

INDUSTRIAL DEVELOPMENT ROADMAP



1. INDUSTRY SNAPSHOT



Structural Imbalance
Tertiary sector contributed to 55.49% of GDP with 8.61% growth rate. While, secondary sector contributed to 29.55% OF GDP with -0.03% growth rate in 2023.



Vision

To build a green, inclusive, and sustainable industrial ecosystem that drives long-term economic transformation while remaining deeply rooted in the country's Gross National Happiness principles.

2. STRATEGY

Mission

To enable resilient industrial growth through strategic policy support, infrastructure and investment facilitation, skill development, technology adoption, resource optimization, and job creation rooted in sustainability and social equity.



3. EXPECTED OUTCOMES BY 2035



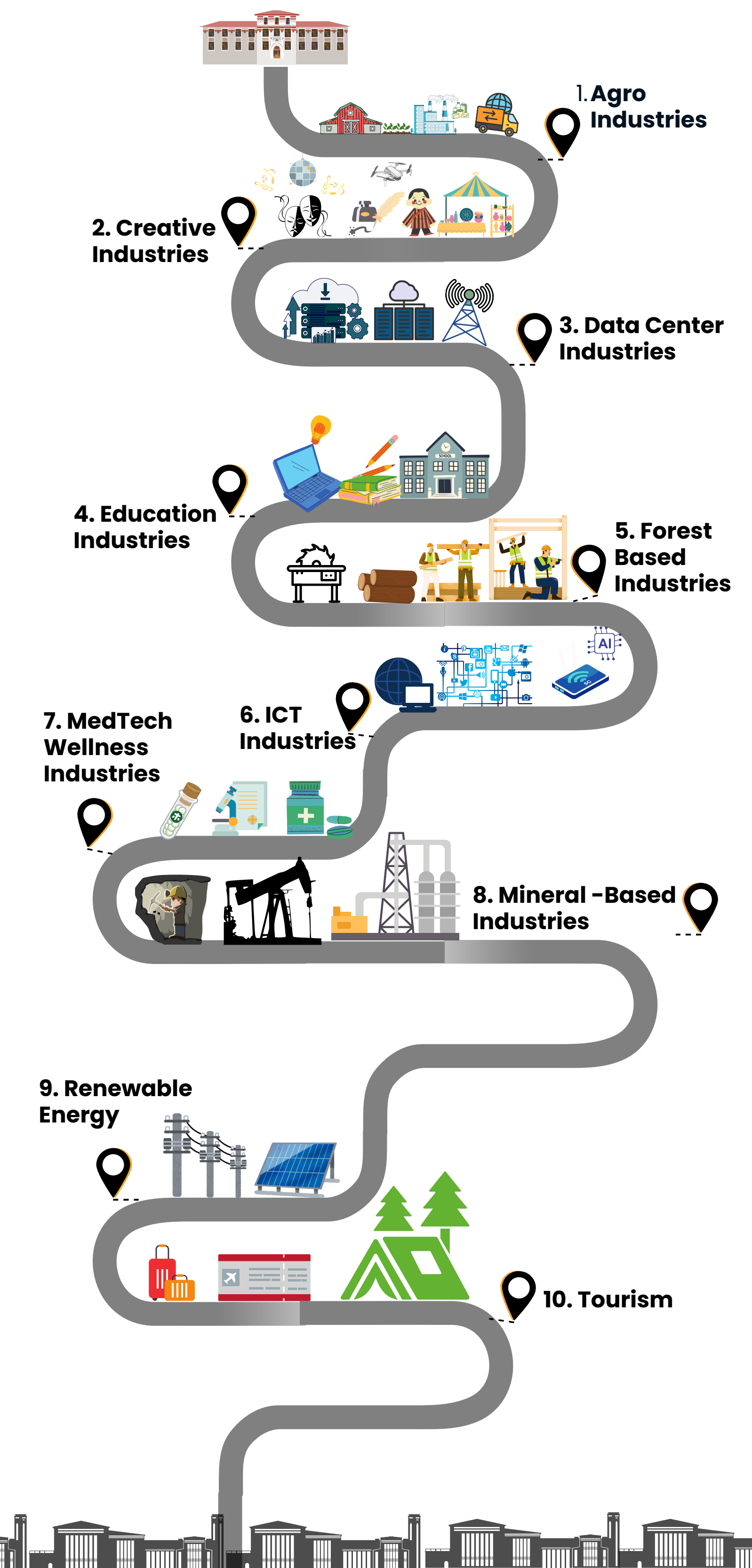
World-Class Industrial Infrastructure and Convergent Support Ecosystem



INDUSTRIAL DEVELOPMENT ROADMAP



10 Priority Sectors



Landscape

>95% CSIs

90%

Turnover by
Large Firms

Early focus: Cement, ferrosilicon, agro-processing, wood, and handicrafts

Industrial hubs: Phuntsholing, Samtse, Samdrup Jongkhar

Shaped by Gross National Happiness (GNH)

Strategic Positioning

- Location: Between India and China
- Resources: Clean energy & biodiversity

- Hydropower
- Stable Governance
- Clean Brand
- CSIs
- Regional access

- Green Industry
- Trade Integration
- Smart Infrastructure
- FDI
- Global Trends

- Skills Mismatch, Policy Inconsistency
- SOE Dominance
- Import Reliance

- Rising competition
- Policy Delays
- LDC Graduation
- Infrastructure Gaps

Strategic Interventions

Policy, Regulatory, and Institutional Reforms

A

1. Establish Industrial Development Finance Facility (IDFF).
2. Expand Affordable Financing Access through Sector-Specific Credit quotas and Strengthened Financial Literacy Services.
3. Implement Strategic Investment Promotion Programs.
4. Introduce Targeted Fiscal Incentives for Industrial Growth.
5. Create Collateral-Free Credit Guarantee Scheme.
6. Reform SOEs for Private Sector Participation.

