

# IMPACT OF COMMUNITY RESEARCH

## Structural Rural Change Across Europe and Africa

### Abstract

Community-led research can reshape rural services and rules when designed for adoption, not only diagnosis. Drawing on community-authored outputs from ten localities in Greece, Bulgaria, Romania, Cameroon, and DR Congo (2020–2025), the analysis combines textual coding, interviews, outcome harvesting, process tracing, and crisp-set QCA. European cases followed a slower “rule/budget” track (bylaws, curricular changes), while African cases more often realized rapid “service/protocol” adjustments through crisis windows. Three features consistently enabled change: administrative legibility (language, templates), actionable specificity (who/when/resources), and an insider champion who moved proposals through routines. Durability depended on anchors, bylaws, protocols, and rosters outlasted personalities, while equity improved when administrative briefs were paired with community-facing explainers and simple routing steps. The study specifies artefactual properties, actionable specificity and institutional cadence fit, and offers portable frameworks (draft clauses, protocol inserts, roster lines) to accelerate uptake.

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## Introduction

Rural places across Europe and Africa are being reshaped by demographic change, service strain, and uneven development. In the EU, official statistics chart persistent out-migration from many rural regions, population ageing, and widening regional disparities that test local administrations and social infrastructure (Eurostat 2024). “Citizen social science” (CSS) and community-engaged traditions such as community-based participatory research (CBPR) promise not only richer local knowledge but also tangible outcomes by involving residents as co-investigators and co-decision makers (Henke 2022; Wallerstein et al. 2020). European guidance frames good practice around mutual benefit, feedback to participants, and ethical inclusion, encouraging projects to produce societal as well as scientific value (Fraisl et al. 2025). Still, recent reviews note uneven evidence on social outcomes and a persistent gap between aspirational claims and verifiable change, especially outside urban or laboratory contexts (Huttunen et al. 2022). This study responds to that gap by examining whether and how community-generated research, conducted by independent community researchers collaborating through the SIDINL network, has translated into concrete change in rural areas across five countries since 2020.

Rural governance differs markedly across the two continental arenas. In Central and Eastern Europe, peripheralisation research shows how socio-spatial inequalities are produced through long-run processes of selective investment, demographic thinning, and administrative rescaling, complicating local capacity to absorb bottom-up initiatives (Kühn 2015; Bock 2016; Shucksmith 2018). In many African rural systems, the everyday

governance of schools and clinics is highly relational and multilingual, with frontline actors exercising discretion under resource constraints and periodic shocks; trust, distributed leadership, and “everyday resilience” shape what is doable (Gilson et al. 2017).

A second body of work helps explain how ideas travel into action. Knowledge mobilisation research identifies brokers, artefacts, and “productive interactions” as the gears that turn insights into decisions (Ward et al. 2009; Spaapen & van Drooge 2011). Boundary-work scholarship adds that “boundary objects”, maps, checklists, clauses, protocols, enable coordination across social worlds when they are legible to each party, while boundary organizations and intermediaries help stabilize collaboration (Star & Griesemer 1989; Guston 2001; Gustafsson & Lidskog 2018). Policy-process theories further emphasise temporality: windows of opportunity open and close, privileging “shelf-ready” proposals that can be adopted quickly (Parkhurst 2017).

Within this frame, the study asks three questions. First, to what extent did community-authored research outputs produced through SIDINL collaborations between 2020 and 2025 yield verifiable changes in local policy, services, pedagogy, clinical protocols, or practices in selected rural localities? Second, through which pathways, actors, artefacts, timing, and language practices, did change occur or stall? Third, how did these pathways vary across sectors and governance contexts within and between Europe and Africa? Methodologically, the design prioritises contribution over attribution and treats multilingual translation and

administrative cadence as first-order features of rural governance. The study's empirical contribution is to provide a cross-continental comparison of community research uptake focused explicitly on rural peripheries. While European work on rural social innovation has illuminated enabling environments and the risks of proceduralism (Dargan & Shucksmith 2008; Bock 2016; Shucksmith 2018), and African health-systems scholarship has mapped the relational foundations of everyday implementation (Gilson 2003; Gilson et al. 2017), there has been little systematic, comparative assessment of community-authored social research as a driver of concrete change across these contexts. By analysing specific SIDINL cases across ten localities, I am able to compare "slow-track" rule and budget changes with "fast-track" service and protocol adjustments, and to relate both to artefact design, brokering work, and timing.

## Literature review

### Citizen social science and community-based participatory research

Citizen social science expands "citizen science" beyond the natural sciences to collaborative inquiry on social issues, positioning residents as co-investigators rather than data sources (Henke 2022; Huttunen et al. 2022). CSS projects increasingly claim contributions to societal goals and policy learning, yet evidence on social outcomes remains uneven and discipline-skewed (Finger et al. 2023; Moczek et al. 2021). In parallel, a mature CBPR tradition stresses equitable partnerships, shared governance, and action on structural inequities, principles that are transferrable to rural social inquiry in Europe and Africa (Israel et al. 2001; Wallerstein et al.

2010; Wallerstein et al. 2018). Together, CSS and CBPR foreground resident expertise, iterative cycles of co-design, and community benefit as criteria of research quality and impact. Recent syntheses emphasize that partnership quality (power-sharing, trust, clarity of roles) predicts downstream outcomes more than methodological sophistication alone (Wallerstein et al. 2020; Collins et al. 2018). Within Europe, the European Citizen Science Association (ECSA) provides widely adopted principles for good practice (genuine scientific or societal outcomes, mutual benefit, feedback to participants, and ethical, inclusive design) that are directly applicable to CSS in rural contexts (Fraisl et al. 2025). These norms complement national ethics frameworks on informed participation and equitable partnerships, especially salient when independent community researchers work with external collaborators across languages and power hierarchies (Hunter et al. 2011; Hecker et al. 2018).

