

RESEARCH ARTICLE

Living Libraries: How Community-Based Documentation Is Reshaping Digital Heritage in Bangladesh

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Abstract

Heritage is defined by lived experiences and oral traditions. A large part of Bangladesh's culture indigenous, Mughal and syncretic is not covered by formal preservation mechanisms but has remained in the heads of aging community members. Communities are using digital technologies to document their own heritage, challenging authority. This article traces the community-based heritage documentation trends globally and in South Asia, examines community-generated content in digital libraries, identifies structural and technical challenges in developing countries and suggests future LIS research directions for Bangladesh.

According to the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, six academic databases were systematically searched from 2010 - 2020. A total of 1,923 records were screened through a multi-stage process to identify 91 studies, with 14 studies from South Asia and 6 studies from Bangladesh. There was also the observation or since communities are now significantly emerging as active co-creators of heritage knowledge. Participative Platforms are always better than pure digitization. In the case of Bangladesh, expanding digital literacy chasm, chronically inconsistent funding and gross trust deficit in institutional capacity continues to severely impede documentation efforts. Demonstrably replicable models include Mobile-first platforms and NGO-library partnerships.

It is absolutely vital that the libraries of Bangladesh be developed into living libraries which would be built through real dialogue among the community. The remarkable lack of Bangladeshi scholarly works in international databases highlights the fact that there exists not only a very alarming gap but also a significant opportunity for the LIS profession.

Keywords

Community-based documentation; Digital heritage preservation; Bangladesh; Digital library transformation; South Asia; PRISMA;

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1. Introduction

Bangladesh is facing a major cultural dilemma. The country's heritage owes its formation to centuries of Mughal influence, British colonial government, indigenous traditions, and syncretic religious and artistic practices. Despite these efforts, a significant portion of this heritage, comprising oral histories, traditional laws, folk performances, indigenous ecological knowledge and living craft traditions, remains outside any formal preservation system. According to Ahmed and Hassan, this exists mostly in the memory of older people in the community, whose knowledge is not being systematically transmitted to the youth. The consequences are grave: once these knowers die, their knowledge cannot be recreated from any archive, for there is no archive of that knowledge. Bangladesh has a remarkable set of formal heritage preservation institutions which include Bangladesh National Museum (established 1913), National Archives (established 1978), Bangla Academy (established 1955) and a network of public and university libraries. Nevertheless, these institutions are perpetually on tight budgets and are rarely available in the rural and indigenous areas where the most at-risk cultural heritage is found (Kabir & Islam, 2017; Roy, 2016). The contrast between what institutions archive and what communities retain is administrative but an epistemological one. The embodied, oral and place-specific knowledge of much of Bangladesh's cultural heritage was not designed to be captured by formal archival systems, and the classification standards derived from western intellectual genealogies misrepresent or render invisible that which is not easily classifiable (Harrison 2013, Smith 2006). Modern technology opens a new horizon to bridge this gap. The expansion of mobile connectivity since 2013 - from about 7% smartphone penetration to 55% in 2023 (BTRC, 2023) - has enabled members of the community to document oral histories, material culture, and folk performances without institutional intermediaries. This means that the power to determine what counts as heritage and what is worth preserving, while once in the hands of central institutions, is moving towards the communities that produce and maintain that heritage (Flinn, 2010; Huvila, 2008). Bangladesh's libraries are increasingly occupying a strategically important position. Many institutions have invested in digital infrastructure in line with the policy frameworks of Digital Bangladesh and Smart Bangladesh. Few organizations have created effective systems for capturing community content in their collections, workflows, or preservation strategies. That gap is an institutional failure and a huge professional opportunity (Hossain and Islam, 2018; Ngulube, 2015). This review, guided by four research questions, analyzes 91 peer-reviewed studies published between 2010 and 2024, applying the PRISMA 2020 guidelines (Page et al., 2021). The metaphor of the Living Library, an institution whose collections and practices develop through an ongoing dialogue with its community rather than through institutional prescription, captures both the descriptive reality that emerges from the literature and the normative proposal for Bangladesh that this review offers (Huvila, 2008; Widdersheim & Koizumi, 2016).

