



Entrepreneurial Bricolage in Climate-Vulnerable Communities

Prof. Trish Reay

Professor, University of Alberta, Canada

Abstract

Climate-vulnerable communities frequently confront overlapping constraints involving unstable livelihoods, limited financial capital, disrupted infrastructure, uncertain resource availability, weak market access, environmental stress, and restricted institutional support. Conventional entrepreneurial models that assume access to optimized resources may therefore provide an incomplete explanation of how local enterprises emerge and persist in such settings. This study examines entrepreneurial bricolage as a resource-construction mechanism through which community-based entrepreneurs recombine locally available materials, skills, relationships, knowledge, infrastructure, and institutional arrangements to address livelihood and market problems intensified by climate vulnerability.

Entrepreneurial bricolage is treated as purposeful resourcefulness rather than unrestricted improvisation or acceptance of scarcity. Baker and Nelson's foundational research shows that entrepreneurs operating under resource constraints can create new services and opportunities by making do with resources at hand and recombining them for new purposes. The present study integrates this perspective with research on social bricolage, livelihood resilience, social capital, and climate adaptation. Because no primary community dataset was supplied, a simulation-based explanatory methodology was employed. Five synthetic scenarios representing entrepreneurial bricolage maturity from 20% to 100% were evaluated through indices of local-resource mobilization, network coordination, livelihood diversification, adaptive innovation, dependency risk, and community adaptive enterprise capacity.

The simulated adaptive-capacity index rises from 49 to 88 as bricolage maturity increases, while external-resource dependency declines from 79 to 38. The findings are methodological illustrations rather than empirical estimates. The study concludes that bricolage can contribute to locally grounded adaptation when entrepreneurs combine resourcefulness with community knowledge, reciprocal networks, learning capacity, and responsible environmental stewardship. However, bricolage should complement rather than substitute for public infrastructure, climate finance, social protection, and institutional investment. The resulting framework provides a basis for future empirical research examining entrepreneurship as one component of livelihood resilience in climate-vulnerable communities.

Keywords: entrepreneurial bricolage, climate vulnerability, community resilience, livelihood resilience, resource scarcity, local entrepreneurship, social capital, adaptive innovation

1. Introduction

Climate vulnerability is not experienced only through environmental change. For households and enterprises, climatic stress can affect income stability, productive assets, water availability, agricultural cycles, infrastructure reliability, market access, transportation, and the ability to maintain livelihoods after recurrent shocks. Livelihood-resilience scholarship therefore emphasizes the capacity of people and livelihood systems to absorb disturbance, self-organize, learn, and adapt rather than viewing resilience solely as a technical property of infrastructure. Ifejika Speranza, Wiesmann, and Rist identify buffer capacity, self-organization, and learning capacity as key dimensions through which livelihood resilience can be understood. Tanner and colleagues similarly argue for a people-centered understanding of climate resilience that gives greater attention to human agency, empowerment, and livelihood systems.

Entrepreneurship becomes particularly significant in such environments because households may need to create, diversify, or modify economic activities while facing severe resource constraints. Yet mainstream entrepreneurial assumptions concerning capital acquisition, specialized inputs, formal infrastructure, predictable institutions, and optimized resource combinations may not adequately describe enterprise formation in disadvantaged settings. Baker and Nelson's concept of entrepreneurial bricolage offers an alternative explanation. Their study of resource-constrained firms demonstrated how entrepreneurs could create value by making do with resources already available and applying combinations of those resources to new problems and opportunities. Bricolage therefore directs analytical attention away from asking only what resources entrepreneurs lack and toward examining how existing resources are reinterpreted and recombined.

This perspective has subsequently been extended to social entrepreneurship and innovation. Di Domenico, Haugh, and Tracey show that social bricolage can involve the creative use of local resources alongside stakeholder participation, persuasion, and social-value creation. Senyard, Baker, Steffens, and Davidsson found bricolage to be a pathway to innovativeness among resource-constrained new firms, demonstrating that constraints do not necessarily eliminate innovative activity when entrepreneurs creatively mobilize available resources. Desa and Basu similarly distinguish bricolage from optimization as alternative resource-mobilization processes and show why bricolage becomes especially relevant in constrained social-enterprise environments.

