



TRANSPORT MIDDLE EAST 2026 · 24TH EXHIBITION & CONFERENCE · CAIRO

People First, Ports Ahead

Human Capital as the Priority Lever for National Economic Resilience

Evidence from Egypt's Ports — Port A & Port B (2018–2023)

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Based on peer-reviewed research · SocioEconomic Challenges, Vol. 9(2), 2025



Egypt's Ports Are Anchor Points in a Disrupted World

90%+

of global trade moves by sea

Ports are economic stabilizers — buffers against inflation, unemployment and supply shocks.

\$4.6B

Suez Canal revenue, FY2025/26 (USD)

Up 23% as tensions eased — yet still well below pre-crisis levels. Disruption hits the economy directly.

2030

Egypt's global logistics-hub target

A national port & logistics modernization plan running since 2014.



The point: when supply chains are disrupted, the ports that stay reliable become national stabilizers — and reliability is delivered by people.

Billions Went Into Concrete and Cranes. People Came Last.



2014 - Egyptian Ports strategy prioritized

- Physical infrastructure, cranes & container logistics
- Equipment expansion & terminal automation
- Digital systems procurement



What strategy was deprioritized?

- Human capital as a core, funded pillar
- Recruitment, upskilling & retention as strategy
- Measuring what training actually changes



What we discovered

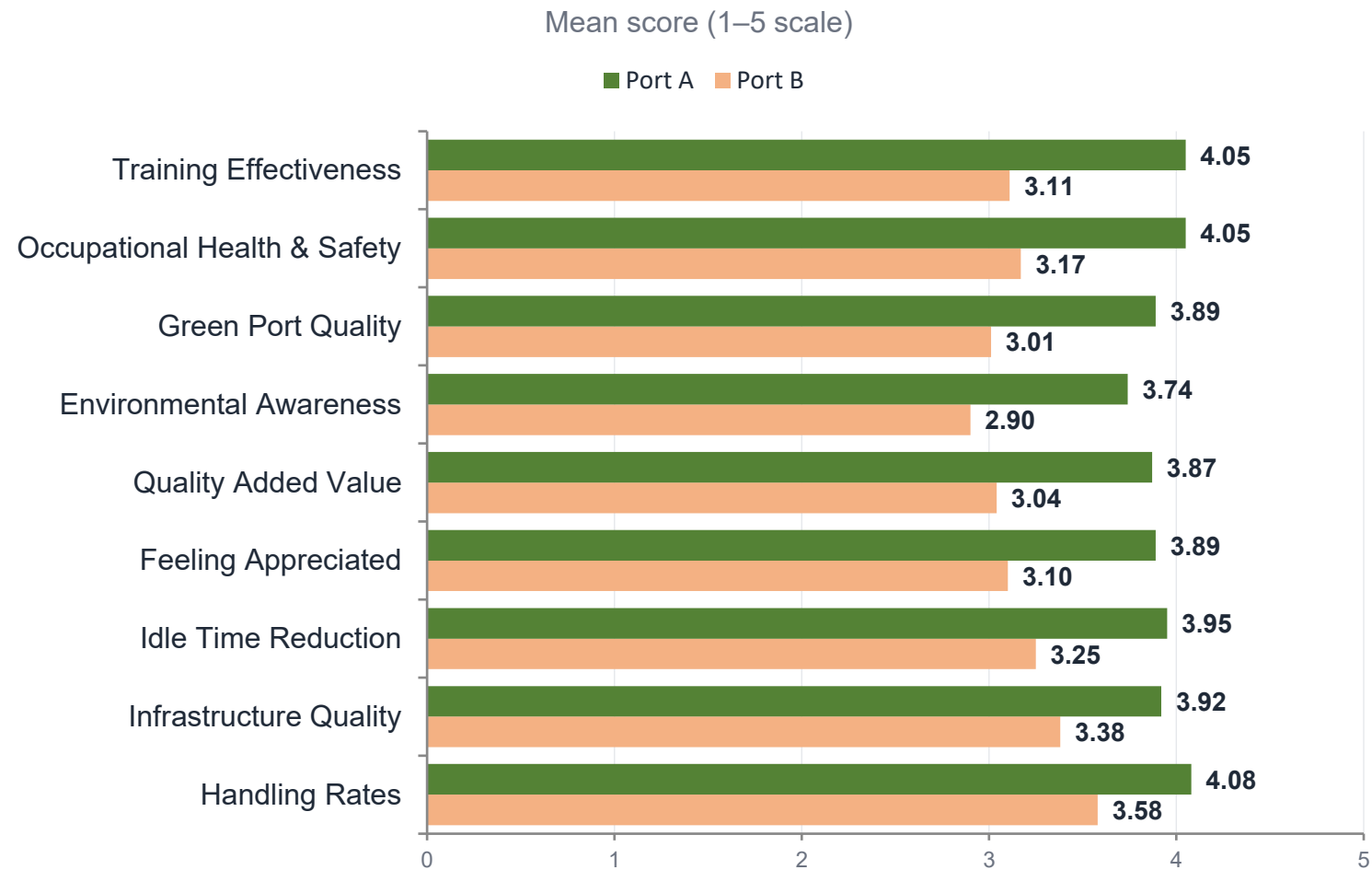
The management system matters more than size. The training system matters more than equipment.