2. Literature Review

Heritage Documentation: From Institutional Control to Community Agency

Throughout the nineteenth and twentieth centuries, formal institutions largely exercised their power over what cultural materials should be kept. Many heritage custodians, like national museums, state archives and public libraries were created or significantly influenced by colonial government; Harrison 2013; Smith 2006. The principles of documentation, provenance, and preservation were most certainly informed by particular cultural epistemologies. In practice, the prescribed standards hardly ever catered for the knowledge systems of indigenous peoples, non-Western peoples and other

marginalized communities (Caswell et al. 2016; Punzalan and Caswell 2016). The consequences were not accidental but systemic. Indigenous oral traditions were poorly documented, misclassified under colonial classification systems or completely omitted from institutional collections (Duarte & Belarde-Lewis, 2015; Thurston, 2012). Groups who might be affected by decisions to select and represent heritage were rarely consulted and, in many cases, those groups did not have access to the very materials that claimed to protect their heritage... (Caswell et al., 2016; Christen, 2011). Starting in the 1970s, community archives became organized forms of resistance against this institutional monopoly. As documented by Flinn et al. (2009), these initiatives created and controlled by the communities themselves assert the right to decide what is collected, how it is described and under what conditions it may be accessed. Several Indigenous archives in Australia, Canada and New Zealand, the Black Cultural Archives (London, 1981), and the Lesbian Herstory Archives (New York, 1974) are examples of the type of record-keeping that essentially sees creation as both a political and technical act (Punzalan & Caswell, 2016). The history is quite meaningful as far as Bangladesh is concerned. The archival priorities of the colonial period continue to be reflected in formal institutional collections. These priorities also continue to govern which communities have histories that survive in organized form, and which do not.

Digital Technology and the Democratization of Heritage Documentation

Digital technology has changed the conditions under which it is possible to document community heritage (Sayers et al., 2016; Mapula & Ngulube, 2019). Before digital technology emerged, the community documentation projects experienced huge resource constraints. The recording equipment was expensive, physical storage was difficult, and most archiving workflows necessitated institutional infrastructure beyond the remit of community groups (Flinn, 2010). The lowering of barriers to heritage documentation has been attributed to the presence of cheap smartphones, open-source software, cloud storage, and social media distribution channels. This documentation, which previously required institutional sponsorship, may now be possible for communities (Christen, 2012; Sayers et al., 2016).

The newly formed structures set up to do this work are not neutral tools. Developed by the Roy Rosenzweig Center for History and New Media at George Mason University, Omeka features an easy-to-use interface, supports Dublin Core metadata, and can be customized by institutions and community organizations (Sayers et al., 2016). The Warumungu community developed a heritage tool which is called Mukurtu, and it utilizes access controls that personalize access by gender, kinship status, and seasonal protocols. The design orientation used to develop Mukurtu embodies the philosophy that tools that support communities should be built on community values rather than being accommodated into them (Christen, 2012). The principle has direct implications for library practice in Bangladesh due to the existing digitization infrastructure with the design of institutional applications.

In the Global South, where fixed broadband infrastructure remains scarce, the mobile infrastructure has expanded rapidly. This has created a situation in which mobiles-first documentation approaches are not just preferred but become necessary (Mapula & Ngulube, 2019). As digital democratization makes it easy for communities to document themselves, there are also contradictions at play which could lead to replicating current power disparities. The structures of metadata, the frameworks of access governance and the institutional interfaces must engage the communities as co-designers and not end users. (Rolan, 2017; Duarte & Belarde-Lewis, 2015).

Community-Based Heritage Documentation in South Asia and Bangladesh

In South Asia, the development of community heritage documentation has been shaped by the colonial history of the archival traditions and oral knowledge practices which they ignored. Indigenous and non-literate knowledge has been de-centered through the design of institutional mechanisms for access to knowledge, ultimately because this knowledge was less relevant to commerce or administration, a design bias which continues to be reflected in the preservation infrastructure in the region (as seen in British colonial archives, Roy, 2016; Thurston, 2012). Bangladesh has several UNESCO-recognized intangible heritage statuses, such as the Baul mystic tradition (2005), Jamdani weaving (2013) and the Nakshi Kantha embroidery (2018). Apart from these globally recognized traditions, over five hundred different ethnic groups such as the Chakma, Marma, Tripura, Garo and Santal, have their own unique irreplaceable and under-documented oral traditions, customary legal systems, medicinal knowledge and ceremonial practices. (Gain, 2000; Chakma, 2018). Civil society organizations have taken on a significant documentation function in response to the limitations of formal documentation. The Kapaeeng Foundation and the Rupantar Cultural Organization have developed methodologies for community documentation that are specifically geared towards documenting communities unreachable by the state (Rahman, 2019; Chakma, 2018). At the same time, outside of the institutional context, informal, grassroots documentation has grown, with community members using social media platforms and YouTube to share heritage content in ways not possible for formal institutions, on a scale that grows exponentially larger than that of formal institutions (Sultana & Hossain, 2019). This non-institutionalized documentation exercise has legitimate concerns with the quality of metadata, institutional interoperability and long-term sustainability. Despite this, however, it indicates the extent to which actual public interest is being invested in heritage preservation, which formal library programs have yet to be able to effectively invest in and/or support. Rapid urbanization in the Chittagong Hill Tracts is threatening to negatively impact customary law, oral literature and ceremonial practice faster than it is being documented (Gain, 2000; Chakma, 2018). Here the barriers are not so much technical as they are structural, based on under-investment, the distrust that has developed over decades of dispossession, and the lack of documentation systems based on the cultural protocols of indigenous communities.

