



Social Transformation of Riverside Communities along the Mahakam River through Asset-Based Empowerment Strategies

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ABSTRACT

Purpose – This study explores the social transformation of riverside communities along the Mahakam River through an Asset-Based Community Development (ABCD) strategy. These communities face socio-economic and environmental challenges, yet possess untapped local assets. This study aims to demonstrate how mobilizing community strengths—rather than focusing on needs—can foster sustainable empowerment and social change.

Design/methods/approach – A qualitative, participatory case study approach was employed in two riverside communities in Samarinda, Indonesia. Data were collected through in-depth interviews with local stakeholders, focus group discussions (FGDs) for asset mapping, and participatory observation. Thematic analysis was used to classify community assets and assess the empowerment process.

Findings – The findings reveal that community transformation occurred through increased awareness and mobilization of local assets such as traditional skills, social networks, cultural practices, and natural resources. The ABCD approach stimulated collective action, improved economic self-reliance, and strengthened social cohesion. Partnerships with external actors further enhanced local initiatives. However, infrastructure limitations and environmental threats remain ongoing challenges.

Research implications/limitations – The study is limited to two urban riverbank communities, which may constrain the generalizability of findings. Additionally, reliance on qualitative methods may introduce subjectivity in interpretation, though this was mitigated through triangulation.

Originality/value – This research offers a practical framework for implementing ABCD in urban riverine settings, contributing to both community development theory and practice. It underscores the importance of shifting development paradigms from need-based to asset-based strategies. The study also offers groundwork for future research on climate resilience and participatory governance in vulnerable ecosystems.

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Introduction

Riverside communities, particularly in regions such as East Kalimantan, Indonesia, exhibit a profound relationship with their natural ecosystems while grappling with significant socio-economic vulnerabilities. This precarious situation is exacerbated as urbanization progresses, leading to environmental degradation and infrastructural neglect. For instance, it has been noted that communities along the Mahakam River face ongoing challenges, including flooding and pollution, which are directly related to inadequate urban planning and resource management (Moulds et al., 2021; , Bawole & Sutanto, 2023). The reliance on the river for essential activities such as transportation and fishing underscores the socio-economic significance of these waterways for local populations. In Indonesia, studies have highlighted that these communities depend heavily on rivers for economic sustenance through fishing and small-scale trading activities, indicating an intrinsic link between their economic well-being and the health of these aquatic ecosystems (Haryono et al., 2024), Sutapa et al., 2022). However, the urban pressures contribute significantly to issues such as pollution and the deterioration of local fisheries, which in turn affects food security and economic opportunities for these residents (Haryono et al., 2024).

The intersection of urbanization and environmental challenges in these communities has led to an increase in socio-economic marginalization. Scholars have pointed out that marginalized groups often experience heightened vulnerability, as urban development initiatives tend to prioritize wealthier districts, exacerbating inequality (Moulds et al., 2021; , Bawole & Sutanto, 2023). This trend is evident in the experiences of informal settlements along riverbanks, where limited access to education and healthcare compounds the struggles of the residents, further entrenching their marginal status (Davy & Pellissery, 2013; , Hamidah et al., 2017). As a result, these communities find themselves in a paradox where reliance on their natural environment is met with the threats posed by urban expansion and ecological neglect (Calderón, 2022). While riverine communities like those along the Mahakam River are deeply interconnected with their ecosystems, they are simultaneously vulnerable to the adverse effects of urbanization and environmental degradation. The combined pressures of flooding, pollution, and limited socio-economic resources highlight the urgent need for targeted interventions that promote sustainable development and enhance the resilience of these communities. This holistic

approach is essential for addressing both environmental sustainability and social equity in these vulnerable regions (Pane et al., 2023).

Conventional development approaches in areas such as low-income communities have often relied on needs-based frameworks that emphasize deficiencies rather than community potential. This focus on what is lacking can contribute to negative perceptions of these communities, undermining their existing strengths and social capital. For example, needs-based strategies may overlook how social relationships and networks can enhance community resilience and health outcomes (Story, 2013; Aldrich & Meyer, 2014). Furthermore, the emphasis on deficiencies can lead to dependency on external aid rather than fostering local empowerment and capacity building (Gómez, 2020).

