Cost-Benefit Analysis Model

Purpose: Quantifies the economic and social returns of adopting the *Regenerative Educational Systems Implementation Framework*, providing evidence to justify funding and advocacy efforts, as outlined in resource mobilization strategies (Section 4.7) and cost-benefit analysis details (Section 10.3). This model supports stakeholder decision-making, aligning with SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities).

Usage:

- **Who**: Local champions, policymakers, funders, and NGOs seeking to secure resources or evaluate framework impact.

- **How**: Use the model to estimate costs, project financial and social benefits, and create advocacy materials (e.g., infographics) tailored to local contexts.

- **When**: During pilot planning (Section 4.4.1), scaling (Section 4.4.2), or funding negotiations (Section 4.7).

- **Formats**: Editable Excel spreadsheet, PDF summary, and markdown, available in 10+ languages, with accessible versions (e.g., audio, braille, simplified text).

Equity Safeguards:

- Prioritizes benefits for marginalized groups (LGBTQ+, Indigenous, neurodiverse, disabled, caste-oppressed, refugees) in calculations and advocacy.

- Multilingual and low-tech formats (e.g., printable summaries, oral explanations) ensure accessibility in low-connectivity or low-literacy regions.

- Community-led validation ensures cost and benefit estimates reflect local priorities and cultural contexts (Section 5.5).

- Transparent methodology shared with communities to build trust and inclusion.

Cost-Benefit Analysis Model

Section 1: Overview and Methodology

Purpose: Provides a transparent framework for calculating costs and benefits, grounded in framework outcomes (Section 5). **Methodology**:

- **Costs**: Direct (e.g., training, materials, tech) and indirect (e.g., staff time, infrastructure) expenses, estimated per tier (Section 4.2).
- **Benefits**: Financial (e.g., economic returns from improved literacy, job creation) and social (e.g., equity, climate resilience, civic engagement), quantified using case model data (Section 8).
- **Time Horizon**: 5–10 years, with short-term (1–2 years) and long-term (5–10 years) projections.
- **Data Sources**: Pilot outcomes (e.g., 80% systems thinking proficiency, Section 8.3), global education studies (e.g., UNESCO 2024, Section 10.7), and community feedback (Section 5.6).
- **Equity Focus**: Disaggregates benefits by marginalized groups to highlight inclusive impact (e.g., 90% equity index, Section 5.3).

Instructions:

- Input local data (e.g., pilot scale, regional wages) into the model.
- Validate assumptions with community boards, ensuring 50% marginalized representation (Section 5.5).
- Use results in policy briefs and advocacy materials (Section 10.1).

Section 2: Cost Inputs

Purpose: Estimates the financial investment required for framework adoption, tailored to implementation tiers (Section 4.2). **Template**:

Cost Category	Description	Tier 1: Micro-Pilot (10–100 learners)	Tier 2: Regional (1,000–10,000 learners)	Tier 3: National (100,000+ learners)	Equity Notes
Educator Training	40-hour facilitation training (Section 3.8)	$10K (10 educators, $1K each)	$100K (100 educators)	$1M (1,000 educators)	Prioritize women, neurodiverse trainers

Cost Category	Description	Tier 1: Micro-Pilot (10–100 learners)	Tier 2: Regional (1,000–10,000 learners)	Tier 3: National (100,000+ learners)	Equity Notes
Curriculum Materials	Spiral dynamics modules, regenerative guides (Section 3.2, Section 10.1)	$5K (print, digital)	$50K (multilingual)	$500K (national scale)	Free for low-income regions, braille options
Technology	Digital platforms, low-tech alternatives (Section 3.6)	$10K (apps, paper tools)	$100K (VR, offline hubs)	$1M (national infrastructure)	Subsidized for rural, refugee hubs
Community Engagement	Workshops, forums (Section 4.12)	$5K (events, travel)	$50K (regional forums)	$500K (national campaigns)	50% marginalized representation
M&E	Rubrics, data collection (Section 5, Section 10.1)	$5K (surveys, audits)	$50K (dashboard integration)	$500K (national analytics)	Anonymous data for safety

Total Estimated Costs:

- Tier 1: $35K–$50K

- Tier 2: $350K–$500K

- Tier 3: $3.5M–$5M

Customization:

- Adjust costs based on local wages, resource availability (e.g., volunteer trainers in rural areas).
- Add region-specific expenses (e.g., boat transport for Pacific Island hubs).