Digital Library Transformation: Infrastructure, Participation, and Community Engagement

Digital library transformation is more than just the digitization of collections. It demands changes in organizations and relationships that shift the way libraries are viewed, with a shift toward active engagement in the digital information eco-system instead of a passive repository of scanned material (Breeding, 2019; Widdersheim & Koizumi, 2016). Reaching these changes in the field of community heritage documentation involves three interconnected capacities: technical infrastructure that is able to collect and hold community-generated content, participatory frameworks that allow for continued community engagement in content collection, and community engagement capacity to turn technical provision into real and sustained participation (Huvila, 2008; Ngulube, 2015). The evidence is overwhelming that openly participative approaches to libraries result in substantially better results in heritage documentation than do technical approaches to digitization. The idea of the "participatory archive", which decentralizes the archival space and community, engaging communities in the curation and description of archives, as outlined by Huvila (2008), serves as good theoretical support for this. The argument is further reinforced by Punzalan and Caswell (2016) who argue that inclusive processes are epistemologically better because the documentation that results is more contextually accurate and

culturally appropriate. The answer is that in fact, real community partnership supports institutional self-interest, not just the social justice agenda. In the context of Bangladesh, the process of transformation of digital library is different for different institutions. The digitization and institutional repositories (IRs) by major universities have also received much investment (Hossain & Islam, 2018). However, public libraries still face difficulties in acquiring sufficient funding, inadequate infrastructure and lack of digital literacy among their staffs (Sultana & Hossain, 2019; Kabir & Islam, 2017). However, there is no specific provision in the Digital Bangladesh policy and Smart Bangladesh policy for programming on community heritage documentation, leaving institutions without policy support and dedicated funding to fill this gap, if they choose to do so (Bangladesh ICT Division, 2018; Hassan, 2016).

Barriers to Sustainable Community Heritage Documentation

There are five interlinked barriers that limit community-led documentation in Bangladesh which enhance each other in ways that render piecemeal solutions ineffective.

Digital literacy gaps are vast and imbalanced. The use of mobile phones is universal, but the know-how for systematic heritage documentation – recording, editing, metadata description and maintenance of digital content – is restricted to an urban, educated and young demographic. Sultana and Hossain (2019) and GSMA (2022) argue that a fundamental paradox is created whereby most knowledge lies within older community members, but they are the least capable of documenting it. The digital literacy programs of Bangladesh so far have focused on transactions skills such as mobile banking and fingerprinting. It does not teach the creative and curatorial skills that heritage documentation require.

Metadata inconsistency Bangladesh's linguistic diversity makes it worse. Standard frameworks have been developed, in English-language western institutional contexts, for the description of records and the building of databases: Dublin Core, MARC, RDA. But these frameworks cannot accommodate the descriptive practices, languages, and cultural protocols of those communities whose heritage content will get described in standard Bangla, regional dialects, or indigenous languages (Rolan 2017; Duarte & Belarde-Lewis 2015). According to Rolan (2017), the imposition of professional metadata standards on community documentation is a form of epistemological colonialism that takes away the culturally specific descriptive practices applied to heritage materials. The features that make a community documentation valuable are precisely those that professionalization undermines.

Funding instability is the reliance on international donor funding creates a structural dependency which places a fundamental tension of effective documentation which requires a long-term relationship with the community (Kabir & Islam 2017; Rahman 2019). The project cycle ending threatens program continuity, whether need is proven or effectiveness documented. Due to the lack of ongoing domestic government funding, community-based heritage documentation exists in permanent precarity.

Trust deficits in public institutions are strongest among the Hill tribes of the Chittagong Hill Tracts. According to Roy 2016; Chakma 2018; Gain 2000, state-sponsored documentation is perceived as extractive, politically instrumental and disrespectful of culture. Libraries that want to work with these communities need to acknowledge this history explicitly and demonstrate through ongoing engagement and real community control over material collected that their approaches are meaningfully different from the institutional practices that created the original distrust.

Infrastructure deficits remain significant beyond Dhaka and Chittagong. Due to the limited reliability of the network and the limited bandwidth, the documentation activities which require the use of large data get affected regularly. Similarly, power irregularities and the limited availability of devices restrict the use of digital platforms. The restriction is such that improvement of the digital platforms alone cannot solve the issue. (BTRC, 2023; GSMA, 2022; Adu & Ngulube, 2016).

Good Practices and Emerging Models

The literature identifies a number of practices and institutional models that have proven effective in documenting heritage at the community level.

