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Transforming the Economic Growth Model of the Mekong Delta Towards Sustainable Development

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ABSTRACT: This paper evaluates the current state and proposes strategic orientations for transitioning the economic growth model of the Mekong Delta toward sustainable development. Utilizing 100% secondary data derived from statistical reports, policy frameworks, and published scholarly works, the research adopts a methodology encompassing literature review, comparative analysis, and synthesis within an economy–environment–society framework. Findings indicate that the prevailing growth model remains heavily reliant on agriculture and resource extraction. Consequently, bottlenecks regarding productivity, human capital quality, infrastructure-logistics, and climate resilience have become increasingly pronounced. The study proposes three pivotal strategic pillars: (i) Economic restructuring aligned with regional comparative advantages and climate change adaptation; (ii) The promotion of innovation and digital transformation to bolster productivity and value-added components; (iii) The advancement of green, circular economies and modernized agriculture. Successful implementation is contingent upon refining regional linkage institutions, enhancing human resource development, and the strategic mobilization of investment capital.

KEYWORDS: Growth model transformation; Mekong Delta; circular economy; green growth; climate change adaptation.

1. INTRODUCTION

The Mekong Delta (MKD) occupies a position of paramount strategic importance to Vietnam's socio-economic fabric, particularly within the realms of agriculture and commodity exports. According to Resolution No. 120/NQ-CP, the region accounts for approximately 12% of the national landmass and 19% of the total population. Furthermore, it contributes a substantial share of national output, including 50% of rice production, 65% of aquaculture, and 70% of fruit yields (Government of Vietnam, 2017).

Despite these contributions, the prevailing growth model, historically predicated on high output volume and intensive natural resource extraction, is facing mounting pressure from escalating climate risks and diminishing growth impetus. The World Bank (2025) reports that climate-induced shocks since 2018 have precipitated a sharp decline in agricultural incomes, contributing to a resurgence of poverty. Simultaneously, the region's contribution to national GDP has eroded from nearly 20% prior to 2000 to 12.4% in 2024. Agricultural value-added growth has likewise decelerated significantly, falling from an annual rate of 4.6% in the 2000s to a mere 1.1% post-2009 (World Bank, 2025). This decline has triggered profound social consequences, evidenced by the migration of nearly 1.7 million residents away from the Delta over the past decade.

Consequently, investigating the transformation of the MKD's growth model toward a sustainable trajectory is an urgent imperative. This transition necessitates a shift from extensive growth, driven by input quantity, to a model rooted in productivity, value-added components, climate resilience, and social inclusivity. Such a transformation aligns with the strategic mandates of Resolution No. 120/NQ-CP and the MKD regional Master Plan for 2021–2030, with a vision toward 2050 (Prime Minister, 2022).

2. THEORETICAL FRAMEWORK FOR TRANSFORMING THE MKD'S ECONOMIC GROWTH MODEL TOWARDS SUSTAINABLE DEVELOPMENT

2.1 Theoretical and empirical foundations of sustainable economic growth models

2.1.1 Conceptual framework and core characteristics

In terms of conceptual underpinnings, sustainable development is defined as a developmental trajectory that meets the requirements of the present without compromising the ability of future generations to satisfy their own needs. This definition places a categorical priority on essential needs, particularly those of the marginalized (World Commission on Environment and Development [WCED], 1987). Building upon this, a sustainable economic growth model can be conceptualized as a paradigm that ensures long-term expansion while simultaneously preserving the resource base (natural capital), mitigating environmental degradation, and upholding social equity and inclusivity, thereby advancing across the three integrated pillars of economy, environment, and society (World Bank, 2012).

