



World Bank Group  
Europe and Central Asia Vice Presidency  
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# From Transit to Transformation:

**Trade-Driven Structural Transformation in Central Asia and the South Caucasus**

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[Territorial Development Team] • [Central Eurasia Practicum]  
[Johns Hopkins University School of Advanced International Studies] • [April 20, 2026]

# Meet the Team

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# The Core Development Challenge:

 *How can Central Asia and South Caucasus (CASC) leverage territorial development frameworks to achieve maximized economic growth and job creation from trade and transport corridors while addressing uneven regional development, infrastructure gaps, and limited comparative advantage coordination?*



## Employment Creation & Inclusion

- Growth is capital-intensive, with limited job creation
- Weak links to SMEs and local labor markets
- Barriers persist for women and youth participation



## Hard & Soft Infrastructure

- Improving infrastructure, uneven connectivity
- Customs and regulatory bottlenecks raise trade costs
- Infrastructure not aligned with economic priorities



## Digital and AI Enabled Growth

- Focus on large scale tech limits local impact
- Underuse of practical, small AI in key sectors
- Missed gains in productivity and job creation at firm level

# Jobs & Employment Inclusivity: *Value Chain Integration*

## FOUNDATION

WBG Project

*Ferghana Valley Rural Enterprise Development*

**Building on:** Agricultural machinery services delivered to farmers, producers, and processors across project value chains via Participating Leasing Companies (PLCs) — this model expands that infrastructure into an integrated agro-industrial ecosystem.

01

### Agro-Industrial Processing Zones

*From machinery supply → finished goods*

- Establish industrial zones producing jams, juices, and preserves from locally sourced produce
- Women-led production units as primary operators, managers, and owners
- WBG supplies equipment, technical standards, and quality certification support

02

### Tourism & Hospitality Integration

*Leveraging processing zones as destination anchors*

- Develop accessible hotels and agro-tourism lodges adjacent to processing sites
- Women-managed hospitality as the flagship economic empowerment vehicle
- Visitor experience links farm, factory floor, and local culture into one offer

03

### Farm-to-Table Market Linkages

*Closing the value chain loop*

- Formal offtake agreements between restaurants, hotels, and local smallholder farmers
- Guaranteed demand for producers; guaranteed provenance for buyers
- Completes the integrated ecosystem: farm → processing → hospitality → consumer

# Soft Infrastructure

## Coordination

"Many countries improved border-crossing times since 2010. However, these gains were offset by bottlenecks in other countries. Regional progress remained uneven; a corridor's speed is decided by its slowest point, not by averaging the good performers."

## Costs

"Most countries reduced crossing costs. But persistent excessive costs in a few countries negated these improvements regionally. Individual success does not create regional impact without coordination."

# Soft Infrastructure: *KEDEN as the Regional Replication Target*

THE EXAMPLE — KAZAKHSTAN'S KEDEN PLATFORM, OPERATIONAL SINCE LATE 2025

**3hr → 30min**

Container train processing

*via single unified platform*

**9hr → 30min**

Vehicle processing at checkpoints

*after logistics center reloc.*

**+16%**

Customs revenue (11 months)

*+566 billion tenge*

**16 / 20**

Platform modules live

*4 checkpoints commissioned*

## THE PROBLEM

### Eight Parallel, Incompatible Efforts

**AZ:** ASAN / IDDA stack

**GE:** national customs e-system

**AM:** Bank P174607 customs mod.

**KG, TJ, TM, UZ:** early-stage

*Each country rebuilding from scratch guarantees interoperability failure — per CPMM 2023*

## RECOMMENDATION

### A KEDEN-to-CASC Replication Facility

*World Bank + EBRD, ADB, AIIB, EIB position KEDEN as reference architecture — three deliverables:*

**1** Interoperability Layer

Standardized exchange of risk data, manifests, clearance status across national platforms.

**2** AI Risk-Targeting

KEDEN image-analysis AI replicated at Poti, Aktau, Turkmenbashi, Alat-Farap, Nizhni Pyanj.

**3** Outbound Data Backbone

Shared reporting mandated as co-financing condition at every MDB-financed crossing.

**COST** \$5–25M per country, 3–5 yrs • **TARGET** 15 corridor nodes by 2028 • **OUTCOME** <30 min median clearance, variance halved

# Why Keden Success Has Not Cascaded

*The Missing Coordination Layer*

## ✓ Keden Works

- 3 hours → 30 min container processing
- 9 hours → 30 min vehicle processing
- +16% customs revenue