Climate-vulnerable communities add an important contextual dimension to this theory. Resources “at hand” may include more than physical materials. They can include traditional ecological knowledge, informal credit relationships, community labor, social trust, household skills, shared infrastructure, local repair capability, recycled materials, underused land, cooperative networks, and knowledge of seasonal environmental conditions. Adger's work on social capital and climate adaptation emphasizes that adaptive capacity is closely connected with collective action, trust, reputation, and reciprocal relationships. Entrepreneurial bricolage in climate-vulnerable communities may therefore operate through a combination of individual resourcefulness and collective social resources.

The present study examines Entrepreneurial Bricolage in Climate-Vulnerable Communities through a simulation-based framework. Its central proposition is that bricolage can strengthen adaptive enterprise capacity when entrepreneurs recombine accessible resources, mobilize community relationships, diversify livelihood activities, and learn from environmental changes. At the same time, the paper rejects a romanticized interpretation of scarcity. Communities should not be expected to solve



structural climate vulnerability merely by becoming more resourceful. Bricolage is conceptualized as a complementary adaptive capability whose effectiveness depends upon wider institutional, financial, infrastructural, and environmental conditions.

2. Objectives of the Study

2.1 To Examine Bricolage as a Resource-Mobilization Strategy Under Climate Vulnerability

The first objective is to examine entrepreneurial bricolage as a mechanism through which entrepreneurs continue economic activity when ideal resources are unavailable, unaffordable, inaccessible, or disrupted. Baker and Nelson's foundational definition emphasizes making do with resources at hand and recombining them for new applications, providing a suitable conceptual foundation for entrepreneurship under environmental and economic constraint.

Within climate-vulnerable communities, resource mobilization may include the reuse of materials, adaptation of existing equipment, combination of household and enterprise assets, reliance on locally available skills, modification of distribution methods, or temporary changes to products and services. The objective is not to argue that improvised local resources are always technologically superior but to examine how entrepreneurs can maintain agency when conventional resource-acquisition pathways become unreliable.

2.2 To Assess the Relationship Between Bricolage and Livelihood Adaptation

The second objective is to examine whether stronger bricolage capabilities can theoretically support livelihood diversification, adaptive innovation, network coordination, and enterprise continuity. Livelihood-resilience scholarship emphasizes agency and adaptation rather than viewing communities as passive recipients of climate impacts. The present study extends this perspective by treating local entrepreneurship as one potential mechanism through which such agency can be expressed.

The analysis further examines whether increasing bricolage maturity can reduce excessive dependence on single external resource channels. This does not imply economic isolation. Rather, resilience may improve when communities retain multiple pathways for obtaining, substituting, sharing, or reconstructing essential resources rather than depending entirely on one supplier, livelihood activity, or institutional intervention.

2.3 To Develop a Framework for Future Community-Level Validation

The third objective is to construct a framework that can be empirically tested using real climate-vulnerable communities. The framework identifies entrepreneurial bricolage maturity, local-resource mobilization, network coordination, livelihood diversification, adaptive innovation, external dependency, and adaptive enterprise capacity as measurable variables.

Future research could combine household and entrepreneur surveys with qualitative interviews, livelihood histories, business records, climate-exposure information, social-network mapping, and community-level institutional analysis. Such research would help establish whether bricolage produces durable resilience, short-term coping, or different outcomes depending on the severity and recurrence of climate stress.

3. Review of Literature

3.1 Entrepreneurial Bricolage and Resource Construction

Baker and Nelson's study represents the central theoretical foundation for entrepreneurial bricolage. Their field research examined resource-constrained firms operating in objectively similar environments but responding to those environments differently. They found that some entrepreneurs created useful services by recombining physical, social, and institutional resources that other actors regarded as unsuitable, unavailable, or insignificant. The importance of this perspective is that resources are not treated as having fixed entrepreneurial value independent of entrepreneurial action.

Fisher later positioned bricolage alongside effectuation and causation as a distinct behavioral explanation of entrepreneurial action. Bricolage is particularly concerned with resource combination and the refusal to accept some externally imposed resource limitations, whereas effectuation emphasizes action beginning from available means under uncertainty. Subsequent strategic-entrepreneurship research has continued to treat these approaches as related but theoretically distinguishable behavioral logics. This distinction matters in climate-vulnerable environments because entrepreneurs may simultaneously employ effectual decision making and bricolage-based resource construction.

Empirical work has also strengthened the measurement and innovation dimensions of the construct. Senyard and colleagues found that bricolage could support innovativeness among resource-constrained new firms. Davidsson, Baker, and Senyard subsequently developed and validated a measure of entrepreneurial bricolage behavior intended to facilitate systematic quantitative research. These developments provide an important methodological foundation for adapting bricolage measures to community and climate-resilience contexts.

