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Article

Delivering development to the urban poor through slum dwellers association: The case of Bhubaneswar smart city, India

Sthitapragyan Ray, Sramana Mukherjee*

Department of Humanities and Social Sciences, National Institute of Technology Rourkela, Odisha 769008, India
*** Corresponding author:** Sramana Mukherjee, sramana.m@rediffmail.com

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Abstract: As cities become hubs of technological innovation and drivers of development, they are also faced with the challenges of the mushrooming growth of slums. Exposed to crowded living conditions, unsafe and hazardous surroundings and lacking in basic amenities of housing, water and sanitation, the urban poor live a life of deprivation in these settlements. Smart cities are expected to provide novel solutions to the persistent challenges of slums. This research explores Bhubaneswar Smart City, capital of the eastern Indian state of Odisha with respect to the implementation of the government's flagship urban renewal program—JAGA Mission (Livable Habitat Mission). The paper examines the contributions of Slum Dwellers Associations created under the JAGA Mission for development of poor neighborhoods in Bhubaneswar Smart City. The study findings reveal that despite their capacity and financial shortfalls and the potential for politicization, these grassroots associations of the urban poor contributed to the slum up-gradation initiatives of the state.

Keywords: slum dwellers association; smart city; Bhubaneswar; JAGA Mission; informality

1. Introduction

Urban transformation is an imperfect and contested process. Bhubaneswar, Odisha's capital, and a leading Smart City in eastern India, stands as a paradox in terms of its particular modes of urban transformation. In the face of the increasing policy focus for creating global cities that can showcase high-end real estate, global finance, and information and communications technology (ICT), Bhubaneswar was rapidly transformed throughout the 1990s and 2000s through uneven and complicated processes [1,2]. The city's growth was marked by establishment of Info Cities as Special Economic Zones (SEZs) for ICT, ICT-enabled services, and international finance outsourcing industries. This strategy was designed to promote global networking and give international visibility to the capital city of Odisha. Continuing with the "world-class city" making project, Bhubaneswar became a Smart City during 2015–2016 under the Smart City Mission (SCM) of the Government of India. The city was also promoted as a global sporting hub, particularly for hockey with two consecutive Men's Hockey World Cups of 2018 and 2023 being held in the city. In a gentrified Bhubaneswar, iconic architectural and mega-projects, golf clubs, shopping malls and pubs co-exist side by side with high overall levels of informality in the city. The neoliberal restructuring of urban space in Bhubaneswar had the potential to produce spatial fragmentation having exclusionary implications for the urban subalterns and their rights to the city [3, 4].

Smart cities are expected to provide novel solutions to the persistent urban challenges including that of slums [5–14]. In this context, the implementation of

Odisha government's flagship urban renewal program—JAGA Mission (Livable Habitat Mission) in Bhubaneswar Smart City slums, assumes significance.

The present research examines the contributions of Slum Dwellers Associations (SDAs), created under the Mission, to the development of poor neighbourhoods in the Smart City. The study also seeks to identify the factors affecting the performance of SDAs in meeting their stated obligations.

Figure 1. Location map of Odisha showcasing Bhubaneswar city.
Source: Online (MapsofIndia.com).

2. Bhubaneswar from a geographical lens

Bhubaneswar city, as the provincial capital of the eastern Indian state of Odisha, is located on the coordinates of 20.27° N and 85.84° E, along the eastern coastal plains (see **Figure 1**). It lies at an average altitude of 45 m (148 ft) above sea level and is surrounded by the Daya River and the Kuakhai River in the south and east respectively. The Mahanadi River flows in the southwest of the city and forms the northern boundary of Bhubaneswar metropolitan area (see **Figure 2**). Bhubaneswar experiences a tropical weather with hot summers and cold, dry winters. Summer lasts from the months of March to May with hot and humid temperatures that shoot up to more than 40 degrees centigrade. November marks the onset of winters with December to January experiencing chilly winds descending from the north and north-east and temperatures drop to 15 degrees centigrade. Maximum rainfall occurs in the months of July and August following the south-west monsoon in Odisha.