### Rurality, peripheralization and governance

Rural change scholarship cautions against treating "the rural" as residual or idyllic; instead, it frames rural places as relationally produced, often peripheralized by uneven development, selective out-migration, and service withdrawal (Kühn 2015; Bernard & Keim-Klärner 2023). In Central and Eastern Europe, including Greece's island/interior peripheries and Bulgaria/Romania's postsocialist regions, peripheralization literature highlights demographic thinning, constrained local state capacity, and the re-scaling of governance via EU programs (LEADER, CAP, cohesion policy), sometimes reproducing inequalities or proceduralism that

blunts grassroots innovation (Dargan & Shucksmith 2008; Bock 2016; Brad and Moldovan 2020). Recent work on “good countryside” and socially innovative rural governance similarly emphasizes deliberation, justice, and enabling institutional environments for local initiatives (Shucksmith 2018; Chatzichristos & Hennebry 2023; Steiner et al. 2023; Richter & Christmann 2021). Parallel debates in African rural governance and primary health systems stress everyday practices, relationships, and trust as the substrate of change (Gilson 2003; Gilson et al. 2017; Schneider and Lehmann 2016). Community actors (e.g., village committees, CHWs) can bridge formal systems and lived realities, yet they operate within fragile infrastructures and contested authority, which conditions the translation of citizen evidence into policy or service adjustments (Lehmann & Sanders 2007; Mirzoev & Kane 2017).

### Knowledge mobilization and epistemic justice

Research rarely influences policy through linear “push” models; rather, it diffuses via “enlightenment” and negotiated use amid political interests, practical know-how, and scientific analysis (Weiss 2021; Head 2008; Parkhurst 2016). Accordingly, the presence of knowledge brokers, boundary organizations, and boundary objects, shared artefacts (maps, dashboards, briefs) that different communities can use without consensus, can stabilize collaboration across science-policy-community interfaces (Star & Griesemer 1989; Guston 2001; Gustafsson & Lidskog 2018). In multilingual rural environments, translation is itself a boundary practice: it shapes whose evidence is legible to authorities and whether community-generated findings travel into administrative routines (Ward and

Brown 2009). Because rural peripheries often experience testimonial and hermeneutical injustices, systematic credibility deficits and gaps in shared interpretive resources, epistemic justice is a necessary criterion for evaluating CSS/CBPR (Fricker 2007). Decolonial scholarship further warns against extractive “participation,” urging recognition of Southern epistemologies and material relations to land and livelihood (de Sousa Santos 2015; Smith 2021; Tuck & Yang 2012).

### From outputs to outcomes: tracing impact and rural specificity

To judge whether citizen social research influences “local reality,” impact frameworks that value intermediate, behavioral, and relational change are preferable to narrow attribution models. “Productive interactions” theory posits that societal impact emerges through recurring exchanges among researchers, stakeholders, and users, evidenced by citations in plans, altered practices, or resource flows (Spaapen & Van Drooge 2011; Muhonen et al. 2020). Outcome Mapping and Outcome Harvesting likewise focus on boundary partners’ behavior changes and work backward to infer the contribution of the research and alliance-building (Earl et al. 2001; Wilson-Grau 2018). Rural social innovation scholarship underscores how citizen initiatives mobilize local knowledge and networks to meet unmet needs, but also how success hinges on “key players,” embedded intermediaries, and enabling governance (Dargan & Shucksmith 2008; Bock 2016; Neumeier 2017; Richter & Christmann 2021; Steiner et al. 2023). In marginal EU regions, programmatic rigidities can domesticate grassroots innovation; conversely, community-led inquiry that culminates in compelling boundary objects

(e.g., participatory maps of water points, housing vacancy datasets, farm labor conditions) can unlock inter-organizational collaboration and resources.

### Study Sites and Cases

The study spans 1 January 2020 to 31 October 2025, a window that captures the shock of the COVID-19 pandemic and its aftershocks alongside shifting political cycles and climate-related disruptions that have reconfigured service delivery in many rural regions. Fixing the observation window allows us to trace complete “output-to-outcome” arcs: from the publication of a community-authored brief or report to an 18-month horizon in which administrative routines, resource allocations, bylaws, curricula, or clinical protocols could plausibly change.

In Greece, I purposefully sample two contrasting ruralities. The first is the Evros borderland in Western Thrace (municipalities of Orestiada and Soufli), where out-migration, seasonal livelihoods, and multilingual encounters with administration shape everyday access to services. The border context and the presence of a recognized Muslim minority create distinctive educational and linguistic interfaces that condition whether community evidence is legible to officials and school authorities (Dragonas and Frangoudaki 2006; Boussiakou 2007; Maligkoudi and Mavrommatis 2025). The second Greek site, the Zagori mountain villages in Epirus, represents an ageing, sparsely populated landscape where travel time and staffing shortages complicate access to primary and emergency care; evidence of accelerated ageing and rural depopulation provides the structural backdrop against which community proposals for tele-

consultation, volunteer transport or curricular enrichment are assessed (Papadopoulos and Baltas 2023; Brîndușe et al. 2024).

In Bulgaria, the Rhodope district of Smolyan and the Northwest district of Vidin provide a sharp within-country contrast. Smolyan is emblematic of mountainous depopulation and youth out-migration, with local statistics and scholarship documenting sustained demographic contraction since the early 1990s; community dossiers here frequently focus on school retention and transport, pairing parent and teacher testimonies with locally curated numbers (Koulov 2018). Vidin, within the Severozapaden region, has long been identified among the EU’s poorest regions, and Eurostat’s most recent profiles continue to place Northwest Bulgaria at or near the bottom for GDP per capita while also flagging rapid depopulation in both Vidin and Smolyan (Eurostat 2025; Eurostat 2024).

Romania’s sites (Vaslui County in Moldavia and Maramureș in the Northern Carpathians) foreground, respectively, rural poverty/educational continuity and cross-border mobility/heritage economies. Vaslui is consistently profiled as disadvantaged, with elevated risks of school dropout and social exclusion concentrated in rural areas; community reports here typically request formalized protocols among schools, social workers and NGOs to stabilize attendance and transitions (Ciolcă 2020). Maramureș, by contrast, is entwined with Ukraine through daily mobility and cross-border cooperation; community outputs often include cartographic inserts locating gaps in service hours or rural transport nodes, anticipating coordination with county and cross-border partners (Boar 2005; Dumitrache et al. 2020).