In response to these limitations, the Asset-Based Community Development (ABCD) model introduced by Kretzmann and McKnight provides a paradigm shift by focusing on identifying, mobilizing, and connecting local assets. This model is predicated on the notion that community development should begin with the strengths inherent within the community, including individual skills, local resources, and community networks (Mathie & Cunningham, 2003; . Research has shown that when communities leverage their social capital — defined as the networks of relationships and trust among community members — they are able to achieve better economic and social outcomes (Prince, 2024; Woolcock & Narayan, 2000). Thus, ABCD emphasizes the potential for communities to drive their own development through existing resources rather than solely relying on external intervention (Mathie & Cunningham, 2003; Adamtey & Frimpong, 2018).

Evidence supporting the effectiveness of the ABCD model can be found in numerous studies demonstrating its capacity to enhance community vibrancy and engagement. For instance, communities that adopt ABCD principles often see improvements in both social cohesion and economic viability. This success is attributed to the recognition of individuals' capabilities and the promotion of collaborative efforts aimed at addressing local challenges (Pan et al., 2005; Bridger & Luloff, 2001). As communities become more engaged and empowered, the benefits are reflected in enhanced health outcomes, increased educational attainment, and overall community well-being (Eriksson, 2011; Woodhouse, 2006).

Recent studies have demonstrated that the Asset-Based Community Development (ABCD) approach effectively fosters community resilience, enhances participation, and encourages bottom-up innovation (Mathie & Cunningham, 2003). This effectiveness stems from its focus on leveraging existing local assets rather than concentrating on deficiencies, which empowers community members to take an active role in their development (Mathie & Cunningham, 2003). Such approaches have been shown to generate more sustainable community outcomes by strengthening social ties and promoting collective action (Bridger & Luloff, 2001).

However, the application of the ABCD model in urban riverine environments, particularly in Southeast Asia, remains underexplored (Prince, 2024). This gap in research represents a critical oversight, as many riverside communities face unique challenges related to environmental degradation, socio-economic vulnerabilities, and rapid urbanization, which could benefit from the principles of ABCD (Nyamari, 2024). For example, communities along the Mahakam River in East Kalimantan are experiencing these issues, and understanding how the ABCD model can be implemented in this context could offer valuable insights for fostering localized resilience and empowerment (Müller et al., 2018).

This research seeks to address the aforementioned gap by investigating the application of the ABCD strategy specifically in the riverside communities along the Mahakam River (Nyamari, 2024). By focusing on how local assets—such as social capital, individual skills, and community resources—can be mobilized, the study aims to explore the potential for social transformation within these vulnerable communities (Sassi & Hoitink, 2013). Furthermore, by examining existing forms of community engagement and participation, it will provide evidence on the effectiveness of ABCD in fostering innovative solutions to local challenges (Adamtey & Frimpong, 2018). In conclusion, exploring the implementation of the ABCD approach in urban riverine environments like the Mahakam River offers a promising avenue for enhancing community resilience and participation. This research not only aims to fill a critical gap in the existing literature but also holds the potential to inform policy and practice by demonstrating the value of harnessing local strengths for sustainable development in vulnerable communities (Nyamari, 2024).

The paper is structured as follows: Section 2 presents the theoretical framework and literature review; Section 3 outlines the methodology; Section

4 details the research findings and discussion; and Section 5 concludes with implications and recommendations. The primary aim of this study is to explore how mobilizing community assets contributes to social transformation in riverside settlements. The study concludes that an asset-based approach offers a viable alternative to traditional development models by strengthening local capacities and promoting community-led change.

Methods

Research Design

This study employed a qualitative research design using a **participatory case study approach**, which is appropriate for exploring social transformation within a specific community context. The Asset-Based Community Development (ABCD) framework guided the research process, emphasizing the identification and mobilization of community strengths and assets. This design allowed for deep engagement with participants and co-construction of knowledge throughout the fieldwork.

Research Site and Participants

The research was conducted in two riverside communities along the **Mahakam River**, specifically in **Loa Janan Ilir** and **Kelurahan Mesjid**, located in **Samarinda City, East Kalimantan, Indonesia**. These areas were selected due to their strategic location along the river and the active presence of traditional and informal community networks.

Participants included community leaders, women's groups, youth representatives, local entrepreneurs, and elders. A total of **25 participants** were involved in various stages of the study through interviews and group discussions. The researchers collaborated with **local facilitators** to ensure contextual understanding and cultural sensitivity during the research process.

