Local Environmentalism in Peri-Urban Spaces in India: Emergent Ecological Democracy?

Ritu Priya, Ramila Bisht, Pritpal Randhawa, Meghana Arora, Jonathan Dolley, Gordon McGranahan, Fiona Marshall

Peri–urban Environmentalism

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This paper explores the potential of a range of peri-urban environmentalisms to come together in support of sustainable urbanisation. The present-day 'urban,' along with the dominant planning visions of urbanisation, lack in inclusivity, deliberative democracy, grassroots innovations, and bottom-up processes of knowledge generation. To sustainably transform this scenario, there is a need for the participation of various sections of citizens, who should be seen not just as subjects of planning, but as creators of a planning framework that emerges from both contestations and innovations in everyday living. Our earlier research on a peri-urban village situated between Delhi city and Ghaziabad town suggested that there is little support for continuation of agriculture in such areas, despite its strategic importance for sustainable urban development. Agriculture could contribute to the greening of urban spaces while enhancing the livelihoods of the poor, recycling urban waste and producing perishable food items for the urban populations. However, we found that present-day government schemes, as they unfold—often under the banner of sustainability—tend to exacerbate peri-urban inequalities. Having observed local citizen environmental action in Ghaziabad, we wanted to understand the potential role it could play in dealing with the environmental crises facing the district and region. During the course of our research we came across a distinctive peri-urban civil society activism, which cannot be viewed in binaries and reflects a pluralist spectrum that allows for alliance building. This environmentalism in Ghaziabad is distinct from the 'environmentalism of the poor' practiced by rural and forest dwelling groups; from the dominant elite urban 'green development' practices and discourses of 'bourgeois environmentalism'; and from the urban politics of the poor. It reflects the possibility of creating bridges across sectional interests—rural and urban, red and green ideological streams—and across classes.

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Acronyms

CBO	Community Based Organisation
CEPI	Comprehensive Environmental Pollution Index
CGWD	Central Ground Water Board
CNG	Compressed Natural Gas
CPCB	Central Pollution Control Board
CSE	Centre for Science and Environment
CSR	Corporate Social Responsibility
EXNORA	Excellent Novel Radical
FAO	Food and Agriculture Organisation
FICCI	Federation of Indian Chambers of Commerce and Industries
GDA	Ghaziabad Development Authority
GOI	Government of India
ILO	International Labour Organisation
JNU	Jawaharlal Nehru University
MIT	Massachusetts Institute of Technology
MOEF	Ministry of Environment and Forest
NAPM	National Alliance for People's Movement
NCR	National Capital Region
NGO	Non Governmental Organisation
NGT	National Green Tribunal
NSS	National Service Scheme
PDS	Public Distribution System
PIL	Public Interest Litigation
RO	Reverse Osmosis
RSS	Rashtriya Swayamsewak Sangh
RTI	Right to Information
RWA	Resident Welfare Association
SPARC	Society for the Promotion of Area Resource Centres
STP	Sewage Treatment Plant
TINA	There is No Alternative
UAs	Urban Agglomerations
UP	Uttar Pradesh
UPSIDC	Uttar Pradesh State Industrial Development Corporation
WRG	Water Resource Group

WSF   World Social Forum

1. Introduction

Contestations against prevailing unsustainable forms of development in the global south have largely been led by communities most affected by them. Academia, social movements and civil society action have played a critical role in bringing the need for sustainable transformations into public discourse and providing experiments and innovations in democratic approaches towards such transformations. This discourse has led to wide acknowledgement of the need for sustainable transformations to be wrought through inclusive development, deliberative democracy, grassroots innovations, bottom up processes of knowledge generation and governance approaches that facilitate these. Such community-led collective action for sustainability and development, rather than technology-led, market-led or state-led development, tends to be an outcome of interactions across all four, i.e. the community, technologies, market and state (Scoones 2016). These transformative societal processes are viewed, not as smooth transitions of planned development 'managed under orderly control, through incumbent structures according to tightly-disciplined knowledges, often emphasising technological innovation, towards some particular known (presumptively shared) end', but as 'more diverse, emergent and unruly political alignments; more about social innovations, challenging incumbent structures, subject to incommensurable knowledges and pursuing contending (even unknown) ends.' (Stirling 2015: 62) This paper explores the potential of a range of seemingly incommensurable forms of environmentalism and pro-poor activism to come together in support of sustainable urbanisation.