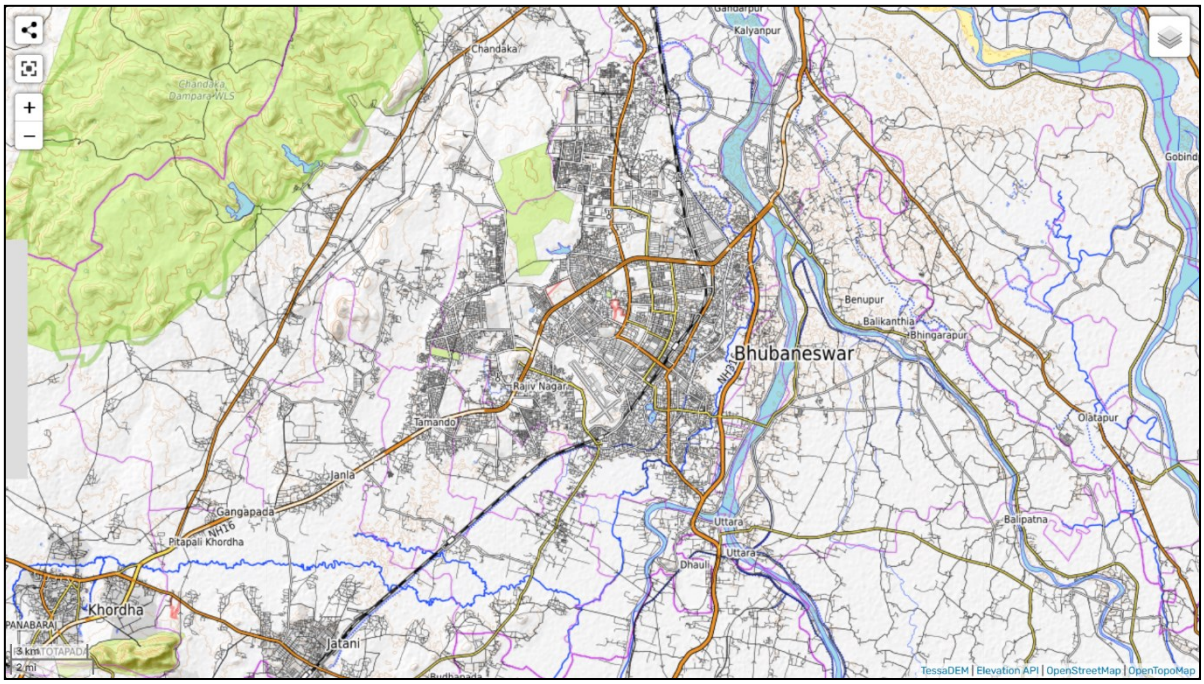

Figure 2. Topographical map of Bhubaneswar city.
Source: Online (topographic-map.com).

Odisha is one of the least urbanized among the major states of India, where16.69% of its population reside in urban areas, and 83.31% live in rural areas [15]. Khordha is the most urbanised district in the state. This is due to the presence of Bhubaneswar, which is the capital city of the state. The population of Bhubaneswar increased from 16,512 in 1951 to 881,988 in 2011 [15] showing a growth rate of 160 per cent (see **Figure 3**).This is due to migration from all parts of the state to the capital in search of jobs and better education [16,17].Bhubaneswar became a Smart City in 2015 and was one of the 20 selected cities in the First Round of national-level selection process under the Smart Cities Mission of Govt. of India [18]. This provided a boost to Bhubaneswar's journey of urbanization, and brought in more planned and ICT-driven interventions in the city. Primarily working on the principles of retrofitting and redevelopment, Bhubaneswar Smart City implemented both Area-based Development and Pan City strategies. The Area-based Development was carried out on a specific demarcated zone within the city, named as the Bhubaneswar Town Centre District (BTCD). This core area of Smart City spreads across 985 acres (3.9 km^2) from Shishu Bhawan through Master Canteen to Vani Vihar Square along the Janpath Road and comprises of seven wards—29, 30, 34, 35, 40, 41, 53 (see **Figures 3** and **4**) [19].