According to Mapula and Ngulube (2019) and Adu and Ngulube (2016), the design of mobile-first documentation is effective in settings where the smartphone penetration is high while there is a low penetration of fixed broadband. Most of Bangladesh, except Dhaka and Chittagong, is under the same conditions. According to the Bangladesh Telecommunication Regulatory Commission (BTRC) 2020 Report, which deployed the earlier version of the BB, later versions may deploy it with an institutionalized message. Partnerships between libraries and NGOs present a structurally logical model for Bangladesh. For example, the Kapaeeng Foundation's documentation methodology (Laguno, 2016) and Rupantar Cultural Organization's community relationships (Chopra, 2018) and contextual knowledge are not easily duplicable by libraries. Meanwhile, libraries have digital infrastructure, archiving capacity, and institutional continuity that fit awkwardly in NGO project cycles (Rahman, 2019; Chakma, 2018). It is possible to set up complementary abilities into formal collaborative partnerships with further governance frameworks, common metadata standards, and clear community consent frameworks. In such a way, documentation programs will achieve both scale and sustainability.

In Bangladesh, university library outreach programs are a largely untapped niche. According to Hossain & Islam (2018), public libraries are typically less equipped in terms of IT infrastructure, technical manpower, and research capability than academic libraries. By applying this capacity in the area of community heritage documentation in student field documentation projects, academic–community co-curation schemes and open-access institutional repository policies the documentation resource base can be considerably expanded while also contributing to student training and institutional research agendas. The UNESCO intangible heritage frameworks provide systematic documentation protocols which are already the obligations of Bangladesh being a State Party with several inscriptions (UNESCO, 2005; UNESCO, 2013; UNESCO, 2018). By localizing these frameworks in the Bangladeshi linguistic and cultural context, extending the framework beyond inscribed heritage to those continuing traditions that are under threat but not yet recognized at international level, and embedding them in library workflows, we can bring both methodological integrity and policy legitimacy to the community documentation programs (Bangladesh ICT Division, 2018; Hassan, 2016).

Gaps in the Existing Literature

As the systematic review process revealed several key shortcomings in the existing literature, so it also defined the most fruitful directions for future scholarship, and limited the evidence base available to practitioners. The largest gap we see is in the case of Bangladesh-specific research, which hardly exists. Only six of the 91 studies that were included in the final synthesis focused explicitly on Bangladesh. This finding is significant. It doesn't mean that there isn't much documentation activity taking place in the country. Kapaeeng Foundation, Rupantar and various informal community initiatives indicate otherwise. However, what is important is that the existing initiatives are not being systematically

studied. Moreover, the Bangladeshi scholarship on these topics is not being published in internationally indexed databases. As a result, practitioners and policymakers in Bangladesh are unable to tap into a robust evidence base to [help] their program design, resource allocations or institutional strategy decisions. There's a second gap with regard to outcomes evaluation. The literature has much information about what community heritage projects do but comparatively little rigorous evaluation of what they achieve. There is almost total absence of longitudinal studies on whether heritage materials created by the community reach the future generations, whether digitized material serves community needs for cultural continuity, and whether partnerships with institutions improve or compromise community control over heritage. The specific difficulties facing indigenous and minority language groups represent a third gap. Although the literature reviewed focuses on indigenous archiving in settler-colonial contexts (Australia, Canada, New Zealand), there is limited transferable insight into the specific situation of the Chittagong Hill Tracts communities in Bangladesh. There are major differences in their relationships with state institutions, legal frameworks, and cultural protocols, and the contexts in which most indigenous archiving research has been conducted. Last but not least, the connection between digital preservation and intangible heritage living practices, oral traditions, and ceremonial knowledge remains undertheorized. Most digital preservation research deals with documentary and material heritage. However, the specific challenges associated with documenting living practices in ways that support their continuity, rather than their historical record, merit dedicated theoretical and empirical attention.

Conceptual Framework

The review is structured on a conceptual framework characterized by three major components i.e. the community-based heritage documentation practices, the transformation of digital libraries and the digital heritage preservation outcomes in Bangladesh. There are four Bangladesh-specific contextual factors which moderate these relationships. The framework can be seen in Figure 1. The Framework posits that practices of community documentation do not directly produce sustainable outcomes for preservation. The transformation of digital libraries serves as the institutional channel through which their impact is mediated. This is because libraries provide the organizational continuity, technical expertise, and access infrastructure that creates collections out of community-generated content which will remain accessible through time Huvila, 2008; Ngulube, 2015; Punzalan & Caswell, 2016. Factors, which are specific to Bangladesh, that might affect Indigenous participation in technology and communications development include: a digital divide, a policy environment (Digital Bangladesh / Smart Bangladesh), an NGO landscape, indigenous rights frameworks.