The core characteristics of a sustainable growth model, which serve as the analytical framework for the MKD, encompass the following dimensions: (1) Long-term orientation and productivity-driven innovation: Growth must transcend the mere expansion of physical inputs; instead, it should be predicated on innovation and strategic investment to secure enduring development (Organisation for Economic Co-operation and

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Development [OECD], 2011a). (2) Preservation and enhancement of "natural capital": economic activities must ensure that natural assets continue to provide the essential resources and environmental services critical to human well-being (OECD, 2011a). (3) Social inclusivity: sustainable growth is not merely "green"; it must be inextricably linked to social pillars. Green growth policies should be meticulously designed to maximize benefits and minimize costs for vulnerable populations, preventing irreversible negative impacts (World Bank, 2012). (4) integrated decision-making: sustainability represents a "process of change" wherein resource exploitation, investment direction, technological development, and institutional reforms are harmonized with both contemporary and future requirements (WCED, 1987). (5) Multi-dimensional assessment: given the multifaceted nature of sustainability, evaluation requires a comprehensive suite of indicators rather than a singular metric. The OECD emphasizes that green growth is "difficult to capture through a single indicator" and necessitates a diversified set of measures to monitor progress effectively (OECD, 2011b).

2.1.2 International precedents in deltaic growth model transformation

The Rhine–Meuse Delta (Netherlands): Following catastrophic flooding in the early 1990s, the Netherlands pivoted its flood risk management paradigm from "continuous dike heightening" to the "Room for the River" approach. This strategy integrates floodplain restructuring with the dual objectives of hazard mitigation and socio-economic/ecological enhancement. Program evaluations reveal that over 30 interventions along three Rhine branches successfully lowered the design flood level (1/1250-year frequency) by an average of 0.3 meters. Furthermore, it expanded floodplain areas by approximately 4,400 hectares, augmenting the existing 28,800 hectares along the Dutch Rhine branches. This serves as a quintessential example of adaptive growth transformation, prioritizing green-grey infrastructure synergy and ecosystem service optimization over traditional structural reinforcement (Klijn, Asselman, & Wagenaar, 2018).

The Ganges–Brahmaputra–Meghna Delta (Bangladesh): Bangladesh has operationalized "adaptive delta governance" through the Bangladesh Delta Plan 2100. A cornerstone of this transformation is the transition from fragmented projects to an integrated investment portfolio based on Adaptive Delta Management (ADM) principles. The initial Investment Plan comprises 80 projects (65 physical/infrastructure and 15 institutional/knowledge-based) with an estimated capital expenditure of 2,978 billion BDT (~$38 billion USD). The ADM logic is specifically engineered to circumvent two policy pitfalls: "too little, too late" and "too much, too soon." By prioritizing flexible solutions and phasing interventions according to risk "tipping points," the plan aligns economic investment with climate resilience and robust cost-benefit analyses (World Bank, 2017).

The Mississippi River Delta (Louisiana, USA): The Louisiana case highlights the economic calculus of adaptation amidst severe wetland degradation and storm surge risks. USGS data indicates a net loss of approximately 4,833 km^2 of coastal land between 1932 and 2016, a 25% reduction from the 1932 baseline. This quantitative evidence underscores the exigency for a resilience-oriented growth model. In response, the 2017 coastal master Plan (a 50-year, $50 billion USD initiative) focuses on a diversified portfolio of restoration, protection, and non-structural solutions. The risk-reduction measures are projected to decrease "Expected Annual Damages" (EAD) by $8.3 billion USD by the 50th year compared to a "no-action" scenario. Economically, the net 50-year benefit of these investments is estimated at $39.6–59.8 billion USD, yielding a benefit-cost ratio (BCR) of 3.0–4.1 (at a 3% discount rate). This reinforces the argument that adaptive investment can serve as a primary driver of sustainable growth when integrated into formal planning (CPRA, 2017; Couvillion et al., 2017; Fischbach et al., 2019).

Table 1. Synthesis of transformational experiences in global deltaic regions

Deltaic region	Strategic pivot	Scope / scale of intervention	Key quantitative outcomes	Policy implications for the MKD
Rhine–Meuse (Hà Lan)	Room for the River" paradigm	>30 interventions; +4,400 ha of additional floodplain	Design flood levels reduced by ~0.3 m	Restructuring production and urban spaces along flood corridors.
GBM (Bangladesh)	100-year master plan + integrated investment mechanism	Projected budget to 2030: 2,978 billion BDT (~$37 billion USD)	Highlighted critical financial implementation hurdles	Necessity of multi-year budgeting mechanisms for systemic transformation.
Mississippi–Louisiana (USA)	Ecosystem restoration + damage mitigation	Net loss of 4,833 km^2 of land (1932–2016)	$50bn/50-year plan; ~$8.3bn reduction in EAD by year 50	Establishing quantitative targets: natural capital vs. avoided losses.