1. Adopt the Industrial Development Roadmap.
2. Establish High-Level Coordination Body: Inter-Ministerial Industrial Development Committee (IDC)/Empower the EDB.
3. Digitize and Streamline Industrial Licensing through IBLS, AI Compliance Checks, and clear TATs.
4. Improve the Regulatory Predictability Framework and Stakeholder Engagement.
5. Modernize e-payment and Cross -Border Digital Transactions.
6. Extend Land Lease Tenure (60-99 years) for Strategic Investments.
7. Finalize Double Taxation Avoidance Agreements
8. Sign Mutual Recognition Agreements

B Financing, Investment, and Private Sector Enablement

1. Promote High-Potential Industrial Sectors based on Comparative Advantage and Global Demand.
2. Integrate Tourism and CSIs.
3. Implement Import Substitution and Domestic Value Addition Strategy.
4. Support CSIMs Productivity and Scalability.
5. Foster Industry-Academia Collaboration for Innovation and Product Development.

C Diversification and Regional Integrations

C

1. Develop Integrated Industrial Parks, Internal Transport Networks, Dry Ports, and Multimodal Logistics Hubs.
2. Expand Energy Generation and Grid Reliability.
3. Develop Green Industrial Standards

D Industrial Infrastructure, Energy, and Logistics

1. Industrial Tech Upgrade and Innovation Support Programs through Tech Audits and Awareness Promotion Programs.
2. Launch Awareness Campaign on Industry 4.0 Tools.
3. Integrate Digital Skills in TVET Curriculum.
4. Facilitate Global Partnerships.

E Technology Adoption

E

1. Launch National Industry-Skills Alignment Program.
2. Expand Youth Industrial Apprenticeship Scheme.
3. Promote Diaspora Engagement and Return Migration Program

F Human Capital and Skills for Industry

F

**GDP Contribution
in 2023****6.57%**

Crops

5.91%

Livestock

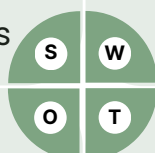
**Sectoral
Challenges**

Small landholdings, low mechanization, labour shortages, post-harvest losses, poor infrastructure, high input costs, weak agro-processing, regulatory hurdles, and export market dependence.

13th FYP Goal**BTN 6 Bn**
Exports by 2029**High-value
Agricultural Products**

- High rural engagement & labor availability
- Diverse agro-ecology, organic-friendly terrain
- Strong “Brand Bhutan” for premium markets
- Supportive policies on food security & self-reliance
- Rich traditional knowledge & sustainable practices
- Rising demand for local agro-products

- High costs, low productivity, outdated practices
- Poor infrastructure & cold chain gaps
- Limited land for commercial farming
- Weak institutional coordination & extension support
- Shortage of skills, inputs, finance & R&D
- Complex, slow regulatory processes



- Urban markets (Gelephu Mindfulness City, border towns)
- Export potential: organic, herbal, GI-certified goods
- Agri-tech, climate-smart farming, protected cultivation
- Branding, value addition, eco-labeling
- Agro-tourism & youth-led agri-preneurship
- Access to carbon credits & green finance

- Cheap imports & input dependency
- Youth migration, rural labor shortage
- Climate risks & wildlife-related crop loss
- Regulatory unpredictability & market shocks
- Unsustainable land use & ecosystem degradation

**Vision**

To catalyze sustainable and inclusive growth of Bhutan’s agricultural sector by maximizing productivity, enhancing value addition, and expanding market access, thereby transforming farming into a vibrant, climate-resilient, and economically rewarding pillar of national development.

Expected Outcomes by 2035**Economic Growth****BTN 70bn**

GDP Contribution

BTN 10bn

Agri-Exports

50%

Crop Yield

**<10%**Post- Harvest
Losses**70%**Vegetable
Imports**Productivity and
Food Security****Value Addition****20 +**Agro - Processing
Units**30%**Value-Added
Exports**5000+**

Jobs

**EU
Singapore
Japan****5+**

Premium Markets

**Market
Diversification**

Strategic Interventions

Policy and Regulatory Support

A

1. Review Existing Legal Frameworks
2. Develop Product-Specific Agro-Processing Standards
3. Review and Streamline FDI Regulations

1. Identify and Zone Potential Areas for Large-Scale Farming.
2. Facilitate Access to Secured Land Leases.
3. Provide Extension Services.
4. Promote High Impact Crops and Livestock.
5. Promote Contract Models.

Promotion of Cooperatives/Group Farming on Government Forest

C

1. Promote and Expand Environmentally Controlled Vertical Farming Systems.
2. Tackle Land, Water, and Climate Constraints
3. Promote Hydroponics and Aeroponics
4. Use Smart Tech and Renewable Energy
5. Enable Year-Round High-Value Crop Supply

Facilitating Land Lease

E

1. Develop Structured Foreign Labour Programs
2. Introduce Authorized Licensed Agents for Recruitment, Compliance, and Management.

Industry Diversification and Global Integration

G

1. Establish Cold Storage and Warehousing
2. Improve Agro-Logistics and Rural Connectivity.
3. Expand and Invest in Climate-Resilient Irrigation Systems.

Market Linkages and Market Support

I

1. Conduct Targeted Training Programs
2. Offer Modular Learning for Value Chain and Modern Machinery Handling
3. Promote Youth Entrepreneurship
4. Train on National and International Standards and Certifications

Promotion of Commercial Farming

B

1. Identify Government Forest Land in 8 Dzongkhags (Chukha, Dagana, PemaGatshel, Samdrup Jongkhar, Samtse, Tsirang, Wangdue , and Zhemgang.
2. Facilitate Land Access and Reallocate Land from Inactive Users
3. Production Focus: Chilli, Onion, Tomato for Lean Season
4. Link to Schools and Gyalsung Feeding Programs
5. Enablers: Approvals, Roads, Cold Storage, Irrigation
6. Support Training Cooperatives/Groups
7. Fixed Price Procurement

Promotion of Vertical Farming

D

1. Identify Zones for Large Scale Farming
2. Facilitate Land Lease and Technical Support
3. Streamline Leasing Protocols

Agri Labour Shortage

F

1. Strengthen Bhutan's Organic Certification System.
2. Conduct Market Studies and Facilitate Trade Agreements.
3. Promote Processing of Raw Organic Produce into Value-Added Products.
4. Support Establishment of Organic Agro-Processing Units.
5. Develop Global Branding Strategies for Bhutanese Organic and Processed Food Products.