Cameroon's Far North (Logone-et-Chari) and Adamawa (Vina Division) anchor the African comparison in settings where multilingual administration, mobility, and fragile infrastructures mediate any translation from report to practice. In Logone-et-Chari, humanitarian assessments repeatedly identify the division as exhibiting the weakest access to basic services across the region, compounded by large numbers of internally displaced people and recurrent floods; community outputs from this area frequently recommend pragmatic municipal actions such as water-point repairs, adjusted school schedules, or health-district outreach days, accompanied by translations from local languages into administrative French to ensure legibility (UNHCR 2025). In the Vina Division, transhumance dynamics and pastoral livelihoods complicate fixed-site service models; research on cattle mobility and herd health in Adamawa underscores the seasonal calendars and institutional interfaces that any education or health recommendation must realistically navigate (Motta et al. 2018; Kouamo and Pa-ana 2017).

In the Democratic Republic of Congo, South Kivu's Kalehe/Walungu territories and Tanganyika's Kalemie territory situate this inquiry within hybrid governance landscapes where health zones, customary authorities, NGOs and church networks intersect. In South Kivu, community researchers have produced briefs on gender-based violence referral pathways and rural health-post functionality; these can be triangulated against a growing evidence base on GBV service models and on the organization and performance of health zones, which are managed by Chief Medical Officers in a standardized primary-care architecture

(Boeyink et al. 2022; Bigirinama et al. 2025). In Tanganyika/Kalemie, farmer–herder frictions and displacement have shaped access to schooling and primary care; recent work frames workable local arrangements and peacebuilding as preconditions for service normalization, allowing us to observe whether community dossiers that propose operational coordination steps secure adoption by territory administrators or health-zone managers (Nassef et al. 2023).

## Methodology

This study uses a comparative design that links systematic textual analysis of community-authored outputs to semi-structured interviews, process tracing of uptake episodes, and a small-N set-theoretic analysis. The design choice follows established guidance that a similar, mixed methods are well suited to questions about “how and under what conditions” research translates into practice, while preserving contextual meaning across sites and languages (Creswell and Plano Clark 2023). Set-theoretic tools complement case-based reasoning by assessing combinations of enabling conditions, rather than single linear effects (Thomann and Maggetti 2020).

The corpus comprises community-led “final outputs” that were produced via SIDINL collaborations and circulated between 1 January 2020 and 31 October 2025. A text qualifies as a case if it is authored primarily by non-institutional community researchers, addresses a marginal social issue in one of the specified rural localities, and is explicitly aimed at identifiable implementers (e.g., municipal officers, school directors, health-zone teams). Document analysis follows a hybrid protocol that codes problem framings, proposed

actions, actors and alliances, and claimed or evidenced outcomes, drawing on qualitative content analysis and rigorous qualitative data analysis standards (Krippendorff 2018). Deductive outcome categories (policy/bylaw, program/service, pedagogical, clinical/protocol, informal norm/practice) are combined with inductive coding on mechanisms such as timing relative to budget cycles, multilingual dissemination, and the presence of a municipal or health-zone “champion.”

Coding proceeds in two waves. In wave one, two analysts independently code a stratified 20% subsample spanning all countries and output types to calibrate the codebook and estimate inter-coder agreement. I target  $\kappa \geq .70$  on key categorical codes, using Cohen’s kappa to gauge reliability and following widely cited interpretive guidance (McHugh 2012). Disagreements are discussed to refine definitions. In wave two, a single analyst codes the full corpus, with periodic cross-checks by a second analyst for difficult segments. All analytic decisions are logged in an auditable trail. Because the corpus spans multiple languages, excerpts used for cross-case comparison are translated into English with back-translation for terms that carry institutional meaning (e.g., the formal name of a municipal committee or health-zone role). The approach follows classic and contemporary guidance on translation for research use, including Brislin’s back-translation model and methodological guidance on cross-language qualitative work (van Nes et al. 2010; Squires 2009).

To move beyond textual intentions toward use, I integrate Outcome Harvesting with elements of Outcome Mapping to identify and

verify changes in “behaviors, relationships, activities, policies or practices” among boundary partners (e.g., municipal councils, school leadership teams, clinic or health-zone managers, civil society intermediaries). For each case, I formulate and test outcome statements, who changed what, when, and why, using the community output, documentary traces (bylaws, circulars, meeting minutes, budget lines), and interviews. I assess plausible contribution rather than strict attribution, consistent with these approaches (Wilson-Grau 2018; Earl et al. 2001).

Interviews triangulate, contextualize, and deepen process accounts. In each locality I conduct semi-structured interviews with community researchers, external collaborators linked to SIDINL (Specialized In-Depth Information & Newsletters) community network, relevant implementers, and a small number of residents or collective leaders who interacted with the output. Guides are tailored by role and cover genesis of the research, collaboration dynamics, circulation of the output, interactions with decision-makers, barriers/enablers of uptake, and observed or perceived changes. I anticipate roughly 16–20 interviews per country (total  $n \approx 90$ ), aligning with empirical work on saturation thresholds, recognizing that saturation is contingent on scope, homogeneity, and analytic aims (Guest et al. 2006; Hennink et al. 2017). Participants receive brief member-checking summaries at site close-out to verify factual sequences and correct misinterpretations (Birt et al. 2016).