Source: Synthesized by the author

Synthesizing global experiences, several universal lessons can be distilled for the MKD through a "systemic" approach. First, the delta must be conceptualized as a risk–resource–livelihood nexus, where climatic hazards, including sea-level rise, saline intrusion, land subsidence, and flooding, function as central binding constraints. Consequently, transforming the growth model must transcend mere "sectoral restructuring"; its core must lie in reforming the governance of natural resources, developmental space, and risk management to safeguard the resource base and mitigate expected losses. Second, international precedents demonstrate that effective interventions are rarely isolated. Instead, they are engineered as diversified portfolios that integrate structural (hard) infrastructure, non-structural (soft) solutions, such as spatial planning, institutional reform, and early warning systems, and nature-based solutions (NbS). This multifaceted approach simultaneously bolsters resilience and generates socio-economic co-benefits. Third, to ensure feasibility, the transition necessitates multi-year financial mechanisms and monitoring systems rooted in quantitative indicators. Long-term programs require stable resource allocation and must demonstrate efficacy through empirical metrics, such as reduced flood levels, restored ecosystem acreage, or avoided damages. Such a framework provides the essential foundation for prioritizing investments and refining policies through an evidence-based approach.

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2.2 Current state of the economic growth model in the MKD

2.2.1. Economic growth performance and sectoral shifts

Recent trends indicate that while the MKD has maintained a steady growth momentum, its sectoral structure continues to exhibit a "heavy reliance" on the primary sector. In 2024, the region's GRDP at current prices reached approximately 1,409 trillion VND, representing an 11.9% increase over 2023 and accounting for 12.2% of the national economy (Ministry of Planning and Investment [MPI], 2025). In terms of growth rates, the region's GRDP expanded by 7.31% in 2024. Specifically, the agriculture, forestry, and fishery sector grew by 3.85%, while the industrial-construction and service sectors recorded increases of 11.18% and 7.63%, respectively (Long An Newspaper, 2025). Regarding the economic composition, the MKD retains a disproportionately high share of Sector I (Primary Sector). The distribution across the three sectors stands at approximately 30.08% – 27.93% – 36.96% (Sectors I–II–III). This reflects a transition toward industry and services that, while underway, has lacked the necessary impetus to fundamentally overhaul a growth foundation traditionally anchored in agriculture (MPI, 2025). Furthermore, the 2024 average per capita income in the region was approximately 80.7 million VND, ranking 5th out of Vietnam's 6 economic regions. This underscores a persistent income disparity relative to the nation's primary growth poles (Long An Newspaper, 2025).

2.2.2. Resource efficiency and growth quality

The quality of growth in the MKD is severely constrained by labor productivity, human capital deficits, and an inability to attract capital into high-value-added sectors. From a macroeconomic perspective, the region's contribution to national GDP plummeted from nearly 20% prior to 2000 to a mere 12.4% in 2024, indicating that the region's growth rate has lagged behind the national modernization pace (World Bank, 2025). A prominent bottleneck lies in the productivity of non-agricultural sectors: labor productivity in manufacturing and services within the MKD is approximately 36% lower than in other regions, which hampers the transition toward high-productivity activities (World Bank, 2025). Regarding human capital, the region's skilled labor rate remains the lowest in the country at roughly 15% (a stark contrast to the 38% observed in the Red River Delta), thereby undermining investment attractiveness and value chain upgrading (World Bank, 2025). This is palpably reflected in FDI inflows: the MKD secured only 3% of Vietnam's total FDI in 2023, while the Red River Delta and the Southeast region accounted for 48% and 29%, respectively (World Bank, 2025). Furthermore, labor market precariousness is evidenced by underemployment rates; in 2024, the underemployment rate for the working-age population in the MKD stood at 2.91%, significantly exceeding the national average of 1.85% (General Statistics Office, 2024). Aggregate indicators suggest that while growth speed has improved, the "engines" driven by productivity, skills, and innovative investment remain feeble, stifling the transition to a sustainable model rooted in innovation and value addition.