Infrastructure and Logistic Enhancement

H

1. Strengthen Linkage between Farmers, Cooperatives, Processors, and Markets.
2. Enhance Export Market Linkages through Trade Agreements and MoUs.
3. Enhance Modern Marketing Tools.
4. Explore Markets beyond India and Bangladesh.

Capacity Building

J

Strategic Interventions

Technology Adoption

K

1. Adopt Tech Transfer Partnerships for Efficient Agro-Processing.
2. Strengthen R&D Center for Agro-Processing.

1. Develop Strategic Branding Interventions and Standards..
2. Enhance Awareness on GI and Branding.
3. Register and promote GI products (red rice, cordyceps, local spices, etc.).
4. Ensure compliance with international labeling and packaging norms.

L

Geographical Indication and Branding

Establishing Agro-Based Hubs for Value Addition

M

1. Develop Regional Agro-Processing Hubs with Shared Facilities for Drying, Packaging, and Processing.
2. Develop Special Agro-Industrial Zones
3. Identify Sites for Agri-Food Eco-Hubs in Four Regions
4. Integrate Special Agro-Industrial Zones with Hubs
5. Incentivize Agro-Firms and Support Processing

N

Promotion and Development of Agro-Based Value Addition Industries

1. Potential Agro Industries and Products: Vegetables, Cash Crops, Grains, Fruits, and Livestock Products.
2. Prioritization will be based on Agro-Ecological Suitability, Market Demand, and Potential for Value Addition.
3. Promotion of industry-specific value chains/ specific agro-based value addition industries:
 - Potato-Based Industries
 - Mushroom-Based Industries /Mushroom Spawn and Raw Material Production
 - Groundnut Production and Value Addition
 - Ginger and Turmeric production and Value Addition
 - Fruit-Based Industries
 - Seed Oil Industries
 - Organic-Based industries (Bio-fertilizer productions Industries, Organic seed production and Organic Processing units).

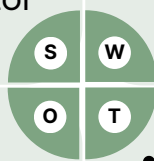
5 Creative Industries **Film, Music, Animation, Digital Content Creation, Over-the-Top (OTT)**

- Rich culture & storytelling potential
- Youth interest & digital adoption
- Gov't support (tax holidays, incentives)
- Strong local talent & diaspora demand
- Cultural preservation via creative sector

- Limited data, training & infrastructure
- Small market, low exports
- Weak IP enforcement & financing gaps
- Poor FDI presence & internet issues

- Global demand for cultural content
- Synergy with tourism, Brand Bhutan & GNH
- Monetization via OTT, TikTok, YouTube
- Job creation & digital tool accessibility
- International collaborations

- IP violations & online abuse
- Cultural constraints on expression
- Dominance of global content & AI disruption
- Tech and e-payment gaps
- STEM preference over arts



To transform Bhutan's creative industry into a dynamic engine of economic growth, job creation, and innovation through strategic investment, cultural branding, and global integration.

Expected Outcomes by 2035



15,000+

Jobs



5-6%

GDP Contribution



ONE

Creative Hub and Collective Management Organization

Strategic Interventions

Policy and Regulatory Support

A

1. Review and Align FI for Creative Needs
2. Tax Reform for Small Businesses
3. Targeted Time-Bound Tax Exemptions for Co-Productions, Equipment Imports, and Training Investments
4. Low Interest Loans and Equity Based Financing
5. Creative Industry Development Fund
6. National Creative Awards

1. Start First, License/Regulate Later
2. Strengthen IP Rights Laws
3. Establish Collective Management Organizations (CMOs)
4. Review National Filming Rules & Regulations
5. Promote FDI Opportunities
6. Develop Film Tourism Strategy/ Plan
7. Build Institutional Linkages for Creative Monetization

B

Investment, Taxes, and Fiscal Incentives

1. Fully Equipped Creative Hubs in Key Cities
2. Creative Schools and Specialized Institutions
3. Support Formation of Industry Associations and Sector-Specific Groups
4. Resolve Payment Gateway Issues
5. Build Centralized Creative Industry Data System

Infrastructure and Logistics Enhancement

C

1. Sensitization Programs for Creative Industries Promotion
2. Structured Entrepreneurship Training Program
3. Skilling and Upskilling Programs
4. TVET Strengthening and Partnerships with Foreign TVET Institutions
5. Increase Undergraduate Scholarships
6. Structured Mentorship Programs

D

Capacity Building

1. Digital Infrastructure Enhancement for Seamless Online Market and Streaming
2. AI Tools for Content Creation and Curation
3. Leverage Social and Digital Media

Technology Adoption

E

1. National Branding Strategy for Bhutanese Creative Products
2. Hand-Holding Approach for Export-Ready Industries
3. Regular National Events and Festivals
4. Participations in International Festivals, Conferences, and Roadshows

F

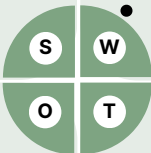
Branding, Market Linkages and Support

Digital Economy GDP Contribution
3.03% 2022 **2.93%** 2023

13th FYP **USD 300 million**
5% of GDP

- Abundant renewable hydropower (36,900 MW potential).
- Carbon-neutral branding for sustainable hosting.
- Cool climate reduces energy costs.
- Strong government ICT support.
- Stable, peaceful, and low-corruption environment.
- STEM and R&D focus for digital talent.
- Strategic location near South Asia’s big markets.

- Limited internet bandwidth (84 Gbps existing vs. 100+ Gbps needed).
- Single point of failure via Siliguri internet corridor.
- High internet cost (Nu. 550/Mbps existing).
- High logistics cost, no port, difficult terrain.
- Limited skilled workforce and brain drain.
- No dedicated data center policy.
- Seasonal power variability and limited substations.
- Small domestic demand.



- Niche for green, sustainable data hosting.
- FDI potential via incentives and tax waivers.
- Digital economy growth (e-commerce, fintech, GMC).
- Satellite and submarine connectivity options.
- Supportive STEM pipeline.

- Tough competition (India, Singapore, China).
- Climate change risks to hydropower.
- Cybersecurity gaps.
- Infrastructure bottlenecks.
- Rising power demand may strain hyperscale supply.



To position Bhutan as a green and eco-friendly destination for technology investments, and establish world-class data center infrastructure that drives inclusive economic growth, fosters digital innovation, and supports a technology-driven knowledge society, aligning with GNH and global sustainability trends.