A Solid Study of Two Egyptian Ports A & B



 **Peer-reviewed:** SocioEconomic Challenges, Vol. 9(2), 2025 · DOI 10.61093/sec.9(2).316-339.2025 · Design control: same sea, similar depth, comparable operators and cranes at both ports

Finding 1 — Port A Outperforms Port B on All 9 Indicators



+ %94

Largest gap: Training Effectiveness

How well employees feel training qualifies them for the job.

+% 79

Feeling appreciated: the 2nd-largest gap

Every difference is statistically significant

Finding 2 — Training Delivers Measurable, Significant Gains



+%57

Environmental sustainability awareness



+%44

Efficient qualification through training



+%43

Quality of value-added services

Direct effect of training on each outcome (difference-in-differences coefficients), holding age, gender, education and experience constant.

Finding 3 — Training Works Through People, Not Around Them



Training's direct effect on idle time - The gain only comes through the employee.



The trap: training on its own

- 1 Course delivered
- 2 No follow-up
- 3 No measurement
- 4 Back to old ways

Result: time and money wasted



What works: training + a system

- 1 Course delivered
- 2 Supervisor coaches
- 3 Measured weekly
- 4 Wins celebrated
- 5 The new normal

Finding 4 — Target the Sweet Spot: Mid-Career Staff



THE SWEET SPOT

Age 36–50
6–15 yrs experience

Why they respond best:

- Experienced enough to know what works
- Young enough to adapt to new ways
- Ready for recognition and advancement



Mid-career drives efficiency

6–15 yrs experience: significant idle-time reduction



Prime-age handlers excel

Age 36–50: strongest handling-rate gains .



Diminishing returns

16+ yrs experience: no significant extra gain from more training



Education pays in infrastructure

Postgraduates: better infrastructure-quality outcomes .

What It's Worth: Training Pays Back in Year One



RETURN ON TRAINING

530%

Year-1 ROI per trained worker

Cost: EGP 5,000 → Value: EGP 31,500

100 workers: EGP 500K → EGP 3.15M



IMPLEMENTATION CASE

Moves / hour

25



32

+28%

Idle time

12%



4%

-67%

Before vs after systematic training



FOR SHIPPING LINES

\$5–10K+

saved per vessel call (USD)

- 2–3 hrs faster turnaround
- 15–20% fewer cargo damages
- \$200–500/day lower demurrage
- More reliable schedules

Operational estimates from an implementation case, separate from the peer-reviewed statistical model.

From Training Budget to National Resilience



The old assumption

Infrastructure and technology come first. Workforce development follows — if budget allows.