2.2.3. Environmental and social externalities in the growth process

The MKD's growth model is operating amidst accelerating environmental risks, exerting direct pressure on livelihoods and social stability. The World Bank (2025) notes that nearly half of the Delta's population currently resides in areas susceptible to severe fluvial flooding, a proportion projected to rise under future climate scenarios. Concurrently, droughts and saltwater intrusion are severely impacting household incomes; risk simulations indicate that each drought event reduces income by approximately 9%. Moreover, saline intrusion exerts prolonged effects by compromising rice yields, freshwater sources, and the economic resilience of coastal areas (World Bank, 2025).

Changes in water and land governance have also yielded profound social consequences. The shift from flood-based management to extensive dike systems (associated with triple-cropping rice intensification) has boosted output but introduced new risks and inequalities. Meanwhile, exacerbated saltwater intrusion is inextricably linked to land subsidence caused by groundwater over-extraction (World Bank, 2025). Regarding social welfare, a troubling trend of "poverty reversal" has emerged; although the regional poverty rate fell from 49% in 2010 to 28% in 2022, nearly 10 percentage points of these gains were lost between 2018 and 2022. This highlights the high sensitivity of livelihoods to agricultural shocks, pandemics, and adverse natural conditions (World Bank, 2025). A critical social byproduct is mass migration: nearly 1.7 million people have emigrated from the MKD over the past decade, with 2024 Labor Market Survey (LMS) data showing that 14% of households have at least one migrant member, primarily seeking employment (World Bank, 2025). Additionally, rural livelihood structures are becoming increasingly fragmented; the proportion of "near-landless" households (owning less than 0.1 ha) rose from 27.8% in 2006 to 40.0% in 2022, heightening poverty risks and limiting capacity for production upgrades (World Bank, 2025).

Table 2. Key indicators reflecting the economic growth model of the MKD

Indicator Category	Key Statistical Data
GRDP Scale (Current Prices)	~1,409 trillion VND; +11.9% (YoY); 12.2% of national share
GRDP Growth Rate (2024)	7.31%
Sectoral Growth (2024)	Sector I: 3.85%; Sector II: 11.18%; Sector III: 7.63%
Economic Composition	30.08% – 27.93% – 36.96% (Sectors I–II–III)
Per Capita Income (2024)	~80.7 million VND/year
National GDP Contribution	Declined from ~20% (pre-2000) to 12.4% (2024)
Foreign Direct Investment	Only 3% of Vietnam's total FDI (2023)
Skilled Labor Rate	~15% (compared to 38% in the Red River Delta)
Underemployment Rate (2024)	2.91% (national average: 1.85%)
Migration Trends	~1.7 million emigrants over the last decade; 14% of households have at least one migrant

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2.3 Strategic orientations and core components for transforming the MKD's growth model

2.3.1. Structural transformation aligned with comparative advantage and climate adaptation

The reorientation of the MKD's growth model must be situated within the strategic framework of the MKD regional master plan for 2021–2030, with a vision toward 2050. Under this paradigm, growth is evaluated not merely by velocity but by quality, resilience, and value addition. The regional plan targets an average GRDP growth rate of approximately 6.5% per annum. By 2030, the economic structure is projected to shift significantly: reducing the primary sector (agriculture, forestry, and fishery) to roughly 20%, while expanding the secondary sector (industry and construction) to 32% and the tertiary sector (services) to 46% (Prime Minister, 2022).

On this basis, structural transformation must leverage the region's "three pillars", agriculture, aquaculture, and fruit production, transitioning from a volume-based to a value-based logic. This involves: (i) The spatial reorganization of production based on ecological suitability and hydrological risks (saline, fresh, and brackish zones); (ii) The expansion of processing industries and supporting services (e.g., cold-chain logistics, preservation, and quality certification); (iii) Enhanced market connectivity through inter-regional infrastructure. The master plan further emphasizes the development of critical infrastructure, including a target of 830 km of expressways, to serve as a "lever" for migrating labor and capital toward higher-productivity sectors (Prime Minister, 2022). Crucially, this structural shift must integrate growth with resource and environmental governance. The plan mandates that 100% of urban solid waste be collected and treated by 2030 (Prime Minister, 2022). These targets underscore that economic restructuring in the MKD must be accompanied by environmental standardization; failure to do so risks eroding competitiveness as global markets increasingly tighten green standards and traceability requirements.