Expected Outcomes by 2035



2500+
Jobs



2 – 4%
GDP Contribution

50 – 100 MW

FDI Hyperscale Data Center
Worth USD 450 mn

Strategic Interventions

Policy and Regulatory Support

A

1. Access to Submarine Cable
2. Leasing of IPLC of Minimum 100GPs Bandwidth and Scalability
3. Redundancy in International Internet Gateway
4. Energy, Stable Grid, and Availability of High-Load Substations
5. Redundancy in Power Supply
6. Special Data Center Zones in Central and Eastern Bhutan
7. Domestic Fiber Optic Connectivity Strengthening and Redundancy
8. Affordable International Gateway Bandwidth Costs

1. National Data Center Strategy
2. Data Protection Laws
3. Regulatory Processes for Data Center Licensing
4. Sandbox Regulations for Hyperscale FDI Data Center
5. FDI Regulations and Landlease Period Review

B

Infrastructure and Logistics Enhancement

Investment, Taxes, and Incentives

C

1. Import Duty Exemptions for Essential Equipment
2. Performance Based Tax Incentives
3. Incentives for using Renewable Energy and Green Cooling Tech

1. Inclusion in Education Curriculum and TVET Programs
2. Skill Based Training and Upskilling
3. Skills and Knowledge Transfer
4. Internships
5. International Expo Participations
6. Continuous Capacity Building Programs
7. Research and Innovation Labs
8. Industry Academia Linkage

D

Capacity Building

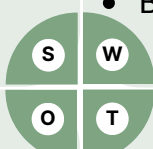
**Domestic
Landscape**

<50%

Domestic Tertiary
Education**95% in Public
Institutions**Low Private
Participation**Missed FDI
Opportunities**

- GNH-guided holistic education
- Strong political support and public investment
- Improved access and literacy
- English-medium, safe learning environment
- Rising interest in specialized/STEM/vocational fields

- Limited tertiary intake (<50% of graduates absorbed)
- Few private or international institutions
- Low FDI due to unclear policies/guidelines
- Skills mismatch with market needs
- Bureaucratic delays and regulatory gaps



- Position as a regional education hub
- High youth demand for diverse learning paths
- FDI and international university partnerships
- Niche academies (arts, sports, ICT, etc.)
- Growth in online/blended learning and PPPs

- Student outmigration and brain drain
- Regional competition
- Poor quality control risks private sector credibility
- Policy inconsistency and weak accreditation systems



To transform Bhutan into a globally recognized hub for inclusive, holistic, and value-based education that fosters innovation, creativity, and future-ready skills; fully meeting domestic demand and attracting international students through excellence in niche disciplines, while contributing meaningfully to economic diversification and growth.

Expected Outcomes by 2035**20%**Private Sector Participation
in Tertiary Education**8%**GDP
Contribution**90%**High School Graduates in
Domestic Institutions**Strategic Interventions****Policy and Regulatory
Support****A**

1. Single Window Clearance Platform for Educational Institution Registration
2. Regulatory Framework, Guidelines, and Standards.
3. National Education Conservation Policy
4. National HRD Masterplan/ Framework

1. Sector-Specific Institutions through PPPs
2. National Rankings/Award Program for Private Institutions
3. MoUs with Foreign Institutions for Co-Branded Programs
4. Global Partnerships

B**Promotion of Industries/
Value Addition****Infrastructure and
Logistics Development****C**

1. Shared Facilities System
2. Quality Digital Technologies

1. Annual Education Fairs
2. Education Export Strategy

D**Market Linkages and
Support****Branding****E**

1. National Education Brand with GNH Focus
2. Niche Destination Marketing for Holistic, Wellness- Centres, and Creative Education Destination

Landscape

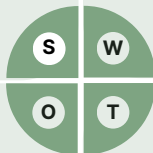
2.68 hectares
Forest Cover32.01%
Coniferous
Forest2.48%
GDP in
2023624
Forest
Industries

- 70% forest cover; renewable, sustainable resource
- 624 existing forest-based enterprises
- Strong environmental policy backing
- Adequate 3-phase electricity for processing

- Strict harvest limits (2%), outdated tech
- High costs, low scale, poor productivity
- Limited domestic demand
- Wasteful production, low by-product use
- Poor rural infrastructure
- No standardization
- High equipment costs

- Industrial hubs
- Export to niche markets
- Waste-to-product industries
- Carbon credits,
- Government procurement and GMC market integration
- Rural job creation

- Regional competition
- Tech acquisition barriers
- Climate risks, and weak R&D
- Poor international visibility
- Risk of overharvesting



To develop a competitive, innovative, and sustainable forestry-based products industry that adds high economic value, promotes green jobs, and contributes to Bhutan's climate goals while ensuring the sustainable use of forest resources.

Expected Outcomes by 2035



5000+

Jobs



3%

GDP
Contribution

BTN 3 bn

Forestry-Based Product
Exports

Strategic Interventions

Policy and Regulatory
Support

A

1. Review Existing Policy and Regulatory Frameworks
2. Silvicultural Management Practice Adoption

1. Cable Logging Systems Deployment
2. Processing Infrastructure Capacity Enhancement

B

Enhancing Productive
CapacityStrengthening Forestry-
Based Product Value Chain

C

1. Promotion of Modern Furniture Making, Herbal Products, Bamboo and Cane Products
2. Development of Industrial Forests
3. Waste and By-products Capitalization
4. Integrated Forestry Product Cluster Development
5. Optimize Forest Resource Management

Wood-Based Industries

1. Engineered Wood Industries
2. Woodcraft and Handicraft
3. Wood Energy Industries

Non-Wood-Based Industries

1. Cane and Bamboo Manufacturing
2. Essential Oil Industry
3. Incense Manufacturing Industry

D

Promotion and Development
of Forestry-Based Value-
Added IndustriesInfrastructure and
Logistics Enhancement

E

1. Increase Timber Production and Access
2. Enhance Transport and Logistics Support
3. Strengthen Industrial Infrastructure

1. Holistic Training and Skills Development Programs
2. Review Foreign Workers Allowance for Industry Needs
3. Promote Advanced Wood Processing Tech
4. Adopt CNC

F

Capacity Building and
Technology AdoptionMarket Linkages , Branding
and Global Marketing