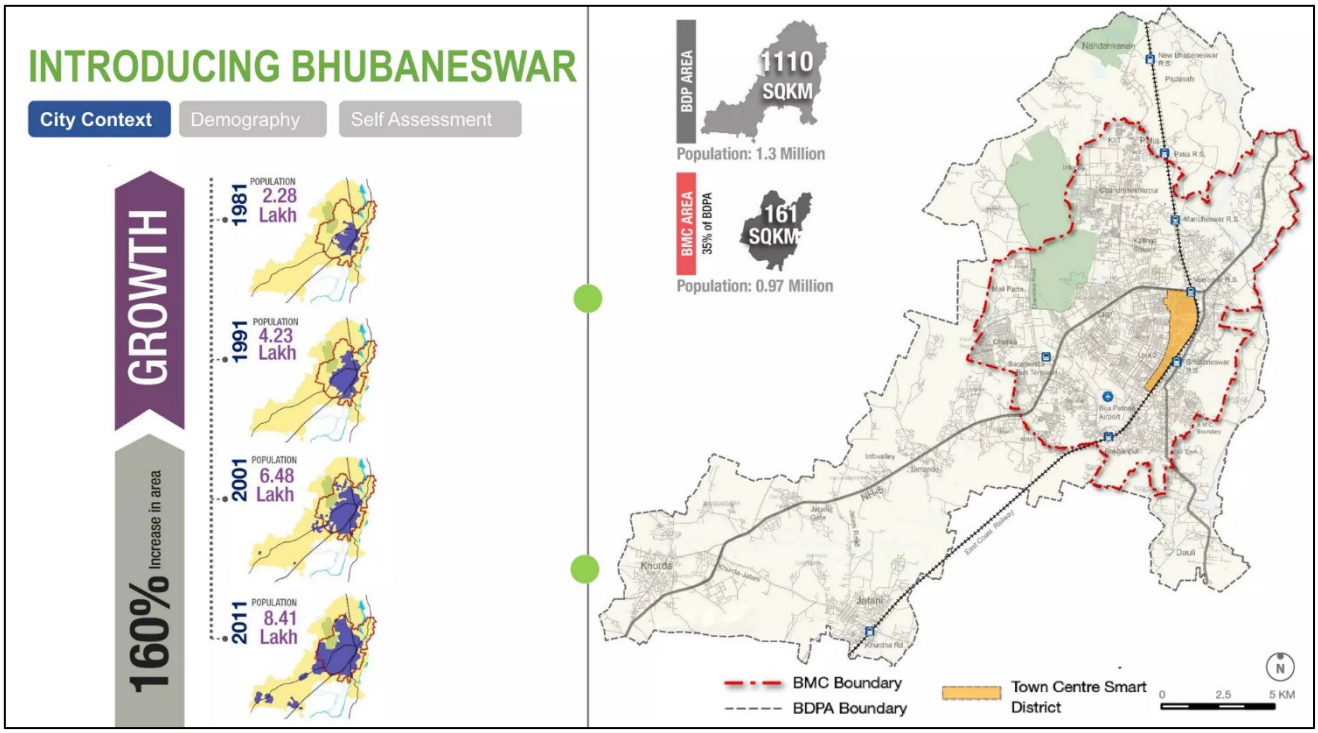

Figure 3. Map of demarcated boundaries of Bhubaneswar city including smart city centre.
Source: Bhubaneswar smart city draft proposal (2015).

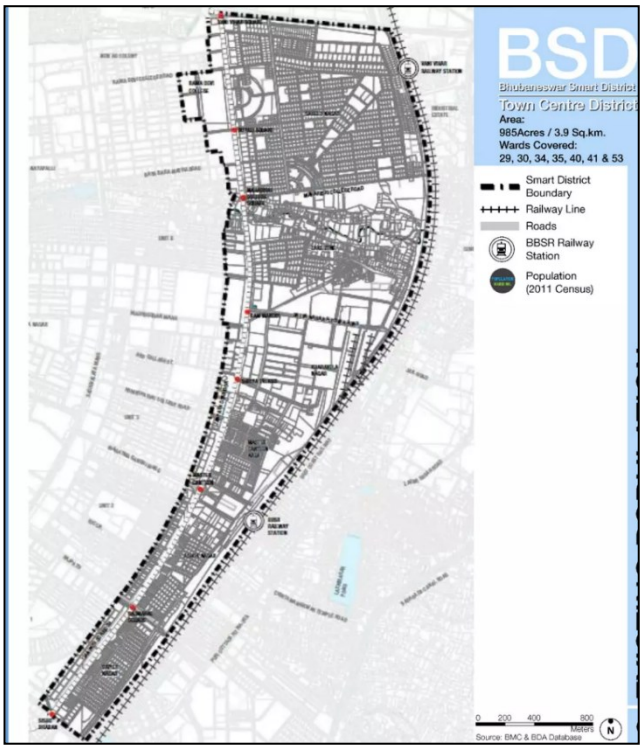

Figure 4. Map of Bhubaneswar Town Centre District (BTCD).
Source: Bhubaneswar smart city draft proposal (2015).

Slum population constituted 35 percent of the total population of Bhubaneswar and resided in its 436 slums [20]. There were originally 53 slums in seven wards of Bhubaneswar Town Centre District (BTCD) area of Smart City, which housed seven percent of Bhubaneswar's total slum population [21,20]. After relocation of three

Smart City slums. i.e., Janata Lodge, Navin Nagar and Behera Sahi to Bhubaneswar outskirts in Gadkan area, as a part of slum up-gradation programmes, 50 slums remained within the BTCD zone.

3. Sampling and research method

It was an exploratory study, which used both primary and secondary data. Fieldwork was conducted in the seven wards of BTCD zone (ABD area) of Bhubaneswar Smart City (ward numbers 29, 30, 34, 35, 40, 41, 53) covering 50 slums, during January to April, 2023. Majority of the 50 slums were in existence for 35 years or more and as such their names became synonymous with their geographical locations —such as proximity to certain landmarks, their caste composition, occupational profile and so on. All the slums have been the result of illegal squatting on government lands. They were initially devoid of infrastructure and public services, and have expanded into larger, ethnically diverse settlements.