2.3.2. Driving innovation, digital transformation, and productivity enhancement

Transforming the growth model toward an intensive growth paradigm requires the MKD to prioritize innovation and digital transformation as the "soft infrastructure" of productivity. Nationally, the National Digital Transformation Program aims for the digital economy to contribute 20% of GDP by 2025 and 30% by 2030, with labor productivity increasing by at least 7–8% annually (Prime Minister, 2020). For the MKD, where agriculture and aquaculture remain foundational, digitalization should focus on value-generating bottlenecks: production data management, hydro-climatic risk forecasting, input optimization (water, fertilizers, feed), and market linkages. The potential for "digital agriculture" is immense; given that agriculture contributes 17% of national GDP and employs 40% of the workforce, the spillover effects of digitalization could be profound (Open Development Mekong, 2021). Within agricultural value chains, digital traceability is a vital component for enhancing growth quality and reducing transaction costs. As of late 2022, GS1 Vietnam reported over 30,000 member enterprises with 860,000 registered products (World Bank, 2022). However, adoption remains uneven; while 60% of formal retailers utilize digital traceability, the informal sector lags significantly. Evidence suggests the following policy priorities for the MKD: (i) Standardizing data and unique identifiers (GS1/QR codes); (ii) Subsidizing transition costs for cooperatives and SMEs; (iii) Integrating traceability with quality monitoring, food safety, and emission controls at the chain level. Effective digital traceability generates value not only through premium pricing but also by mitigating market risks, reducing post-harvest losses, and optimizing supply-demand coordination.

2.3.3. Advancing green growth, circular economy, and modernized agribusiness

Green and circular economic models constitute the fundamental pillars for the MKD to sustain growth while simultaneously reducing environmental costs, factors that are increasingly becoming "real costs" in global competition. The national green growth strategy establishes quantitative benchmarks, such as reducing primary energy intensity per GDP by an average of 1.0 - 1.5% annually during the 2021 - 2030 period, while increasing the share of renewable energy in the total primary energy supply to 15 - 20% (Prime Minister, 2021). These targets provide a vital reference framework for the MKD to design "green solution packages" across processing industries, logistics, and agriculture (e.g., energy efficiency, rooftop solar power, transport optimization, and high-performance refrigeration technology). From a circular perspective, the MKD possesses immense potential due to its vast volume of agricultural by-products, which currently suffer from low utilization rates. Research indicates that agricultural residues in the region, primarily from crop and livestock sectors, are estimated at 39.4 million tons. Specifically, crop production generates approximately 26 - 27 million tons of rice straw, 70% of which is still burned or buried in fields, exacerbating pollution and greenhouse gas emissions (Huynh et al., 2025). Therefore, the circular transition should prioritize: (i) The commercialization of by-products (straw, husks, peels, etc.) into inputs for mushroom cultivation, organic fertilizers, animal feed, or bio-materials; (ii) The expansion of industrial-agricultural symbiosis models (processing clusters integrated with raw material zones and by-product processing); (iii) The application of policy instruments to "internalize" the costs of residue burning through regulations and financial incentives. By closing material loops, the MKD's growth will shift from "volume expansion" to "increasing value per unit of resource," aligning with long-term sustainability mandates.

Table 3. Framework for transforming the MKD's growth model

Pillar	Core components	Key indicators / quantitative orientations
Adaptive structure & infrastructure	Shift toward processing industries & services; inter-regional infrastructure; integrated risk management.	GRDP growth: ~6.5%/year; Sectoral ratio: 20%–32%–46%; ~830 km of expressways; 100% urban waste collection/treatment.
Innovation & digitalization	Digital data for production & markets; digital traceability; digital services for agriculture.	Digital economy: 20% of GDP (2025), 30% (2030); Productivity growth: +7%/year (2025), +8% (2030).
Green & circular economy	Energy efficiency; emission reduction; agricultural by-product utilization.	Energy intensity reduction: 1.0–1.5%/year; Renewable energy: 15–20%; By-product volume: 39.4 million tons (70% currently wasted).

