for a country whose \$4 billion-plus IT export sector has, until now, been built almost entirely on renting out engineering hours rather than owning products. Officials point to a pipeline of roughly 600,000 technology professionals and a stated target of Centres of Excellence graduating 100,000 to 150,000 AI-skilled students a year as evidence the raw material for that shift already exists.

Sitting next to that number is a less comfortable one. Roughly 11,000 engineers left Pakistan for work abroad in FY2024-25 alone, part of a wider skilled-emigration wave that also took some 5,000 doctors and 13,000 accountants out of the country in the same period, and that has pushed the two-year cumulative outflow of Pakistani workers toward 1.5 million by official reckoning. Industry figures such as Faisal Mushtaq of the Special Technology Zones Authority have said plainly that training budgets without USD-denominated retention incentives — stock options, foreign-currency accounts, tax relief — simply fund a brain drain rather than a sovereign AI sector.

This is the real question behind the policy language: is Pakistan actually positioning itself to export artificial intelligence — models, platforms, sovereign infrastructure — or is it, more accurately, still exporting the people capable of building those things, just for someone else's balance sheet in Dubai, London, or the Bay Area? The honest answer, at least for now, is closer to the second. Ambition has outrun the conditions needed to make it true, and closing that gap is a harder, more specific project than any single policy document can capture.

"A training budget without a retention plan does not build a sovereign AI sector. It funds a very well-educated brain drain."

What Sovereign AI Would Actually Require

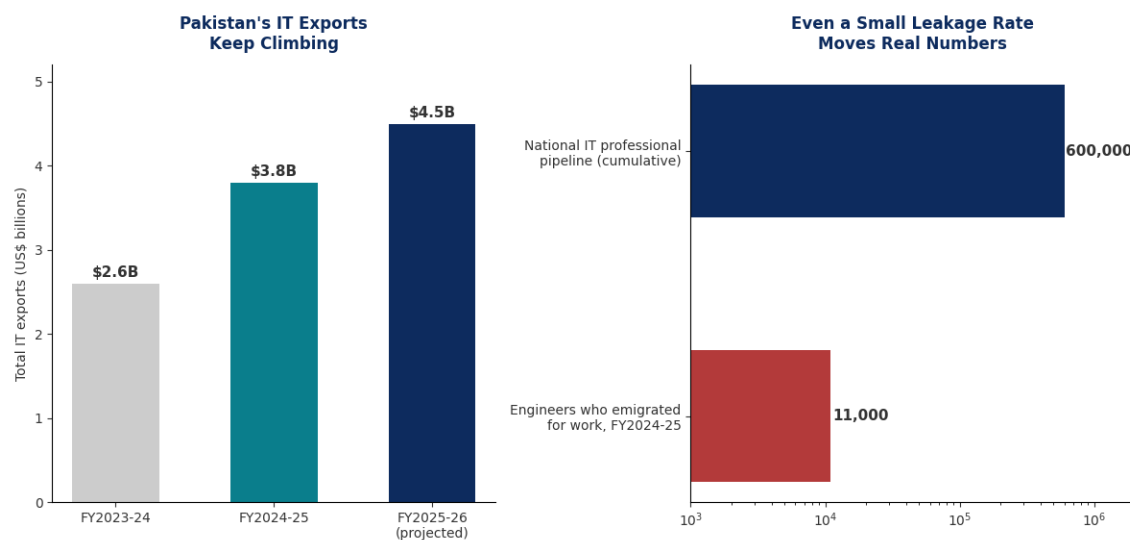
Industry experts describe a five-layer AI stack that has to be built roughly in order: energy first, then chips and data-centre infrastructure, then models, then applications, with talent running through all five. Skip straight to



funding applications and model fine-tuning — the layers that photograph well in a policy launch — without first solving grid reliability for technology parks, and the result is expensive AI Centres of Excellence graduating skilled people into a domestic market that cannot yet employ, pay, or retain them at globally competitive rates.

