Reimagining Other Narratives
Navigating the Role of Design in Fostering the Cultures of Inclusive Innovation in Rural Indonesia

Gamia Dewanggamanik[1,*]

[1] *The Glasgow School of Art, Scotland*
* Corresponding email: g.dewanggamanik1@student.gsa.ac.uk

ABSTRACT

The growing recognition of the creative economy's critical role in Indonesia's sustainable development sector poses new questions and challenges around inclusive innovation. Whilst formal and institutionalised forms of innovation proliferate in this sector, the role of informal, rural everyday community-based practices within development frameworks remain underexplored, thus overlooking the communities' collective assets that might be potentially an empowering source of resilience. The research presented in this paper focuses on fostering the cultures of inclusive innovation within the context of community-based design engagement in Indonesia. This paper attempts to expand understanding of inclusive innovation and its situated nature by exploring space for often-undervalued community-based innovation practices to attend to relevant development concerns through community-based everyday practices. It further explores how design can nurture the process and encourage plural ideas of what constitutes development and progress. This study reflects the need to deeply consider plurality within the debates of inclusive innovation in an increasingly global-oriented development agenda. This study suggests that embedding local knowledge in the design frameworks may support the practice to ethically engage with Indonesia's development plans, thus opening up discussions on the significance of respecting the community's assets to enhance their participation and sense of ownership.

Keywords: *inclusive innovation, participatory action research, community resilience, sustainable development*

1. INTRODUCTION: SUSTAINABLE DEVELOPMENT AND INCLUSIVE INNOVATION

There has been a growing recognition of the creative economy's role in the sustainable development sector in recent years. The research discussed in this paper is situated within the context of the UN International Year of the Creative Economy for Sustainable Development, which sets out to address challenges in 'promoting sustained, inclusive and sustainable economic growth' [1]. Interests in developing more inclusive innovation have been growing in many parts of the world, including Indonesia, which recognises innovation and community empowerment as the driving force for inclusive economic growth. Inclusive innovation commonly refers to the pursuit of innovation with social aims. It does not focus on a single solution but is more coherent to the nature of the complex challenges faced by communities. The concept of inclusive innovation has particularly drawn institutional attention, adopted by policymakers, particularly in seeking to answer SDG challenges [2].

Given the growing interest in inclusive innovation models in this sector, it is increasingly relevant to interrogate what it entails, as the concept requires diverse interpretations and ways of framing what gets included and what remains excluded [3]. Fostering inclusive innovation can refer to the participation of underrepresented groups in the (innovation) process, or it can refer to the outcomes that bring about social change for marginalised groups. With the premise that

inclusive innovation takes a different view of development and growth from conventional views of innovation, numerous studies [4-6] have explicitly linked the concept with the informal sector. These studies have identified the different natures between the informal-type of innovation (community-based) and ones operating in the formal sector such as universities and companies. Whilst both sectors play an essential role in tackling development challenges, they cannot be analysed and scaled in the same way. They both operate differently and have different forms of knowledge and network. It is also crucial to understand the difference in their aspiration, motivation, historical and political drives.

Focusing on the context of the Global South, the development of inclusive innovation means reinforcing plural pathways to sustainable development. Accordingly, debates around inclusive innovation should consider the diversity of innovation processes across different socio-cultural settings. However, existing studies on the role of design innovation in the development sector have mostly focused on the proliferation of formal, institutionalised forms of innovation. Whilst expert-driven innovations that operate in a formalised space (such as university, tech-start-ups or research lab) have been widely acknowledged, there has been little discussion about the inclusion of *the other types of innovation,* particularly those operating in the margin. These innovations are community-led and usually emerged out of a sense of resourcefulness and collectivism. There has not been much discussion about their role in the development agenda.

The study discussed in this paper is based on ongoing doctoral research that focuses on fostering the cultures of inclusive innovation in Indonesia. In doing so, this study explores community-based, everyday creative practices in rural Indonesia as exemplary modes of innovation that demonstrates collective resilience and situated knowledge. Informed by decolonisation theories, this study is specifically looking into place-based craft practices and grassroots initiatives and their roles toward their local socio-economic renewal. This research's inquiry is to identify opportunities for innovation and growth that are contextually located and in what ways design can nurture more inclusive and diverse modes of innovation practice.