BTCD slums were selected for the study as Bhubaneswar Smart city has been acclaimed nationally and globally for its social initiatives including Socially Smart Slums Programme to promote inclusiveness, community mobilization, and resilience [18,22,23]. The Socially Smart Slums Programme, which was implemented during 2017–2022 in all the BTCD slums with the help of UNFPA, concentrated on capacity-building of slum youth (both male and female) under the Youth Peer Leaders Programme and provision of basic amenities. Many of the SDA office bearers and members in the Smart City slums were trained as Youth Peer Leaders.

All the 50 SDAs in these 50 Smart City slums were covered in the study. Primary data was collected from focus group discussions (FGDs) with five respondents from each SDA including its President, Treasurer, Secretary and two female members. 50 FGDs were conducted, covering 250 respondents from 50 SDAs, which included 150 office bearers and 100 female members (see **Table A1** in Appendix). Considering the qualitative nature of the research, sample respondents were purposefully selected to yield cases that were "information rich" [24]. This involved identifying and selecting individuals for FGDs who had special knowledge/experience in the study phenomenon i.e., SDA [25]. Hence, all the three office bearers of the 50 SDAs i.e., President, Secretary and Treasurer were selected. In order to do justice to the gender composition of SDAs, where more than half of the members were women, two female members each having SHG membership or training as Youth Peer Leader, were selected from each of the 50 SDAs. Availability and willingness to participate in FGDs and the ability to articulate experiences/views were also key considerations for participant selection [26,27]. The following themes were covered in the FGDs: organizational structure and operation of SDA; selection, roles/responsibilities of office bearers/members, challenges faced by them in performing their duties, political dynamics involved in the process, reactions of slum residents and officials towards SDA. These focused group interviews were recorded with informed consent, translated (where necessary), transcribed, de-identified, and analysed. In view of the fact that Secretaries constituted the operational backbone of SDAs, specific attention was paid to capture their contributions. The working patterns of 21 out of the 50 SDA Secretaries (at the rate of three each from seven Smart City wards), who were trained

as Youth Peer Leaders under the Socially Smart Slums programme, were closely observed by the two researchers.

Necessary ethical approval was obtained for collecting data from sample respondents. All the names of the slum respondents were anonymized and pseudo names were used to hide their identity. The study tried to assess perceptions, perspectives and experiences of SDA office bearers and members. As these were complex constructs, so they could not be measured directly, rather, one must rely on inferences. This involves an inductive exploration of data to identify recurring themes, patterns, and then describing and interpreting them. As far as practicable, data collected qualitatively was also converted into numerical data—frequencies, percentages, and averages for comparison and evaluation. The two researchers also extensively used non-participant observation method in the study. They spent time in the field with 21 SDA Secretaries (at the rate of three Secretaries from seven Smart City wards) spanning over a period of two months and closely observed their working patterns. Interactions were also held with the Director, JAGA Mission, Govt. of Odisha and with the Commissioner, Additional Commissioner (Slums), Deputy Commissioner (Housing) and Zonal Community Organiser (South-east) of Bhubaneswar Municipal Corporation (BMC) with the help of check-lists.

Primary data was supplemented by "documentary constructions of reality" [28] wherein official documentary sources—JAGA Mission guidelines, standard operating procedures, BMC records, etc., were analysed [29,30]. Secondary data was collected from BMC, BSCL, and JAGA Mission offices.

3.1. Limitation and scope for future research

It is a cross-sectional and sample-based study where primary data from different respondent categories was collected at a particular period of time. There was an inherent intentional bias in the purposive selection of sample respondents [26,31]. The researchers selected the sample informants based on their judgments of the latter's reliability and competency in the subject matter. But selection of in-appropriate informants might render the data meaningless and invalid [32]. Also, possible biases on the part of the selected informants might further compromise the study findings [33]. These limitations may be addressed by a large-scale study using probabilistic/random sampling where the potential for bias in sample selection and the influence of known and unknown confounders may be minimized, leading to greater generalizability of findings.

4. JAGA Mission and SDA in Bhubaneswar

The Sustainable Development Goals (SDGs), Quito UN-Habitat III Conference and the New Urban Agenda of 2016 have put questions of urbanization at the center of development debate. The urban development strategy of Odisha government is reflective of a situation where cities have emerged as one of the few truly cross-cutting arenas for realization of SDGs (specifically Goals 6, 10 and 11). The transformation and revitalization of slums through the establishment of critical services, infrastructure, and land rights are key components of the 'social urbanism' policy of the Biju Janata Dal (BJD) government in Odisha [34]. JAGA Mission as a

comprehensive urban habitat development strategy creates integrated urban projects, which combines land titling, physical upgrades, with investments in social infrastructure.