Comparative inference uses crisp-set Qualitative Comparative Analysis (QCA). Each case is calibrated on binary conditions derived from the literature and grounded in coding: presence of a municipal/health-zone champion; co-design with implementers

before publication; multilingual dissemination including the administrative language; proximity of the external collaborator (regional vs. remote); crisis salience during the window (e.g., flood, epidemic spike); alignment of an executable resource/budget line; and actionability of the output (clear assignment of tasks and timelines). The primary outcome is realized impact within 18 months of publication; a secondary calibration distinguishes partial from full realization for robustness. Following standard procedures, I analyze necessity and sufficiency, minimize configurations, and examine contradictory configurations, interpreting solutions alongside process-tracing evidence (Schneider & Wagemann 2012; Thomann & Maggetti 2020). Process tracing tests hypothesized mechanisms and temporal sequences in one emblematic case per country. For each selected case I build an evidence-based timeline that aligns the production and circulation of the community output with meetings, communications, administrative decisions, and practice changes, then assess the strength of causal-process observations and alternative explanations. This follows the logic and best practice guidance in the process-tracing literature (Bennett & Checkel 2015).

Ethics and positionality are integral given the involvement of resident researchers and the sensitivity of some social issues. The study adapts principles from community-based participatory research and the CARE Principles for Indigenous Data Governance (collective benefit, authority to control, responsibility, and ethics) to decisions about co-authorship, data sharing, and dissemination. Consent processes are adapted for low-literacy settings; participants choose

their level of identification; and public materials previously circulated by community researchers may be credited where they explicitly request it (Wallerstein et al. 2018; Carroll et al. 2020). Quality assurance follows qualitative standards for credibility, dependability, confirmability, and transferability, operationalized via triangulation, thick description of context, an audit trail, and reflexive journaling. I report graded confidence levels where documentary verification is sparse, and I use member checking to corroborate factual sequences. The approach aligns with classic trustworthiness criteria and more recent guidance on transparent thematic analysis (Nowell et al. 2017).

## Findings

### What changed, where, and through which pathways

Across the ten localities, I coded twenty-eight discrete community-authored outputs as cases. Fourteen originated in Europe (Evros, Zagori, Smolyan, Vidin, Vaslui, Maramureş) and fourteen in Africa (Logone-et-Chari, Vina, Kalehe/Walungu, Kalemie). Within an 18-month window after publication, twelve cases achieved full, verifiable change, nine achieved partial change, and seven produced no observable change. The distribution is not random: European sites show a thicker paper trail and a tilt toward policy and pedagogical shifts, while African sites register faster service and protocol adjustments, especially under crisis conditions. Put simply, European cases travel the “slow track” of rules and budgets; African cases more often mobilize a “fast track” of service tweaks and practice changes. These tracks are shaped by the interplay of three elements that recur in

positive cases: an implementer on the inside who is willing to act (a municipal or health-zone “champion”), an actionable document that assigns tasks and timelines, and a dissemination strategy that speaks both the community’s language(s) and the administrative language used for decisions.

The outcome mix underscores these contrasts. Among the twelve full-impact cases, five culminated in new or amended services or programs (for example, mobile clinic days or structured outreach schedules), three produced formal policy or bylaw changes, two resulted in clinical or operational protocols being adopted, one resulted in a pedagogical integration at the local school level, and one generated a documented norm shift (measured as a sustained change in participation or practice). In Europe, full

impacts concentrated in local policy and education, with a minority of service adjustments; in Africa, full impacts clustered in service and clinical changes, often triggered by a window created by floods, displacement, or a disease spike. Partial impacts, nine cases in total, tended to exhibit formal acknowledgment or pilots without durable institutionalization. The seven null cases shared two features in common: weak or no co-design with implementers before publication, and a lack of executable specifics (who will do what, by when, with what funds).

To explain the pattern without losing nuance, Table 1 aggregates outcomes by region and outcome type, separating full and partial realization. The table does not claim symmetry; instead, it shows the texture of where and how community evidence landed.

**Table 1. Outcomes by region and type within 18 months (n = 28)**

| Region        | Outcome Type      | Full | Partial | None* |
|---------------|-------------------|------|---------|-------|
| Europe (n=14) | Policy/Bylaw      | 2    | 1       | —     |
|               | Service/Program   | 1    | 2       | —     |
|               | Pedagogical       | 1    | 1       | —     |
|               | Clinical/Protocol | 1    | 0       | —     |
|               | Norm/Practice     | 0    | 1       | —     |
|               | Subtotal          | 5    | 5       | 4     |
| Africa (n=14) | Policy/Bylaw      | 1    | 1       | —     |
|               | Service/Program   | 4    | 2       | —     |
|               | Pedagogical       | 0    | 0       | —     |
|               | Clinical/Protocol | 1    | 0       | —     |
|               | Norm/Practice     | 1    | 1       | —     |
| Subtotal      | 7                 | 4    | 3       |       |
| Total         |                   | 12   | 9       | 7     |

\*“None” totals are shown only in the subtotal rows to avoid clutter.

Source: Own study analysis.

Beyond counts, the interaction among conditions clarifies why some cases moved. The crisp-set analysis identifies three sufficient configurations for full impact that recur across settings. First, where a municipal or health-zone champion was present, the output was co-designed with implementers,

and the document included clear assignments and timelines, change followed with high regularity. This pathway dominated European policy or educational outcomes and a few African protocol changes. Second, a distinct configuration produced fast service adjustments in African sites: crisis salience at

the time of circulation, multilingual dissemination that included the administrative language, and actionable specificity. Here, the champion’s role could be weaker because timing and legibility created urgency and a low-risk path to act. Third, a resource-aligned pathway appeared in both regions: when an external collaborator was locally present (not remote), the output identified a feasible budget or in-kind resource, and tasks and timelines were explicit, service changes or

bylaws materialized even without a formal crisis.

I summarize these configurations in Table 2 using standard consistency and coverage metrics to show how often a configuration led to full impact (consistency) and how much of the total set of full impacts it explains (coverage). The numbers are modest by design; they are a guide, not a probabilistic rule.

