

Analysis of the Economic Impact of Dongxing Port on the China-Vietnam Border Region

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Abstract: This study examines the Dongxing Port on the China-Vietnam border, focusing on analyzing the impact of the "border residents' mutual trade + on-site processing" model on regional economic development. Analysis reveals that this model, leveraging policy innovations and the enabling role of digitalization, has significantly increased border residents' income levels. It has also facilitated the formation of distinctive industrial clusters, driving regional economic growth. Related research indicates that by 2025, Guangxi's border residents' mutual market trade will reach a total import-export value of 16.53 billion yuan, with on-site processing accounting for over 50% of this volume. This effectively facilitates the transition from a "channel economy" to an "industrial economy." However, the model currently faces challenges such as high policy dependency and incomplete industrial chains. Recommendations include optimizing the policy framework, strengthening cross-border coordination, and advancing digital transformation. These measures provide theoretical references and practical pathways for promoting sustainable economic development in border regions.

Keywords: border trade; on-site processing; Dongxing Port; industrial upgrading

1. Introduction

The Dongxing Port serves as a vital land border crossing between China and Vietnam, possessing unique geographical advantages and a favorable policy environment that make it a prime case study for examining economic development along the Sino-Vietnamese border. In recent years, driven by the "border trade combined with on-site processing" model, the port has not only facilitated bilateral trade between China and Vietnam but also spurred industrial upgrading in the border region, thereby boosting local economic growth. This study adopts a border economics theoretical framework, focusing on Dongxing Port as its research subject. It examines the impact mechanisms and outcomes of the "border trade combined with on-site processing" model on the regional economy.

2. Operational Mechanisms and Economic Effects of Border Trade

2.1 Policy Mechanisms and Implementation Status

Border residents' mutual trade is a policy implemented by the state in border regions, aimed at promoting border economic development and increasing the income of border residents. This policy permits border residents within 20 kilometers of the border to engage in commodity trading activities in government-designated mutual trade zones or trading points. They also enjoy preferential policies exempting them from customs duties and import taxes on goods valued at less than 8,000 RMB per person per day. Dongxing Port actively responds to national policy directives by adopting a "Party Organization + Border Residents Mutual Aid Group + Collective Economic Organization + State-Owned Enterprise" model to effectively organize border residents' participation in mutual market trade. In practice, residents often engage in transactions through cooperatives or by appointing representatives. Border residents in Yunnan's Hekou County utilize the "Border Mutual Trade" app to complete customs declarations, achieving the goal of "handling procurement and sales with just one smartphone." Dongxing Port similarly adopts the "bulk import, individual export" model to reduce logistics and customs clearance costs per import transaction and enhance trade efficiency[1]. To ensure policy implementation, local governments established the Mohan-Mouding Cooperation Zone Administrative Service Bureau, implementing a "single-window acceptance, one-stop processing" model. After joining cooperatives, border residents can complete all relevant procedures at dedicated service counters, reducing the entire process time by over 80%.

2.2 Economic Benefit Analysis

The border trade policy has delivered significant economic benefits to the development of border regions and the improvement of border residents' livelihoods since its implementation. In terms of income growth, this policy has effectively raised the income levels of border residents. In Jimunai County, Xinjiang, the Fengying Agricultural and Sideline Products

Sales Farmers' Professional Cooperative successfully enrolled over 6,400 border residents through the "bulk-in, retail-out" and "cooperative agency settlement" models. By 2025, its transaction volume had exceeded 3.76 million yuan, directly enabling 546 border residents to achieve stable income growth with an average per capita increase of 37,000 yuan. In Yunnan's Hekou County, border residents' mutual market trade generated 270 million yuan in turnover by 2025, yielding 2.179 million yuan in additional income. After expanding this model to 49 border villages across the prefecture, cumulative income gains for border residents reached 7.44 million yuan. From the perspective of promoting local trade and industrial clustering, the gradual expansion of mutual market trade will drive the development of related industries, ultimately forming distinctive industrial clusters.

3. Industrial Upgrading Effects of the On-Site Processing Model

3.1 Industrial Development Characteristics

The on-site processing model has fostered distinctive industrial development features in border regions, exhibiting clear trends toward clustering, specialization, and chain integration. At the industrial layout level, each port leverages its unique geographical advantages and resource endowments to cultivate specialized processing industry clusters. Dongxing City has developed an industrial system centered on agricultural product processing, seafood processing, and light manufacturing. By leveraging the "border trade + on-site processing" model, it achieves tax-free raw material imports and product value enhancement. In terms of industrial chain construction, on-site processing enterprises fully utilize border trade policies to import raw materials, process them, and then sell the finished products to the domestic market or re-export them, thereby forming a complete "import-processing-sales" industrial chain. Yao Mountain Township in Yunnan has focused on coffee beans, pioneering an integrated industrial chain model combining "import + sorting/processing + roasting." Its enterprise structure features a tiered development pattern dominated by small and medium-sized enterprises (SMEs) with large enterprises playing a leading role. Companies form industrial alliances through cooperatives or industry associations to achieve resource sharing and collaborative development.

3.2 Policy Support System

The development of the on-site processing model relies on a multi-tiered and comprehensive policy support system. Border regions offer special tax incentives, with on-site processing enterprises eligible for VAT and retained portions of corporate income tax rebates. VAT revenue is shared between the central government (75%) and local governments (25%), while corporate and personal income taxes are shared at a 60:40 ratio. The local portion is further channeled back to enterprises through tax rebates to support their development. Regarding land policies, local governments plan and construct dedicated on-site processing industrial parks, offering preferential industrial land use. For instance, the on-site processing zone in Dongxing City charges a rent of only 20 yuan per square meter, significantly lower than non-border areas. From a financial support perspective, a special fund for border trade development has been established to subsidize on-site processing enterprises in areas such as factory construction, equipment procurement, and logistics transportation. Yunnan Province's nine policies introduced in 2025 explicitly state support for enterprise factory construction, equipment procurement, and domestic transportation costs[2]. For customs clearance facilitation, customs authorities implement measures such as "authorized declaration," "direct transport," and "exemption from on-site inspection." This allows goods to be transported directly to processing plants after inspection, significantly enhancing clearance efficiency.

