Economic Analysis Framework

In this document:

Overview and Purpose

The Economic Analysis Framework provides stakeholders with a structured approach to assess, evaluate, and plan economic systems within the Nested Sovereignty Framework. It enables communities, regions, and global actors to examine current economic conditions, model potential interventions, and monitor outcomes through a methodology that honors sovereignty, interoperability, justice, and adaptability. By integrating quantitative metrics with qualitative insights, including indigenous and marginalized perspectives, this framework supports evidence-based decision-making while ensuring cultural relevance and inclusivity.

Core Functions

- **Baseline Assessment**: Analyze existing economic conditions before framework implementation

- **Intervention Modeling**: Project impacts of various economic interventions (e.g., currencies, cooperatives)
- **Outcome Evaluation**: Measure results against sovereignty, justice, and adaptability goals
- **Cross-Scale Analysis**: Connect local, regional, and global economic data for comprehensive insights
- **Decision Support**: Provide evidence for governance and policy decisions

Guiding Principles

- **Mixed Methods**: Combine quantitative metrics with qualitative insights and traditional knowledge
- **Participatory Analysis**: Include diverse stakeholders, especially marginalized voices, in analytical processes
- **Transparent Methodology**: Ensure all analytical approaches are accessible and understandable to communities
- **Appropriate Technology**: Provide both high-tech and low-tech analytical options for diverse contexts
- **Cultural Relevance**: Respect and integrate indigenous economic concepts and evaluation approaches

Analytical Components

The framework consists of six interconnected analytical components that can be applied across local, regional, and global scales:

1. Circulation Analysis

Purpose: Examine how value moves through economic systems, identifying leakages, multiplier effects, and concentration patterns

Key Methods:

- **Local Multiplier Mapping**: Track the number of times currency circulates locally before leaving the community
- **Network Flow Visualization**: Map transaction relationships between economic actors

- **Leakage Identification**: Quantify value leaving local economies through external purchases
- **Wealth Concentration Assessment**: Measure distribution of financial assets across population segments

Sample Metrics:

- Local Economic Retention Rate: Percentage of value remaining in community after 1, 3, and 6 months
- Transaction Network Density: Connections between local economic actors
- Diversity Index: Variety of transaction types across economic sectors

2. Commons Resource Analysis

Purpose: Evaluate management, access, and sustainability of shared resources within economic systems

Key Methods:

- **Resource Mapping**: Catalog commons resources and their governance structures
- **Access Equity Assessment**: Measure distribution of commons benefits across demographic groups
- **Sustainability Indicators**: Track ecological health and regenerative capacity of commons
- **Traditional Stewardship Evaluation**: Incorporate indigenous knowledge in commons assessment

Sample Metrics:

- Commons Access Index: Percentage of population with meaningful access to commons resources
- Governance Participation Rate: Diversity and inclusivity of commons decision-making
- Ecological Health Indicators: Specific measures of biodiversity, soil health, water quality, etc.

3. Value Foundation Analysis

Purpose: Assess the underlying foundations that give currencies and economic systems their value and stability

Key Methods:

- **Value Triangle Assessment**: Evaluate balance between community trust, productive backing, and currency design
- **Stability Indicator Tracking**: Monitor volatility, inflation, and other measures of economic stability
- **Trust Network Mapping**: Identify relationships that reinforce economic confidence
- **Exchangeability Analysis**: Measure ease of conversion between different forms of value

Sample Metrics:

- Trust Index: Community confidence in local economic systems measured via surveys
- Value Foundation Balance: Percentage distribution across trust, productivity, and design elements
- Volatility Ratio: Stability of local currency compared to national currencies

4. Justice and Equity Analysis

Purpose: Evaluate how economic benefits, burdens, and opportunities are distributed across populations

Key Methods:

- **Distributional Impact Assessment**: Measure how economic outcomes vary across demographic groups
- **Opportunity Mapping**: Identify barriers and enablers to economic participation
- **Historical Equity Analysis**: Examine how current distributions relate to historical inequities
- **Power Dynamics Evaluation**: Assess how decision-making power shapes economic outcomes

Sample Metrics:

- Equity Gap Index: Measurable differences in economic outcomes between groups
- Opportunity Access Rate: Percentage of marginalized populations with access to economic resources
- Power Distribution Metric: Concentration of economic decision-making authority

5. Resilience and Adaptability Analysis

Purpose: Assess economic systems' capacity to withstand shocks and adapt to changing conditions

Key Methods:

- **Shock Simulation**: Model responses to economic, environmental, and social disruptions
- **Diversity Assessment**: Measure variety of economic activities, resources, and connections
- **Feedback Loop Mapping**: Identify information flows that enable system learning
- **Adaptive Capacity Evaluation**: Assess governance mechanisms for changing course when needed

Sample Metrics:

- Resilience Index: Composite measure of diversity, redundancy, and modularity in economic systems
- Recovery Time: Estimated period to restore core functions after disruption
- Adaptation Rate: Speed of policy and practice updates in response to changing conditions

6. Cross-Scale Integration Analysis

Purpose: Evaluate how effectively economic systems connect across local, regional, and global scales

Key Methods:

- **Interoperability Assessment**: Measure seamless exchange across different economic systems
- **Sovereignty Balance Evaluation**: Assess appropriate decision-making at each scale
- **Value Chain Mapping**: Track economic relationships across geographic scales
- **Policy Coherence Analysis**: Identify alignments and conflicts between governance levels

Sample Metrics:

- Interoperability Index: Ease of economic interaction across different scales
- Sovereignty Retention Rate: Percentage of decisions made at appropriate scale
- Cross-Scale Benefit Distribution: How value generated is shared across local, regional, global actors

Analysis Process

The framework employs a seven-step process designed to be accessible, participatory, and adaptable to diverse contexts:

1. Participatory Scoping

Purpose: Define analysis boundaries and questions with inclusive community participation

Key Activities:

- Convene diverse stakeholder groups with minimum 50% representation from women, non-binary, indigenous, and marginalized communities
- Identify key economic questions and concerns through facilitated dialogue
- Establish appropriate scale and boundaries for analysis
- Co-create research questions aligned with community priorities

Tools:

- **Stakeholder Mapping Template**: Identifies relevant participants across demographic groups
- **Question Development Guide**: Structures dialogue to surface key analytical needs
- **Visual Boundary Setting**: Uses maps and diagrams for non-technical boundary definition

2. Mixed-Method Data Collection

Purpose: Gather both quantitative and qualitative information through culturally appropriate methods

Key Activities:

- Design data collection instruments in local languages with community input
- Train local researchers, prioritizing indigenous and marginalized community members
- Implement surveys, interviews, focus groups, and participatory mapping
- Collect quantitative economic data through transactions, observations, and existing records

Tools:

- **Community Survey Toolkit**: Customizable instruments for economic data gathering

- **Storytelling Interview Guide**: Collects qualitative economic narratives

- **Participatory GIS Template**: Enables spatial mapping of economic activities

- **Transaction Tracking Forms**: Paper and digital tools for monitoring economic exchanges

3. Baseline Analysis and Visualization

Purpose: Establish current economic conditions through accessible analytical approaches

Key Activities:

- Process and analyze collected data using both technical and participatory methods

- Create visual representations of economic conditions accessible to diverse literacy levels

- Identify key patterns, challenges, and opportunities in current economic systems

- Document baseline conditions for future comparison

Tools:

- **Economic Visualization Templates**: Create charts, maps, and diagrams from data

- **Participatory Pattern Recognition**: Facilitated community analysis of economic data

- **Baseline Documentation Form**: Standardizes recording of initial conditions

4. Intervention Modeling

Purpose: Project potential outcomes of framework implementation components

Key Activities:

- Model anticipated impacts of various economic innovations (currencies, cooperatives, etc.)

