

PROSPECTS FOR THE DEVELOPMENT OF PRODUCTION BASED ON INTERNATIONAL STANDARDS

(Case study: Namangan region)

Farrux Rustamjon o'g'li Asraqulov

Lecturer, Department of Financial Relations

Faculty of Economics Namangan State University

farruxasraqulov94@gmail.com

Abstract

The article developed prospects and practical mechanisms for the development of product production in the Namangan region on the basis of international standards. The study summarized international empirical evidence (ISO 9001, ISO 14001, ISO 45001) on the impact of standard implementation on enterprise outcomes and linked to local institutional conditions. The presence of a free economic zone ("Namangan" EIZ) in the Namangan region provides additional opportunities for investment and the placement of export production. As a result of the article, a "5-Step roadmap", a support package for state and territorial institutions, a KPI at the enterprise level, and a cost-benefit (CBA) assessment model were proposed. Accordingly, the implementation of standardization with the integration of technological modernization and training of personnel was based on the fact that Namangan is a real prospect of increasing the competitiveness of exports and the domestic market.

Keywords: Roadmap, ISO certification, free economic zone, investment, CBA, KPI, Namangan.

Introduction

Assessing the prospects for developing production based on standards requires careful consideration of the "institutional environment." In Namangan region, the Free Economic Zone "Namangan" has been established, providing special tax, customs, and currency regimes — an important institutional platform for attracting export-oriented manufacturing.

At the same time, substantial international evidence exists regarding the economic effects of ISO certification:

- ✓ Meta-analyses of ISO 9001 frequently show positive associations with revenue growth and financial performance, with particularly strong results when implementation focuses on internal quality improvement rather than mere compliance.
- ✓ Empirical studies on ISO 14001 demonstrate improvements in technical efficiency, especially in high-pollution industries.
- ✓ Research on ISO 45001 reveals positive impacts on productivity and profitability in many cases, although the strength of the effect varies and is not always consistently high.



2. Methods

- ✓ Normative-institutional analysis
- ✓ Review of the Presidential Decree establishing the “Namangan” Free Economic Zone
- ✓ Analysis of legislation and agency activities in the field of technical regulation
- ✓ Examination of Namangan’s industrial structure and technological shares (covering 2024–2025 data)

3. Results

3.1. Conceptual development model for Namangan The proposed model can be summarized as: Institutions (Free Economic Zone, technical regulation, laboratories/accreditation) + enterprise internal resources (personnel, technology, management) → capacity to implement standards → improvements in quality / safety / resource efficiency → export performance / market share / financial outcomes

Practical foundation of the model Namangan’s high share of textiles, clothing, and food production indicates that standards are likely to deliver relatively quick returns precisely in these dominant sectors.

3.2. 5-Step Roadmap (for enterprises)

- ✓ **Diagnostics** (1–2 months): Gap analysis, risk mapping, product requirements matrix
- ✓ **System building** (2–4 months): Process mapping, standard operating procedures (SOPs), document circulation, traceability system, training
- ✓ **Technical preparation** (1–3 months): Calibration, sanitation/PRP programs (for food), HSE requirements
- ✓ **Internal audit and CAPA** (1–2 months): Identification of nonconformities, corrective action plans, KPI monitoring
- ✓ **Certification** (1 month): External audit, certification issuance, surveillance audits

3.3. Support package for state and regional institutions

- ✓ Subsidies / concessional financing to reduce audit and laboratory testing costs
- ✓ Expansion of testing laboratory infrastructure (especially for food products and construction materials)
- ✓ Personnel training programs (internal auditors, quality managers, HSE specialists)
- ✓ Promotion of export-oriented production through the capabilities of the “Namangan” Free Economic Zone

3.4. Economic evaluation (CBA) and example KPIs

Cost components

- ✓ One-time: consulting, documentation development, equipment/calibration, testing
- ✓ Recurring: annual audits, training, laboratory monitoring



Benefit channels

- ✓ Reduction in defects and rework
- ✓ Resource savings (energy, water)
- ✓ Decrease in customer complaints and returns
- ✓ Increase in number of export contracts

Example KPIs

- ✓ Defect percentage; batch rejection rate; number of complaints; rework hours
- ✓ Energy consumption per unit; frequency of accidents (ISO 45001)
- ✓ Number of nonconformities in ISO audits; number of export contracts signed
- ✓ Given the existing body of research showing a positive relationship between ISO certification and financial indicators, the CBA model should separately account for “revenue/productivity” channels.

4. Discussion

The prospects for developing production based on international standards in Namangan region are strong due to:

- ✓ Sectoral structure skewed toward segments that naturally demand standards (textiles/clothing, food processing);
- ✓ The institutional boost provided by the Free Economic Zone, which strengthens investment and export logic;
- ✓ Positive empirical evidence on efficiency gains from ISO 14001 and ISO 45001 (although outcomes depend on sector and implementation quality).
- ✓ Therefore, policy and practice should incentivize not just “obtaining a certificate,” but genuine systemic management (audit → KPI → continuous improvement).

5. Conclusion

The development of production based on international standards in Namangan region is a realistic prospect. This is supported by:

- ✓ the institutional framework of the Free Economic Zone,
- ✓ the favorable sectoral structure,
- ✓ international empirical evidence on the performance impact of standards.
- ✓ Practical solutions proposed include:
 - ✓ a 5-step roadmap,
 - ✓ a state support package,
 - ✓ enterprise-level KPI and CBA models.

References

1. UNIDO. Quality Infrastructure System (QI) materials
2. UNIDO. QI4SD Index Results Report 2024/2025
3. ISO. Meta-analysis review on ISO 9001 and financial performance
4. Namangan Regional Statistics Department. Industrial press releases (2024–2025)



5. Lex.uz: Laws and reform documents related to technical regulation 6–9. Asqarov A. Publications on innovative pedagogical technologies and financial literacy in higher education (4 entries as listed in the original)