This paper will discuss some of the key aspects that need to be considered in developing inclusive innovation, within the scope of design practice in the community development sector. The discussion begins with a rethinking of innovation to consider which groups and practices are included and remain excluded. Subsequently, the discussion will address relevant concerns in innovation processes, reflecting upon common approaches used in community-based design

engagements. Lastly, the paper will look at some reflections from this research's community engagement phase, followed by evaluations of how design can help support inclusive innovation.

2. RETHINKING INCLUSIVE INNOVATION IN THE GLOBAL SOUTH

Debates around inclusive innovation have strong relevance with the context of the Global South. Historically, the concept can be traced back to the Appropriate Technology movement in 1970, which also aligned with Papanek's social vision of designing context-relevant technology in developing countries. This research concurs with some design scholars' concerns with the growing hegemonic paradigm of innovation in the Global South[7-10]; therefore, discussions on inclusive innovation cannot be separated from the debates within the decolonising design landscape. The works of these decolonial design scholars try to re-orient design studies and move away from the further practise of colonialism and centralising trends and instead promotes a plurality of practices and discourses [11-12].

An inclusive approach to development needs to interrogate the power relations and hierarchy in innovation practice. Several studies indicate that various forms of discrimination exist within the political economy of design and innovation, with only professionalised design work are acknowledged, valorised and credited [13,10]. For example, Tunstall identified that one of the issues in the mainstream design innovation discourse is that it classifies craft or indigenous practices as subordinate to modern design, thus excluding histories and practices of innovation among the so-called Third World communities. Some Participatory Design (PD) scholars have also critiqued the approaches to innovation that are exclusive and privileged [14-15, 13] for completely ignoring diverse layers of communities, particularly the ones living in the margin. Concepts such as von Hippel's democratising innovation [16], even though it highlights participation in the process, it only benefits privileged 'lead users' or individuals who have better access to information, design tools and technology. As it fails to engage with structural inequalities, it shows that the concept of democratisation in the design innovation process does not automatically align with inclusivity.

Such a dominant narrative of innovation appears to disregard alternative ways of being, thinking and knowing, which leads to the common assumption that only the privileged few with expert knowledge can hold an important role in innovation. To summarise, an inclusive innovation should allow for plural ways of knowing, doing and being. In contesting the

homogenising narrative of innovation and growth, it is necessary to start by investigating existing forms of innovation that are deemed invalid and invaluable.

2.1. The Cultures of Innovation on the Peripheries

This section explores an alternative of cultures of innovation that exist on a community level, rooted in the everyday creative practice of rural communities in the Global South. Considering such global agendas, it is essential to understand the socio-economic landscape and acknowledge the plurality and the diversity of the communities' locations, experiences and knowledge.

One of the overriding concerns when developing inclusive innovation is to consider which groups or which practices are being included or remain excluded. In this context, 'inclusion' means engaging with underrepresented groups as well as taking into account unrecognised forms of innovation practice. In line with feminist critiques of development [17-19], a growing body of literature on design and social innovation stresses the significance of everyday, vernacular design practices particularly those in marginalised or subalternised sites of innovation [20,13]. Other studies on innovation and development [21-22, 3-6] suggested looking into the grassroots innovation movements in marginalised settings. Whilst the innovation reflects the interests and values of the communities involved, it also demonstrates ingenuity and resourcefulness by generating bottom-up solutions that directly respond to the local condition. These innovations are deeply entangled within the everyday context of the communities themselves and are driven by everyday necessity often without any professionalised knowledge.

Interrogating the power dimension of innovation by focusing on subaltern groups' everyday practices is vital in the increasingly global-oriented development. Design scholar and Design Justice activist Sasha Costanza-Chock stresses that it is important to interrogate the concept of inclusivity within design and innovation discourse through the framework of intersectionality [13]. For her, inclusive innovation means considering certain design practices that are intersectionally disadvantaged; those that have been gendered, raced and/or otherwise coded as less valuable or not recognisable as innovation. Some examples include rural craft artisans, women initiatives and creative communities with socioeconomic disadvantages. Factors such as location and social network can also significantly impact those communities' capacities and challenges for innovation [23]. Discrimination within innovation practice can be seen in the craft sector in rural areas in the Global South. Notwithstanding the emergence of the creative economy into the development discourse, many rural creative practices

are still facing barriers to actively participate in the (development) agenda due to the under-appreciation of the practice. The craft sector is often considered a prominent development tool to improve national and regional socio-economic conditions, particularly in the rural context. However, the creative economy policies and strategies tend to overly focus on the advancement of economic growth, in which scalability tends to underpin the notion of growth itself. This does not always reflect the nature of many creative practices in the rural context. Furthermore, rural, traditional creative practices within development frameworks also remain circumscribed by the colonial perceptions of exoticism and its commercialisation aspect, which risks neglecting the communities' knowledge system and the underlying issues.

