A perspective on migration and community engagement in Smart Cities

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Abstract : This is a conceptual paper interfacing community engagement and migration flows in relation to Smart Cities' development. The paper notes community engagement as a crucial variable, in general and with reference to the aspired for impact on migration flows. It conceptualises community engagement as an operationalizable construct for strategic design. The idea of community engagement is there in most multi-stakeholder projects and initiatives. Enhancing design and execution for making it count for superior performance of smart city initiatives is what we seek to develop here. The paper is also oriented to deliver an agenda for field research based on hypotheses it comes forth with.

Key words: Community engagement; Inbound migration; Socio-economic clustering; Willingness; Ability

1. Introduction

In delivering smart city projects, policy aspirations are more than just about developing an effective interface between technology, lifestyle, and regional asset and capabilities. These aim at reducing pressures on urban centres that draw more inbound migration through improvements, and in tandem, enhancing the attractiveness of other urban centres for diffusing migration flows. This could be by diverting more rural to urban migration to these secondary urban regions or, inducing migration to them from overburdened urban centres. Frequently, another policy aspiration is to develop effective networking between smart cities and satellite rural regions for socio-economic stability and equitable growth (Cosgrave, 2013). The central argument of this paper is to highlight the importance of active engagement by resident communities for achieving such aspirations, engagement that is manifested in the interface between variables of willingness and ability that shape community response. The paper develops this argument and draws lessons from research on community engagement experiences. More importantly, it tries to create an agenda for primary research by presenting hypotheses to help investigate how this can be done effectively. The central questions that the study relates with and for which it shapes a case for further investigation are:

How can the resident community's engagement be purposively interfaced with migration that associates with Smart City development ? And;

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How can rural and urban socio-economic clustering be influenced by design of community engagement strategies ?

Research and knowledge domains that relate with these questions include strategies for migration and urban regeneration. Understanding community engagement will be of value to academia in development studies & for policy and practice that deals with community-based projects. Focused insights on the rural & urban interface from the vantage point of urban regeneration will also benefit scholars in development & migration studies.

2. Conceptual moorings of Community Engagement

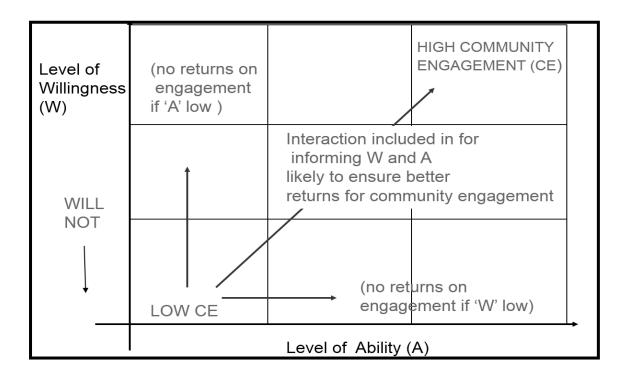
Research and practice in the area of urban (and rural) regeneration, and associated infrastructure development clearly recognises the importance of community engagement (e.g. Saunders and Baeck, 2015). Going deeper this recognition can yield two perspectives, one is that of the *willingness* of the end user community i.e. the inhabitants of the novel or regenerated urban entity, in this case the smart city. Willingness is a direct consequence of utility perceptions about an intervention, affected by sensitisation for buy in and by past experience of development interventions by the involved agencies. Understanding the level and nature of willingness is crucial to design sensitisation in both scope and content. For instance, if willingness, say in a certain segment of the community is already high, investments on sensitisation therein would be less useful. On the other if it is low, then also understanding the reasons for this becomes crucial for appropriate sensitisation design, whether it is about poor past experiences or simply inability to see benefits and their link through to improving living- the content and delivery will vary. It is important to reiterate that it is not communication 'but' buy in for engagement that is strived for under this perspective.

The other perspective is the *ability* of the community which is about their capacity to engage, shaped by variables such as knowledge about the intervention that may relate to access and operations of the new schema, the communities' economic, lifestyle and associated contextual rigidities. This is perspective thus less about rigidities that are perceptual and cognitive like 'willingness' discussed above, and more about behavioural rigidities and resource constraints including knowledge and associated communication (distinct from buy in and sensitisation under 'willingness') about the schema that can relate with engagement

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(Magis, 2010). Understanding the precise nature of ability constraints are also critical for directing resources in an optimal fashion for ramping up ability.