Data Collection Techniques and Instruments

Data were collected using three main techniques:

- **In-depth interviews** with key informants (e.g., community leaders, local business actors) to explore narratives of transformation and perceptions of assets.
- **Focus Group Discussions (FGDs)** to collaboratively conduct **asset mapping**, categorizing individual, social, physical, institutional, natural, and cultural assets.
- **Participatory observation**, where the researchers were present during daily activities and community meetings to observe community dynamics and empowerment practices.

An interview guide and FGD protocols were developed based on the ABCD framework and validated by academic peers before use.

Researcher Presence

The **first author** conducted the fieldwork directly, spending **three weeks** in each community during the data collection phase. The presence of the researcher involved **active participation** in community events, informal conversations, and documentation of asset mobilization practices. This participatory presence enhanced trust and openness among participants.

Data Analysis

Data were analyzed using **thematic analysis** (Braun & Clarke, 2006), involving data reduction, coding, and categorization based on the six types of assets defined in the ABCD model. Triangulation was employed by comparing data from interviews, FGDs, and field notes to ensure validity and consistency. Member checking was conducted with several participants to validate the interpretations drawn from the data.

Validity of Findings

To enhance credibility, the study applied **triangulation of sources, peer debriefing, and member checking**. Reflexive journaling and audit trails were maintained throughout the study to document the researcher's role and mitigate bias. Ethical considerations, including informed consent and participant anonymity, were strictly followed.

Result

This section presents the results of the study conducted in two riverside communities along the Mahakam River. The findings are categorized into three main themes: identification of community assets, the process of asset mobilization, and indicators of social transformation. Each category is discussed in detail below.

Identification of Community Assets

The community asset mapping, conducted through focus group discussions and interviews, revealed six major asset types based on the ABCD framework:

Individual Assets

Community members possess various traditional skills such as fishing, boat-building, cooking local dishes, and crafting tools from wood and recycled materials.

Associational Assets

Numerous informal groups exist, such as arisan (rotating savings groups), youth sports clubs, and women's cooking collectives. These groups function as support systems and social capital hubs.

Institutional Assets

Local institutions include mosques, community health posts (posyandu), elementary schools, and cooperative stalls. These provide formal support for education, health, and spiritual activities.

Physical Assets

Key infrastructures such as river docks, footbridges, and stilt houses form the physical backbone of the community. Despite their basic condition, they reflect resilience and adaptability to riverine environments.

Natural Assets

The Mahakam River provides fish, freshwater vegetation, and water access for transportation. The mangrove and wetland ecosystems also serve as environmental buffers.

Cultural Assets

Local traditions such as *Selamatan Sungai*, community cleaning rituals, and river folklore are deeply rooted and contribute to collective identity and belonging.

Figure 1. (a) Community members mapping assets during an FGD; (b) Visual representation of categorized assets by the participants.

Mobilization of Community Assets

Process of Activation

Following the asset identification phase, community groups began to organize collaborative activities such as:

- (1) Producing smoked fish using traditional methods
- (2) Organizing youth-led river clean-up events
- (3) Hosting monthly cultural storytelling nights

These initiatives were low-cost and utilized internal resources, increasing local ownership and pride.

Role of Local Leadership and External Partnerships

Community leaders facilitated the connection between internal assets and external actors such as NGOs and universities. This resulted in support for

tools (e.g., packaging machines for smoked fish) and training (e.g., financial literacy for women’s groups).

Table 1. Examples of Community Initiatives and Asset Utilization

| Initiative | Asset Utilized | Outcome |
|---------------------------|-----------------------------|-------------------------------------|
| Smoked fish production | Traditional cooking skills | Increased household income |
| Youth river clean-up | Youth clubs, cultural norms | Improved environmental awareness |
| Storytelling and folklore | Cultural traditions | Strengthened intergenerational ties |

Indicators of Social Transformation

Evidence of social transformation was observed through changes in behavior, structure, and community values:

- (1) **Enhanced Collective Agency** – Communities independently planned and executed small-scale economic and cultural programs.
- (2) **Increased Trust and Participation** – Participation in collective decision-making improved across age and gender groups.
- (3) **Emergence of New Leadership** – Younger individuals began to take leadership roles in environmental and economic initiatives.
- (4) **Shift from Dependency to Autonomy** – Communities began to rely less on aid and more on internally mobilized resources.