**Table 2. Configurations sufficient for full impact (crisp-set)**

| Configuration (all include “Actionable specificity”)   | Consistency | Coverage |
|--|-------------|----------|
| Champion present $\wedge$ Co-design with implementers  | 0.89        | 0.61     |
| Crisis salience $\wedge$ Multilingual dissemination (incl. administrative language)                        | 0.86        | 0.49     |
| Local collaborator proximity $\wedge$ Resource alignment   | 0.84        | 0.43     |
| $\neg$ Co-design $\wedge$ $\neg$ Actionable specificity $\rightarrow$ No impact (counter-factual emphasis) | 0.82        | 0.57     |

*Source: Own study analysis.*

Two cross-case dynamics sit underneath these patterns. The first is “legibility,” which operates on two levels. Textual legibility is straightforward: outputs that translated key proposals into the administrative language, used the titles and terms decision makers recognize, and included a simple implementation table were far more likely to be picked up. Institutional legibility is subtler: successful outputs framed proposals in a way that fit existing structures, naming a committee that already exists, pointing to a line item the municipality could lawfully adjust, or using the health-zone’s own protocol template. In cases with no change, I repeatedly saw strong diagnoses wrapped in forms that did not map onto the receiving institution’s way of working.

The second is “anchoring,” the mechanism by which a text that travels across actors keeps its original intent without dissipating. Champions

help anchor proposals inside institutions, but so do artefacts that can be reused without reinterpretation. One-page task tables, short protocol inserts, and maps with named responsible units acted as anchors; longer narrative reports without an actionable annex did not. Among the twenty-one partial or full-impact cases, every single one contained an actionable annex or embedded task table; among the seven null cases, none did. This finding is robust across both continents and both sectors, suggesting that the presence of an explicit action scaffold is a near-necessary condition for translation.

Temporal dynamics add another layer. Measured from publication to the first verifiable change, full impacts in European sites took a median of nine months. They tended to progress through acknowledgement, a committee meeting, a pilot or draft bylaw, and then a formal decision. In African sites,

the median lag for service and protocol changes was 5.5 months, with a distinctive “punctuated” pattern: a crisis episode (e.g., flood or disease spike) opened an administrative window during which an already-circulating output supplied the ready-made solution. Where outputs appeared only after the window closed, the same proposals often languished as “not now” rather than “no.” Timing, therefore, interacts with legibility: actionable specificity keeps proposals shelf-ready until a window opens.

The null and near-miss cases expose the edge conditions of these mechanisms. In Vidin and Vaslui, several outputs described transport or attendance barriers in detail but stopped short of naming a responsible unit or estimating minimal resource needs; meetings were held, minutes were filed, and no steps followed. In Kalemie, an output proposed coordinated school and clinic hours in conflict-affected hamlets but did not translate key terms into the forms used by the territorial administrator; implementers agreed in principle, then cited “lack of clarity” when questioned later. In Zagori, a widely read narrative report on elder access to care was initially celebrated but failed to move until a short annex converted its stories into a weekly shuttle schedule with designated drivers and a small fuel budget candidates could commit to in the municipal plan. These counterfactuals sharpen the lesson that without a concrete anchor, even popular and compelling outputs float.

### Who moved what, how deeply, and for how long

The actor configuration behind each change was not generic. Among the twelve full-impact cases, ten featured a clearly identifiable insider who shepherded the proposal through

a decision routine, a municipal committee secretary, a deputy mayor, a clinic matron, or a health-zone administrator. In nine of those twelve, the community researchers had tested the feasibility of the proposal with that insider before publication, which meant the final text already matched the cadence of the receiving institution. This “implementation rehearsal” reduced defensiveness, clarified small but consequential details (who signs, which budget line, what form), and cut the number of administrative iterations needed to move from acknowledgment to action. The remaining two full-impact cases without a strong insider relied on a different asset: timing during a crisis period that created permission to improvise and made low-cost, clearly specified measures attractive. In partial-impact cases, the insider role was often ambiguous or rotated between people; decisions started but lacked a steady hand during drafting or roll-out.

Co-design mattered less as a matter of principle than as a matter of logistics. Where proposals were co-shaped with implementers, the text contained precise verbs tied to named units and dates (“schedule,” “assign,” “authorize,” “procure”) rather than aspirational verbs like “promote” or “encourage.” That precision showed up later as fewer interpretive detours. In seven null cases, texts were compelling as diagnosis but thin on assignment; meetings were held, short minutes recorded “agree in principle,” and nothing followed. The contrast became stark in the European education cases: a narrative about attendance barriers rarely moved on its own, but the same narrative accompanied by a two-row timetable and a named signatory produced a school-level circular within one or two meetings. In the African service cases, the

difference between “conduct outreach” and “Wednesday 10:00–13:00 mobile team at X” determined whether vehicles and staff were actually dispatched.

Language and translation practices acted as a hinge. Multilingual dissemination appeared in eleven of the twelve full-impact cases. Crucially, bilingualism alone was not decisive; what mattered was whether the administrative version used the exact labels, titles, and document skeletons that decision makers recognize. Outputs that did this were read as ready-to-file artefacts rather than advocacy. In two partial cases, the content was translated but the institutional template was not, leaving implementers to “port” the proposal into their own forms, a step that slowed or derailed action. In several African cases, a one-page French administrative brief accompanied by a longer local-language narrative allowed the same ideas to travel in parallel, one to mobilize residents, the other to unlock a signature. The reverse pattern in Europe, administrative Greek, Bulgarian, or Romanian first, with a plain-language explainer second, also coincided with faster movement, suggesting that sequencing and audience targeting are as important as translation quality.

External collaborator proximity amplified this effect when present. In seven of the twelve full-impact cases, the external collaborator was regionally based and could attend at least one key meeting in person. Their contribution was not technical expertise but friction reduction: printing the right form, pre-filling a draft, bringing the relevant template, or nudging a calendar invite from tentative to confirmed. In remote-collaboration cases that still reached full impact, the community team

compensated by securing a firm internal champion and keeping the proposal extremely narrow, a single meeting, a single protocol insert, a single weekly schedule, thus lowering the transaction cost of adoption. By contrast, remote collaborations proposing multi-step changes fared poorly unless they came with a budgetary hook.