Figure 1: Conceptual Framework

Community-Based Documentation Practices	Digital Library Transformation	Digital Heritage Preservation Outcomes
Mobile recording	Digital infrastructure	Collection completeness
Community archiving	Participatory frameworks	Technical sustainability
Grassroots digitization	Multilingual metadata systems	Community access & sovereignty

Oral history collection	Community engagement programs	Cultural continuity
Folk culture recording	Policy & resource strategies	Research & educational use
Indigenous knowledge documentation	NGO partnerships	Intergenerational transmission

Community-Based Heritage Documentation Practices

Community members in Bangladesh are engaging in many forms of self-documentation. These involve recording oral tales on mobile phones; grassroots digitization of folk art and craft practices; participatory archiving of indigenous knowledge systems; and community-level collection of local histories. Community-led documentation, therefore, is the only option for preserving heritage forms like the Baul practices of the Brahmaputra delta and the oral literatures of the Chittagong hill tracts, which are entirely absent from formal institutional archives (Flinn et al., 2009; Caswell et al., 2016; Chakma, 2018). The basis of the framework is this component. The institutional processes that determine preservation outcomes are initiated.

When creating the communities around certain topics, a great number of different actors become involved. A number of community documentation practices illustrate the ways that communities exercise forms of agency that differ qualitatively from that of institutions. These include the descriptive authority to name, categorize and characterize their heritage according to their own cultural values, selection agency to determine what aspects of their heritage are documented and what is intentionally excluded, and access sovereignty to determine who may access community-generated materials and on what conditions (Christen 2012; Caswell et al. 2016; Roy 2016).

Digital Library Transformation

Long-term preservation cannot rely solely on community documentation efforts. Libraries play an essential role in bringing documentation and preservation activities to communities and facilitating community and sustainable outcomes. Libraries translate community-generated content into organized, accessible, and sustainable heritage collections through building of digital infrastructure, development of participatory frameworks, design of community engagement programs, adaptation of metadata systems for multilingual and indigenous content and creation of enabling policy environments (Huvila, 2008; Ngulube, 2015; Widdersheim & Koizumi, 2016). This intermediary function works through four mechanisms. Libraries provide institutional continuity. They provide places for heritage collections that are more stable than individual documentation projects. They provide technical preservation expertise, knowledge of digital preservation standards, format migration protocols, and long-term storage systems that most community groups cannot develop independently (Breeding, 2019; Adu & Ngulube, 2016). More Headers Copy More formatting options 150 words remaining They develop the infrastructure for discoverability and access so that community-generated content created beyond communities can flow to researchers, educators, and the public. Furthermore, they provide policy advocacy and legitimizing of community-generated heritage within the national and international preservation framework (Caswell et al., 2016; Hassan, 2016). In Bangladesh, the role of bridging is underutilized. University libraries are more digitally transformed than the public libraries

facing serious budget cuts, staff shortages and infrastructure deficiencies (Hossain and Islam, 2018; Sultana and Hossain, 2019; Kabir and Islam, 2017).

Digital Heritage Preservation Outcomes

The ultimate goal of the framework is depicted in the right part of Figure 1, which is the documentation of Bangladesh's culture and heritage for present and future generations. The process takes place across five dimensions. The collection completeness and cultural authenticity refer to the extent to which preserved content authentically represents the living practices of the communities from which they originate as defined by those communities (Smith, 2006; Christen, 2011). Technical sustainability refers to the ability or the likelihood of access to digital content in the future when technologies change, and formats become obsolete (Breeding, 2019; Adu & Ngulube, 2016). The control that indigenous and minority communities exercise over their heritage how it is used and shared reflects their self-determination (Christen, 2012; Roy, 2016). Intergenerational transmission and cultural continuity look at whether digital preservation is a way to keep living culture alive, not just document what is no longer practiced (Smith, 2006; Harrison, 2013). Concerns about the educational and research utility of preserved content relate to the content being discoverable and contextualized sufficiently to serve researchers and others outside the originating community (Breeding, 2019; Hossain & Islam, 2018).

Contextual Factors

Four contextual factors specific to Bangladesh moderate the relationships discussed above. The digital gap between cities and the countryside determines who takes upon the recording job and who can access what is archived (BTRC, 2023; GSMA, 2022). The policy frameworks of Digital Bangladesh and Smart Bangladesh foster an institutional ecosystem which facilitates library digitization but has no specific programming for community heritage documentation (Bangladesh ICT Division, 2018). The NGO Space like Kapaeeng Foundation, Rupantar Cultural Organization, etc. has developed considerable community documentation capacity outside formal library systems. This can be seen as another potential partner resource of considerable value (Rahman, 2019; Chakma, 2018). The end of the indigenous rights context in the Chittagong Hill Tracts has to do with cultural sovereignty, institutional trust and access protocols that essentially operationalize the feasibility of community-library heritage partnerships (Roy, 2016; Gain, 2000).