Whilst design innovation is often associated with a highly professionalised field; there has been steadily growing literature investigating other modes of innovation that links to community-based practices such as grassroots innovation movement, indigenous practices and craft tradition. It has been argued that innovation practice exists across cultures in different names and forms [24], with many important socio-technical knowledge and practices being constructed and shared through social interactions within communities. This mode of innovation demonstrates a form of *collaborative survival* [25], a place-based form of relating and continual process of world-making where histories, natures and cultures are entangled. In this mode of innovation, craft or grassroots practices, the form of knowledge is usually tacit, emerging from knowledge and skills embedded in the lived experiences [26,5]. Understanding their modes of knowledge is key in exploring approaches for inclusive innovation. This would allow us to view these practices as an ecology of knowledge tied to its place and everyday social environments, and more importantly, shift away from approaching them as isolated commodities. Rethinking these community-based innovations in terms of their ecology means considering the interdependency across local actors (human and non-human) in the community. The significance of these community-based practices should be understood in relation to the importance of the local network that supports the practices and how these practices maintain community resilience.

2.2. The Process of Innovation: Re-navigating the role of design in Fostering Inclusive Innovation

Today, it is increasingly popular to use design as a means to tackle socio-economic problems and to empower rural communities to meet sustainable development goals as well as the region's economic growth. Departing from Victor Papanek's vision [27], more designers now have been tapping into the realm of

social design, shifting away from market-led and product-oriented design paradigm to a process for designing solutions to complex social, environmental, and even political problems [28-30]. The practice of design within the development sector has been usually accompanied by the growing adoption of design tools and methods from popular design practices such as design thinking, participatory design and service design [31-32]. Here, collaborative "development design thinking" is often used to develop interventions, placing communities and other stakeholders to participate in the process of innovation [33,9].

The expansion of design practice within the development sector has gained criticism. There are growing concerns among scholars regarding the criticalities of dominant methods in design innovation, such as design thinking, that falls short of addressing the structural drivers of socioeconomic inequalities [34-35] and gives too much emphasis on the replicability aspects in problem-solving [36]. Those approaches tend to offer universalised solutions that prioritise pre-determined one-size-fits-all growth indicators over the local communities' lived experiences. With the lack of attention to local contexts and cultural diversity, the empathy approach widely promoted in design thinking does not necessarily challenge the power dynamics between practitioners and the people they engage. It also does not acknowledge the practitioners' positionalities as well as their biases.

Despite the good intention of the socially engaged design, many designers may be unaware of ways that their actions and solutions might be discriminatory or perpetuating colonial power by "othering" [37] the communities or participants in the design process [13,15]. Numerous studies have problematised the epistemological dominance of designers in the process of community-based design engagement [38], and within development frameworks in Indonesia, crafts communities are often perceived as inferior to designers, especially in rural areas lacking access to formal design knowledge [39].

Design, hence innovation, is never neutral; any design decision within innovation processes has the potential to perpetuate narratives and exacerbate inequalities. Pursuing an inclusive innovation agenda in the Global South requires a great consideration towards developing appropriate (design) approaches and strategies involved within the process, as most popular design innovation methods that have been replicated across the world carry colonial legacies. On that account, the practice of community-based design engagement in Indonesia needs to be re-contextualised and re-evaluated, in which plurality needs to be embraced in the design process.

3. CREATING A SHARED CULTURE OF INNOVATION THROUGH A COMMUNITY OF PRACTICE: REFLECTION FROM THE CASE STUDY OF SANGGAR SARANTANGAN

In this section I will outline the context foregrounding my research approaches and reflect upon the ongoing fieldwork, where I investigated design processes in a community-based design engagement. This reflection aims to provide insights into the process of fostering inclusive innovation that involves engaging with underrepresented groups.