In the context of sustainable urbanisations, there are visions under discussion of 'smart cities', 'ecological cities', 'livable cities' and 'resilient cities' (Platt 2004; Datta 2015; Meerow *et al*. 2016). What elements of these visions or combination of elements actually emerge will depend on the larger political economy of urban development as well as the local geo-physical, infrastructural, socio-political context. Besides the visions of planners and policy makers, it has been the contestations and innovations for everyday living by the citizens which has shaped urban spaces (Chatterjee 2004). In our understanding, while the former, i.e. state and market led visions of planners and policy makers, have created the skeletal grid of possibilities, along with the exclusions, the urban residents and urbanising migrants have together put the flesh and blood on it. What sustainable transformations seem to require is a participation of the various sections of citizens in designing the vision of the skeletal grid itself.

It is from this perspective that peri-urban agriculture has been viewed as important to improving urban environments and food security as well as contributing to poverty alleviation (FAO 2011; te Lintelo *et al*. 2002; Marshall and Randhawa 2017). However, the dominant visions of urban development give little support for continuation of agriculture in such areas. Findings of our earlier research in peri-urban locations in the National Capital Region of Delhi, India, showed that the villages at the periphery of Ghaziabad town adjoining Delhi were administratively included in the municipal area but about one third of the households continued to engage in occupations related with agriculture (Marshall *et al*. 2017). It was the women, lower caste residents and migrants from other rural areas who were most commonly dependent on such sources of livelihood. Agriculture and food production in the area was threatened by the depletion of water sources and pollution of both the water and air that affected agricultural produce as also health of the local residents. There was little by way of official policy actions on environmental degradation or agricultural livelihoods. Nor was there collective mobilisation and political activism visible on these issues (Marshall *et al*. 2017).

In India, especially in recent years, there have been many of what Smitu Kothari, paraphrasing V S Naipaul, has called a 'million mutinies' of local citizens movements, some prominent and some not so visible (Kothari 2001). It has been argued that it is these New Social Movements, or non-party political processes, which represent concerns of the local citizens. Though often issue-based, these non-party

political processes in rural, urban and (through this paper we suggest) also peri-urban areas have the potential to evolve into a comprehensive, cohesive and coherent force with possibilities of democratising development planning. The specificities of peri–urban areas provide us the imperative to move beyond rural–urban dichotomies and Chatterjee's political society/civil society distinction, to a relatively more nuanced understanding of the positive and more inclusive contribution that informal workers, agriculturalists and middle class actors, engaged in a wide range of environmentalisms, can make within India's diverse social and political spectrum. Brown and McGranahan (2016: 103) review of the opportunities and barriers posed by the informal economy concludes inclusive urban planning requires engaging with the informal economy through a 'consultative and negotiated process' that will require different processes and forums from those being advocated for the green economy. The peri-urban is certainly one of the sites of such informality.

The study for this working paper leads on from community based research concerning relationships between peri-urbanisation, environmental change and livelihoods of poor and marginalised groups in Ghaziabad district over the past three years (Marshall *et al*. 2017). Here we had focused on the peri-urban communities who remain involved in agriculture as a central part of their livelihood strategies. This, and our earlier studies have demonstrated complex and neglected 'nexus' interactions in the peri-urban, which have local impacts, but also impact adversely on the sustainability of urban food, water and waste systems and multiple dimensions of poverty. The dynamic nature and changing scale of these challenges, coupled with the diverse nature of possible solutions, is such that there is a need for an ongoing process of mutual engagement and learning across disciplines, sectors and communities.

Recognising how political economy, the politics of knowledge and power relations at multiple scales are integral to the formation, disintegration and changing nature of priority setting for urban environmental agendas, we had begun to focus on the characteristics of knowledge exchange interactions between communities, researchers and civil society/social movements that can lead to improved environmental and human health consequences for the urban and peri-urban poor. This requires attention to the mechanisms that can link bottom up knowledge generation to decision making processes and a re-configuring of societal visions. With these objectives in mind, we were interested in the untapped potential to establish new partnerships with and across civil society/urban social movements. The environment-livelihood-health-poverty nexus is largely missed by pro-poor urban social movements, whilst elite environmental movements are being successful in influencing environmental policy and governance, largely through judicial activism and advocacy with state policy makers.