3.3 Industrial Upgrading Effects

The on-site processing model can drive industrial upgrading in border regions. First, it enhances industrial value by significantly increasing product value-added through processing. For instance, Hunchun Laoji Seafood Development Co., Ltd. imported over 32 million yuan worth of raw materials in the first half of 2025, achieving a 30%+ increase in product value after processing. Second, it drives industrial restructuring, shifting border economies from pure trade toward processing and manufacturing. From January to August 2025, Guangxi's border trade imports and exports totaled 16.53 billion yuan, with 8.78 billion yuan of imported goods undergoing on-site processing—a 24.7% year-on-year increase. The proportion of on-site processing continues to rise. Third, it drives technological advancement and innovation. Enterprises introduce advanced production equipment and technical processes to enhance product quality and competitiveness. For instance, on-site processing enterprises in Dongxing City have average operating costs 15% to 20% lower than comparable enterprises in non-border areas, strengthening their market competitiveness.

4. Comprehensive Impacts and Policy Recommendations

4.1 Comprehensive Impact Assessment

The "border residents' mutual market + on-site processing" model has generated multifaceted and profound comprehensive impacts on the Dongxing Port and the China-Vietnam border region. Economically, this model has vigorously stimulated growth in border trade and driven industrial upgrading. From January to August 2025, Guangxi's total import and export volume through border residents' mutual market trade reached 16.53 billion yuan, with 8.78 billion yuan worth of imported goods undergoing on-site processing—a 24.7% increase compared to the same period the previous year. Concurrently, this model has boosted local fiscal revenue. While enterprises benefit from preferential tax policies, the continuous expansion of operations still generates substantial tax contributions for local governments. Taking Dongxing City as an example, local processing enterprises, after leveraging tax rebate policies, have seen their reinvestment capacity further strengthened. From a social perspective, this model effectively raises the income levels of border residents. For instance, in 2025, Hekou County, Yunnan, increased border residents' income by 2.179 million yuan through border trade. When this model was extended to all 49 border villages in the prefecture, it cumulatively boosted border residents' income by 7.44 million yuan. Moreover, it creates numerous job opportunities. For example, processing enterprises in Jimunai County, Xinjiang, provide local residents with average annual wages of 30,000 to 50,000 yuan [3]. From a regional development perspective, this model strengthens economic ties between China and Vietnam, promotes cross-border economic cooperation, and fosters distinctive industrial clusters.

4.2 Existing Issues

Although the "border trade + local processing" model has achieved significant results, it remains highly dependent on policy support and exhibits insufficient resilience to risks. This model relies heavily on special policies for border trade. Any policy adjustments or shifts in international relations would directly impact industrial development. For instance, the closure of land ports during the pandemic dealt a severe blow to border trade. Furthermore, the industrial chain remains incomplete, and product value-added potential requires enhancement. Although the proportion of on-site processing has increased, most enterprises still operate at the primary processing stage, lacking capabilities for deep processing and resulting in relatively low product value-added. For instance, processing enterprises in Dongxing City primarily engage in the primary processing of agricultural and marine products, with a low proportion of high-tech industries. Third, cross-border coordination mechanisms require further refinement, as obstacles persist in policy alignment, mutual recognition of standards, and regulatory cooperation between China and Vietnam. Disparities in border trade policies between the two sides lead to asymmetrical transactions, with Vietnam imposing relatively strict import restrictions on certain goods. Fourth, deficiencies exist in infrastructure and supporting facilities. Port clearance capacity, warehousing and logistics, and industrial park hardware facilities have yet to fully meet developmental demands. Take the Dongxing Port as an example: during peak seasons, customs clearance congestion frequently occurs.

4.3 Policy Recommendations

To promote the sustainable development of the "border trade + on-site processing" model, the following policy recommendations are proposed: First, optimize the policy framework to enhance stability. It is recommended that a long-term national plan for border trade development be formulated to ensure policy continuity and predictability. A transition mechanism for policy adjustments should also be established to mitigate the impact of policy changes on the industry. Second, prioritize strengthening the industrial chain to enhance value-added potential. Provide robust support to enterprises engaged in deep processing, incentivizing increased investment in R&D and technological upgrades to extend the industrial chain. For instance, establish a special fund for border industrial upgrading and provide targeted support for high-tech on-site processing projects. Third, improve cross-border coordination mechanisms to promote regional cooperation. Establish a regular bilateral consultation mechanism between China and Vietnam to advance policy alignment, mutual recognition of standards, and regulatory coordination. This includes jointly developing measures for border trade facilitation and product quality standards. Fourth, actively advance infrastructure development to enhance port functionality. Increase investment to improve customs clearance conditions, warehousing and logistics, and supporting facilities in industrial parks. This includes building smart ports to achieve digital and automated customs clearance processes.

5. Conclusion

Analysis of the actual development of the "border residents' mutual market + on-site processing" model at Dongxing Port reveals that this approach has effectively promoted continuous industrial upgrading and sustained socioeconomic

development in border regions. Leveraging innovative policy measures and robust digital empowerment tools, this approach has significantly boosted border residents' income levels while gradually forming distinctive industrial clusters, thereby enhancing the resilience of the regional economy. However, practical implementation still faces challenges such as high policy dependency and incomplete industrial chains, issues that warrant sufficient attention from relevant stakeholders.

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