Source: Synthesized by the author

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2.4 Strategic orientations and core components for transforming the MKD's growth model

For the sustainable transformation of the MKD's growth model to be successful, the "sufficient" conditions extend beyond selecting the correct strategic orientations (sectoral structure and spatial development). It necessitates robust institutional and coordination capacity, high-quality human capital, and a potent system for resource mobilization and allocation to implement long-term, inter-provincial programs. This is particularly critical as the region simultaneously grapples with internal skill deficits (with skilled labor at approximately 15%, the lowest nationally) and a limited capacity to attract investment (securing only ~3% of Vietnam's total FDI in 2023) (World Bank, 2025).

Table 4. Summary of enabling conditions and monitoring indicators

Category of conditions	Implementation focus	Monitoring indicators
Institutional & regional linkages	Coordination mechanisms; inter-provincial project portfolios; defined roles for Central vs. Local governments.	Number of approved inter-provincial projects; percentage of projects completed on schedule.
Human capital	Upskilling for high-value agriculture, processing, logistics, and digitalization.	Skilled labor rate; labor productivity by sector.
Investment resources	Public investment as a catalyst + PPP/FDI/ODA; efficiency monitoring.	Disbursement rates; capital structure; project efficiency and output quality.

Source: Synthesized by the author

2.4.1. Refining institutional frameworks and regional linkage policies

The institutional foundation for the MKD's growth model transformation is anchored in the "sustainable development with climate change adaptation" orientation established by the Government in Resolution No. 120/NQ-CP (2017). Regarding implementation, the establishment of the MKD regional coordination Council for the 2020 - 2025 period (under Decision 825/QD-TTg) provides a vital platform for inter-sectoral and inter-provincial coordination. The Council serves an advisory role to the Prime Minister, facilitating the direction, coordination, and monitoring of regional linkages while proposing mechanisms, policies, and resource allocation strategies for regional-scale projects (Prime Minister, 2020). Consequently, a pivotal requirement is the "institutionalization" of the regional master plan into a portfolio of inter-provincial projects aligned with the developmental corridors and dynamic centers outlined in Decision 287/QD-TTg, such as the Can Tho - Long An urban-industrial corridor, the Tien - Hau river corridors, and the coastal corridor, while integrating climate adaptation constraints into project selection criteria (Prime Minister, 2022).

2.4.2. Human resource development and labor quality enhancement

Human capital represents the primary "bottleneck" in the MKD's growth transformation, as skill deficits impede productivity and deter investment. The World Bank (2025) highlights that the MKD possesses the nation's lowest skilled labor rate at 15%, significantly trailing the 38% observed in the Red River Delta. Furthermore, the region's non-agricultural sectors exhibit low productivity, with manufacturing and service labor efficiency approximately 36% lower than other Vietnamese regions (World Bank, 2025). Therefore, human resource policies must pivot from generalized training to "value cluster" specialized education aligned with regional planning: (i) High-tech agriculture and aquaculture techniques adapted to saline/flood conditions; (ii) Deep processing, quality standards, and digital traceability; (iii) Logistics, cold storage operations, and maritime/river transport services; (iv) Digital skills for production management and agricultural e-commerce. Establishing a "state–academy–industry" nexus in regional hubs (particularly Can Tho) is essential to catalyze local employment, mitigate migration pressures, and enhance investment attractiveness, especially given that the region currently secures only ~3% of national FDI (World Bank, 2025).