3.1. The Fieldwork Approach

Situated within a specific cultural and rural landscape in Indonesia, the fieldwork involves engagement and building relationships with design practitioners in Indonesia and community groups in the Wakatobi Islands and Singkawang in West Borneo. However, for the scope of this paper, I intend to focus on the context in Singkawang. This phase of the study aims to re-orientate the development process towards the lived experiences of the communities directly affected by the development concerns. In doing so, this engagement brings together a community of practice, consisting of designers and community groups, to develop appropriate tools, methods and solutions based on the community's own knowledge and practices. I draw on Lave and Wenger's concept of communities of practice (CoP), where I intend to establish a long-term research partnership with a group of practitioners who share common concerns and interests, with an intention towards collective learning and joint endeavour [40].

Whilst there are several types of social actors enabling inclusive innovation, I focused on two categories of actors to participate and collaborate in this study. The first category is designers who demonstrate commitment in using their creative practice to engage in the community development sector across Indonesia. Several designers who participate in this study have their works intersected with the country's development priorities across themes such as tourism, village revitalisation, poverty alleviation, and culture and heritage conservation. The second category is grassroots, community groups who live in the peripheries of Indonesia, areas characterised as rural or villages in Indonesia. These groups are involved in local activism, working to bring about positive changes for their community. Whilst they are not attached to a specific creative practice, their modes of creativity are based on everyday necessities for the wellbeing of their community. Several community groups within this category participate in this study, including a youth creative collective in Singkawang, West Borneo.

3.1.2. The Methodology

Participatory Action Research (PAR) is considered a suitable approach, given this study's focus on the co-production of knowledge through a community-based design engagement. PAR challenges the traditional status quo of 'expert knowledge' and relies on mutual learning to re-centre and highlight local knowledge by delving into the communities' everyday practices. The fieldwork was designed into three main phases of engagement, and was developed iteratively following typical stages of PAR; plan, action and reflection [41]. The participants are involved in all phases of the project, from developing the project's focus to collectively sense-making of the findings. The data collection utilises various methods such as semi-structured interviews, group discussions and creative workshops. In order to get a better understanding of the community's context, a participatory visual method was introduced where we used photos and cultural probes to trigger discussion and help the participants articulate their experiences.

The participants were encouraged to be actively involved from the scoping phase until they could identify and define (development) issues relevant to their area. This phase of problem framing is considered the critical, ethical element of the process, in which participants collectively explore, discuss and define a problem and jointly explore, develop and evaluate possible solutions [42]. The intention is to encourage the community to develop ideas and strategies to a point where they can identify their role within this, so they would have control over the process involved as well as the outcomes. Ultimately, the objective is to develop guides and resources that can empower the designers and community groups to respond to local issues, work together towards meaningful goals and eventually reimagine an alternative development model.

3.2. Contextual Challenges Faced by Communities and Designers

This phase has provided an opportunity to learn in-depth about a collaborative project conducted by the research's participants; designers from Sepatokimin Initiative and members of a collective from a creative *sanggar* (studio) in Sagatani Village in Singkawang of West Borneo. The majority of the members of the *sanggar* are young people experiencing challenges related to the high rate of school dropouts and lack of economic opportunities. The collective's *raison d'être* itself is rooted in the socio-economic challenges they face as young people, which is inextricably linked to the changing landscape around them. As it happens, the landscape of Singkawang has been profoundly transformed due to illegal gold mining practices and the expansion of oil palm plantation zones. From a socio-

environmental perspective, the area has experienced a 'disturbance' [25] which refers to profound changes in the natural ecosystem and social relations. These changes have shaped the local community's livelihood with particular social, material and political dynamics. The socio-economic landscape in the area provides only limited opportunities for upward mobility, particularly for the younger generation. The usual pathway is to become a migrant worker in the neighbouring country Malaysia, or other high-risk-but-low-payment jobs in mining or plantations. Though perceived undesirable, it is still common for young people in the area to follow those footsteps. These conditions have bound the group together and established their role of exploring alternatives for the community.

The designers often find themselves as *middlemen* between the formal and informal sectors who facilitate diverse needs and work towards specific goals. The intermediary aspect of their role allows them to move fluidly around institutions (government, education or private sector) whilst remaining close with the communities and negotiating tensions and values of both ends. Given the nature of their role, some of the complex challenges the designers are facing include facilitating diverse interests and motivations from both the beneficiary communities and the program sponsor. In many cases, the narrative of progress demonstrated through a set of key progress indicators (KPI) that needs to be attained by designers does not accurately reflect the value of the practice. Compared to other measurable outcomes such as market growth, transformative aspects like sociocultural growth that might include knowledge transfer or 'learning as an outcome' [43], ethical partnership and networking, enhanced communities' sense of agency and governance, or restored community resilience, are rarely acknowledged [44]. These impacts are more complicated to convert into numbers. The following section will illustrate the process and transformative impacts made in the collaboration.