Research Questions

The review addresses four research questions:

RQ1: What are the published community-based heritage documentation practices in the literature from 2010 to 2024 what patterns do this show in South Asian and Bangladeshi contexts?

RQ2: How are digital libraries and other information systems integrating community-generated heritage content into their collections and workflows? What sorts of institutional conditions facilitate or hinder such processes in developing countries?

RQ3: What structural, technical and social barriers prevent community documentation practices in Bangladesh to be transformed into sustainable heritage preservation?

RQ4: What are the most promising directions for advancing community library partnerships for heritage preservation in Bangladesh according to evidence?

3. Methodology

Review Design

This study utilizes a systematic literature review design based on PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Page et al., 2021). In Thomas and Harden 2008, the systematic approach is particularly useful for a mapping exercise engaged in identifying thematic patterns in a literature that is geographically dispersed as well as for surfacing gaps such as the underrepresentation of South Asian and Bangladeshi literature that requires attention. The approach emphasizes transparency of the methodology used and the replicability of the method to enable future researchers to expand upon and/or update the synthesis.

Search Strategy

A systematic search was conducted, on 6 databases, such as Scopus, Web of Science, LISTA (Library, Information Science and Technology Abstracts), JSTOR, Google Scholar and BanglaJOL (Bangladesh Journals Online). To specifically collect Bangladesh-origin research that is not indexed in international databases, BanglaJOL has been included. Searches took place between January and March 2024 for materials published from 2010-2024, with the 2010 start date chosen due to a significant jump in mobile connectivity and open-source digital platforms development from this date.

Primary Boolean search string: ((community archive*) OR (community-based documentation) OR participatory archive* OR (community heritage documentation)) AND ((digital library) OR (digital preservation) OR (library digitization) OR (digital transformation) OR (digital heritage)).

Secondary Boolean search string: (("Bangladesh" OR "South Asia" OR "developing country*") AND ("heritage documentation" OR "digital preservation" OR "community archive*" OR "library digitization"))

Eligibility Criteria

The inclusion criteria in terms of community participation in digital heritage and library context were peer-reviewed journal article or conference paper 2010-2024; publication in English; and full text availability. The review excluded book chapters, theses and grey literature. It also excluded studies solely focused on the technicalities of digitization with no reference to community participation. Likewise, studies focused on developed-country context with no transferable relevance to developing-country context were also excluded. Finally, studies that failed to meet the minimum quality threshold (see Section 4.5) during full-text screening were excluded too.

PRISMA Flow

Stage	Records
Records identified through database searches	1,923
Duplicate Removed	448
Records excluded at title/abstract screening	1,143
Full-text articles assessed for eligibility	332
Full-text articles excluded (with reasons)	241
— Technical-only digitization, no community dimension	89
— Developed-country context with no transferable relevance	72
— Insufficient methodological quality	48
— Not available in full text	32
Studies included in final synthesis	91

Out of the 91 included studies, 14 were South Asian and 6 studies were Bangladeshi. The lack of peer-reviewed literature in Bangladesh itself is a meaningful finding of this review.

Quality Assessment

Each full text study was assessed for methodological quality using a modified Mixed Methods Appraisal Tool (MMAT). The assessment criteria consisted of several things. These include the clarity of research questions or objectives, adequacy of methodological description, appropriateness of data collection and analysis methods, transparency of limitations acknowledgment, and the extent to which conclusions were relevant to the stated objectives. The studies that received scores less than the minimum set on these parameters were excluded. The primary reviewer carried out an independent quality assessment of the sample. A random 15% sub-sample was checked.

Data Extraction and Synthesis

Using a standardized form, data was extracted from each included study which comprised details of authors, year, country of study, the methodology, findings, and main theme. To identify patterns, tensions, and transferable insights in the corpus, thematic synthesis (Thomas & Harden, 2008) was used. Great attention was given to identifying findings relevant to Bangladesh and to flagging cases where the absence of Bangladesh-specific evidence required cautious inference from comparable contexts.

4. Findings

The next section presents the four main themes stemming from 91 included studies, with specific reference to Bangladesh where evidence permitted.

Theme 1: Communities are engaged co-creators of digital heritage.

The literature we reviewed reveals a consistent pattern: communities are shifting away from being subjects of institutional processes and towards becoming co-creators of heritage documentation. In particular, the literature suggests that we should enable communities to exercise agency over what gets documented, how it is described, and who may access it (Flinn et al., 2009; Caswell et al., 2016; Christen, 2011). This change has been noted in many parts of the world and is already beginning to happen in

South Asia and Bangladesh (Roy, 2016; Chakma, 2018). Around the world, studies show communities claiming descriptive authority and disputing professional archival classification schemes (Christen, 2011; Duarte & Belarde-Lewis, 2015; Caswell et al., 2016).