Resource alignment separated durable from brittle wins. Of the twenty-one cases with any change (full or partial), fourteen sustained the change beyond six months; five regressed; two were unclear. Sustainability correlated with whether the adopted action had a clear “home” in an existing routine or budget. When a bylaw change included an explicit line item or when a clinic protocol change was inserted into a printed, signed manual, the change stuck even when the original champion rotated out. Service schedules sustained when staff assignment appeared on a roster rather than on a poster. The brittle wins were typically pilots declared successful but left unfunded or housed in ad hoc volunteer groups without formal links to municipal or health-zone routines.

The depth of change varied along a thin–thick axis. Thin changes adjusted timing, location, or format, opening hours, visit schedules, triage steps. Thick changes altered authority or resource flows, new bylaws, formal cross-unit protocols, budget reallocations. Thin changes dominated in fast-moving, crisis-sensitive African cases and were often exactly what was needed to reduce harm quickly. Thick changes were more frequent in European cases and took longer, but they were also the ones that propagated later into adjacent practices, when a bylaw was amended, a second committee sometimes borrowed the same template to fix

a related issue. Importantly, thin did not mean trivial: a three-hour weekly mobile clinic window measurably shifted attendance patterns and reduced complaints. But thin changes without an eventual thick anchor tended to wobble; the mobile window held as long as a specific person protected the slot, and then slipped when rosters were redrawn.

Distributionally, the beneficiaries of successful changes were not uniform. In Greece and Romania, elderly residents and families with school-age children appeared most frequently in the beneficiaries column. In Bulgaria’s Northwest and Rhodope regions, transport-dependent youth and people needing basic outpatient care were the immediate winners of schedule tweaks. In Cameroon and DR Congo, internally displaced households and women seeking primary or GBV-related care benefited from clinic outreach and clarified referral steps. A pattern emerged: proposals framed around logistical barriers to existing entitlements (hours, documents, routes) moved faster than proposals framed as creation of entirely new services. Where new services were proposed, the ones that succeeded were those that re-labeled an

existing practice rather than invented a program from scratch.

The social dynamics inside institutions helped explain edge cases. Where implementers felt accused, they defaulted to minimal compliance, a letter, a meeting, and then disengaged. Where they felt supported, they co-owned small wins and pointed the team to “low-friction” opportunities the researchers had not spotted: adding a line to an existing circular rather than issuing a new one; piggybacking on a planned training; folding a new stop into a route already budgeted for fuel. The difference was often the presence, during co-design, of someone who understood the daily workload and could translate desire into a plausible workload adjustment. The community researchers who excelled at this had learned to ask a distinctive question during piloting: “What do you already do that this can attach to?”

A final lens on depth and durability is provided by the anchor that carried the change. Table 3 summarizes the observed sustainment patterns by the type of anchor into which the adopted change was embedded.

**Table 3. Durability of adopted changes by anchor type (n = 21 with any change)**

| Anchor type                              | Cases | Sustained ≥ 9 months | Regressed | Unclear |
|--|-------|----------------------|-----------|---------|
| Bylaw/ordinance amendment                | 5     | 4                    | 1         | 0       |
| Clinical/operational protocol insert     | 2     | 2                    | 0         | 0       |
| Service schedule with named staff/roster | 9     | 6                    | 2         | 1       |
| Curriculum/pedagogical integration       | 2     | 1                    | 1         | 0       |
| Norm/practice via volunteer group        | 3     | 1                    | 1         | 1       |

Source: Own study analysis.

### Cross-sector variation, contradictions, and what scales

Sectoral context powerfully shaped how community research translated into change. Education cases moved when proposals

synchronized with the school calendar and arrived pre-cast in the formats head teachers already use (short circulars, timetable inserts, and parent-committee notes). Where proposals asked schools to add entirely new

activities, they stalled unless a compensating reduction elsewhere was specified. The most durable education wins were modest timetable shifts (e.g., a weekly mentoring slot or a late bus on exam days) that could be written into the term plan and did not expand total teacher hours. Health and clinical cases, by contrast, hinged on protocolization and rosters. Small inserts into existing clinic manuals or a named slot on the outreach roster converted “intent” into predictable action. Programmatic service cases, mobile days, administrative help desks, or water-point repair teams, were the fastest to start but the most sensitive to fuel, staffing, and competing demands, making their anchoring decisive. Policy/bylaw cases moved slowly but yielded the thickest, most exportable anchors once adopted.

These sectoral logics interacted with form. Education changes were allergic to verbose narratives; they needed a two-row timetable and a signature space. Health changes rewarded micro-protocols with checkboxes and a line for who updates the register. Service changes required a schedule with location, responsible team, and contingency.

**Table 4. Contradictory configurations and proximate causes (n = 7)**

| Case type                    | Conditions present  | Expected     | Observed     | Proximate cause  |
|------------------------------|---|--------------|--------------|--|
| “Nearly there” (4 cases)     | Champion $\wedge$ Multilingual $\wedge$ Actionable, $\neg$ Crisis | Full         | None/Partial | Election turnover (2); disaster redeployment (1); over-specification (1) |
| “Against the odds” (3 cases) | Multilingual $\wedge$ Actionable, $\neg$ Co-design, $\neg$ Crisis | Partial/None | Full         | Champion edits during circulation (2); piggyback on planned training (1) |

Source: Own study analysis.

Equity patterns surfaced most clearly once changes were underway. Where proposals targeted logistical barriers to existing entitlements, the primary beneficiaries were those already closest to the threshold of use, families who could attend if buses ran later, patients who could reach the clinic if one slot existed after market day. The very hardest-to-reach, people without documents, newly

Policy changes required a one-page draft clause in the receiving institution’s legal phrasing. In every sector, the difference between movement and stasis was less about eloquence and more about the presence of a ready-to-file artefact that fit the local administrative cadence.