We are particularly concerned with the possibilities for working with local civil society groups/social movements to develop mechanisms that are able to influence incumbent urban environmental policy and governance regimes, and support the integration of environment, health and poverty concerns into the planning and imagination of urban futures. Our preliminary explorations revealed that there were several local citizens organisations working on environmental issues and on issues of peasants and industrial workers in Ghaziabad, although environmental and pro-poor concerns were largely separated.

This paper presents findings from our rapid study of environmental activists and a trade union. We simultaneously reviewed literature on social movements and environmentalism in India so as to place the Ghaziabad environmentalism in a wider perspective. We found that while there is a large literature on rural and urban social movements, including environmentalism, there is little on contemporary everyday forms of citizens' environmental action in small towns and peri-urban spaces. This paper presents the findings of our study of local citizen environmentalism in Ghaziabad, located within the literature on environmentalism in India. Alliance making across such organisations/actors at local, regional, national and international levels is also an emerging phenomenon that we have witnessed and consider that it bears watching for its implication on how issues unfold on the ground**.**

The purpose of this study was to further examine the potential of alliance making across sectional interests as a strategy for influencing environmental policy and planning (with researcher-community co-produced knowledges). With a focus on improved livelihoods, environmental and human health consequences for the urban and peri-urban poor, our case studies examined the opportunities and challenges associated with peri-urban agriculture. Using the environmentalists' perspectives and action on environmental issues (more specifically on water since that emerged as the single common issue across all categories) as the lens for examining civil society action in Ghaziabad, the paper argues that: (i) peri-urban environmentalism is distinct in that it plays a bridging role between ideological, locational, occupational and class categories as well as between formal and informal social/economic/political/governance arrangements; and (ii) this allows for an alliance making across the categories of civil society action groups that can create greater influence on state policies and on local citizens' ecological consciousness. The paper ends with the contention that enhancing the understanding of linkages of environmental issues with livelihoods, poverty alleviation and health will strengthen the alliance of civil society environmentally active groups with the poor, and of the organisations of the poor with environmental issues, and that the potential of doing so exists in a majority of the categories of environmentalist groups/actors included in this study.

The paper is structured in six sections. After the introduction, the second section briefly traces the trajectory of post-Independence social movements and environmentalism in India through a review of literature that reflects the varied roots and strands of social and environmental activism. This section ends with relating this narrative of rural and urban environmentalism to the data from Ghaziabad to argue that citizens' action on environment in peri-urban areas and small towns is distinct from both rural and urban environmentalism but so far has been overlooked in this literature. Giving a description of the case study site, Ghaziabad district and town, the third section outlines the process of transformation there and its impact on the environment and people. Section four presents the data on the nature of local citizens' environmental action in Ghaziabad by categorising it into five ecological framings. It also describes the existing and emerging civil society alliances on environmental issues in Ghaziabad. The fifth section analyses the data to answer research questions about the nature and potential of the citizen environmentalism. The concluding section summarises the findings of the study and also discusses the transformative potential of citizens' action in peri-urban spaces such as Ghaziabad.

2. Social Movements and Environmentalism in India

India has witnessed social movements of the kind now termed the New Social Movements since the 1970s, including those on issues of the urban poor. However, with changes in state policies since the end of the 1980s which have resulted in escalating changes in the country's economic structure, urban spaces have changed in character, and so have the social movements. Specific economic changes have included the growing prominence of the tertiary (service) sector at the expense of the primary and secondary sectors, regression of the state from its welfarist role, and growing socio-economic inequalities.