3.2 Social Bricolage, Networks, and Local Resourcefulness

Entrepreneurship in vulnerable communities rarely occurs through isolated individual action. Di Domenico, Haugh, and Tracey's social-bricolage framework extends conventional bricolage by incorporating social-value creation, stakeholder participation, and persuasion. Their qualitative study of social enterprises shows why local actors and relationships can become part of the entrepreneurial resource base rather than merely external stakeholders. This is particularly relevant where formal institutions provide incomplete support and entrepreneurs rely on community relationships to mobilize knowledge, labor, legitimacy, or market access.

Desa and Basu likewise show that resource-constrained social entrepreneurs may rely on bricolage rather than optimization depending upon the availability of resources and their organizational position. Their work cautions against assuming that the entrepreneur's objective is always to obtain an ideal combination of market-priced resources before taking action. In highly constrained settings, entrepreneurial action may begin precisely because actors are capable of reorganizing what is already accessible.

Social capital provides a complementary explanation for why some communities may be more capable of such recombination than others. Adger argues that collective action and adaptive capacity are linked with social-capital processes involving trust, reciprocal action, and reputation. For climate-vulnerable entrepreneurs, these relationships may facilitate shared equipment, informal market information, collective transport, emergency credit, cooperative labor, or rapid dissemination of



environmental knowledge. Nevertheless, social networks may also reproduce exclusion or unequal access, meaning that community embeddedness should not automatically be equated with equitable resource availability.

3.3 Livelihood Resilience and Climate Adaptation

Livelihood-resilience research provides the broader climate-adaptation foundation for the present study. Ifejika Speranza, Wiesmann, and Rist develop an indicator framework emphasizing buffer capacity, self-organization, and capacity for learning as interconnected components of livelihood resilience. This formulation aligns closely with entrepreneurial bricolage because bricolage can influence each dimension: resource recombination can expand buffer options, networks can support self-organization, and iterative experimentation can contribute to learning.

Tanner and colleagues argue for a livelihood-based approach to resilience that places greater emphasis on agency, empowerment, human needs, and transformational change. This perspective is important because entrepreneurial resilience should not be evaluated only by whether a business survives. An enterprise may continue operating while household well-being deteriorates, natural resources are depleted, or unpaid labor burdens increase. A climate-resilience interpretation therefore requires attention to the sustainability and distributional consequences of entrepreneurial adaptation.

Ayeb-Karlsson and colleagues' people-centered research on environmental stress and livelihood resilience in Bangladesh further demonstrates why climate adaptation must be understood through people's lived livelihood conditions rather than abstract system-level resilience alone. The present study responds to this literature by positioning entrepreneurial bricolage as one possible component of livelihood adaptation while explicitly recognizing that community enterprises remain embedded within wider social-ecological systems.

4. Research Methodology

4.1 Research Design and Analytical Context

The study adopts a simulation-based explanatory research design. No real entrepreneur interviews, household surveys, enterprise accounts, climatic observations, geographic records, or community-level datasets were supplied. Consequently, every numerical value presented in the analysis is synthetic and exists solely to demonstrate the proposed theoretical relationships.

Five analytical scenarios were developed representing Entrepreneurial Bricolage Maturity levels of 20%, 40%, 60%, 80%, and 100%. The percentages are conceptual scenario labels rather than empirically validated thresholds. Higher maturity represents a progressively stronger ability to recognize overlooked resources, recombine locally accessible inputs, coordinate through social networks, experiment with alternative livelihood activities, and document learning from previous climate-related disruptions.

4.2 Construct Operationalization

Entrepreneurial Bricolage Maturity represents the principal explanatory construct. Local-Resource Mobilization captures the entrepreneur's capacity to identify and redeploy physical, human, knowledge-based, social, and institutional resources already available within or near the community. Network

Coordination represents the ability to access and combine resources through trusted relationships, cooperative arrangements, and reciprocal support.

Livelihood Diversification represents the extent to which entrepreneurial activities reduce dependence on a single climate-sensitive income source. Adaptive Innovation captures modifications to products, processes, services, sourcing, distribution, or market relationships undertaken in response to environmental stress. External Dependency Risk measures vulnerability created by dependence on scarce external inputs or single supply channels. Community Adaptive Enterprise Capacity represents the broader ability of local entrepreneurial activity to continue, adjust, and create livelihood options under environmental disturbance.