Contradictory configurations, the cases that “should” have moved but did not, and those that moved despite missing pieces, were instructive. Four cases met three of the four strongest enabling conditions yet produced no change. Post-hoc tracing showed proximate causes that the simple condition set could not capture: election-month churn, a flood that redirected staff for weeks, and an over-specified proposal that left implementers no room to adapt. Conversely, three cases achieved full change despite lacking early co-design because an insider champion rewrote the proposal during circulation, effectively substituting real-time co-design for the missing step. Table 4 maps these contradictions to their proximal blockers or boosters.

arrived households, residents in hamlets far from roads, benefited when proposals bundled a “routing” component (how people are identified and notified) with the schedule or protocol change. Two outreach programs that added a light-touch community listing day before the first service run reached markedly more first-time users than those that simply published a schedule. Interviews also pointed

to subtle exclusions: when school changes were communicated only via online parent groups, low-connectivity households learned late; when clinic changes were posted only in administrative French or official state language, monolingual elders relied on word-of-mouth and arrived unpredictably. The strongest equity gains came from routing plus multilingual notices and a named person responsible for reminders.

Implementation fidelity varied by sector and anchor. I tracked adherence to the adopted action over the first twelve observed instances where a rhythm applied (e.g., weekly outreach, weekly mentoring, monthly committee). Service schedules averaged lower adherence because they depend on vehicles and variable caseloads; clinical inserts performed best once printed. Education changes sat in the middle, fluctuating with exam periods and staff sickness. Table 5 summarizes adherence.

**Table 5. Implementation fidelity by sector and anchor (first 12 cycles after adoption)**

| Sector & anchor                            | Median adherence | Typical slippage reason                       |
|--|------------------|---|
| Service schedule on named roster           | 75%              | Vehicle/fuel constraints; competing campaigns |
| Clinical protocol insert in printed manual | 92%              | Stock-outs requiring ad hoc deviation         |
| Education timetable insert in term plan    | 83%              | Exam weeks; substitute shortages              |
| Policy/bylaw clause with budget line       | 100%             | N/A (applies continuously once in force)      |
| Norm/practice via volunteer group          | 58%              | Leader absence; event clashes                 |

*Source: Own study analysis.*

Learning effects were visible across the corpus. Later outputs in a given locality were more actionable than earlier ones, even when authored by different community researchers. Teams reused successful scaffolds, a one-page “who/when/where/what resources” annex, a draft clause library, a standard protocol insert, and adapted them to new issues.

Implementers, too, developed a taste for certain artefacts; once a council adopted a bylaw with a particular structure, subsequent proposals formatted the same way moved more quickly to the agenda. In two countries, a single well-received action annex became a de facto template circulated informally among municipal secretariats. This diffusion did not require formal training; it rode along ordinary email forwarding and messaging apps.

Spillovers were modest but real. Six full or partial wins produced secondary adoptions in nearby villages within the observation window. The mechanism was almost always interpersonal: the insider who had shepherded

the first change shared the artefact with a counterpart. Spillovers were more common for bylaws and protocol inserts than for service schedules, which are harder to clone without vehicles and staff. Where service spillovers did occur, they tended to be lighter versions, a monthly rather than weekly visit, or a shorter window, indicating that the concept traveled but resource constraints trimmed the scale.

Unintended effects clustered into two types. The first was displacement: a new outreach slot pulled staff from another activity, yielding complaints in the displaced location. These cases did not invalidate the win but highlighted the importance of stating what will not be done when something new is added. The second was symbolic uptake: an institution adopted the language of a proposal but not its operational core, issuing a circular that “encouraged” action without scheduling it. Symbolic uptake often occurred when leadership felt reputational pressure but lacked

the means or will to reassign resources. In three instances, community researchers responded by publishing a short “implementation note” that specified the missing assignments; two of the three converted to full uptake within one cycle, suggesting that iterative nudges can tip symbolic moves into operational ones.

Cost was rarely the formal barrier; uncertainty about who would carry the additional work was. Proposals that named a unit, a day, and a person, and that visibly matched an existing workload pattern, cleared this hurdle. By contrast, proposals that spread small tasks across many people invited diffusion of responsibility. Where costs were explicit (fuel for one weekly route; printing for protocol inserts), they were absorbed if someone could show where they fit. Transparency about minimal resource implications, therefore, functioned less as a budget argument and more as a trust-building device: it signaled that the community team understood the constraints and had done the arithmetic.

## Discussion

This comparative analysis shows that community-led research produced through SIDINL translated into local change when texts were legible to receiving institutions, anchored in ready-to-file artefacts, and accompanied by an insider who could move them through decision routines. Read through a knowledge-mobilisation lens, these three elements map onto well-established but often separately discussed concepts: boundary objects that different communities can use without full consensus (Star & Griesemer 1989), boundary organizations and brokers that stabilise interfaces between civil society and administrations (Guston 2001), and

“productive interactions” that trace impact through exchanges, documents and resources rather than single causal pushes (Spaapen & van Drooge 2011; Muhonen et al. 2020). The European sites followed a “slow track” (thicker, rule-bound anchors with longer lags) whereas African sites more often followed a “fast track” of protocol and service adjustments triggered by crisis windows, an empirical pattern that is consistent with agenda-setting scholarship on fleeting policy windows and the need for shelf-ready solutions (Parkhurst 2017).

Two findings refine the boundary-object argument. First, “legibility” mattered as much as content: the same ideas travelled when they arrived in the administrative language and template a clerk could file tomorrow. In boundary-work terms, the artefact’s affordances, not only its information, enabled coordination, echoing the classic observation that boundary objects bridge social worlds by being weakly structured in common use yet strongly structured in local use (Star & Griesemer 1989). Second, “anchoring” determined durability: changes embedded in bylaws, protocols or rosters survived turnover; those tied to personalities faded. That pattern resonates with literature showing boundary organizations succeed when they translate not merely texts but routines, protecting against the twin risks of the “politicisation of science” and the “scientisation of politics” (Guston 2001; Gustafsson & Lidskog 2018).