What the evidence shows

- The port that invested in people outperformed on all 9 indicators
- Training alone explains only 8–15% of KPI variance, so it needs recognition, satisfaction and teamwork alongside it

Sky Ports: A Private-Sector Model That Invests in People

*“Investing in people is the most sustainable investment against economic and social crises.”
2020 – 2024 Supply chain crises open new Professional School.*



People are the first line of defence

Port success doesn't rest on infrastructure or technology alone. It starts with people.



A smart port starts with a qualified person

Joint training program with AASTMT, linking academic study to real operations.

[159] trainees



Job stability builds stable communities

Direct and indirect employment around the terminal.

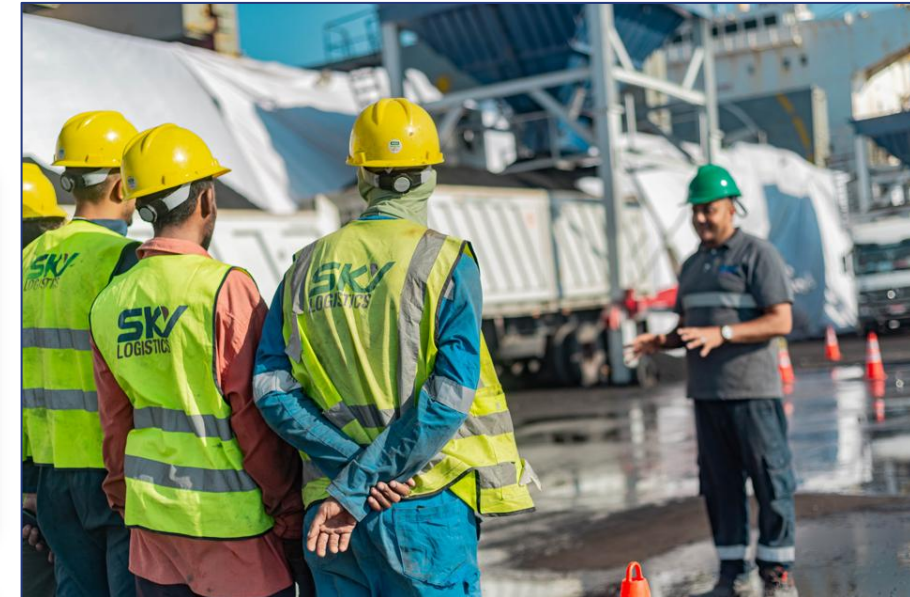
[620] direct · [2000] indirect jobs



Efficiency for the supply chain

Higher handling efficiency, shorter waiting times, stronger supply chains.

[110]% KPI gain



How we measure success

Not by tonnage alone, but by jobs created, quality of life for our people, and positive impact on the local community.

A Three-Track, Human-Capital-First Agenda

TRACK 1

National Policy



- Ring-fence 5–7% of port capex for human capital
- Link ports to an accredited national port workforce academy
- Pay for outcomes, not attendance
- Publish a Human Capital Index next to the CPPI.

TRACK 2

Port Operators



- Replicate the Port A model across ports
- Target mid-career staff first
- Make training practical and competency-based
- Evaluate by KPI, not certificate
- Pair training with recognition

TRACK 3

Monitor & Research



- National M&E across all seaports & SCZone
- Research satisfaction, teamwork & recognition
- Formal academia–industry ties (e.g., AASTMT)
- Market workforce strength to attract FDI

THE BOTTOM LINE

**Infrastructure builds the port.
People build its performance —
and the nation's resilience with it.**

We already have the people, the experience and the data. What's missing:

SYSTEM

True Leaders

MEASUREMENT

The question isn't whether it's possible. The evidence shows it is. **The question is how fast we move.**

Where we want to be:  **Egyptian Sea Ports – Logistics International Hub 2030 (Where are we?)**



Thank You

Questions & discussion welcome



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LET'S TALK ABOUT

- Auditing your training system
- Piloting the 3-step approach
- Accessing the study data
- Joint research & partnerships



Resilience of the Port Industry to Socioeconomic Challenges: The Role of Human Capital. SocioEconomic Challenges, 9(2), 316–339.