Analysing the development of social movements in India, Sheth (2014) traces the roots to two post-Independence strands; the communist left's trade union movement, and the Gandhian thought inspired social movements. While social movements remained low profile in the first three decades after Independence, the 1970s saw a decline in the mainstream institutional polity based on representative democracy and a rise of mass movements of protest, what has been termed as the non-party political process. Sheth observes:

> They took up issues and constituencies abandoned by the political parties and trade unions, and those ill-served by the bureaucracy. The organisational form they evolved for themselves was not of a political party or a pressure group. It was that of a civil-associational group, leading political struggles on issues articulated to them by the people themselves. The key concept they worked with was democratising development through empowerment of the people.
> Sheth 2014: 106

As this discourse of 'Alternative Development' was evolving in India and with parallel developments in other parts of the globe, the Cold War ended and the discourse of globalisation thrust a different focus on the movement groups, that of safeguarding what the representative democracy and welfare state model of development had been able to provide for the poor and marginalised. The globalisation discourse effectively depoliticised development by displacing the politics through the idea of governance. It also delegitimised the feasibility of the idea of participatory democracy by reinforcing political legitimacy of the liberal representative democracy, 'making it appear as if it is the only natural form that democracy can have' (Sheth 2014). Critiquing this discourse Sheth argues that it has:

> [...]bogged down the theory's political imagination to pragmatic concerns of the old, 'actually existing' democracies of the West. In the process, it has pre-empted options of the new and growing democracies to evolve and experiment with institutional alternatives for deepening democracy and choosing forms appropriate to their own restive cultural and historical context.
> Sheth 2014: 123

Since the mid-1990s, as the impacts of globalisation were experienced by the poor in India, the movements regrouped and formed wider alliances, across sectors and across national boundaries, towards achieving 'two inter-related goals: (a) re-politicising development, and (b) re-inventing participatory democracy' (Sheth 2014: 116).

It is in this context and chronology that we can understand the urban social movements in India. The women's movement and *dalit* (ex-untouchable caste groups) movement have been active in the urban areas and, being the more articulate voice, they have often been accused of being urban and middle class to the detriment of the issues and priorities of their poor and rural counterparts. It is thereby argued that class is still a category that needs to be considered by the social movements while analysing and taking up issues of the marginalised by caste, gender or ethnicity (Chaudhuri 2014). However, together with caste, gender, ethnicity and class, the issues of marginalisation and exclusion are also now

being understood by place based relationships and informal status, such as of the peri-urban within the urban, or of rural-urban migrant status, or of the vast array of informal sector livelihood arrangements. This widening of intersectional understandings across various streams of ideas and action, is what is now leading the movement groups to create green-red alliances, and also for researchers to theorise the need to bring the New Social Movements and the Classical Labour Movements together (Savyasaachi and Kumar 2014). Environmentalism in India will have to be seen within this context of social movements in general.

The discourse on environmentalism in India started with several small and big environmental movements witnessed since the 1970s and 1980s. Most famous of the many movements were the *Chipko* movement against felling of trees in the Himalaya in Uttarakhand that was initiated in the early 1970s, and the anti big dam movements (Save Silent Valley Movement in Kerala in the late 1970s and the Narmada Bachao Andolan, Save the Narmada River, in central India) in the mid-1980s. Alongside these big movements, there were also local movements against deforestation, water logging, salinisation, and desertification in the command areas of dams on the Kosi, Gandak, and Tungabhadra Rivers and in the canal irrigated areas of Punjab and Haryana. Local movements like that of the Tarun Bharat Sangh[1] and Pani Panchayat[2] advocate ecological principles for water use. In a similar vein, a movement in the small fishing communities against ecological destruction existed along the coasts of south Indian states (Karan 1994). Alongside these movements, an important turn came in environmentalism in India with the Bhopal Gas Tragedy of 1984. A total of 200,000 people in a city of 800,000 (1984 population) were exposed to the crippling methyl isocyanate (MIC) gas (Varma 2005). It is argued that recognition of the horror of the incident of the Bhopal gas tragedy spread so widely across the world that it set the stage for transnational environmental movements (Broughton 2005).