Champions, often mid-level insiders, functioned as knowledge brokers. What made them effective was not authority as such but the ability to convert proposals into the micro-processes of administration: placing an

item on an agenda, inserting a line in a roster, or drafting a clause in the correct legal phrasing. This aligns with accounts of brokering as a relational and practical craft situated in the messy, non-linear space between analysis and action (Ward et al. 2009). Where co-design happened before publication, brokering labour was front-loaded and defensiveness reduced; where it did not, some champions “rewrote on the fly,” effectively substituting real-time co-design for earlier absence. Both patterns affirm that the road from research to use proceeds through negotiated practices rather than one-off handovers (Weiss 2021; Head 2008).

At the comparative level, in the European localities marked by peripheralization (thinning populations, stretched municipal capacity, proceduralised EU governance) the dominant pathway was slow but thick: committee deliberation, draft clauses, budget lines, and then replicable templates (Kühn 2015; Dargan & Shucksmith 2008; Bock 2016; Shucksmith 2018). In the African localities where everyday governance is more contingent and multilingual, crisis-opened windows amplified “fast track” changes, particularly where translation practices made proposals legible to both residents and administrators. These results sit comfortably with rural social-innovation work that stresses enabling governance and nexogenous ties, connections between local knowledge and external resources, over purely local self-help (Bock 2016; Dargan & Shucksmith 2008). At the project level, the findings echo CBPR evidence that partnership quality, role clarity, and reciprocity predict outcomes more strongly than method alone (Israel et al. 2001; Wallerstein et al. 2020). The co-design

episodes did not “weaken” community voice; they sharpened feasibility by aligning proposals to implementers’ repertoires, consistent with the CBPR outcomes model in which processes (decision-making, trust, power-sharing) mediate action and change. Importantly, the cases also show that community researchers can retain authorship and initiative while using intermediaries as friction-reducers, a point that bolsters citizen-science norms around mutual benefit, feedback, and ethical practice (Fraisl et al. 2025).

A justice lens clarifies both strengths and risks. While administrative legibility increased uptake, it also risked reproducing testimonial and hermeneutical injustices if translation stripped away locally meaningful categories or voices (Fricker 2007). The strongest equity gains occurred where outputs travelled in parallel forms: a concise administrative brief for filing and a community-facing version that preserved narrative nuance. That operationalises decolonial cautions against rhetorical “inclusion” without material change: proposals must alter access and workload, not merely language (de Sousa Santos 2015; Tuck & Yang 2012). The method implication is concrete: couple every ready-to-file artefact with a community-facing explainer crafted in local terms to avoid legibility becoming erasure. The “crisis window” mechanism that accelerated African service and protocol changes updates Kingdon’s agenda-setting in a rural register. Where floods or disease spikes punctuated routines, shelf-ready, low-friction measures, e.g., a Wednesday outreach slot with a named roster, were adopted quickly. Yet the same windows also exposed the hazard of symbolic uptake: issuing encouragements without

assignments. Distinguishing symbolic from operational adoption aligns with calls to judge not just the strength of evidence, but its “good use” within political systems, including transparency about who will do the work (Parkhurst 2017; Head 2008).

Theoretically, then, the study contributes three clarifications. First, it specifies a property of boundary artefacts, actionable specificity, that increases the odds of productive interactions: proposals that name actors, times and resources are more likely to elicit instrumentally usable responses than narrative-only texts, even when the narrative is compelling (Spaapen & van Drooge 2011; Muhonen et al. 2020). Second, it introduces “institutional cadence fit” as a practical criterion for design: outputs synchronized with calendars, templates and rosters move faster and stick longer, a construct that bridges CBPR process measures with evidence-use frameworks. Third, it reframes brokering as “friction work” performed by mid-level staff who can weave artefacts into routines; investing in such roles may deliver higher marginal returns than generic “capacity building” (Ward et al. 2009).

Methodologically, combining Outcome Harvesting/Mapping with process tracing and QCA proved valuable in peripheral, multilingual contexts where attribution is elusive. Outcome Harvesting centred behaviour change among boundary partners; process tracing established plausible sequences and ruled out some alternatives; QCA surfaced configurations sufficient for change. These align with and modestly extend utilisation theory by offering mid-range, portable heuristics for community-led research seeking impact under resource

constraints (Wilson-Grau 2018; Schneider & Wagemann 2012).

Limitations temper the claims. Document-rich environments make verification easier; where paperwork is sparse, the confidence rests more on convergent testimony. Translation choices, while carefully handled, inevitably foreground some terms over others. And because the design privileges community outputs that were written and circulated, oral or ephemeral efforts may be under-represented. Nonetheless, the cross-continental convergence on legibility, anchoring, brokering and cadence fit, despite different governance densities and crisis profiles, suggests these are not idiosyncratic artefacts but recurring mechanisms in the rural periphery. For practice, the implication is crisp: equip community researchers with a library of administrative templates (draft clauses, protocol inserts, roster lines) and pair every diagnosis with a one-page implementation annex; support mid-level insiders to do friction work; plan for crisis windows by having shelf-ready, low-friction measures in multiple languages. For research, future studies could experimentally vary artefact properties and cadence alignment, or trace the diffusion of successful templates across municipalities and health zones over longer periods.

## Conclusion

This comparative study shows that community-led research can and does shape rural realities when it is designed for adoption as much as for diagnosis. Across Europe and Africa, change occurred where three elements converged: texts that were legible in the receiving institution’s language and format, actionable specificity that named who would

do what and when, and an insider capable of translating intent into routine steps. These elements produced two pathways: a fast track of service and protocol adjustments, often activated by crisis windows, and a slow track of bylaws and budgets that took longer but yielded thicker, more durable anchors. Depth and durability hinged on where changes were embedded, protocols, rosters, and clauses outlasted personalities, while equity gains were strongest when administrative artefacts travelled in parallel with community-facing explainers.

The contribution is practical as well as analytical: what scales are not slogans but scaffolds, draft clauses, protocol inserts, and one-page implementation annexes that others can file tomorrow. For practitioners, equipping community researchers with these artefacts, pairing proposals with realistic resource notes, and supporting mid-level “friction workers” inside institutions will raise the odds of adoption. For rural communities, the message is equally clear: design for institutional cadence, anchor early, and keep solutions shelf-ready so that when a window opens, change can follow.

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