These changes suggest that the ABCD approach catalyzed a process of grassroots-driven transformation and sustainable empowerment.

Discussion

The findings of this study suggest that the implementation of the Asset-Based Community Development (ABCD) strategy in riverside communities along the Mahakam River has successfully contributed to social transformation by empowering local actors, enhancing self-reliance, and strengthening community cohesion. These outcomes confirm the working

hypothesis that mobilizing internal assets can be more sustainable and empowering than external, needs-based interventions.

Interpreting the Results in Light of Previous Studies

The identification and activation of six categories of assets—individual, associational, institutional, physical, natural, and cultural—are consistent with Kretzmann and McKnight's (1993) ABCD framework, and align with Mathie and Cunningham's (2003) findings that asset mobilization strengthens local agency and initiative. Similar to the findings of Green and Haines (2015), this study illustrates how small-scale, internally initiated actions can lead to significant collective impact.

Moreover, the emergence of new leadership among youth and increased cross-generational participation reflect what Chambers (1997) calls “reversed learning,” where communities rediscover and reclaim their own capacity for change. This is particularly relevant in urban riverine areas, where traditional ecological knowledge and cultural practices have often been overlooked in formal development agendas (Rahmawati, 2018; Sutrisno et al., 2021).

Broader Implications for Community Empowerment

The study demonstrates that the ABCD approach is not only applicable in rural settings—as is often assumed—but can also be effectively adapted to **urban riverine environments** where communities face both environmental vulnerability and socio-economic marginalization. The practical implication is clear: development actors—including NGOs, local governments, and universities—should reconsider deficit-based models and instead build empowerment programs grounded in asset recognition and mobilization.

This study also contributes to the discourse on **resilience and sustainability** in marginalized communities. By fostering autonomy and collective identity, ABCD-based initiatives may serve as a foundation for long-term environmental stewardship, social entrepreneurship, and participatory governance.

Limitations and Directions for Future Research

This study was limited to two communities in one geographic region, which may limit the generalizability of the findings. Furthermore, the qualitative nature of the study—although rich in depth—may benefit from complementary quantitative data in future studies, particularly in measuring long-term outcomes of empowerment and economic development.

Future research should explore:

- (1) Comparative ABCD implementation across different ecological or ethnic contexts;
- (2) Integration of asset-based strategies with climate adaptation frameworks in flood-prone areas;

(2)

(3) The role of digital tools in enhancing community asset mapping and network-building

Conclusion

This study examined how an Asset-Based Community Development (ABCD) approach contributes to the social transformation of riverside communities along the Mahakam River. The findings reaffirm the central argument that sustainable community empowerment is best achieved by recognizing, mobilizing, and connecting existing community assets—rather than by emphasizing needs and deficiencies.

Through participatory methods, this research identified a wide range of local assets—spanning individual, social, institutional, natural, physical, and cultural domains—and revealed how communities were able to mobilize these assets to initiate economic activities, strengthen social ties, and build local leadership. These outcomes demonstrate the practical viability of ABCD in urban riverine environments that are often overlooked in conventional development models.

The study concludes that ABCD offers a powerful framework for promoting grassroots-led transformation and increasing the resilience of marginalized communities. Its application can inform the design of community-based programs by NGOs, local governments, and academic institutions seeking to implement sustainable and inclusive development strategies.

Key recommendations include:

- (1) integrating asset mapping into local planning and community development practices;
- (2) providing capacity-building for community leaders in ABCD facilitation;
- (3) encouraging multi-stakeholder collaboration that respects and enhances local assets.

For future research, there is a need to explore the scalability of ABCD approaches across different geographical and socio-cultural settings. Longitudinal studies are also recommended to evaluate the long-term impact of asset-based strategies on community resilience, environmental stewardship, and economic well-being.

Ultimately, this study contributes to reimagining development not as something brought to communities, but as a process that begins **within** them.

Declarations

Author contribution statement

All authors contributed equally to the conceptualization, methodology, fieldwork in Mahakam riverside communities, data analysis, drafting, and

critical revision of the manuscript. Each author approved the final version for publication.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request. Due to the qualitative nature of the data and confidentiality agreements with participants, data are not publicly archived.

Declaration of interests statement

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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