The BJD, a regional party, ruled the state for 24 continuous years. The party also scored victories in the last Odisha urban elections in 2022, winning three municipal corporations including Bhubaneswar and 95 out of 108 urban local body councils in the state [35]. Despite inroads made by the rival Bharatiya Janata Party (BJP), Bhubaneswar had been a BJD stronghold for about a decade now. In the 2014 urban elections, ruling BJD controlled Bhubaneswar Municipal Corporation (BMC) by winning from 49 out of 67 wards in the city. BJD candidates were also elected as city Mayors during 2014 and 2022. The party also retained all the three Assembly seats in Bhubaneswar, while the opposition BJP candidate was elected in the Bhubaneswar Lok Sabha seat in the 2019 general elections.

How the BJD government treats slum settlements housing 35 percent of city's population is key to its own political future in Bhubaneswar. It is significant not merely with respect to the party's relationships to citizens as electoral constituents and political subjects, but also with respect to its party-specific political allegiances, aspirations, and ideologies. Too much accommodation of informality or the claims of citizens to stay put or be better serviced might get in the way of land use transformations and the formalization of property rights needed to facilitate city's economic growth, thus creating negative fiscal externalities while also potentially generating charges of populism or even corruption and insufficient attention to the rule of law. Yet too little accommodation can leave the government open to criticisms about potential violations of slum dwellers' rights to the city [4] and an unwillingness to recognize the inclusionary aspirations from poor residents and their advocates alike, thus, generating charges of neoliberal excess, elite capture, and insufficient commitment to participatory democratic ideals. Major transformations of the urban environment—in the form of slum development and the regularization of land rights represent inherent challenges for the government.

Guided by the Odisha Land Rights to Slum Dwellers Act, 2017 (OLRSDA) [36], along with the allied Rules and the policy framework provided by the Slum Redevelopment Policy, 2011, the state is implementing a landmark initiative called the Odisha Livable Habitat Mission (OLHM), also known as the JAGA Mission since 2018 in all its 114 urban local bodies (ULBs)including all the Municipal Corporations, Municipalities, and Notified Area Councils. The OLHM seeks to transform the existing slums in urban areas into livable habitats (Biju Adarsh Colonies) by providing:

i. tenure security to slum households through land-titling by providing Land Right Certificate (LRC);
ii. holistic development of habitat by providing necessary infrastructure/amenities and delisting slums from the slum list of urban bodies,
iii. improved housing, and
iv. mainstreaming the urban poor living in slums through participatory planning and budgeting [37].

As per the OLRSDA, slum or slum area means a compact settlement of at least twenty (20) households with a collection of poorly built tenements, mostly of

temporary nature, crowded together usually without adequate sanitary and drinking water facilities in unhygienic conditions which may be on the State Govt. land in an urban area. The up-gradation and delisting initiatives are operational in all slums except slums situated on railway, defense, and environmentally hazardous land. However, the ULB Administration reserves the final right to decide on slum re-location. Slum Dwellers Association (SDA) has been formed at each slum in urban areas under the OLHM since 2018. Number of members in the SDA remains variable. But at least half of the members of SDA must be women and each SDA is to be headed by a woman President. In the 50 Smart City slums, SDAs consisted of 11 members—six females and five males. Each SDA had one secretary and one treasurer, who were either male or female members. All the members were residents of the concerned slums and were selected by the slum dwellers themselves in Gram Sabha like meetings of slum residents. There was no clarity on the tenure of SDA members. SDAs were neither registered nor statutory bodies. Each SDA had a bank account in its name, which was jointly operated by the treasurer and secretary.

Following are the roles and responsibilities of SDAs in slum up-gradation and delisting processes under OLHM [37]:

a. assisting the ULB in carrying out Participatory Infrastructure Need Assessment (PNA), a slum level assessment to identify infrastructure facilities available in a slum.
b. giving inputs to ULB based on Infrastructure Gap Assessment Profile (I-GAP), an analysis done to identify infrastructural gaps which require up-gradation.
c. execution of up-gradation work like road and drainage construction in the slum area.
d. preparing and submitting slum de-listing resolution and proposal comprising eligible HH names for land rights under OLRSDA to ULB for evaluation and decision.

5. Findings and discussion

5.1. Structure of SDAs in smart city slums

SDAs were designed as mechanisms for making individual and collective claims on the state. SDAs were sustained by an executive body—a core group of active members led by their President, Treasurer, and Secretary. In the 50 Smart City slums, SDA executive body consisted of 11 members—six females and five males. All the members were residents of the concerned slums. The selection of SDA members was done through informal elections, Gram Sabha like community meetings, or appointment. In some cases, slum leaders, who were mostly male with popular following, seemed to have played key roles in selection of SDA members. In most cases, local corporators and MLA exercised influence on appointment of SDA office bearers. Given BJD's electoral hegemony in Bhubaneswar where the party-controlled BMC including its Mayor post and the three assembly constituencies of the city, ruling party involvement in SDA matters was not surprising. Out of the seven electoral wards in the ABD area, six were in BJD control (ward nos. 30, 34, 35, 40, 41, 53) and one

ward (no. 29) was with the BJP. The Smart City Assembly (MLA) constituency was with the BJD. 44 out of 50 SDAs in the ABD area were controlled by the BJD. Management of remaining six SDAs was shared with the opposition BJP. While political patronage extended beyond the selection process, it was found that outside actors including ruling party politicians could not arbitrarily bestow authority on SDA office bearers who did not already enjoy a degree of local public support.