G

1. Strengthen Market Information
2. Create Local Market
3. Strengthen Standards and Certification
4. Initiate GI Application Processes
5. Strengthen "Grown in Bhutan" and "Made in Bhutan" initiatives

Landscape

2.93%

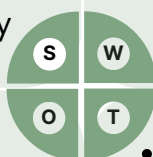
GDP in 2024

370,479

1% Engaged in
ICTScalable, Low-Carbon
Pathway

- Strong govt support (Digital Strategy 2024, FDI Policy)
- Tax breaks & import duty waivers
- Green, ethical branding with GNH alignment
- Skilled, English-speaking, STEM-trained youth
- Strategic location & favorable time zone
- Political stability & low-cost green energy

- Limited high-speed internet & high costs
- Small ICT workforce & low R&D investment
- Gaps in AI/ML/blockchain skills
- Poor global visibility, weak branding
- Limited partnerships & regulatory gaps
- Nascent startup ecosystem



- Rising global demand for ethical outsourcing
- Niche appeal as green tech destination
- Tech parks, PPPs, and global certifications
- Innovation hubs & export potential
- Leverage carbon neutrality in global ICT markets

- Competition from India, Philippines, etc.
- AI reducing low-skill BPO demand
- Risk of brain drain & policy delays
- Infrastructure gaps may widen rural exclusion
- Lack of data protection frameworks deters investors



To establish a vibrant, competitive, and digitally inclusive ICT sector that drives innovation, economic diversification, and youth employment, while positioning Bhutan as a regional hub for digital services by leveraging its skilled workforce, enabling policies, and trusted international brand.

Expected Outcomes by 2035

USD 300 Mn

GDP Contribution

5000

Jobs

10,000

Trained and
Certified

Two

ICT Tech
Parks

Five

Regional
Digital Hubs

Strategic Interventions

Policy and Regulatory
Support

A

1. Data Governance Framework
2. Revising Qualification Criteria for International ICT Professionals
3. Eliminate Double Taxation on Dividends

1. ICT Investment Destination Rooted in GNH and Sustainability
2. Foster Strategic International Partnerships
3. Land for Digital Bhutan

B

Promotion of ICT Sector

Infrastructure and
Logistics Enhancement

C

1. Strengthen Digital Infrastructure
2. Enable Cross-Border Digital Payments

1. Integrate AI and Emerging Technologies
2. Pilot AI and Automation in Key ICT Sub-Sectors
3. Dedicated Experimentation Space
4. National Strategy for Ethical AI and Emerging Tech

D

Technology Adoption

Capacity Building

E

1. Build Competitive ICT Talent Pipeline
2. Integrate Coding and Digital Literacy in Formal Education
3. Facilitate Industry-Recognized Certifications and Global Partnerships
4. Engage with Impact Sourcing Servicing Providers (ISSPs)
5. Launch Industry-Led Internships/ Fellowships
6. Collaborate with Universities and Tech Firms for R&D

1. Launch Awareness Campaigns
2. Strengthen Trade Facilitations
3. Establish Robust PPPs

F

Market Linkages and
Support

Brand Bhutan

G

1. Create Bhutan Tech Brand

4 Industries

Modern Medicine, Traditional and Herbal Medicine, Medical Devices, CDMO



215/600

Species used in Herbal and Traditional

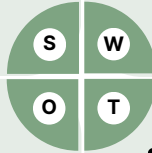


BTN 795M

High Import Dependency of Modern Medicine

- Strong regulations, clean energy, GNH-aligned care
- Rich biodiversity, institutional support, green branding

- “Clean pharma” & herbal exports
- CDMO, biotech, AI, telemedicine
- R&D via PPPs, wellness tourism, global naturals demand



- Weak R&D, MedTech, CDMO base
- High costs, import reliance, slow approvals
- Low FDI, limited global certification, overharvesting

- Competition (India, China), climate risks
- Policy gaps, slow cycles, limited scale



Vision

To develop a dynamic, inclusive, and sustainable health-based industrial sector that leverages Bhutan's natural heritage, traditional knowledge, and clean energy to drive economic diversification, innovation, and national well-being.

Expected
Outcomes
by 2035

500+

Jobs

12%
Growth

USD 3 Mn

GDP Contribution

50% Import
Reduction

USD 150,000

Export Revenues

1 Pharma Tech Industrial Park, 2 Herbal Hubs, and 6 MPUs

Strategic Interventions

Policy and Regulatory Support

A

1. BFDA Testing and Quality Assurance Expansion
2. Pharma Tech Industrial Park Near GMC with 6 Clusters
3. Smart Cold Chain Logistics Linked to 4 Main Referral Hospitals
4. Establish MPUs in Bumthang, Tashiyangtse, and Gasa
5. Create Herbal Industry Clusters with Integrated MPUs

1. Accelerated and Streamlined Regulatory Approvals
2. Launch Green Lane Corridor for Traditional/Herbal Products
3. Standardized Licensing in Park and Hubs
4. Develop Niche Activity Guidelines
5. Blanket EC for Park and Hubs
6. Time Bound Innovation Sandbox for R&D Projects
7. Create National Digital Repository
8. Medicinal Plant Conservation Protocols and Policy

B

Infrastructure and Logistics Enhancement

1. Medicinal Plant Zoning (HAMP and LAMP Zones)
2. Develop Sustainable Cultivation Protocols
3. Pilot Units for Herbal Extracts, Powders, and Packaged Productions
4. Standardize Herbal Formulations
5. Develop Legal Cannabis Derivatives with IP and Safety Framework
6. Traditional Medicine Certification and Testing Hub
7. Promote Prototypes of Low-Cost Medical Devices

Promotion of Industries/
Value Addition

C

1. Institutional Capability Enhancement for Certification and Export
2. Digital Trade Platform/Portal
3. Local Procurement Mandate for EDL and Local Medical Devices and Consumables

D

Value Chain Development

1. Blockchain for End-to-End Traceability
2. Portable Field-Tech for Herbal Zones
3. AI-Drive Biopharma Innovation Lab
4. Pilot Industry 4.0 Tools in the Park and Hubs
5. 3D Printing for Medical Device Innovation
6. Global Positioning and Indigenous Innovation through Blockchain and IP