3.3. An inclusive Process of Innovation through Collaborative Learning

The collaboration process of Sepatokimin Initiative and the *sanggar* relies on the designers' understanding of the community's assets (both tangible and intangible) as well as taking account of the communities' barriers and constraints. Here, the designers re-orientate their practice from the problem-solving paradigm towards re-centering their approaches and strategies around the community's assets and needs. Before introducing new design solutions, the designers look for what is already working at the community level and respect the community's knowledge and practices as well as individual interests. One of the ways to respond to the challenges they face is by reconnecting with the communities' assets, such as Dayak histories and

traditions, including their traditional craft utilising local material such as *hanjeli* or pearl barley.

One of the key ethical aspects in their collaboration lies in the balanced consideration of the communities' socio-economic barriers as well the recognition of these young people's aspirations. For example, the designers took into account that the *sanggar*'s members are young (age group between 17-25), which means they are in the process of becoming and are in the phase where they are still exploring their futures. To make such knowledge transfer possible, one of the strategies being employed to support the *sanggar* people moving forward is to keep it exploratory; allowing for as many opportunities as they can. Accordingly, the range of activities is quite diverse; from producing crafts, learning traditional music and dance to learning photography and film-making. The designers were aware that the purpose of this collaboration was to accommodate the exploration process of these young people. The creative practice has functioned as a tool for the *sanggar* members to keep exploring their future pathways.

Through this collaboration, the designers re-orientate their practice from the problem-solving paradigm towards re-centering their approaches and strategies around the community's assets and needs. They design this engagement to become a platform for collaborative learning that stimulates social and knowledge growth, and eventually enhances the community's confidence about what would lay in store for them. It is possible that reconnecting to these assets may empower the communities to enhance a sense of agency and confidence in their futures. Instead of commoditizing their activities, their creative practice has become a tool to envision plural future narratives; in which the value goes beyond economic growth. The design practice is inclusive because not only it involves active participation from the traditionally excluded groups; it addresses deep-seated local socioeconomic challenges, yet it is emancipatory in a way that it has become a platform that amplifies the communities' voices.

Examples from the collaborative design engagements above demonstrate an emerging space of inclusive innovation where multiple encounters happen; entanglement between informal and formal sector, expert and tacit knowledge, institutionalised and community-led practices and everything that happens in between. Within this space, designers and communities form a community of practice in which each individual brings in their specific skills and knowledge. The communities of practice then form a shared culture of inclusive innovation that is fluid and contains plural ideas and visions; one that considers the significance of place and is informed by the socio-cultural context in which the role of design is investigated [44-45]. A set of

design approaches and strategies are re-examined and converged with the context where it operates. Rather than the designers prescribing and imposing their own 'design culture', they explore and construct tools and methods that are situated and context-bound. A shared knowledge emerges from inter-subjective relations, dialogues between diverse modes of creativity.

4. CONCLUSION

The scope of this research considers explicitly the often-overlooked other kinds of innovation that operate on a community level in rural Indonesia. This study reflects the need to deeply consider plurality within the debates of inclusive innovation in an increasingly global-oriented development agenda. This paper argues that a more comprehensive discussion on inclusive innovation should explore the processes of innovation that reflect the knowledge and values of diverse practices. This paper also argues that to address challenges related to developing an inclusive innovation model, the definition of innovation itself needs to be expanded and re-evaluated.

This paper suggests that an inclusive innovation agenda should contest the dominant narratives and reinforce the plurality of development pathways. This means acknowledging the particularities of the context as well as the design process where it is operating. Reflected in the case study, it encourages the situated nature of design innovation, which suggests that appropriate design strategies and interventions are co-constructed rather than pre-constructed.

Inclusive innovation agenda should allow plural practices and encourage an emancipatory process that enhances a sense of agency of the under-represented groups and practices. The inclusion process does not only tick the boxes, but it requires a deep understanding of the community's assets and the nature of their practice and respect for their histories. Eventually, understanding other kinds of innovation would lead to recognising other narratives of progress. It is through understanding the situated nature of such innovation that compels us to rethink the role of designers, particularly those working in the development sector, to actively interrogate the power dimensions of innovation by fostering mutual learning.

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