Both perspectives can be articulated independently or as in a mutually interacting context. Let us elaborate, for instance, high willingness alone cannot assure engagement. Insufficient knowledge about the operations of an initiative and overbearing constraints that can make it difficult to engage. Ability constraints can dilute the impact of high willingness translating into high community engagement. This last aspect can simply make for 'want to but cannot do' scenarios where willingness is high, but ability is low. By extension, a flip side will also exist where ability will be high but willingness low (Jha and Bhalla, 2018).



3. Community engagement and the migration context in Smart Cities

Two illustrations in the smart cities' context maybe pertinent to flag, just to demonstrate the interface between willingness and ability. Say for instance we have an urban region marked by low set housing and plenty of area of to get in new housing and also multi storey buildings. Now while the ability to absorb new housing for migrants maybe high, the willingness to disrupt the ambience maybe low in the resident community. This needs to be addressed through suitable sensitisation. Another case would be that of relative cultural homogeneity in smaller cities, where communities maybe willing to absorb inbound migrants (for reasons of services, support and wider economic benefits they get) but the ability to do

so because of the rigidities of existing socio-cultural settings would make it difficult. Ability support as focused interventions to provide common grounds and interaction opportunities between migrant sub-communities and existing resident communities, could be useful as a mechanism for increasing cohesion over time.

As noted, an active engagement by the resident communities is crucial for achieving such aspirations (Engasser & Saunders, 2015; Bhattacharya et al., 2015). Research and practice in development studies clearly recognizes the importance of community engagement (Alsop et al., 2004; Davis, 2005; Schischka et al., 2008; Engasser & Saunders, 2015). The two dimensions flagged as contributing to or shaping community engagement thus need to be carefully contextualised, interpreted and fed forward into design. To re-iterate, the first is willingness of the community, in this case, of the urban centre residents. Willingness is a direct consequence of utility perceptions about an intervention, affected by sensitization for buy in and by experience of past interventions (Hanemann, 1991). The second perspective is the community's ability to engage given resource constraints (Mataria et al., 2006; Sen, 1998). The interface between the two is crucial - a high willingness will not advance community engagement if ability is low & ability will not matter if willingness is low. Community engagement has yet to be examined from a perspective that interfaces willingness and ability as mutually mediating influences. This is becoming of increasing relevance as events and conditions in both developing and developed countries have demonstrated that migration has a crucial determinant in host communities' receptiveness.

Hypothesis 1: The nature of interface between Willingness and Ability (W&A) of the resident community is crucial to their uptake of the smart city agenda.

Policy and practice informing insights are crucial to understand resident communities' willingness and ability to engage with smart city projects, including in context of inbound migration that follows urban renewal. Satellite rural regions' interface with an urban centre's ecology is important as well to examine how smart cities can be effective as nodal entities - not only seeking superior socio-economic and sustainable outcomes for themselves, but also for the wider regional and national ecology. This goes to the heart of the challenge of reducing regional and rural-urban development disparity facing developing countries in general, and India in particular-where urbanization is often argued to have yielded skewed growth and development.

Smart city features would map out differently as well. For instance, willingness and ability intersection (figure provided before) for 'Making governance citizen-friendly and cost effective - increasingly rely on online services to bring about accountability and transparency' will typically be different than that for 'Applying Smart Solutions to infrastructure and services in area-based development'(Smart Cities Mission, GoI, 2019). The closer these intersection points, less resource intensive and aligned would be the management of enhancement of willingness and ability for the initiative as a whole.

Hypothesis 2: Reducing the difference in how W&A relate with different smart city features, will yield superior outcomes.

We have noted the need for effective networking between smart cities and satellite rural regions for socio-economic stability and equitable growth in smart city initiatives. The reasons of inevitable mutual impact satellite rural areas and the urban areas create are oft cited (Smart Cities Mission, GoI, 2019). Co-creation is thus likely to improve design and uptake of intervention's impact on community engagement and outcomes positively. This comes with the caveat of resolving conflicting demands and perception of benefits that can make such co-creation difficult.

Hypothesis 3: Involving satellite rural communities in co-creation of selected interventions within the smart city programme, will yield superior outcomes. This is provided the nature of willingness and abilities across communities can be aligned.

4. Conclusions

Examining smart cities from a community engagement, inbound migration & regional development context requires interdisciplinary framing and associated expertise, oft implied in extant research, and something that we propose going forward from this conceptual paper(Brettell & Hollifield, 2014; Swapan, 2014; Handlos, 2015). We are looking to further develop this trajectory of hypotheses. This will be for subsequent primary research that examines the very well-situated smart cities initiatives in India, with strong implications for the wider developing countries and south-east Asian context. These smart cities initiatives are typically, sequentially and parallelly planned over phases, therefore the opportunity to feed in study findings for impacting design is significant.

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