Urban Water Management in India: A Community Perspective

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Abstract: The relationship between water and society has come to the forefront of critical inquiry in recent years. Water in the global era has acquired more meanings than simply a natural resource and the key to water management not only revolves around the need to deal with the scarcity of the resource, but also the complex interactions on the different aspects of water's social, cultural, political and ecological significance (Fontein,2008). Political ecologists, sociologists and geographers have attempted to understand water in its varied dimensions, and more broadly, as a key ingredient of the production of cities. They have brought in a critical dimension to the social production of space through water. This paper based on research of a community water intervention in Cuttack, Odisha, attempts an analysis of water management in rapidly growing urban areas in an effort to provide safe water to all. The paper illustrates the idea of community water interventions in urban areas as a way of not only providing safe water but also understanding the relationship of water from a social, political and economic perspective.

I. INTRODUCTION

Water, its management and circulation present a seminal example of how ecological, physical, social, and political processes can fuse together in the modes of organizing, regulating, controlling, and/or accessing resources. Water, conceived as a hydro-social cycle, constitutes an encompassing vector to such a degree that the ecological process of water circulation can no longer meaningfully be abstracted from its mode of political and economic embeddedness (Davis, 1990; Swyngedouw, 1996).

As water has been understood to be determined by political, social and economic power dynamics, access and availability of water is also thereby determined by these very determinates. The social and ecological narratives of water have reinforced these concerns of the social, political and economic determinates which marginalize the marginalized further from their access to water resources. In an era where technological revolutions are seen as solutions for 'in access' and unavailability of resources, the narratives also suggest that technical solutions alone are not sufficient to ensure equitable and secure access to water resources. Access to water depends on legal rights, social relations, cultures and customs, rights to land, control of resources (including labour) and access to appropriate regulatory institutions and governance mechanisms. This realization of the role of the social within the technological debates requires to be integrated into a more nuanced understanding of water. This in turn could lead to a more enhanced focus on the governance framework of water and focus on inclusive and participatory approaches of water management.

II. THE CONTEXT: ISSUES OF EMERGING URBANIZATION

Cities grow throughout their life span, growing faster as they become bigger. The rural – urban fringe constantly gets consumed in this rapid growth leading to deteriorating areas of habitation. One sees them all around. These peri/ semi urban areas along with small emerging towns are a cause of concern as they grow in an adhoc manner with usually no people centric governance processes in place leading to sub-standard living conditions and a poor quality of life.

Life in these small towns and peri urban settlements are full of dichotomies. They are neither rural nor urban but usually take on the ills of both along with some of the benefits. Critical concerns that plague these settlements are essentially lack of basic services, inequitable social dynamics, partisan politics, economic disparities and gender based discriminations. One of the issues that affects all and is one of the the most essential to human life is the access or lack of it to services. This leads to sub human living conditions and affects the quality and dignity of human life. The specific concerns around this are that of drinking water, hygienic sanitation practices, waste management, public health, education and livelihoods linked with the issues of access ad equity. Therefore, engaging people/ residents in local water management to ensure an integrated development of such settlements is one of the seminal points discussed in this paper. The paper shares two case studies as a window to understand the socio natural process of water flows in an urban context and examines

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and analyses the viability and impact of community solutions to basic amenities. The paper attempts to understand community water interventions and their impact on the lives of urban poor and sustainable urban community water management.

III. URBAN WATER PROVISIONING

The provisioning of urban water is an essential service and has been a significant parameter of human and urban development. The nature of urban water provisioning has always tended to be capital-intensive and large, the reason for this has been primarily towards making water available for human and development activity in an urban settlement.   Urban studies suggest that urban settlements have predominantly been managed by a set of people or institutions and water supply and other basic services have been typically provided for by a centralized mechanism (Hall, 1975). Water has been always been a significant indicator of centralization and control and today when it has been recognized as a critical parameter of development, water continues to be in the hands of a few leaving behind significant numbers of population without access to safe water(Davis, 2006). The water challenge becomes further exaggerated in urban areas where persistent poverty, ineffective governance and rapid urban growth are some of the underlying factors for inequitable water availability.[1].