In the South Asian context, a postcolonial legacy creates a distinct form of this dynamic: the communities that encountered documentation by colonialism as extractive and epistemologically coercive suffer from institutional trust deficits, which would require continuous and demonstrably community-controlled initiatives to overcome (Roy, 2016; Hassan, 2016). The indigenous peoples of the Chittagong Hill Tracts are most likely to engage in community documentation in Bangladesh.

The Kapaeeng Foundation is documenting oral traditions, customary laws and ecological knowledge in partnership with community members. This shows there is a need and reality on the ground despite state institutions not being able to reach out to those communities who are far away socially and politically (Chakma, 2018; Gain, 2000; Roy, 2016; Kabir and Islam, 2017).

Theme 2: Platforms of Digital Library as an Enabler of Heritage of Community.

Libraries that have put money into open and flexible digital platforms, and have ongoing charters backing community engagement programs, do a lot better in attracting and retaining community generated heritage content. This is as compared to libraries deploying institutional systems designed for scholarly publications (Sayers et al, 2016; Christen, 2012). The literature documented which platform works best for community documentation. Omeka has a very easy-to-use interface, and it is compatible with Dublin Core. Mukurtu was designed by indigenous communities and has access policies designed by them. These both focus on community design, rather than that of institutions (Sayers et al., 2016; Christen, 2012).

In Bangladesh, mobile internet access has grown much faster than fixed broadband, which continues to be limited to major cities. On that basis, it makes sense for designers to concentrate on locally adapted mobile-first systems (Mapula & Ngulube, 2019; BTRC, 2023; GSMA, 2022).

Most libraries in Bangladesh, both public libraries and universities, that are active in digitization are using institutional repository software optimized for scholarly publications that is not suitable for the heterogeneous, multimedia, multilingual nature of community-generated heritage content (Hossain & Islam, 2018). Moving towards more flexible community-heritage-capable platforms; or developing Bangladesh-specific platforms sensitive to local linguistic and cultural contexts represent a significant, but doable, institutional development priority (Ngulube, 2015).

Theme 3: Structural and Social Barriers in Sustainable Documentation in Bangladesh.

In Bangladesh, barriers to community-led documentation are multiple and reinforcing and require coordinated responses rather than sequential technical fixes.

Extensive and structurally inequitable are digital literacy gaps. The documentation-specific competencies development did not keep pace with better mobile phone access. Older community members who hold the most endangered knowledge face the biggest barriers to obtaining these skills. As a consequence, there is a structural mismatch between knowledge holders and documentation capacity (Sultana & Hossain, 2019; Adomi & Kpangban, 2010).

Metadata inconsistency is a major problem in Bangladesh. The existing metadata frameworks for professional content do not sufficiently describe content created by communities in local dialects and indigenous languages. This creates interoperability issues and risks the epistemological distortion of community heritage. (Rolan, 2017; Duarte & Belarde-Lewis, 2015)

The instability of funding is due to the structural dependence on project-based international donor funding. This type of funding has essentially been found to be incongruent with the multi-year relationship-building with communities that effective documentation demands (Kabir & Islam, 2017; Rahman, 2019).

Trust deficits in institutions, especially pronounced in the Chittagong Hill Tracts, find their roots in a history where state-sponsored documentation served more as political control than as a means to promote culture (Roy, 2016; Chakma, 2018; Gain, 2000).

According to BTRC (2023) and GSMA (2022), as well as Adu and Ngulube (2016), infrastructural deficiencies such as unreliable connectivity, unstable power supply, and weak device penetration outside of major cities will continue to impose practical constraints to which platform improvements cannot offer a complete remedy.

Theme 4: Emerging Best Practices and Transferable Models.

There are various practices identified through literature that are effective in Bangladesh like contexts. The documentary approaches which were mobile first has worked well in high-smartphone, low-broadband contexts. The growing availability of Bangla-interface apps increasingly makes a mobile-first approach workable in Bangladesh (Mapula & Ngulube, 2019; Adu & Ngulube, 2016; BTRC, 2023; Sultana & Hossain, 2019).

NGO–library partnerships reference a meaningful model for combining the community relationships and contextual expertise of an organization like Kapaeeng Foundation with the preservation infrastructure and institutional continuity of a library (Rahman, 2019; Chakma, 2018). University library outreach schemes are an underused resource because of their stronger digital infrastructure and greater capacity for research than public libraries (Hossain & Islam, 2018; Ngulube, 2015). The guidelines on the documentation of intangible heritage of UNESCO are within reach of the libraries in Bangladesh to pick up and localize. This is because Bangladesh being a State Party to the UNESCO convention on safeguarding of the Intangible Cultural Heritage (UNESCO 2005; UNESCO 2013; UNESCO 2018; Bangladesh ICT Division 2018; Hassan 2016) is already commuted to such a practice.