Nevertheless, the routine involvement of corporators in SDA matters went against the spirit of the JAGA Mission. The Mission Director expressed the sentiment tersely: "*one of our primary objectives is to break the corporator-contractor nexus and eliminate the road blocks created by them in government's slum development projects. This is a big challenge for the SDAs and we are gradually building their capacity to serve as a bulwark against these elements*".

The most striking dimension of SDA was in its representation of gender. Due to reservation of seats, women outnumbered men in membership of the 50 SDAs. Out of the 50 SDA Presidents, 19 (38%) were women. Similarly, out of the 50 SDA Secretaries, 20 (40%) were women and amongst 50 Treasures, 34 (68%) were females (see **Table A2**). Thus, in majority of the SDAs, women were controlling the finances as Treasurers. 41 of the 73 SDA women office bearers (56.2 %) were trained as youth peer leaders and were members of women self-help groups (SHGs). This testified to the success of the capacity-building of slum women in the Socially Smart Slums initiative and the strength of the women SHG programme in Odisha. Pramila (pseudonym), a young female Treasurer put the picture pithily: "…*our training as Youth Peer Leaders and subsequent organization into women SHG, gave us the much needed skills and confidence to deal with male contractors and BMC officials and hold them accountable for project works in our area*". There were five slums where all the three SDA office bearers i.e., President, Secretary and Treasurer were women (see **Table A3**). Interestingly, this included the Mali Sahi slum, which was infamous as the red-light area of Bhubaneswar. SDAs provided poor women with a platform to utilize their capacity for development of their areas and participate in the community decision-making process. Apart from gender, Smart city SDAs were diverse in their social composition in terms of caste, regions of origin and reflected the demography of the respective slums. Vast majority of the SDA respondents were Hindus (96.0%). Except the Masjid Colony slum where Muslims constituted majority members in the SDA, in the other 49 SDAs, Hindus were in majority. In the Masjid colony slum, all the SDA office bearers were men, which reflected a conservative religious bias against women. At least 13 distinct caste groups were identified in the membership of the 50 SDAs. Other backward castes (OBCs) constituted the majority (62.0%) of the respondents, followed by scheduled castes (22.0%). General castes and scheduled tribes comprised 10 percent and six percent respectively of the SDA respondents. Majority of the sample SDA respondents (56.0%) were in the younger age group of 25–35 years, while about one-fourth (24.0%) were in the 35–45 years age group. Just five percent were in the 55 and above age group. This brings out the youthful nature of the SDA members in Smart city slums. Interestingly, there was not a single illiterate person among the 250 sample SDA respondents. Majority of them (62.0%) had studied up-to secondary level, followed by those (28.0 %) who were educated till higher secondary level. Presence of higher degree holders was miniscule, but not absent

among the respondents (graduates and post-graduates constituted eight percent and two percent of the sample respondents respectively) (see **Table A4**).

5.2. Contributions of SDAs

SDAs were primarily designed to help improve the slum settlements, in whole or part, through provision of public goods and services: paved roads, sewers, drainage, streetlights, and land titles. They helped the city government in preparing the slum de-listing proposals comprising names of eligible HHs for land rights. Each eligible slum HH got 323.00 square feet of homestead land under JAGA Mission. All the sample office bearers and female members of SDAs were unanimous in their opinion that BMC/government did involve them in identifying beneficiaries under the JAGA Mission. Kanhu (pseudonym), an SDA Secretary said: "*BMC zonal deputy commissioners and corporators involve us in vetting the result of government's urban slum household area survey (USHA) which is used to select beneficiary households for LRC under the JAGA Mission. In the meetings we speak freely for our people and they (the officials) listen to us carefully. In case of any differences, we also approach our local member of legislative assembly*". SDAs were also expected to execute infrastructure development work like road and drainage construction in slums without the involvement of contractors. But all SDAs suffered from financial and capacity shortfalls and were not able to fulfill this responsibility. Vast majority of SDA office bearers (about 97%) pointed out that they did not have the technical knowledge/skills, man power and financial strength to execute infrastructure development work like road and drainage construction assigned to them by the government. Shanti (pseudonym), a female SDA President put it in the following words: "*BMC tries to impose road/drainage construction work on us without making any advance payments. We are poor people and don't have the money to start construction work. Also, it's very difficult to get our payments cleared from BMC in time and they take at least seven to eight months to clear our bills. Hence, we are constrained to outsource construction work to contractors, who have money and man power to do it. We charge some amount from them as slum development fee*". Consequently, government's attempt to keep contractors away from infrastructure development work in slums did not work in practice. It was found that all the Smart city SDAs outsourced construction work to contractors after keeping a cut of 7.5 percent of the total sanctioned amount of the project as supervisory charge. This amount was deposited in the slum development fund. When asked about it, BMC officials feigned ignorance about this practice. BMC Deputy Commissioner (Housing) said: "…*we have no information on involvement of contractors in slum infrastructure development work. Officially, the concerned SDAs remain the executing agencies for the work done in their areas and we transfer money to the SDA bank accounts as per the estimated project cost in tranches. This is as per the government guidelines*".