Table 1: Operationalization of the Entrepreneurial Bricolage Framework

Construct	Operational Meaning	Measurement	Expected Direction
Entrepreneurial Bricolage Maturity	Capacity to make do, creatively recombine available resources, and apply them to emerging problems and opportunities	Scenario: 20%–100%	Independent condition
Local-Resource Mobilization	Ability to identify and redeploy available materials, skills, knowledge, assets, and institutional resources	Index: 0–100	Increase
Network Coordination	Ability to mobilize resources and information through trusted community and market relationships	Index: 0–100	Increase
Livelihood Diversification	Development of complementary income-generating activities that reduce dependence on one vulnerable livelihood	Index: 0–100	Increase
Adaptive Innovation	Context-responsive modification of products, services, production, sourcing, or distribution	Index: 0–100	Increase
External Dependency Risk	Vulnerability created by excessive reliance on	Index: 0–100	Decrease

Construct	Operational Meaning	Measurement	Expected Direction
	unavailable or disruption-sensitive external resources		
Community Adaptive Enterprise Capacity	Ability of local enterprises to maintain, adjust, and reconstruct economic activity under climate stress	Index: 0–100	Increase

Source: Author-developed simulation framework informed by entrepreneurial bricolage and livelihood-resilience research. Baker and Nelson provide the resource-recombination foundation, while Ifejika Speranza and colleagues provide a resilience framework emphasizing buffer capacity, self-organization, and learning.

4.3 Simulation Procedure and Analytical Logic

The lowest-maturity scenario represents entrepreneurial activity that uses some informal resource substitution but remains highly dependent on conventional external inputs and relatively narrow livelihood activities. The intermediate scenarios incorporate progressively stronger community resource mapping, peer exchange, product adaptation, diversified income strategies, reuse of materials, local knowledge, and network coordination.

The highest-maturity scenario represents an entrepreneur or community enterprise capable of systematically identifying and recombining local resources while still using external markets and institutions where advantageous. The scenario does not represent economic self-sufficiency or complete independence from public support. Climate-vulnerable communities frequently require investments that cannot responsibly be replaced by bricolage, including resilient infrastructure, formal finance, insurance, public health protection, communication systems, and disaster-risk governance.

The evaluation is descriptive rather than inferential. No p-values, statistical-significance claims, population estimates, or causal effect coefficients are reported because the values were intentionally generated for simulation. This distinction prevents synthetic analysis from being misrepresented as completed field research.

5. Analysis

5.1 Bricolage Maturity and Community Enterprise Adaptation

The simulated results indicate progressive improvement across the positive adaptive-capacity indicators. At the 20% bricolage-maturity condition, Local-Resource Mobilization is 50, Network Coordination is 47, Livelihood Diversification is 44, Adaptive Innovation is 51, and Community Adaptive Enterprise Capacity is 49. External Dependency Risk remains comparatively high at 79.