- Simulate changes to economic flows, access, and equity under different scenarios

- Engage communities in evaluating model outputs and refining assumptions

- Identify key leverage points for maximum positive impact

Tools:

- **Currency Simulation Tool**: Models effects of local currency implementation

- **Cooperative Impact Calculator**: Projects economic outcomes of cooperative formation

- **Trade Zone Modeling Template**: Assesses regional trade system impacts

- **AUBI Distribution Simulator**: Models effects of basic income on local economies

5. Implementation Analysis

Purpose: Monitor and assess economic changes during framework implementation

Key Activities:

- Track key indicators throughout implementation phases

- Compare actual outcomes with modeled projections

- Identify emerging patterns, challenges, and opportunities

- Document lessons learned and successful approaches

Tools:

- **Implementation Tracking Dashboard**: Visualizes progress against key metrics

- **Variance Analysis Template**: Compares projected and actual outcomes

- **Emerging Patterns Recognition Guide**: Helps identify unexpected developments

6. Adaptive Refinement

Purpose: Use analytical insights to continuously improve economic systems

Key Activities:

- Review analytical findings with diverse stakeholders

- Identify necessary adjustments to economic strategies and implementations

- Document reasons for adaptations and expected outcomes

- Update models and projections based on implementation experience

Tools:

- **Adaptation Decision Matrix**: Guides choices based on analytical findings

- **Stakeholder Feedback Integration Template**: Structures community input on refinements

- **Impact Projection Update**: Revises expectations based on implementation data

7. Transparent Reporting and Knowledge Sharing

Purpose: Communicate findings and lessons across the nested framework

Key Activities:

- Create accessible reports for diverse audiences and literacy levels

- Share insights across communities implementing similar approaches

- Document case studies of successful implementations and lessons learned

- Contribute to the global knowledge commons on economic transformation

Tools:

- **Multi-Format Reporting Templates**: Generate technical, executive, and community reports

- **Knowledge Exchange Protocol**: Structures sharing across implementing communities

- **Case Study Documentation Format**: Standardizes success story recording

Metrics and Indicators

The framework employs a nested set of indicators that connect local, regional, and global economic assessment while ensuring relevance to diverse contexts:

Core Universal Indicators

These indicators are tracked across all implementations to enable comparison and aggregation:

Indicator	Definition	Measurement Approach	Target
Local Transaction Share	Percentage of economic activity occurring through framework-aligned systems	Transaction logs with quarterly sampling	70% by 2035
Commons Access Equity	Distribution of commons benefits across demographic groups	Access surveys and observation with equity scoring	80% equitable access by 2035
Value Stability	Volatility of local/regional currencies compared to	Price sampling of essential goods	50% reduction in volatility by 2033

Indicator	Definition	Measurement Approach	Target
	national currencies	basket	
Economic Decision Sovereignty	Percentage of economic decisions made at appropriate scale	Governance analysis with decision mapping	70% sovereignty by 2035
System Interoperability	Ease of exchange and cooperation across economic scales	Interoperability testing with transaction sampling	90% compatibility by 2035
Redistribution Effectiveness	Equitable flow of resources to underserved communities/regions	Fund flow analysis with demographic mapping	10% regional trade zone revenue redistributed by 2032
Marginalized Economic Participation	Engagement of traditionally excluded groups in economic systems	Participation surveys with demographic analysis	80% participation rate by 2035

Context-Specific Indicators

Communities and regions select additional indicators from a menu to reflect local priorities:

Ecological-Economic Indicators

- Carbon Footprint of Economic Activity (CO_2e per unit of value)
- Water Use Intensity (liters per unit of value)
- Biodiversity Impact (species richness in economic zones)
- Circular Material Flow (percentage of resources reused/recycled)

Social-Economic Indicators

- Care Economy Value (recognition of traditionally unpaid work)

- Economic Mobility (generational change in economic position)

- Time Sovereignty (control over work schedules and time allocation)

- Cooperation Density (number and strength of cooperative relationships)

Cultural-Economic Indicators

- Traditional Knowledge Integration (use of indigenous practices in economic activities)

- Cultural Expression Value (economic recognition of artistic and cultural work)

- Intergenerational Knowledge Transfer (economic skills passed between generations)

- Language Diversity in Economic Activities (use of indigenous and local languages)

Well-being Economic Indicators

- Work-Life Balance (time allocation across activities)

- Economic Stress Levels (financial anxiety measures)

- Meaningful Work Access (alignment of work with personal values)

- Community Connection Through Economic Activity (relationship strength via economic ties)