2.4.3. Mobilization and efficient utilization of investment capital

As the growth model transformation is a long-term endeavor, capital structures must follow a "public investment-led – private/ODA supplemented – outcome-based monitoring" logic. Regarding the public investment framework, Resolution No. 29/2021/QH15 targets total social investment at 32 - 34% of GDP for 2021 - 2025, with public investment accounting for 16 - 17% of that total, alongside mandates for improved disbursement rates and capital efficiency (National Assembly, 2021). To mobilize the private sector, the Law on Public-Private partnership No. 64/2020/QH14 provides the legal basis for attracting private investment into bankable infrastructure and public service projects (National Assembly, 2020). In practice, the MKD must prioritize inter-provincial "project packages" with high spillover potential, such as multi-modal logistics, climate-resilient transport, and digital infrastructure, while applying outcome-based monitoring (e.g., logistics capacity, transit time reduction, risk-mitigated acreage, and post-harvest loss reduction) to ensure that public funds are allocated based on measurable efficiency..

3. CONCLUSION AND RECOMMENDATIONS

3.1 Conclusions

The analysis demonstrates that while the economic growth model of the MKD has maintained steady momentum in recent years, it has simultaneously revealed significant bottlenecks regarding quality and sustainability. In terms of scale and velocity, regional economic indicators have improved; however, the structural composition remains heavily weighted toward agriculture. This indicates that the transition toward industrial and service sectors has lacked the necessary impetus to fundamentally overhaul the region's growth foundations. Furthermore, competitiveness indicators suggest that the drivers of intensive growth remain underdeveloped. This is evidenced by a deficit in human capital quality, suboptimal labor productivity in non-agricultural sectors, and a modest capacity to attract high-quality investment inflows. Concurrently, environmental and social risks have increasingly become central binding constraints on long-term expansion. The compounding effects of droughts, saltwater intrusion, land subsidence, and extreme weather events have heightened the volatility of agricultural production, undermined

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rural livelihoods, and catalyzed significant labor out-migration. Without effective governance, these risks will continue to deplete the region's "natural capital," escalate developmental costs, and erode the scope for inclusive growth.

Consequently, this paper asserts that transforming the MKD's growth model is an existential imperative. The region must pivot from an extensive growth paradigm to a model rooted in productivity, value addition, climate resilience, and social inclusivity. The core pillars of this transformation include: economic restructuring aligned with ecological comparative advantages; the promotion of innovation and digitalization to bolster productivity; the advancement of green and circular economies alongside modernized agribusiness. To ensure feasibility, it is essential to refine institutional frameworks and regional coordination mechanisms, enhance human resource quality, and strategically mobilize investment capital, prioritizing long-term, inter-provincial programs supported by quantitative monitoring and evaluation systems.

3.2 Recommendations

3.2.1. Strategic recommendations for central government in regional policy formulation

Refining regional coordination mechanisms under the integrated principle of "one master plan – one portfolio – one monitoring framework." It is imperative for the Central Government to establish a unified set of criteria for the selection, prioritization, and evaluation of inter-provincial programs (specifically in transport-logistics, adaptive irrigation, digital infrastructure, and livelihood transitions).

Designing medium- and long-term financial frameworks tailored to the MKD, prioritizing capital allocation toward climate resilience and productivity enhancement goals. Furthermore, the government should permit the flexible utilization of capital mobilization tools (such as ODA, PPP, and green credit) linked directly to outcome-based performance rather than traditional disbursement-volume metrics.

Perfecting the policy framework for ecological-based agricultural restructuring, with a concentrated focus on quality standards, digital traceability, emission reduction, and risk governance. It is essential to implement specific support mechanisms for smallholders, cooperatives, and SMEs to prevent excessive "compliance costs" from exacerbating socio-economic inequalities.

Developing an integrated regional data system (encompassing climate, hydrology, land-use, and socio-economic metrics) that is both open and interconnected. This system should facilitate risk forecasting, production management, and evidence-based investment decisions, with priority given to shared data platforms for raw material zone management, logistics, and natural disaster early warning systems.

Strengthening regional human resource development policies by pivoting from generalized support to market-driven, "industry cluster" training programs (including agri-aquatic processing, logistics, the digital economy, and eco-tourism). This should be accompanied by incentive mechanisms to encourage private sector participation in vocational training and labor absorption.

3.2.2. Recommendations for local authorities and economic stakeholders

Local governments must operationalize regional master plans through provincial action plans that are strictly aligned with ecological zoning and climate risk assessments. It is crucial to prioritize specific key sectors and projects based on the principle of resource concentration, thereby avoiding fragmented investments and inter-provincial redundancies.