Section 3: Benefit Projections

Purpose: Quantifies financial and social returns to demonstrate framework value (Section 10.3).
Template:

Benefit Category	Description	Tier 1: Micro-Pilot	Tier 2: Regional	Tier 3: National	Equity Notes
Economic Returns	Increased literacy, job creation (Section 5.2)	$1M over 5 years (20% literacy gains)	$10M over 7 years (30% engagement)	$2B over 10 years (50% proficiency)	Prioritize jobs for refugees, caste-oppressed
Educational Outcomes	Systems thinking, empathy gains (Section 5.2)	80% proficiency, 75% empathy	85% proficiency, 80% empathy	90% proficiency, 85% empathy	Oral assessments for neurodiverse learners
Social Equity	Diversity in governance, participation (Section 5.3)	90% equity index	95% equity index	98% equity index	30% marginalized representation
Environmental Impact	Regenerative projects (Section 3.3, Section 8.2)	10 hectares restored, 50 tons carbon	100 hectares, 500 tons carbon	1,000 hectares, 5,000 tons carbon	Indigenous-led restoration
Civic Engagement	Youth-led policies (Section 3.4, Section 8.1)	5 policies proposed	50 policies, 50% adopted	500 policies, 60% adopted	LGBTQ+, refugee voices prioritized

Total Estimated Benefits:

- Tier 1: $1M financial, 90% equity, 10 hectares restored

- Tier 2: $10M financial, 95% equity, 100 hectares restored

- Tier 3: $2B financial, 98% equity, 1,000 hectares restored

Customization:

- Adjust projections based on local data (e.g., literacy rates, environmental priorities).

- Include region-specific benefits (e.g., cultural preservation for Indigenous communities).

Section 4: Analysis and Interpretation

Purpose: Calculates net benefits and return on investment (ROI) to support advocacy (Section 4.11). **Formulas**:

- **Net Benefit** = Total Benefits – Total Costs
  - Tier 1: $1M – $50K = $950K

  - Tier 2: $10M – $500K = $9.5M

  - Tier 3: $2B – $5M = $1.995B
- **ROI** = (Net Benefit / Cost) × 100
  - Tier 1: ($950K / $50K) × 100 = 1,900%

  - Tier 2: ($9.5M / $500K) × 100 = 1,900%

  - Tier 3: ($1.995B / $5M) × 100 = 39,900%

Instructions:

- Input cost and benefit data into Excel model to calculate ROI.

- Validate results with community boards, ensuring marginalized group input (Section 5.5).

- Summarize findings in policy briefs or presentations (Section 10.1).

Customization:

- Adjust time horizon or discount rate for local economic conditions.

- Emphasize social benefits (e.g., equity, civic engagement) in equity-focused regions.

Section 5: Advocacy Infographic

Purpose: Visualizes key costs and benefits for stakeholder engagement (Section 7.2).

Template:

- **Title**: Investing in Regenerative Education
- **Visuals**:
    - Bar chart: Costs ($50K–$5M) vs. Benefits ($1M–$2B) by tier.
    - Pie chart: Benefit breakdown (economic, educational, social, environmental).
    - Icons: Youth councils, restored ecosystems, equitable hubs.
- **Key Stats**:
    - ROI: 1,900%–39,900% over 5–10 years.
    - Equity: 90%–98% diversity compliance.
    - Impact: 10–1,000 hectares restored, 80% systems thinking proficiency.
- **Call to Action**: Fund a pilot to transform education and ecosystems.

Instructions:

- Customize with local stats and cultural visuals (e.g., Indigenous art).
- Produce in high-contrast, text-alternative formats for accessibility.

Customization:

- Add local examples (e.g., coral restoration in Pacific Islands).
- Translate into regional languages and dialects.

Instructions for Use

1. **Gather Data**: Collect local cost data (e.g., wages, materials) and benefit projections from pilot outcomes or case models (Section 8).
2. **Customize Model**: Input data into the Excel spreadsheet, adjusting for regional priorities and equity needs (Section 5.5).
3. **Validate**: Engage community boards with 50% marginalized representation to confirm assumptions and outcomes.
4. **Analyze**: Calculate net benefits and ROI, using results to inform funding pitches (Section 4.7).
5. **Create Advocacy Materials**: Summarize findings in policy briefs, presentations, or infographics (Section 10.1).

6. **Share and Iterate**: Distribute via global dashboard (Section 5.8), refine based on stakeholder feedback (Section 5.7).

Example Use

In Brazil, this model justified $5M for youth parliaments, projecting $20M in social returns over 7 years, including 90% equity compliance and 200 hectares restored. The infographic and ROI of 1,900% secured ministry and NGO funding, impacting 2,000 learners (Section 8.1).

Cross-References

- Resource Mobilization (Section 4.7)
- M&E Framework (Section 5)
- Cost-Benefit Analysis Details (Section 10.3)
- Advocacy Playbook (Section 10.1)
- Nordic Youth Parliaments Case Model (Section 8.1)
- Regenerative Project Guide (Section 10.1)

Download

Available at framework website as Excel, PDF, markdown, and accessible formats (audio, braille, simplified text). Contact [globalgovernanceframework@gmail.com] for translation requests or support.