IV. CHALLENGES OF EXISTING WATER SYSTEMS

The centralized water provisioning system along with catering to better public health demands large volumes of water. With the growth of cities and urban agglomerations huge amounts to water were required to fulfill the demand. To cater to the growing demand distant sources for water collection were sought and large infrastructures built to cater to this growing need (Dingle, 2008).

Until the 1990's, across the world, water supply was primarily controlled by the state and above all by the local governments and municipalities. In the recent times, however, one sees a shift in the understanding of water and water governance framework(E Swyngedouw, 2002). There has been a transformation of both institutions and mechanisms of water management. Participation, negotiation and conflict intermediation have become ingrained within water governance paradigm. The changing power relations and their consequences within the ongoing context of privatization and decentralization lends itself to interesting change today within the new forms of Governance.   In India too, in the era of liberalization, a vibrant debate around the privatization of water is emerging. The criticality of clearly articulated roles of people in the management and governance of water is also evolving.

In this gamut of debates of centralization, capital-intensive water provisioning, global water crisis and environmental sustainability and limitations of the conservative hydraulic paradigm in the growing urbanism, there is a need to look at localized water management shifts and governance structures. A more localized water management framework involving citizens as stakeholders and micro and community based infrastructures is increasingly being recognized as a promising alternative to the centralized piped water approach.

Another grave challenge to the existing water discourse is the exclusionary nature of the water delivery system. Literature on water and gender studies in the last decades have pointed out that water needs to be understood from the social and cultural perspective. Even though water is a natural resource, the flow of water taken on social, political, economic and cultural connotations. It becomes exclusionary in its flow and urban water provisioning further marginalizes the most marginalized like – poor, dalits (the most marginalized and vulnerable in India) and women.

India is urbanizing rapidly and this massive urban transformation is posing unprecedented challenges to India's growing cities and towns particularly in the provision of infrastructure such as water, sanitation and sewerage meeting the needs of a future urban population of nearly 600 million people by 2031. This growth is accompanied by a proliferation of slums inside and around the urban centres. These are places of dilapidated/ inadequate housing, inadequate basic services, overcrowding, diseases and undignified human life (Davis, 2006). The inadequacy of water further aggravates the lives and livelihoods of these people.

Water provisioning in India has always been the government's responsibility and therefore water servicing since Independence has been a part of the centralized service delivery mechanism implying that water provisioning in the urban areas comes under the local urban government's mandate. However, with rapid urbanization, the task of providing, operating and maintaining basic services has grown beyond the capacities of central, state and local governments. Studies suggest that most urban areas in the country have witnessed in recent years deterioration in the standard and quality of public life. In almost every urban centre irrespective of size or class, the availability of basic services has declined, and considerable populations in these settlements have no access to many of the services and amenities. It is within this context that community based management is being recognized as a way to reimagine urban water systems. They are primarily facilitated by

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[1]Development Journal, Water for People, SID, March 2008

NGOs and aid agencies in an effort to demonstrate a more inclusive, democratic and participatory approach to basic services in urban poor or marginal and peripheral communities in an urban agglomeration.

Community based water management advocates[2] emphasize an enormous potential of this approach in engaging with people and designing water accessible solutions based on the community's available resources and the people's need and requirements. They suggest that this could provide for a cheaper and effective alternative to a centralized service delivery option and also help in rejuvenating local practices of water management and bringing in citizen engagement and local resources and in the process enhance local participation and ownership. This approach also believes that it addresses challenges of equity and access of basic services faced by the poor and marginalized and also reduces the risk of improper designing and execution of large - scale centralized water provisioning services. More significantly, this community management approach literature states that this process also aims at addressing issues of exclusion at various levels and works towards bringing in people to the centre of planning.

Given these complex debates and discourses on water at the global and local levels, and in the context of international aid coming in to finance different models of water servicing within the government through privatization and reforms, the urban water scenario is undergoing an interesting phase. There is both a dominant discourse on the privatization of water on the one hand which is being supported by the state and critiqued by NGOs and peoples movements and on the other, a people centric narrative which is being tried out based on the CBM successes in the country and the world where local NGOs are attempting to demonstrate the role of community water initiatives as sustainable and equitable models for inclusive and participatory water management. It is within this existing and exciting context that this paper illustrates the community water approaches as a way to reconfigure conventional water practices and suggests a deeper engagement with people to manage and sustain water resources.