The industry's own diagnosis of why engineers leave is unusually consistent: rupee volatility that erodes any locally denominated salary, load-shedding and internet disruptions that make running latency-sensitive AI workloads unreliable, and a visa and remittance environment that makes building from Karachi strictly harder than building the same product from Dubai. None of these are talent problems. They are infrastructure and macroeconomic problems that happen to determine whether AI talent stays.

Set against a national IT professional pipeline of roughly 600,000 people, 11,000 departing engineers in a year looks small — under 2 percent. But raw headcount understates the damage, because emigration is rarely random: it disproportionately removes the most senior, most internationally employable people, exactly the cohort a sovereign AI strategy would need to lead its Centres of Excellence, architect its models, and mentor the graduates coming up behind them. A leakage rate that looks modest in aggregate can still hollow out the specific layer of seniority any serious AI programme depends on.



Source: Business Recorder (2026), Express Tribune / Bureau of Emigration data on FY2024-25 engineer emigration.

Figure 1: IT export earnings keep climbing (left), but even a small annual outflow of engineers can concentrate on the senior talent an AI strategy most depends on (right). Sources: Business Recorder (2026); Bureau of Emigration & Overseas Employment / Express Tribune (2026).

Key Findings & Impact

There is also a structural shift inside the existing export model that AI is accelerating, independent of the sovereignty question. Pakistan's "body rental" model — software houses billing clients by headcount rather than by outcome — is under direct pressure as AI copilots let a single senior developer do what used to take a team of five. Falcon Engineering's Tahir Mahmood Chaudhry has argued the value proposition industry-wide must shift from selling hours to selling expertise: architects who can integrate AI into legacy systems, not interchangeable junior coders. That shift favours companies and countries that already own products and platforms — and works against a talent base still primarily selling labour by the hour.

A useful comparison is India, which the same commentators point to as instructive precisely because it has larger domestic high-tech sectors and global brand recognition that occasionally pull talent back — a "reverse brain drain" that Pakistan and Bangladesh have so far struggled to replicate. The lesson is not that Pakistan needs



an identical model; it is that repatriation only happens once staying (or returning) is competitive with leaving, and that competitiveness is set by wages, currency stability, and infrastructure, not by the existence of a national AI policy document.

It is worth being fair to what the policy gets right. Naming sovereign AI as the objective, rather than leaving the goal implicit, at least creates a benchmark against which future progress — or its absence — can be measured publicly. The Centres of Excellence target, if half of disbursements really are matched by industry as proposed, would at minimum tie training output to a real employer's hiring plan rather than to an abstract graduate quota. The policy's weakness is not its ambition; it is the absence, so far, of the retention machinery that would let that ambition survive contact with a competing offer from Dubai.

What's Next?

The retention incentives already being floated by industry are specific enough to act on: multi-year tax holidays for certified AI engineers who commit to Pakistan-registered entities, legal access to foreign-currency accounts and stock-option structures that let a Lahore-based AI company compete with a Bay Area offer on take-home terms, and subsidised access to the AI tooling — GitHub Copilot, enterprise model APIs — that keeps freelancers and small teams competitive without each of them bearing the full dollar cost individually. None of this is exotic; several Gulf states already offer comparable packages to attract the same talent pool Pakistan is trying to keep.

The energy-first sequencing that industry technologists have urged — solving grid reliability for technology parks by act of Parliament before issuing infrastructure incentives — deserves to be taken as literally as it is meant. A Centre of Excellence built on an unreliable power connection is not a smaller version of a sovereign AI sector; it is a different thing entirely, one that trains people for someone else's grid. Universities have a role here too, beyond producing graduates: institutions like NUST are increasingly being asked to co-design curricula with industry rather than hand off finished graduates to a labour market that has no better offer waiting than a flight to Dubai. Pakistan can plausibly export artificial intelligence rather than the people who build it — but only if policy stops treating talent supply and talent retention as the same problem, because right now, it is solving only the first.

About the Author

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