Alongside environmental movements, the discussion on environment became prominent in 1982 with the publication of the report titled *State of India's Environment: First Citizen's Report* by the Centre for Science and Environment (CSE). The report provided a perspective for understanding the relationship between environment and development through a detailed examination of ecological degradation, especially the burden borne by women who have to deal with the decline of the biomass-based rural economy. The Report gave voice to a nascent 'red' and 'green' environmental consciousness within the country, creating links between ecology and social justice (Agarwal *et al*. 1982). This report was followed by *The Second Citizens' Report* (Agarwal and Narain 1985). It concluded with two essays with a similar title *The Politics of the Environment*. The first one was by Anil Agarwal founder of the CSE and the second essay was by Dunu Roy. By documenting the state of India's forests, rivers, cities and industries, Agarwal argued for holistic management of land and water resources in the country. He analysed the potential roles of the government and voluntary agencies and of legislation in bringing about change (Roy 2007). Dunu Roy's essay began with the observation that 'different persons give different answers to the same question' and located that difference within an understanding of 'ecobalances and interpenetration of different systems in a generalised world market'. He concludes by suggesting that environmental politics needed to be understood in terms of 'who benefits' and 'whose interests are being protected' (Roy

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[1] The Tarun Bharat Sangh, the youth wing of the Gandhian Sarvodaya movement, initiated rural work in Alwar district of Rajasthan in the mid-1980s, successfully mobilised the community to solve its problem of water depletion, then expanded to other states across the country using the model developed there. This work was organisationally consolidated into the Rashtriya Jal Biradari in the year 2000.

[2] Pani Panchayat is a voluntary activity of a group of farmers engaged in the collective management (harvesting and distribution) of surface water and groundwater (wells and percolation tanks). Pani Panchayat is the name first given to a movement by Mr Vilasrao Salunke for motivating farmers of Naigaon village of the drought prone Purandhar taluka of Maharashtra in 1974.

2007: 523). Both these reports were transliterated into Hindi by Anupam Mishra and the second, titled '*Hamara Paryavaran*' (Our Environment), carried additional content beyond the English text.

The discussions on environment in India often overlook the work that has been done in the non-English languages. For instance, the book *Aaj Bhi Khare Hain Talaab* (Ponds Are Still Relevant) by Anupam Mishra (1993), is a pioneering work from an environmental movement perspective, but has rarely been discussed in the literature on environmentalism in India (Guha 2016). The book documents the myriad forms of water harvesting and conservation traditionally organised by communities across regions of the country, especially water management systems through *talaabs* (ponds). The book has been translated, through the initiative of several inspired readers, into 19 languages and has undergone several reprints. The total number of prints of the book is now over 100,000 copies (Ashis 2016). It has also been serialised in popular newspapers, journals and radio broadcasts, thereby reaching a wide section of rural and urban vernacular speaking peoples across the country. The book continues to inspire a large number of individuals, communities and groups to take up work on setting up and reviving such water harvesting systems.

In 1995 Madhav Gadgil and Ramchandra Guha, in their book *Ecology and Equity,* argue that resource related conflicts provide a backdrop to the environmental movement in India. According to them, 'it is the protests of environmentalists, rather than the concerns of the state or of the intelligentsia, that have generated a wide public awareness of the extent of environmental degradation in India' (Gadgil and Guha 1995: 2). In the introduction to their book on social movements in India, Ray and Katzensteinze (2005) acknowledge that the take off point for the book was a comment by Ramachandra Guha in 1997 that what characterised environmental protest politics in India, in contrast to the Global North, was their greater concern with distribution of the costs and benefits of particular environmental changes rather than with environmental stewardship *per se* (Ray and Katzenstein 2005). These struggles for control over natural resources have also been understood as 'environmentalism of the poor', which manifests new kinds of class conflicts, 'where traditional class conflicts were fought in the cultivated field or in the factory, these new struggles are waged over gifts of nature such as forests and water, gifts that are coveted by all but increasingly monopolised by a few' (Guha and Alier 1997: 5). While the environmental movements and related discussions were growing, a review of the same in 2001 contends that neither environmental movements nor the discourse around them have been able to infect the mainstream electoral politics. It was argued that environmentalism in India had failed to become an environmental movement or to create a political awareness about the use and abuse of natural resources or about the serious limitations of the dominant model of development (Nandy *et al.* 2001).