Table 2: Simulated Outcomes Across Entrepreneurial Bricolage Maturity Levels

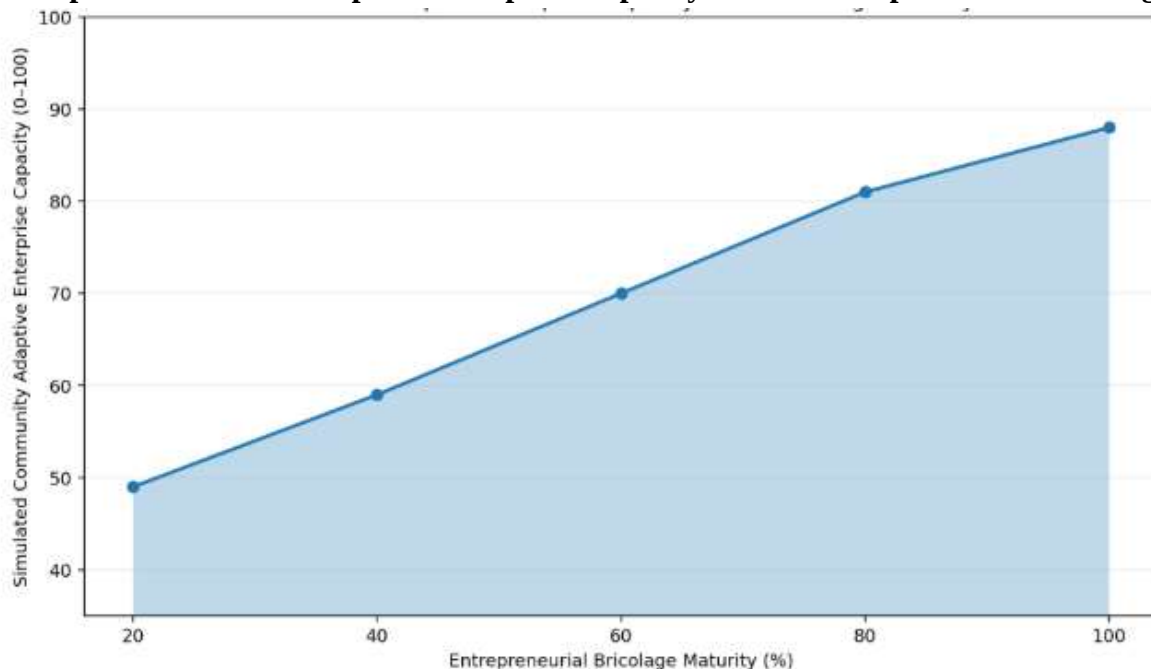
Bricolage Maturity	Local-Resource Mobilization	Network Coordination	Livelihood Diversification	Adaptive Innovation	External Dependency Risk	Adaptive Enterprise Capacity
20%	50	47	44	51	79	49
40%	61	58	56	61	69	59
60%	72	69	67	73	58	70
80%	84	80	79	83	47	81
100%	92	88	86	91	38	88

Note: All numerical values are author-generated synthetic indices and are provided solely for methodological demonstration. They must not be interpreted as measurements obtained from actual climate-vulnerable communities.

5.2 Entrepreneurial Bricolage and Adaptive Enterprise Capacity

The graph illustrates the simulated relationship between increasing entrepreneurial bricolage maturity and Community Adaptive Enterprise Capacity. The index rises from 49 at the 20% bricolage condition to 59 at 40%, 70 at 60%, 81 at 80%, and 88 at the highest simulated maturity condition.

Graph 1: Simulated Adaptive Enterprise Capacity Across Entrepreneurial Bricolage Maturity



The total simulated increase is 39 index points. Relative to the initial scenario, this represents an illustrative increase of approximately 79.6%. The number is not an empirical effect size. It visualizes the framework's proposition that the adaptive value of entrepreneurship increases when locally available resources, community networks, diversification, and innovation are combined more systematically.

The simulated direction is theoretically compatible with Senyard and colleagues' evidence that bricolage can provide a route toward innovativeness under resource constraints. It is also consistent with livelihood-resilience frameworks in which learning, self-organization, and buffer capacity collectively strengthen adaptation.

5.3 Dependency Reduction, Diversification, and Adaptive Limits

External Dependency Risk declines from 79 to 38 across the simulated conditions. This does not imply that external resources are undesirable. External finance, technology, transportation systems, government services, insurance, disaster assistance, and specialist knowledge may be indispensable. The analytical concern is concentrated dependency, particularly where a community has few alternatives when one critical input becomes unavailable.

Livelihood Diversification rises from 44 to 86. In a climate-vulnerable context, diversification can provide additional pathways through which households respond when one activity is disrupted. Tanner and colleagues' livelihood-resilience approach emphasizes the importance of people's agency and livelihood systems when analyzing climate adaptation. Bricolage may contribute by helping entrepreneurs combine existing skills, materials, and relationships into complementary activities rather than requiring each new livelihood activity to begin with a completely new resource base.

Nevertheless, the benefits of bricolage have limits. Reusing unsuitable materials, operating without appropriate safety protections, drawing excessively on natural resources, or replacing reliable infrastructure with permanent improvisation could create additional vulnerability. Bricolage should therefore be judged by the quality and sustainability of the resulting adaptation rather than by resourcefulness alone.

6. Discussion

6.1 Bricolage as Adaptive Resourcefulness Rather Than Scarcity Acceptance

The first major implication is that entrepreneurial bricolage should not be interpreted as a celebration of deprivation. Baker and Nelson's central theoretical contribution is that entrepreneurs can construct value from combinations of resources that conventional perspectives may disregard; it is not an argument that resource-poor environments are preferable. In climate-vulnerable communities, this distinction becomes ethically important because narratives of community ingenuity can inadvertently shift responsibility away from institutions capable of providing infrastructure, finance, risk protection, or public services.