Indicator Selection Process

Communities implement a participatory process to select 10-15 total indicators:

1. Begin with the 7 Core Universal Indicators

2. Add 3-8 Context-Specific Indicators through community dialogue

3. Document selection rationale and measurement approaches

4. Review and refine indicator set annually

Visualization and Reporting

The framework uses accessible visualization approaches to ensure economic analysis is understood across diverse stakeholders:

Local Visualization Tools

- **Community Economic Dashboard**: Interactive or printed displays showing local indicators with simple gauges and trend lines

- **Currency Flow Maps**: Visual representations of how value moves through community, highlighting circulation and leakage

- **Access Equity Charts**: Visual displays of how different populations access economic opportunities and resources

- **Participatory System Maps**: Co-created visualizations of local economic relationships and dependencies

Regional Visualization Tools

- **Bioregional Exchange Networks**: Maps showing cross-community trade and resource flows

- **Comparative Performance Dashboards**: Visual comparison of indicators across communities

- **Regional Redistribution Flows**: Sankey diagrams showing resource movements among communities

- **Trade Zone Impact Visuals**: Maps showing environmental and social impacts of regional trade

Global Visualization Tools

- **Nested Systems Diagram**: Visual representation of local-regional-global economic relationships (green local circles, blue regional webs, red global sphere)

- **Global Commons Governance Maps**: Visual display of commons management across regions

- **AUBI Distribution Dashboards**: Visualization of basic income implementation and impacts globally

- **Framework Adoption Mapping**: Geographic display of implementation progress worldwide

- **Decision Rights Diagram**: Maps authority and decision-making flows across scales

- **Dashboard Mock-Ups**: Standardized gauge, chart, and indicator displays for various metrics

Reporting Approaches

The framework employs multi-format reporting to ensure accessibility:

Technical Reports

- Comprehensive data analysis for specialists and researchers
- Detailed methodological documentation
- Statistical significance testing and correlation analysis
- Integration with global economic research

Executive Summaries

- Condensed insights for decision-makers
- Key findings and recommendations
- Strategic implications and priority actions
- Cross-scale comparison and benchmarking

Community Reports

- Highly visual presentations accessible to diverse literacy levels
- Local language translations with cultural adaptation
- Storytelling format connecting data to community experience
- Clear connections between findings and local priorities

Accessibility Features

- Screen reader compatibility for all digital reports
- Audio versions for oral tradition communities
- High contrast visuals with colorblind-friendly palettes
- Tactile reporting options for vision-impaired stakeholders

Case Studies and Applications

The framework includes documented applications across diverse contexts to guide implementation:

Bristol Pound Analysis (Urban Context)

Context: City-scale local currency implementation in Bristol, UK to increase local economic resilience.

Analysis Process:

1. **Context Mapping**: Identified 500 SMEs, 20 cooperatives, and high digital access in the community.
2. **Data Collection**: Tracked transactions, business participation, and user satisfaction via surveys.
3. **Performance Evaluation**: Measured local transaction share, cooperative penetration, and community feedback.
4. **Gap Analysis**: Identified limited interoperability with regional systems.
5. **Intervention Design**: Developed API for regional trade zone integration.

Key Findings:

- 15% increase in local spending through currency circulation
- 3.5x multiplier effect compared to national currency
- 70% local transaction share achieved
- 50% cooperative penetration among businesses
- 85% user satisfaction rate via community surveys
- 30% initial interoperability with regional systems, targeted for improvement

Tools Used: Economic Health Index Dashboard, Currency Simulator App, Audit Report Template

Lessons for Implementation:

- Currency design must align with existing business transaction patterns
- Marketing and outreach are critical success factors
- Integration with municipal services significantly increases adoption

- Regional interoperability requires intentional design from early stages

Great Lakes Commons Analysis (Bioregional Context)

Implementation Context: Cross-jurisdiction water commons governance **Analytical Focus**: Equitable access and management of shared water resources **Key Findings**:

- 40% reduction in water-related conflicts through cooperative governance
- Indigenous management practices increased water quality by 30%
- Cross-jurisdictional cooperation required formal coordination structures **Lessons for Implementation**:
- Commons governance requires clear nested decision protocols
- Traditional ecological knowledge significantly improves resource management
- Cross-border commons necessitate specialized governance mechanisms