Gadgil and Guha (1995) comprehend the environmental movements of the 1970s and 80s in terms of three different ideological strands. First, *Crusading Gandhian,* relies heavily on a moral/religious idiom in its rejection of the modern way of life. Here environmental degradation and social conflicts are viewed, above all, as moral problems, their origins lying in the wider acceptance of the ideology of materialism and consumerism, which draws humans away from nature even as it encourages wasteful lifestyles. The second ideological strand is termed *Ecological Marxist*, who see the problem in political and economic terms, arguing that it is unequal access to resources rather than the question of values, which better explains the patterns and processes of environmental degradation and social conflict. They term the third tendency *Appropriate Technology*. Less strident then the Gandhian in its opposition to industrial society, this strand of the environmental movement strives for a working synthesis of agriculture and industry, big and small units, western and eastern (or modern and traditional) technological traditions (Gadgil and Guha 1995).

After the introduction of neo-liberal economic policies in the early 1990s, a large number of protests and environmental movements continued all over India. Most of the movements were focused on the industrial and mining sectors, which have received a huge amount of foreign investment and have

placed a huge negative impact on the environment (Nayak 2015). Among others, *Cola Quit Campaign* in Plachimada (Kerala) was one of the most vibrant example of such movements. In the year 2000, Coca Cola set up production operations in Plachimada. The site was home to nearly ten tribal colonies, which were promised employment in the factory. The operation of the factory started causing discontent amongst the villagers because it was over pumping ground water, and also discharging its polluted effluent into open spaces, which caused a severe ground water crisis as well as the pollution of water resources in the region. *Cola Quit Campaign* was launched against these acts of the factory. After a long and difficult legal/political battle through a collective of local people, the factory was eventually closed in 2004 (Raman 2010). While the Cola Quit movement and a few others succeeded in their immediate objective, a majority of the movements (such as the anti-Posco movement, a protest against the Kundakulum nuclear plant) have faced massive state repression in recent years.

In the late-1980s and 1990s environmentalism also entered the urban arena, with focuses on air and water pollution, including issues of waste and its management. In 1988 there was a cholera outbreak in Delhi affecting people across 44 slums and resettlement colonies. It received high media coverage, as well as concerted academic public health and civil society analysis of its causes and attempted control measures. What was argued was that the dominant model of urban planning, with its lack of priority to issues of water and sanitation, neglect of participatory mechanisms and anti-poor attitudes of the planner-administrators were the reasons of the outbreak (Priya 1993; Tiwari *et al*. 2015). The political leadership and courts took notice, and augmentation of piped water supply, laying of sewage lines, setting up of a surveillance system for gastro-enteritis and outreach health services in the affected colonies were all subsequent measures that resulted in a decline in diarrheal diseases in the city (Dasgupta 2012). An outbreak of Surat plague in 1994, was similarly followed by some successful efforts to clean up the city (Shah 1997). These efforts were followed by the 'Clean India Campaign' by Capt J S Velu of EXNORA that reached out to 63 municipalities across the country (Bakshi 2000). One of the key messages of the campaign was that India's filthy cities are a time bomb waiting to explode. Alongside this campaign, in 1996 Almitra Patel, a retired MIT educated engineer, filed a Public Interest Litigation (PIL) before the Supreme Court of India for a violation of Article 21, the right to life and healthy environment (Writ Petition No. 888 of 1996). The Petition argued that 'various government agencies had neglected to discharge their constitutional and statutory obligation in relation to the proper collection, handling, transportation and hygienic ultimate disposal or recycling of municipal solid waste' (Rajamani 2007: 297). In response to Patel's PIL, in 1998, the Asim Burman Committee was formed under the Supreme Court of India to identify deficiencies and make recommendations to improve solid waste management in cities across the country, which eventually led to the formulation of Municipal Solid Waste (Management and Handling) Rules 2000 (MOEF 2000).

In 1996 CSE once again became a centre of attraction through the publication of its report called *Slow Murder: The Deadly Story of Vehicular Pollution in India*. It showed that the air pollution in Indian cities has a severe impact on human health causing cancer, eye infection, cardiovascular and respiratory disease and so on (Sharma and Roychoudhary 1996). The report became the basis of the PIL filed by M.C. Mehta on the issue of vehicular pollution in Delhi and its impact on human health. The report was extensively used by CSE to launch a campaign to build public pressure both in the court and against the government. Subsequently, in 1998 the court gave a judgment in favour of the campaign and set up the deadline for the government to convert the entire public transport fleet of Delhi into compressed natural gas (CNG) mode, which according to the Bhurelal Committee (constituted by the court) was a less harmful fuel than the petrol and diesel (Mathur 2003). This judgment also led to the formulation of *National Auto Fuel Policy* (GOI 2001). There has been a mixed response on the CNG story in Delhi. While media celebrated it as a moment of victory of civil society, some academics and activists saw it as an intermediary solution that left the city in chaos with no long term vision (Mohan 2001; Kathuria 2005).