Strengthen value chain integration through the "smallholder/cooperative – processor – logistics – market" nexus. Adherence to quality standards and digital traceability must be treated as mandatory prerequisites for bolstering value-added components and mitigating market volatility. Concurrently, the development of centralized collection hubs, primary processing facilities, cold-chain storage, and logistics is essential to minimize post-harvest losses.

Enterprises and cooperatives should prioritize technological innovation and digital transformation within high-value-added segments, including raw material zone management, input optimization, quality control, and e-commerce. Furthermore, participation in adaptive production models (e.g., polyculture, crop rotation, agroecology, and circular aquaculture) is vital for reducing costs and enhancing systemic resilience.

Accelerate the implementation of green and circular economies through tangible projects: recycling agricultural by-products, treating aquaculture waste, and enhancing energy efficiency in processing and cold storage. The formation of "linkage clusters" involving processors, environmental service providers, and cooperatives should be encouraged to effectively close material loops.

Enhance localized risk governance and social welfare via early warning systems, agricultural insurance (piloted by specific commodities), local contingency funds, and specialized skill-building programs for rural labor. These interventions aim to mitigate livelihood vulnerability and curb the necessity for forced migration.

The synchronized implementation of these recommendations will catalyze the transformation of the Mekong Delta into a dynamic and resilient economic hub. By leveraging its competitive advantages in agriculture, logistics, and the digital economy, the region can achieve long-term sustainability and foster balanced development across all constituent provinces

To align with international journal standards (APA 7th Edition), I have translated the Vietnamese titles and entities into English while maintaining the original citations for accuracy. This format is essential for a high-scoring IELTS Academic or professional research submission.

REFERENCES

1) Government of Vietnam. (2017, November 17). Resolution No. 120/NQ-CP on sustainable and climate-resilient development of the Mekong Delta. Government News Agency. https://chinhphu.vn/default.aspx?docid=192249&pageid=27160
2) General Statistics Office (GSO). (2025). Statistical Yearbook 2024. https://www.nso.gov.vn/du-lieu-va-so-lieu-thong-ke/2025/06/nien-giam-thong-ke-2024/
3) Huynh, T. N., Nguyen, T. T. A., Dinh, T. K. O., & Le, B. M. Q. (2025). The current status of circular economy development in the Mekong Delta. VNU Journal of Science: Policy and Management Studies, 41(1), 11–19. https://doi.org/10.25073/2588-1116/vnupam.4548
4) Klijn, F., Asselman, N., & Wagenaar, D. (2018). Room for rivers: Risk reduction by enhancing the flood conveyance capacity of The Netherlands' large rivers. Geosciences, 8(6), Article 224. https://doi.org/10.3390/geosciences8060224

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5) Prime Minister. (2020, June 3). Decision No. 749/QD-TTg approving the "National Digital Transformation Program to 2025, with orientations toward 2030". Government News Agency. https://chinhphu.vn/default.aspx?docid=200163&pageid=27160
6) Prime Minister. (2021, October 1). Decision No. 1658/QD-TTg approving the National Green Growth Strategy for the 2021–2030 period, with a vision toward 2050. Government News Agency. https://vanban.chinhphu.vn/?docid=204226&pageid=27160
7) Prime Minister. (2022, February 28). Decision No. 287/QD-TTg approving the Mekong Delta Regional Master Plan for the 2021–2030 period, with a vision toward 2050. Government News Agency. https://chinhphu.vn/?docid=205414&pageid=27160&tagid=1&type=1
8) World Bank. (2017, July 31). Investment plan for the Bangladesh Delta Plan 2100: Volume 1—The plan (Report No. ACS23966). World Bank. https://documents1.worldbank.org/curated/en/890611546628658220/pdf/Investment-Plan-for-BDP-2100.pdf
9) World Bank. (2022). Digital technology for traceability in Vietnam's fruit and vegetable value chains. World Bank. https://documents1.worldbank.org/curated/en/099724310182330688/pdf/IDU03bd6b7680aa0804d260a4120c0c008620286.pdf.

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