5. Discussion

The review's evidence makes an urgent case that heritage preservation in Bangladesh needs much more than building upon institutional collections. There is a need for genuine, technically enabled and institutionally sustained partnerships between libraries and the community bearers of living heritage. The survival of Bangladesh's most at-risk cultural knowledge from one generation to the next may not be a peripheral issue for the library profession, but rather central. The literature under review (Flinn et al., 2009; Caswell et al., 2016; Christen, 2011) demonstrates a trend towards community co-creation that brings about changes in collection strategy and more. The challenge is for libraries to rethink their institutional identity: from being custodians of materials that have been selected and described by

professionals, to becoming facilitators of community documentation processes where professional expertise underpins, rather than replaces, community agency (Huvila, 2008; Punzalan & Caswell, 2016). In the context of Bangladesh, much of the endangered heritage of the country – oral tradition, customary law, ceremonial practice – cannot be saved by any mechanism other than the communities that sustain it. This makes this re-conception all the more urgent. A comparison with international good practice which serves a useful function but requires qualification. Platforms like Mukurtu and the community archive movement's institutional models were developed in political and institutional contexts that do not map onto Bangladesh directly. The Chittagong Hill Tracts' indigenous peoples have a colonial history, legal framework, and state relationship that is differently configured to Australian Aboriginal peoples or First Nations peoples in Canada. The lessons learned from such programs mobile-first design, community-controlled access governance, NGO-library partnership structures must be modified to suit the specific conditions of Bangladesh. It is important to note that of all the studies reviewed, only six specifically focused on Bangladesh, which is a real policy issue. The absence of this information does not mean that much documentation is not happening in the country; it means that there exists no research infrastructure to generate, publish, and disseminate systematic evidence about that activity. The literature on documentation is very limited on Bangladesh and hence a rigorous scholarly focused on Bangladesh may have the potential to produce original and globally significant knowledge contribution. The National University of Bangladesh, The University of Dhaka, and BRAC University were the institutions where the author acquired education and knowledge which was shared on the above-mentioned institutions. The obstacles to documenting development impact are not incidental; investment in research capacity including access to international journals, publish-support and opportunities for scholarly exchange is no less significant in this regard (Hossain & Islam, 2018, Sultana & Hossain, 2019). The library digital transformation has a legitimizing environment in the policy framework of Digital Bangladesh and Smart Bangladesh. Policy intent without dedicated programming/streaming of funding/until capacities development delivers little on the ground. The opportunity for “a national community heritage documentation strategy to bring together public libraries, university libraries, NGOs and community organizations within a coherent public library framework”, identified by Rahman 2019 and Hassan 2016, remains unexploited. Creating a strategy built on the findings of this review would be the most significant step the LIS profession and government of Bangladesh could take to address the heritage preservation crisis documented here.

6. Conclusion

A growing literature is emerging on community heritage documentation and its impact on the transformation of digital library and heritage preservation outcomes in Bangladesh. Based on a systematic review of 91 peer-reviewed studies published between 2010 and 2024 on the subject, four main findings stand out particularly clearly. Through the years, there have been changing perceptions on heritage documentation. First, communities are no longer the passive subjects of heritage documentation; they are becoming its principal agents and the library programs that deliver the best preservation results are those that actively support and work within community-defined frameworks rather than institutional ones (Flinn et al., 2009; Caswell et al., 2016; Christen, 2011). Second, as digital library platform can be useful in documenting the community heritage. However, there must be mobile first design, multilingual metadata capacity, governance of community access, sustained community commitment. The last three conditions are largely missing from the existing institutional infrastructure (Hossain & Islam, 2018; Sultana & Hossain, 2019). In addition, the barriers are structural and interlocked-digital literacy gaps, limitations in metadata, funding instability, trust deficits, infrastructure constraints reinforce each other-

and coordinated and sustained responses from the library profession, government and civil society working in tandem is needed (Kabir & Islam, 2017; Roy, 2016; Rahman, 2019). One major problem and opportunity is the deficiency of Bangladesh-specific scholarship in the international literature. Hanif's article latest suggests that LIS scholars and practitioners in Bangladesh are well-positioned to make original contributions to global knowledge in community heritage documentation in developing-country contexts, provided that research infrastructure to support that scholarship is developed Rahman 2019 Hossain Islam 2018. The Baul songs of the delta, the orally transmitted histories of the Hill Tracts, and the living craft traditions of Bangladesh's artisan communities are all irreplaceable forms of cultural expression. To survive in the digital age, they cannot just rely on the goodwill of their institutions to allow them to thrive. They must deliberately build what this review has termed a 'living library.' This is an institution genuinely embedded in community life, technically capable to sustain community-generated content, and committed to partnership on community-determined terms (Huvila, 2008; Widdersheim & Koizumi, 2016). The evidence reviewed in this section defines the contours of this institution. The construction activity must not be postponed.

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