V. DESIGNING COMMUNITY WATER SOLUTIONS

The engagement ofspecifically two civil society organizations(studied for this research) for the last decade in engaging with ordinary citizens and understanding ways of enhancing their quality of life and sense of well-being through participative and consensual planning processes in urban areas has been a learning by itself. The effort was towards demonstrating, supporting and implementing sustainable, people centric community models and providing learning opportunities leading to improved governance and sustainable development. The NGOs through their interventions have been focussing on developing community management models of basic services like clean water, sanitation and waste in an effort to improve the quality of life of people living in low income urban areas. The aim is to bring all the key players with the citizen groups/ communities as the core, to create and identify spaces for holistic, inclusive and people friendly urban development.

Given the existing reality and the aspirations of the inhabitants and the challenges therein, the approach to engage follows an inherently participatory and inclusive process. The interventions engage and facilitate citizens to understand the local contexts, take more responsibility and participate in making their settlement better and improve their quality of lives. The approach encourages ordinary residents to engage proactively with the Local city government and actively involved in creating conditions where citizens and the local bodies work together cutting across social, political, economic, gender lines for a vision towards a more just, equitable, socially inclusive and better governed settlement. This endeavour has evolved into developing models for participatory and inclusive community management of basic services in a few select urban poor communities in the states of Odisha, Jharkhand and Chattisgarh in India.

The community urban interventions have tried to push beyond traditional planning methods to focus on local/ community governance structures as a mechanism for (re) ordering lived spaces. It has pushed beyond traditional governance discourses to focus on community governance models i.e. the role of citizen- citizen relationships and community self-organization as the prime agency of the local developmental process and has invested in cultivating community organizations and local social leadership through various sectoral interventions like safe water, sanitation and waste management.

The efforts have focused less on conventional approaches of town planning and have instead sought to establish a participatory governance mechanism that enables citizens to meaningfully engage in the improvement of their own settlements. While the search for meaningful ways of engaging citizens is an issue in town planning and governance processes across the world, these community approaches become relevant in the Indian context, where the state actors, including urban local bodies severely lack the social base capacity and vision for making a more socially just, responsible and improved community. This approach demonstrates citizen – citizen relations and an exceptional scope for redefining citizenship and community in urban areas. It also clearly indicates that doing so may be a prerequisite to involving citizens in the co creation of a vibrant urban community.

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[2] Based on reports and discussions with NGOs and practitioners

"We have put elected officials in a difficult role. We distort them into service providers and suppliers. We relate to them as if we are consumers, not citizens. We want them to solve for us those issues that we should be solving for ourselves. The customer model, where elected representatives exist to satisfy citizen demands, is a disservice to community, even though citizens love it. Elected officials are partners with citizens, not suppliers. The most useful role elected officials can perform is to bring citizens together". (Peter Block, 2008 in his book *Community– The structure of belonging*)

Therefore, the community approach looks at transforming urban governance at the local level by facilitating and promoting citizen – citizen relations and citizen – local governing body relations to enable

- Deeper engagement with citizens who on the ground are fragmented on issues of gender, class, caste, education, status, age, religion, party affiliation etc and trying to change their behaviours
- Redefining peoples agencies and co owning and sharing responsibility on both the problems as well as the solutions by both the elected representatives and citizens thereby reducing the one sided dependence and enhancing collective capacities for coordinated efforts to serve the common good.
- Relooking at the community as being the source of agency to bring about inclusive change based on cooperation and mutual understanding.

This basically implies rebuilding trust amongst citizens, cultivating leadership qualities amongst ordinary people, developing citizen capacity for self-management in an inclusive and transparent manner and sensitizing citizens and elected representatives to social, cultural, economic and political power imbalances. Improved urban governance and inclusive and participatory democracy therefore is something that gradually emerges as a result of new forms of interactions and relations amongst citizens and local governing bodies.