Majority of the office bearers (83%) and female members (68%) opined that SDAs provided an institutional platform to ordinary slum dwellers for playing leadership roles. All the respondents interviewed agreed that SDA membership enhanced their social status and it was crucial for aspiring politicians to fight in municipal elections.

The time spent in the field with Secretaries of twenty-one SDAs in seven Smart City wards (@ 3 SDA Secretaries per ward) was quite revealing. All the twenty-one SDA secretaries were males and in their twenties. These slum-level representatives set up offices each morning at community centres/youth clubs of respective slums where they listened to local residents' problems. These street politicians, showed their use of judicious networking as 'party workers' capable of delivering 'vote banks' to achieve services for themselves and their constituencies. They were the fourth tier - the elementary units of local politics, and social organization in the city. Balia (pseudonym), a young SDA Secretary and a former youth peer leader, described the challenges involved in his work: "*I have to work really hard and strike a delicate balance between the demands of the people and the red tape of the city administration. Most of the slum residents don't understand the intricacies of government mechanism and want immediate results, which sometimes may be unjust. For example, during the distribution of LRC under JAGA Mission, some of my neighbours' claims (for LRC) were rejected by the BMC. But my family received LRC. Consequently, these people ascribed motives to me and blamed me for the rejection of their claims. They started abusing me and my family for no fault of mine. I had to run from pillar to post and lobbied for them with BMC, local corporator and MLA for settling their claims*".

6. Conclusions

By using SDAs to deliver rights of urban citizenship to slum dwellers through tenure security on encroached land and control over infrastructure projects, Odisha government tapped into the potential of the urban poor, particularly slum women as a social agency outside of the state apparatus, as a form of power from below. As the study findings show, implementation of initiatives like the Socially Smart Slums and SHGs did prepare the slum youth, particularly young slum women for leadership roles in SDAs. At a macro scale, these strategic distributional dynamics of JAGA Mission can be seen as an aspect of 'patronage democracy' of the BJD and the socially embedded "vernacular" character of Indian democracy" [38], where party-controlled SDAs functioned as institutional mechanisms for participation of urban poor in resource allocation. But challenges remained: SDAs lacked the wherewithal to meet all their obligations, could not keep contractors and corporators (party politics) out of slum development. But their presence increased the access of the urban poor, particularly women to state institutions and resources. Despite weak SDAs having capacity and financial shortfalls, the study did bring out how informality could in fact add to institutional efficacy by linking marginalized urban populations to the enabling properties of the state structure.

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Appendix

Table A1. Distribution of SDA office bearers and members by gender.

SL. NO.	WARD NO.	SLUM NAME	GENDER DISTRIBUTION				
			PRESIDENT	SECRETARY	TREASURER	MEMBER 1	MEMBER 2
1	29	Unit-9 Flat Basti	M	M	F	F	F
2	29	Bhoi Nagar Basti	M	F	M	F	F
3	29	Bhoi Nagar Basti Suka Vihar	M	F	F	F	F
4	29	Sani Mandir Vani Vihar Basti	F	F	F	F	F
5	29	Laxmi Narayan Basti	F	M	F	F	F
6	30	Birsa Munda Slum	F	F	M	F	F
7	30	Sahid Nagar Telgu Basti	M	F	F	F	F
8	34	Durga Mandap Side Basti Satya Nagar	M	M	F	F	F
9	34	Timber Colony	F	F	F	F	F
10	34	Rajkumar Basti	M	M	F	F	F
11	34	Santi Palli Sahid Nagar	M	F	M	F	F
12	35	Bhagabati Basti-2	M	M	M	F	F
13	35	Labour Colony Unit-3	M	F	M	F	F
14	35	Mali Colony	F	F	F	F	F
15	35	Maa Mangala Basti	M	M	M	F	F
16	35	Bayababa Basti	M	F	F	F	F
17	35	Maa Bhagabati Basti	M	M	F	F	F
18	35	Sudhanidhiswar Basti	M	M	F	F	F
19	40	Maa Tarini Basti Unit-3	M	F	F	F	F
20	40	Laxmi Narayan Pragati Basti Unit-1	M	M	F	F	F
21	40	Akhandalmani Basti Unit-1	F	M	F	F	F
22	40	Harijan Basti	M	M	F	F	F
23	40	Ram Mandir Basti	F	M	F	F	F
24	40	Jagannath Basti Unit-1	F	M	F	F	F
25	40	Maa Mangala Basti Unit-1	M	M	F	F	F
26	40	Tarini Basti Unit-2	M	M	M	F	F
27	40	KasturabaNarimahal Basti Unit-1	M	F	F	F	F
28	40	Patel Hall Basti	M	F	F	F	F
29	40	Tati Basti Near Adibasi Padia Unit-1	M	M	F	F	F
30	40	Kalinga Basti, Unit-1	F	M	F	F	F
31	41	Kalimandir Side Basti Unit-2	F	M	F	F	F
32	41	Rickshaw Colony Near Press Colony High School	M	M	F	F	F
33	41	Tiranga Sahi	F	F	M	F	F
34	41	Phd Sahi Unit-3	M	F	M	F	F