Technology Adoption

E

1. Modular Bootcamps and Certifications in GMP Herbal Production, API Basics, and AI for Drug Discovery
2. National Pharmaceutical Workforce Development Program
3. National Scholarships for R&D, Regulatory Science, Biomanufacturing
4. Community-Based Certifications for Collectors
5. Annual Trainings for Industries and Regulators

F

Capacity Building

1. Dual Export Accelerator Portals
2. Bhutan Herbal and Pharma Industry Forum
3. Bilateral and Regional Trade Facilitation
4. Market Intelligence and Trade Analytics Unit
5. International Branding Campaign

Market Linkages and Support

G

1. GI Tagging for Bhutanese Botanicals
2. Unified Branding Architecture
3. Wellness Tourism Cluster
4. Third-Party Global Certifications

H

Branding and Global Marketing

Landscape

2.21%
GDP in 2023

342
Mineral Industries




14 Bn Tonnes
Dolomite

- Green energy, carbon-negative branding
- Low-cost electricity, rich industrial minerals
- Political Stability
- Established parks & infrastructure
- Clean industrial profile for eco-export

- Limited finance access, small domestic market
- Weak logistics & border delays
- Heavy reliance on ferro alloys
- Short mining leases, rigid value-add rules
- FDI restrictions in captive mining
- Skills gap, outdated tech, poor value-chain mapping

- Value-added products (cement, engineered stone)
- Green processing & export branding
- Mineral-linked sectors (solar, electronics)
- Rare earth exploration & FDI with ESG safeguards
- MSME crafts, product diversification
- Job creation, tech adoption, R&D, skill-building

- Commodity price swings, synthetic substitutes
- Policy inconsistency, export rejections
- Environmental risks, regional competition
- Community pushback on mining

**Vision**

To foster a highly sustainable, technologically advanced, and economically vibrant mineral industry that responsibly harnesses Bhutan’s geological endowment, including its unique capacity for clean power, to contribute significantly to the nation’s high-income GNH economy while upholding environmental integrity, ensuring social equity, and promoting intergenerational well-being.

Expected Outcomes by 2035



5000+
Jobs



11.9%
Growth

45% Import Reduction



2–3 Advanced Mineral Processing Zones

GDP Contribution

Export Revenues

Strategic Interventions

Policy and Regulatory Support

A

- Key Mineral Identifications
 - Establish Mineral Royalty Investment Fund
 - Establish Value-Added Mineral-Based Industries
 - Promote Green Mineral Products
 - Strategic Industrial Location

- Integrated Clearance and Permit System
 - Feasibility of Privatizing State-Owned Mines
 - Review Electricity Tariffs
 - Subsidized MLR
 - Fiscal Incentives
 - Creditworthiness-Based Lending Scheme
 - Exploration Support for Private Sector

B Promotion of Industries/ Value Addition

Infrastructure and Logistics Enhancement

C

- Adopt Green and Energy-Efficient Technologies
 - Trade Facilitation System Improvement

- Road and Transportation Network Improvement
 - Operationalization and Expansion of Dry Ports
 - Strengthen Standards and Certification Infrastructure
 - Feasibility Study for Mineral Processing Zones
 - Trade Routes Enhancement

D Technology Adoption

Capacity Building

E

- Support Programs in TVET and Colleges
 - Strengthen Industry Associations
 - Long-Term Skills Development Plant

- International Trade Fair Participation
 - Global Recognition and Credibility Programs
 - Leverage E-Commerce Platforms
 - Bilateral and Regional Trade Agreements
 - Enable Market Intelligence and Demand Forecasting
 - Leverage Bhutanese Embassies and Missions
 - Establish B2B Platforms

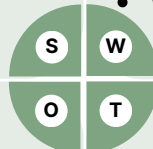
D Market Linkages and Support

Landscape

**32,600MW**
Hydro Potential**12,000MW**
Solar Potential**800MW**
Wind Potential**11.61%**
GDP in 2023**BTN 4,260 Mn**
Royalty Revenues**Increasing Energy Demands**

- Abundant hydro & solar potential
- Strong government & policy backing
- Carbon-negative, clean energy branding
- Mature hydropower export market
- Affordable green electricity

- Overreliance on hydropower
- Limited energy storage & solar manufacturing
- Policy fragmentation & slow approvals
- High capital costs, limited financing
- Skills shortage in RE tech
- Grid access, land, and procedural constraints
- Weak market competition and price discovery



- Diversification into solar, wind, biomass
- Carbon credits & green tech FDI
- Export to India/Bangladesh
- Energy storage & smart grid solutions
- Local RE manufacturing & services
- Sustainable tourism & PPPs
- Employment growth & skill development

- Regional solar competition (esp. India)
- Policy shifts in export markets
- Climate risks to hydropower (GLOFs, floods)
- Economic/geopolitical shocks
- Cybersecurity vulnerabilities



By 2035, Bhutan will be a global leader in sustainable energy, harnessing its abundant renewable resources to achieve energy self-sufficiency, drive green industrialization, and emerging a key exporter of clean power and green technologies.

Expected
Outcomes
by 2035**15,000+**
Jobs**12% Growth****Renewable Energy**
GDP Contribution**10,000 MW**
3000 MW
Hydro and Solar
Capacity

Strategic Interventions

Policy and Regulatory
Support**A**

- 1.Enhance Grid Connectivity
- 2.Advance Energy Storage Solutions
- 3.Strengthen Transmission and Cross-Border Links
- 4.Facilitate Land Access
- 5.Develop Solar Site Inventory

- 1.National Energy Policy Implementation
- 2.Streamline Investment Process Through Guidelines and Digital Platforms
- 3.Reduce Bureaucratic Hurdles
- 4.Establish Grid and Tariff Framework
5. Institutionalize Public-Private Consultations
- 6.Standardize Project Development Procedures
- 7.Promote Solar Rooftop Adoption
- 8.Harmonize Agreement Templates

BInfrastructure
Development

- 1.Establish Green Financing Facilities
- 2.Fiscal Incentives—Tax Rebates and Custom Duty Exemptions
- 3.Promote Innovative Financing Models

D

Capacity Building

- 1.Strengthen Institutions and National Capacities
- 2.Support Training and Capacity Building Programs
- 3.Facilitate Tech Transfer Agreements
- 4.Promote In-Country Training by Technical Instiutes