VI. CONCLUSION

Water as discussed above is and should be everybody's business but somehow provisioning of water in urban areas is today connected with only engineers and government officials. This techno managerial approach to water without the societal involvement has left people totally out of the water decision making process and thereby contributing to the water challenge. The issue of accountability within the department is also not very clear. The government officials are not accountable to the people therefore their attitude to the ordinary poor is not very friendly and the ordinary citizen is at a loss regarding her water crisis. Further, only when an elected representative sees this as a necessity to his/her own political upward mobility process, does water becomes an agenda. The ambiguous work responsibility and relationship between the engineers and elected representatives at the local level adds to the ambiguity of the delivery process.

Through the urban intervention, the organization of community members as formal associations facilitating them as peoples' agencies[3]; helped in bringing, rejuvenating and developing local water systems to ensure clean water.

Scholarships around community approaches and informality discourses emphasize an enormous potential of this local approach in engaging with people and designing accessible solutions based on the community's available resources and the people's need and requirements. The debates suggest that community approaches could provide for a low cost and effective alternative to a centralized trunk delivery option and also help in reviving local practices of water management.

The water intervention approach shared in this paper is a way of enhancing social capital and strengthening people's agencies. The approach which is inclusive in nature has ensured that the most affected and the marginalized people (single women households, poorest households, households with disabled family members) have been brought within the community water management and service provisioning architecture.

The water intervention has helped in shifting focus from addressing only individual needs to a collective vision building and also engaging with the wider urban city processes The interventions also focused on increasing capability of women and girls to realize their rights, determine their life outcomes, and influence decision-making in households, communities, and societies. This was done through awareness, mobilization activities, capacity building efforts, exposure to outside scenario, and systematic efforts to engage them with service providers to lodge grievances and to demand for their rights. As the paper indicates, water needs to be recognized as a socio - political issue in this increasingly urbanizing framework of the country and the poor need to be recognized as visible city residents with as much right on the city services like anybody else. The research on which this paper is based also explains how through community water intervention, low income communities evolve to become empowered to act as advocates for their inclusion in city development processes.

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[3]Will or intent on the part of an individual or collective to act, to make a change in either a personal or collective circumstance.
Both agency and social capital must be available in a community to effect social change (Krishna 2001)

Several conclusions emerge from this analysis, some of them I think will help in supporting the community solutions as ways of rethinking sustainable urban water management in India. Very briefly, they are

- *Enabling Policies and Institutional Arrangements* – Governments especially local bodies need to play a guiding role in the promotion of these community management models. They need to be strengthened to stimulate and encourage the use of these local approaches by developing new policies and regulations which create an enabling environment for other non state actors to participate. The inability of the state to meet the emerging demand for water should necessitate integration of community approaches. The centralized piped water systems are controlled by the state whereas the community water models are owned by the community groups which effectively implies in redistribution of power. Swyngedouw (2005) refers to a new governance model which might be referred to as governance – beyond – the –state. This would imply greater involvement of citizens and community participation in planning, designing and implementation of water systems and thereby better service delivery.

- *Recognizing Water as a Social and Political Construct* – Water in the community approach redefines or rather brings back the traditional relationship of community with its local water resource. This approach would imply learning of new skill sets and developing a cultural understanding of water amongst all the water interest groups to ensure effective and efficient operations of community decentralized water approaches. The Government would need to understand the local context and look at water through various social contexts of exclusion, gender, marginalization, peripherality etc.

- *Appreciating Local Water Solutions and Innovations* – This approach also encourages local innovative solutions to water management. Innovative technical solutions need to be adapted and stimulated to foster local ownership and benefits. They should be designed with and by the community to ensure maximum ownership.

- *Facilitating Inclusive Urban Water Management* – Today's urban management and growing inequities within urban areas need to recognize urban informalities and community approaches to basic services. The community approach recognizes the informal water systems and thorough its intervention brings in larger ownership, inclusiveness and participation to initiate and consolidate participatory governance with people through community participation in municipal affairs of area development program with special emphasis on poor communities; to empower vulnerable sections such as the women, youth, backward castes for participation in community affairs through capacity building measures and engaging them in specific activities such as income generation, vocational trainings, etc; to carry out interventions in water, sanitation and waste management for providing scope to the people for participatory governance and to empower people for taking actions for their own development.

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