AUBI Pilot Analysis (Low-Resource Context)

Implementation Context: Rural basic income pilot in Africa **Analytical Focus**: Economic empowerment and local value circulation **Key Findings**:

- $500/month local basic income created 2.7x multiplier effect
- Women-led enterprises increased by 45% during pilot period
- Customized distribution methods required for different geographic contexts **Lessons for Implementation**:
- Distribution infrastructure must precede implementation
- Community-led eligibility verification increases legitimacy
- Integration with complementary initiatives amplifies impact

Digital Currency Analysis (High-Tech Context)

Implementation Context: Blockchain-based community currency **Analytical Focus**: Technology adoption patterns and transaction efficiency **Key Findings**:

- 80% digital adoption achieved through mixed digital-analog approach
- Transaction costs reduced by 90% compared to traditional banking

- Technology learning curve required phased implementation **Lessons for Implementation**:

- Hybrid digital-paper systems maximize accessibility

- User experience design critically impacts adoption

- Offline functionality essential for resilience

Tools and Resources

The framework includes practical tools for implementing economic analysis:

Economic Analysis Starter Kit

Essential tools for basic analysis available in the Economic Integration Seed Kit:

- Basic data collection templates (paper and digital)

- Simple analysis spreadsheets with built-in formulas

- Visual reporting templates for common indicators

- Facilitation guides for participatory analysis

Advanced Analysis Resources

Additional tools for comprehensive analysis:

- R and Python scripts for sophisticated economic modeling

- GIS mapping tools for spatial economic analysis

- Network analysis software for economic relationship mapping

- Econometric packages for causal impact evaluation

Training and Capacity Building

Resources for developing local analytical capacity:

- Economic analysis training curriculum (basic and advanced)

- Facilitator guides for participatory economics workshops

- Mentorship protocols for supporting new analysts

- Young economist development program

Accessibility Tools

Specialized resources ensuring inclusive analysis:

- Screen-reader compatible analytical platforms
- Oral tradition-friendly data collection methods
- Visual analysis tools for different literacy levels
- Multilingual analysis templates in 10 languages

Implementation Guidelines

To ensure effective implementation of the Economic Analysis Framework:

Stakeholder Inclusion

- Engage municipalities, indigenous groups, and marginalized communities early in the process
- Ensure minimum 50% representation from women, non-binary, indigenous, and other marginalized groups
- Use accessible formats (Braille, audio, 10+ languages) for all materials
- Implement culturally appropriate engagement strategies for different contexts

Resource Adaptation

- Tailor tools for low-resource settings (e.g., SMS-based surveys, paper guides)
- Leverage existing assets via Resource Mapping Tool
- Begin with minimum viable analysis approach when resources are limited
- Build capacity progressively, starting with core indicators before expanding

Phased Rollout

- Start with pilot communities (10 cities by 2027)

- Scale regionally (2028-2030), then globally (2032-2035)

- Begin with simplified analysis (3-5 indicators) before expanding

- Develop local analytical capacity alongside implementation

Funding Strategy

- **Phase 1**: $5M (2026-2028) from crowdfunding, grants
  - Basic data collection infrastructure

  - Pilot analysis capacity building

  - Core visualization tools development

- **Phase 2**: $20M (2029-2031) from regional budgets, private sector
  - Regional analytical integration

  - Advanced modeling capabilities

  - Cross-community knowledge sharing

- **Phase 3**: $100M (2032-2035) from multilateral funds, public-private partnerships
  - Global analytical infrastructure

  - Advanced visualization systems

  - Comprehensive training programs

  - System-wide integration

Implementation Support Resources

- Economic Financing Navigator for funding options

- Implementation Sequence Planner for staged deployment

- Capacity Assessment Tool for resource planning

- Technical Assistance Directory for specialized support

Risk Mitigation

The framework includes strategies to address common implementation risks:

Political Resistance

- **Risk**: Government or institutional opposition to economic analysis findings or methods
- **Mitigation Strategies**:
    - Frame analysis in terms of shared objectives (resilience, prosperity, sustainability)
    - Engage political stakeholders early in the design process
    - Emphasize complementary nature of framework to existing systems
    - Develop robust evidence base with transparent methodology
    - Implement advocacy campaigns to build public support for analysis

Technical Failures

- **Risk**: Data collection systems, analysis tools, or visualization platforms malfunction
- **Mitigation Strategies**:
    - Develop offline alternatives for all digital systems
    - Implement redundant data collection methods
    - Create simple backup analysis protocols for technology failures
    - Test all systems thoroughly before full implementation
    - Train local teams in troubleshooting and contingency measures

Data Quality Issues

- **Risk**: Incomplete, inaccurate, or biased data undermining analysis
- **Mitigation Strategies**:
    - Implement rigorous data validation protocols
    - Use multiple sources for critical indicators
    - Train data collectors in quality assurance techniques
    - Develop transparent data cleaning and verification processes
    - Include data quality metrics in all analyses

Capacity Limitations

- **Risk**: Insufficient local skills or resources to implement analysis

- **Mitigation Strategies**:
  - Begin with minimum viable analysis approach
  - Provide graduated training programs for different skill levels
  - Develop mentor networks for implementation support
  - Create simplified analysis tools requiring minimal expertise
  - Establish regional support networks for technical assistance

Stakeholder Disengagement

- **Risk**: Community members lose interest or trust in analytical process
- **Mitigation Strategies**:
  - Ensure analysis addresses community-identified priorities
  - Provide tangible benefits from analytical insights
  - Make results accessible through diverse communication channels
  - Create meaningful participation opportunities throughout process
  - Celebrate and publicize successful applications of analysis

Integration with Framework

The Economic Analysis Framework connects directly to other components of the Nested Sovereignty Framework:

Connection to Core Principles

- **Sovereignty**: Analysis methods honor local decision-making about what to measure and how
- **Interoperability**: Standardized core metrics enable cross-scale comparison and aggregation
- **Justice**: Explicit focus on equity and inclusion in both analytical process and metrics
- **Adaptability**: Continuous refinement of analysis based on implementation learning

Connection to Implementation Timeline

- **Phase 1 (2026-2028)**: Baseline analysis and intervention modeling for pilot programs

- **Phase 2 (2029-2031)**: Comparative analysis of pilot outcomes to inform scaling

- **Phase 3 (2032-2034)**: Cross-regional analysis to identify success patterns

- **Phase 4 (2035)**: Comprehensive impact evaluation across framework implementation

Connection to Technical Systems

- Integration with Blockchain Ledger Platform for transaction data

- Connection to Nested Economic Health Index Dashboard for visualization

- Interoperability with DecideTogether Platform for participatory analysis

- Data sharing protocols with Global Commons Governance systems

Connection to Decision Protocols

- Analysis provides evidence base for adaptive governance decisions

- Evaluation findings trigger predefined adaptation protocols when thresholds are crossed

- Impact assessments inform redistribution mechanism allocations

- Performance metrics guide crisis response fund disbursements

Appendices

Glossary of Terms

- **AUBI**: Adaptive Universal Basic Income, adjusted by local and global indices

- **Commons Access Index**: Measure of equitable resource distribution across populations

- **Interoperability**: The ability of different economic systems to exchange value and information

- **Local Transaction Share**: Percentage of economic activity occurring within community-controlled systems

- **Nested Economic Health Index**: Composite metric (40% transactions, 30% access, 30% interoperability)

- **Sovereignty**: Community control over economic decisions and resources

- **Value Foundation Triangle**: Balance of community trust, productive backing, and currency design

Visual Resources

- **Nested Systems Diagram**: Green circles (local), blue webs (regional), red sphere (global)
- **Decision Rights Diagram**: Maps authority across scales
- **Value Foundation Triangle**: Visual representation of currency stability foundations
- **Dashboard Mock-Up**: Gauges for sovereignty, equity, interoperability
- **Economic Flow Diagram**: Visualization of value circulation within nested systems

Reference Materials

- Community Currency Design Template
- AUBI Implementation Guide
- Commons Management Toolkit
- Economic Financing Navigator

Contact and Support

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