E

Technology Adoption

- 1.Establish Market-Based Platform for Power Transactions
- 2.Strengthen Role of DoE as the Central Authority for Power Systems and Energy Markets
- 3.Promote Cross-Border Electricity Trade
- 4.Support Establishment of Local Manufacturing Industries for Renewable Energy Components
- 5.Promote Local Maintenance Service Providers for O&M

FMarket Linkages, Support,
and Renewable Energy
Value Chain

- 1.Establish Partnerships with International Research Institutions
- 2.Transfer of Knowledge and Best Practices
- 3.Encourage Integration of Hydropower Value Chain through Derivatives
- 4.Promote Green Hydrogen as Alternative Fuel for Transport Sector

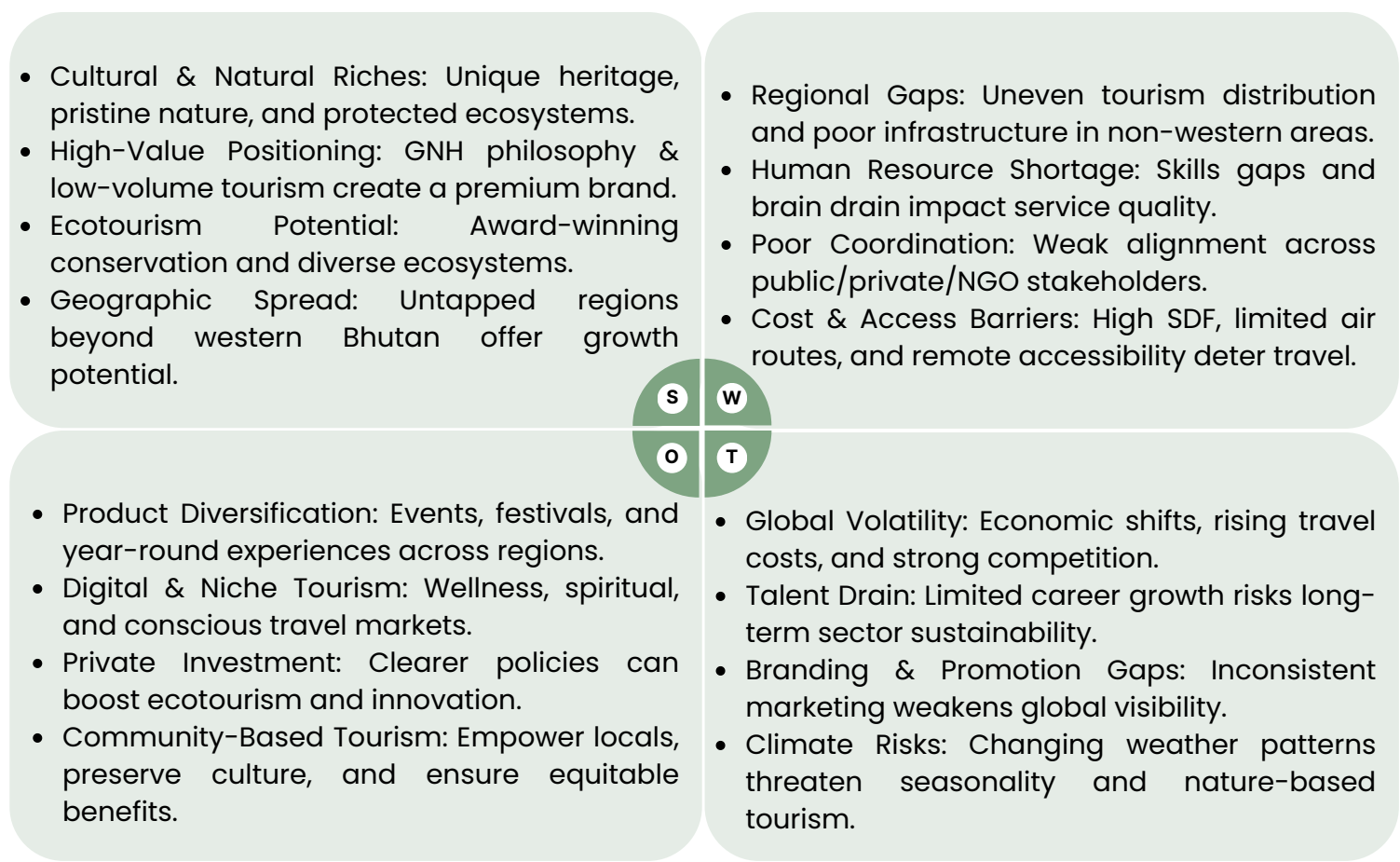
IDR TOURISM

**Landscape**

10% to GDP
USD 345M in 2019


USD 29Mn
SDF Earning, 2024


50,000 Jobs
Across 7000 Establishments





Vision By 2035, Bhutan will establish itself as a "A global leader in regenerative tourism, driving economic growth, and championing culture and environment stewardship"

Expected Outcomes by 2035

**300,000**
Annual Visitor

**USD 2.56 bn**
SDF Revenue

50% 
Private Sector Investment

**4.5+** Guest Satisfaction Score

75% Tourism Activities Ecological Restoration and Community Enhancement

Strategic Interventions

Regulatory Framework and Investment Incentives

A

- 1.Modernization of the SDF
- 2.Regional Development
- 3.Regulatory Streamlining
- 4.Strengthen and Synchronize Linkages with Other Sectors

- 1.Regional Tourism Plan
- 2.Regional Tourism Product Development and Marketing
- 3.Infrastructure and Capacity Development
- 4.Regional Development Incentives

B

Regional and Peripheral Development and Management

Product Innovation and Experience Design

C

1. Tourism Resource Re-Validation and Private Sector Development
- 2.Product Development and Marketing Initiatives

- 1.Brand Development and Strategic Positioning
- 2.Content Development and Media Engagement
- 3.Brand Implementation and Stakeholder Engagement