Bricolage is more defensibly understood as adaptive resourcefulness under constraint. Community entrepreneurs may be unable to control rainfall, flooding, heat exposure, infrastructure damage, or wider market disruption, but they can sometimes alter how existing resources are combined. Such agency can preserve economic activity while larger institutional responses are developed.

This interpretation also explains why bricolage can coexist with formal investment. An entrepreneur may use recycled materials, community skills, and local distribution networks while



simultaneously seeking formal finance for resilient equipment. Bricolage and optimization should therefore not be presented as mutually exclusive permanent strategies. Desa and Basu's work explicitly treats bricolage and optimization as alternative resource-mobilization processes whose use can vary with environmental and organizational conditions.

6.2 Social Networks, Local Knowledge, and Collective Adaptation

The second implication concerns the collective dimension of entrepreneurial resourcefulness. Climate-vulnerable entrepreneurs operate within communities containing accumulated ecological knowledge, relationships, reputations, reciprocal obligations, and shared resources. Adger's analysis of social capital and adaptation demonstrates why trust, reputation, reciprocity, and collective action are relevant to adaptive capacity. Bricolage can therefore occur at the network level rather than being restricted to an individual entrepreneur.

This networked perspective is consistent with social bricolage. Di Domenico and colleagues show that social entrepreneurial bricolage can involve stakeholder participation and persuasion in addition to resource recombination. In climate-vulnerable communities, comparable processes might include cooperative use of transportation, shared tools, collective purchasing, neighborhood distribution systems, informal repair networks, or coordinated use of market information.

However, network resources are not automatically inclusive. Community status, gender, caste, wealth, location, ethnicity, or existing business influence may affect who can access reciprocal relationships. Future empirical research should therefore test not only whether social bricolage improves resilience but also whose resilience is strengthened. A community-level average may conceal unequal access to networks and adaptive opportunities.

6.3 From Short-Term Coping to Sustainable Livelihood Resilience

The third implication is the need to distinguish short-term coping from sustainable adaptation. Climate-vulnerable households may demonstrate considerable ingenuity after disruption, but an action that permits survival for several weeks does not necessarily strengthen long-term resilience. Ifejika Speranza and colleagues' framework is valuable because livelihood resilience incorporates buffer capacity, self-organization, and learning rather than a single post-shock outcome.

Entrepreneurial bricolage contributes most meaningfully when temporary adaptations generate reusable capabilities. A makeshift distribution arrangement may reveal a more resilient route to customers. Temporary product substitution may identify a less climate-sensitive input. Community repair efforts may evolve into a specialized enterprise. An emergency collaboration may become a durable cooperative network. In such cases, bricolage generates organizational and community learning rather than only temporary coping.

This learning dimension is also consistent with Tanner and colleagues' argument that livelihood resilience should incorporate agency, empowerment, and potentially transformational changes. Sustainable climate entrepreneurship therefore requires an evaluative question beyond "Did the venture survive?" It should ask whether entrepreneurial adaptation improves long-term livelihood options without transferring excessive costs to workers, households, ecosystems, or future generations.



7. Conclusion

Entrepreneurial activity in climate-vulnerable communities takes place within a demanding intersection of environmental uncertainty, livelihood insecurity, and constrained access to conventional business resources. This study has argued that entrepreneurial bricolage provides a useful theoretical lens for understanding how local entrepreneurs continue acting when preferred resources cannot be obtained in conventional ways. Through the recombination of available materials, skills, knowledge, relationships, and institutional possibilities, bricolage can expand the range of feasible responses to climate-related livelihood stress.

The simulation demonstrates a theoretically coherent progression in which Community Adaptive Enterprise Capacity rises from 49 to 88 as entrepreneurial bricolage maturity increases across five synthetic scenarios. Local-Resource Mobilization, Network Coordination, Livelihood Diversification, and Adaptive Innovation also increase, while External Dependency Risk falls from 79 to 38. These values are entirely simulated and should not be presented as empirical findings from real communities. Their purpose is to operationalize the proposed framework transparently and establish measurable relationships for subsequent field research.

The broader conclusion is that bricolage should be understood neither as a substitute for formal resources nor as evidence that disadvantaged communities can adapt indefinitely without external support. Effective climate adaptation requires investment, infrastructure, responsive institutions, climate information, financial protection, and appropriate public policy. Entrepreneurial bricolage becomes most valuable when these systems recognize and strengthen local capabilities rather than forcing communities to rely permanently on improvised solutions.