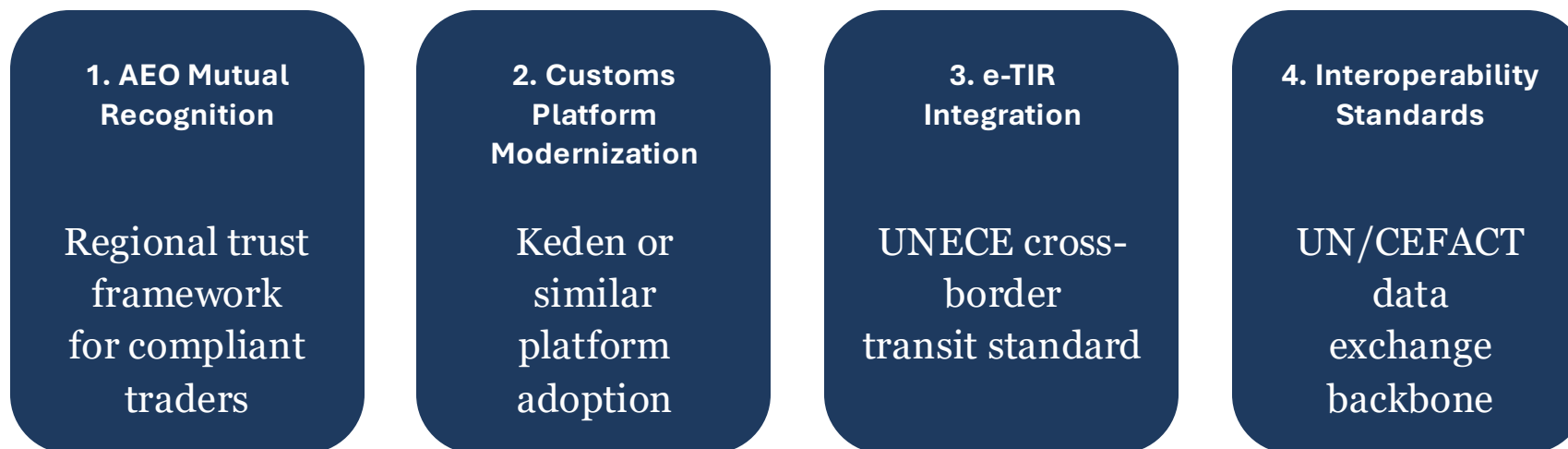
## ✗ Hasn't Cascaded

- Sovereignty risk (EAEU-linked)
- Adoption cost (\$5–25M/country)
- No regional payoff guarantee

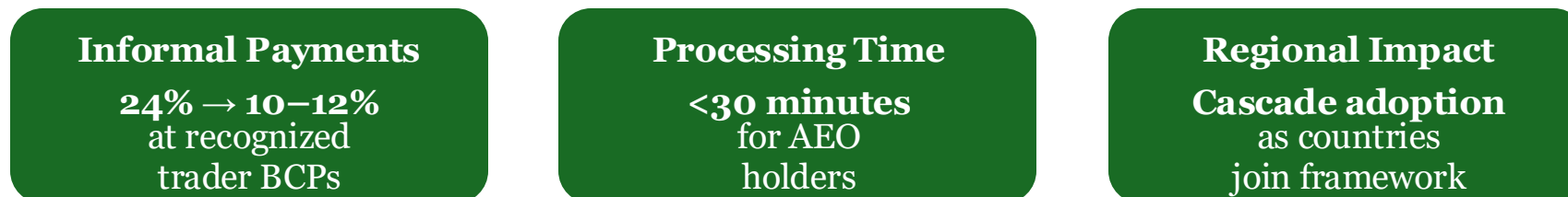
Key Insight: CPMM (2011–2023) showed informal payments persisted at 24% despite individual improvements. Keden solves internal efficiency but not cross-border trust. Countries need mutual recognition of compliance to justify modernization investment.

# Implementation: Four Complementary Pillars

*How Keden + AEO MRA + e-TIR + Interop Work Together*



## EXPECTED IMPACT (CPMM-Measured)



# Digital and AI: *South Caucasus Models Replicable Eastward*

**CORE CLAIM** The South Caucasus has piloted inclusion models that scale directly into Central Asia — replication, not invention.

## THE MODEL

### Armenia's TUMO + Generation AI

*A proven youth digital-skills pipeline, already built.*

- Free after-school platform, ages 12–18
- Animation, coding, game dev, robotics, film
- World Bank (2024) named TUMO as expansion model for digital-skills pipeline
- Layered with FAST “Generation AI” (2026)

**\$500M**

**Firebid / NVIDIA AI hub in Armenia**

*Following U.S. export license, Nov 2025*

*Source: Firebird AI press release, Nov 2025; WB Armenia Digital Tech Adoption (2024)*

## CORRIDOR APPLICATION

### Plant Four Nodes Along the Corridor

*Youth, logistics-adjacent, digitally underserved.*

● **Almaty–Khorgos**

KZ / China gateway

● **Tashkent–Syrdarya**

UZ industrial belt

● **Osh–Kashgar**

KG / CKU railway

● **Khujand–Dushanbe**

TJ logistics zone

FEEDS DIRECTLY INTO CORRIDOR-DIGITAL JOBS

**Customs analytics • Manifest processing • E-commerce • Logistics coord.**

*Low single-digit millions per site | Bank co-finances curriculum + Gen AI module*



# Thank You

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*Questions & Discussion*