D

Adaptive Branding and Marketing

Capacity Building and Community Development

E

- Three-Pronged Strategy:
- 1.Establishment of Tourism Workforce Advisory Committee
 - 2.Strengthen Targeted Provision of Training and Development Programs
 - 3.Incentivization of Workforce Training and Development

| Existing Incentive | Proposed Incentive |
|---|--|
| <div>Tax Holidays (up to 10 years) for High Priority Sectors</div> <div>Renewable Energy, Data Centers, ICT and ITES, Medical Products</div> | <div>Tiered Tax Holidays (5, 7, 10 years) based on Sector Impact and Performance</div> |
| <div>Concessionary Tax Rates (5%/15%) for CSIs, ICT, etc.</div> <div>Agro Processing, Forestry-Based Industries, Tourism, Creative Industries, Mineral Based Industries, and Education Industries</div> | <div>Concessionary Tax Rates of 5% and 10% for Priority Industries based on Set Criteria</div> |
| <div>Investment Allowance on Approved Projects</div> <div>Agro Processing, Forestry-Based Industries, Tourism, Creative Industries, Mineral Based Industries, and Education Industries</div> | <div>Investment Allowance on Fixed Capital Goods, Intangible Assets, Green Technologies, and Digital Systems</div> |
| <div>ST/CD Exemptions on Machinery and Raw Materials</div> <div>Agro Processing, Forestry-Based Industries, Tourism, Creative Industries, Mineral Based Industries, and Education Industries</div> | <div>GST/CD Exemptions on Plants & Machinery, Raw Materials, Circular Economy Inputs, Eco-Label Certified Materials, and Energy-Efficient Tech</div> |
| <div>Tax Exemption for Creative Industries Employing Minimum 15 by 12 Month Period</div> <div>Creative Industries</div> | <div>Tax Exemption for Creative Industries Employing a Minimum of 5 National Employees</div> |

PERFORMANCE-BASED INCENTIVES

| Metric | Incentive | Threshold |
|---|--|---|
| Employment of Bhutanese Nationals | Additional 100% Deduction on Emoluments for up to 3 years | Hiring > 20 Bhutanese with Skill Training |
| Export Growth | Tax Credit up to 5% of Incremental Export Value for Agri Products and Value-Added Products | Min. 15% YoY Export Growth |
| Local Sourcing of Raw Materials | GST Refund or 5% Tax Credit | Use >50% Domestic Raw Materials |
| Innovation & R&D Spending | A 5% Tax Rebate on 10% of the Eligible R&D Expenditure | R&D Spending > 5% of Total Revenue |
| Green Certification and Standard-Compliant Production | 2-Year Income Tax Holiday | Must Obtain Third Party Certification |
| Import Substitution | Additional 10% Tax Deduction on Net Sales | Replaces >3% of Value of a Specific Imported Good |
| Capacity Building | Additional 100% Deduction on Capacity Building | Recognized Industry-Specific Training |
| Patent Commercialization Incentive | Tax Waiver for the First 3 Years on Income from Commercialization of Bhutanese Patents or Traditional Knowledge Products | Approved by Relevant Authority |

Financing Mechanism

Incentive



Concessionary Loans and Sector Specific Credit Quotas

All 10 Sectors

1

**Revise and Lower Interest Rates to 5–6%
Sector-Specific Credit Quotas at Concessional Rate without Collateral**

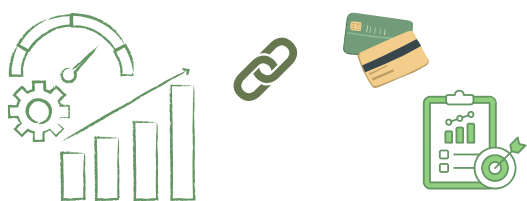


Diverse Financing Models

**All 10 Sectors
and All CSI**

2

Offer Financing Models other than Collateral Models



Performance-Linked Financing

**All 10 Sectors
and All CSI**

3

Offer Loan Based on Credit Worthiness Rather than Collateral



Asset-Based Lending

**All 10 Sectors
and All CSI**

4

Facilitate Loans Secured Against Industrial Assets Rather than Collateral



Revenue-Based Financing

**All 10 Sectors
and All CSI**

5

Instead of Fixed EMI Loans, Industries Repay Based on Percentage of Monthly Revenue



Credit Guarantee Schemes

**All 10 Sectors
and All CSI**

6

Reintroduce and Operationalize Credit Guarantee Schemes Tailored for Startups, CSMLs, and New Industries Ventures



Blended and Soft Financing

**All 10 Sectors
and All CSI**

7

Introduce Blended Financing on Collateral-free/ Soft Loan Options through Dedicated Industrial Development Funds

Enablers

Policy and Regulatory Framework

- 1.Improve physical, digital and industrial infrastructure including transportation and utilities
- 2.Maintain updated data on workforce availability
- 3.Improve Access to Finance
- 4.Encourage Public Private Partnerships
- 5.Improve investor aftercare and retention services.

1

- 1.Develop and Adopt an Investment Act
2. Clear and well-defined sectoral policies for FDI
- 3.Streamline the single window service for FDI licensing process
- 4.Implement sector-specific tax incentives
- 5.Improve and Strengthen the legal protection for investors

2

Investment Ecosystem

- 1.Develop sector specific value proposition
- 2.Develop sector specific investible projects
- 3.Maintain a comprehensive database
- 4.Conduct targeted outreach and promotion
- 5.Focus on refreshed marketing and consistent branding

Investment Attraction

3

Sector Wise FDI Opportunities

Agro Industry

- Agri Tech
- Value Added Agro Processing
- Organic Inputs

Creative Industry

- Creative Co-Production
- Animation and Game Development
- Fashion and Handicraft

ICT Industry

- Research Projects in AI, Blockchain and IoT
- E-Learning Platforms
- BPO and KPO

Data Center Industry

- Sustainable Data Centers

Forest-Based Industry

- Sustainable Timber Harvesting
- Engineered Wood
- Extraction of essential oils and herbal products

Tourism Industry

- Adventure and Eco-Tourism
- Wellness Tourism

Medical Industry

- Contract Manufacturing of essential Medicines
- Herbal and traditional medicines
- Manufacturing of medical devices

Renewable Energy

- Development of Hydro, Solar and Wind Projects
- Manufacturing of renewable equipments

Education Industry

- Tertiary and Higher Education Institutions
- Technical and vocational Education and Training

Mineral Industry

- Mineral Beneficiation beyond crushing or powdering

Investible Projects to be developed