Table A1. (*Continued*).

SL. NO.	WARD NO.	SLUM NAME	GENDER DISTRIBUTION				
			PRESIDENT	SECRETARY	TREASURER	MEMBER 1	MEMBER 2
35	41	Masjid Colony	M	M	M	F	F
36	41	Mali Sahi	F	F	F	F	F
37	41	Press Colony Basti	M	M	F	F	F
38	41	Kanjiahoda Harijan Sahi	M	M	F	F	F
39	41	RamkrushnaLeprocy Colony	F	M	F	F	F
40	41	Ashok Nagar	F	F	F	F	F
41	41	Shanti Nagar Fci Colony	F	M	F	F	F
42	53	Bhimpur Bhoi Sahi	M	M	F	F	F
43	53	Kalinga Basti	F	F	F	F	F
44	53	JharanaUppar Sahi	F	M	M	F	F
45	53	Kukuteswar Basti	M	F	M	F	F
46	53	Bapuji Nagar Railway Basti	F	M	M	F	F
47	53	Lingaraj Leprocy Colony	M	F	M	F	F
48	53	Jharana Sahi Tala Basti	M	M	M	F	F
49	53	Kedar Palli Basti	M	M	F	F	F
50	53	Ananda Nagar Palasapalli	M	M	F	F	F

Source: Authors' Fieldwork.
Note: M—Male; F—Female.

Table A2. Distribution of SDA office bearers and members by gender.

CATEGORIES	PRESIDENT	SECRETARY	TREASURER	MEMBER 1	MEMBER 2
Male	31 (62)	30 (60)	16 (32)	0 (0)	0 (0)
Female	19 (38)	20 (40)	34 (68)	50 (100)	50 (100)
Total	50 (100.0)	50 (100.0)	50 (100.0)	50 (100.0)	50 (100.0)

Source: Authors' Fieldwork.
Note: Percentage in parenthesis.

Table A3. Distribution of slums by all female and Male SDA office bearers.

WARD NO.	SLUM NAME	PRESIDENT GENDER	SECRETARY GENDER	TREASURER GENDER
29	Sani Mandir Vani Vihar Basti	F	F	F
34	Timber Colony	F	F	F
35	Bhagabati Basti-2	M	M	M
35	Mali Colony	F	F	F
35	Maa Mangala Basti	M	M	M
40	Tarini Basti Unit-2	M	M	M
41	Masjid Colony	M	M	M
41	Mali Sahi	F	F	F
53	Kalinga Basti	F	F	F
53	Jharana Sahi Tala Basti	M	M	M

Source: Authors' Fieldwork.
Note: M – Male; F – Female.

Table A4. Socio-demographic profile of SDA office bearers and members.

SL. NO.	CATEGORIES	SUB-CATEGORIES				TOTAL
1	Religion	Hindu	Muslim	Christian	Others	250 (100.0)
		240 (96.0)	10 (4.0)	0 (0.0)	0 (0.0)	
2	Caste	General	SC	ST	OBC	250 (100.0)
		25 (10.0)	55 (22.0)	15 (6.0)	155 (62.0)	
3	Age	25–35 Years	35–45 Years	45–55 Years	55 Years & Above	250 (100.0)
		140 (56.0)	60 (24.0)	38 (15.0)	12 (5.0)	
4	Educational Qualifications	Up to Secondary	Higher Secondary	Graduation	Post-Graduation	250 (100.0)
		155 (62.0)	70 (28.0)	20 (8.0)	5 (2.0)	

Source: Authors' Fieldwork.
Note: 1. Percentage in parenthesis. 2. 250 respondents include 150 SDA office bearers (President, Secretary, Treasurer) and 100 female SDA members.