Future empirical research should examine entrepreneurial bricolage longitudinally across communities exposed to different climatic hazards, including drought, flooding, coastal change, extreme heat, and variable agricultural conditions. Researchers should investigate whether bricolage produces durable livelihood diversification, whether social networks mediate its effectiveness, and whether repeated bricolage eventually creates new resource traps or environmental pressures. Particular attention should be given to gender, inequality, institutional exclusion, ecosystem sustainability, and access to formal climate finance. Such research would permit a more precise assessment of when entrepreneurial resourcefulness becomes a meaningful component of climate resilience and when structural intervention remains indispensable.

References

1. Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366. <https://doi.org/10.2189/asqu.2005.50.3.329>
2. Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34(4), 681–703. <https://doi.org/10.1111/j.1540-6520.2010.00370.x>
3. Senyard, J. M., Baker, T., Steffens, P. R., & Davidsson, P. (2014). Bricolage as a path to innovativeness for resource-constrained new firms. *Journal of Product Innovation Management*, 31(2), 211–230. <https://doi.org/10.1111/jpim.12091>



4. Desa, G. (2012). Resource mobilization in international social entrepreneurship: Bricolage as a mechanism of institutional transformation. *Entrepreneurship Theory and Practice*, 36(4), 727–751. <https://doi.org/10.1111/j.1540-6520.2010.00430.x>
5. Nelson, R. E., & Lima, E. (2019). Effectuations, social bricolage and causation in the response to poverty in the Brazilian Amazon. *Small Business Economics*, 54, 413–432.
6. Fisher, G. (2012). Effectuation, causation, and bricolage: A behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, 36(5), 1019–1051. <https://doi.org/10.1111/j.1540-6520.2012.00537.x>
7. Baker, T., Miner, A. S., & Eesley, D. T. (2003). Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Research Policy*, 32(2), 255–276. [https://doi.org/10.1016/S0048-7333\(02\)00099-9](https://doi.org/10.1016/S0048-7333(02)00099-9)
8. Desa, G., & Basu, S. (2013). Optimization or bricolage? Overcoming resource constraints in global social entrepreneurship. *Strategic Entrepreneurship Journal*, 7(1), 26–49. <https://doi.org/10.1002/sej.1140>
9. Welter, F., & Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*, 49(1), 107–125.
10. Williams, T. A., & Shepherd, D. A. (2016). Building resilience or providing sustenance: Different paths of emergent ventures in the aftermath of the Haiti earthquake. *Academy of Management Journal*, 59(6), 2069–2102. <https://doi.org/10.5465/amj.2015.0682>
11. Shepherd, D. A., Williams, T. A., & Patzelt, H. (2015). Thinking about entrepreneurial decision making: Review and research agenda. *Journal of Management*, 41(1), 11–46.
12. Shepherd, D. A., & Williams, T. A. (2014). Local venturing as compassion organizing in the aftermath of a natural disaster. *Journal of Business Venturing*, 29(2), 217–233. <https://doi.org/10.1016/j.jbusvent.2013.02.002>
13. Williams, T. A., & Shepherd, D. A. (2016). Victim entrepreneurs doing well by doing good: Venture creation and well-being in the aftermath of a resource shock. *Journal of Business Venturing*, 31(4), 365–387.
14. Corner, P. D., & Ho, M. (2010). How opportunities develop in social entrepreneurship. *Entrepreneurship Theory and Practice*, 34(4), 635–659.
15. Mair, J., & Martí, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24(5), 419–435. <https://doi.org/10.1016/j.jbusvent.2008.04.006>
16. Williams, N., & Vorley, T. (2015). The impact of institutional change on entrepreneurship in a crisis-hit economy: The case of Greece. *Small Business Economics*, 45, 603–617.
17. Bruton, G. D., Ahlstrom, D., & Obloj, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future? *Entrepreneurship Theory and Practice*, 32(1), 1–14.
18. Bullough, A., Renko, M., & Myatt, T. (2014). Danger zone entrepreneurs: The importance of resilience and self-efficacy for entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 38(3), 473–499.



19. Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733–769.
20. Pelling, M., & High, C. (2005). Understanding adaptation: What can social capital offer assessments of adaptive capacity? *Global Environmental Change*, 15(4), 308–319.
<https://doi.org/10.1016/j.gloenvcha.2005.02.001>