The examples of solid waste management rules and conversion of public transport into CNG mode are part of the larger context of emergence of environmental jurisprudence in the country, which received

a boost after the introduction of PIL. During the 1980s and 90s, there was relaxation of the traditional process of standing in the Court (called *locus standi*) and introduction of the concept of PIL. The Court emphasised that any member of the public having sufficient interest may be allowed to initiate the legal process in order to assert diffused and meta-individual rights in environmental problems. Several cases on environmental issues were initiated through PIL, for instance the Dehradun limestone quarrying case, the Ganga Water Pollution case, Oleum Gas Leak case, Tehri Dam case, Narmada Dam case, Coastal Management case, industrial pollution in Patancheru, and T.N. Godavarman case. NGOs and environmental activists initiated most of these cases on behalf of other individuals and groups. The instrument of PIL provided an opportunity for third parties to represent on behalf of the affected people and the environment itself (Sahu 2008; R. Sharma 2008). No doubt the activist attitude of the court resulted in many positive measures related to the environment but there were also many court judgments which went against the tribal and urban poor. For instance, the judgment on Narmada Dam, industrial relocation from Delhi, displacement of thousands of people from Yamuna Pushta in Delhi and numerous other decisions went against the poor and marginalised (Navlakha 2000; Ramanathan 2005).

The environmentalism in the urban context also played out in the process of neoliberal restructuring of urban space across several Indian cities. Under the slum clearance schemes, between 1990 and 2007, around 90,000 houses were demolished in Delhi (Bhan 2009). One of the major slum demolitions happened on the bank of river Yamuna on the basis of a Public Interest Litigation (PIL), which argued in the court that slum dwellers contribute significantly to polluting the river Yamuna. It is worth noting that a study by the Hazards Centre found that the demolished settlement had only been responsible for 0.5 percent of the effluent discharged into the river (Mehra and Batra 2005). Slum demolition and displacement in the name of development projects and beautification is a common phenomena in Mumbai as well (Doshi 2013), and in recent years there has been increasing privatisation of beaches along the west coast (in areas such as Juhu, Manor, Madh and Gorai) by the development of resorts. Also, *adivasi* (tribal) hamlets in or around the Sanjay Gandhi National Park and Aarey Milk Colony have shrunk with the encroachment of luxury residential complexes, hotels, golf courses and recreation spaces (Parthasarathy 2011).

This process of urban restructuring in the name of environment and beautification has broadly been discussed around three streams. In the first stream it is argued that urban restructuring is an outcome of 'bourgeois environmentalism', 'where the middle classes try to pursue the creation of an ordered space, which is beautiful, gracious, which fulfils their desire for a privileged lifestyle, where nature is controlled and made available for recreation' (Baviskar 2010: 172). Such a kind of environmentalism is very hostile to the poor. It intends to remove all forms of 'ugliness' from the city marked by polluting industries, slums, hawkers and vendors, homeless and so forth (Baviskar 2003). The second stream positions its analysis of urban restructuring within the concepts of 'global city' or 'world class city. Here discussion is focused on demolition of slums, provisions of alternative housing and basic amenities for the poor (Roy 2004; Dupont 2011; Banerjee-Guha 2009). The third stream falls broadly within the realm of environmental justice (Anonymous 2015; Agarwal *et al.* 2015; Demaria and Schindler 2016). Here the focus is mainly on the issue of occupational health of the workers involved in mining (case of silicosis in Bhatti Mines in Delhi) or informally managing urban waste. In this stream there is also some attention towards the issue of environmental health through the analysis of impact of waste to energy plants on the people living in its vicinity (Agarwal *et al.* 2015). It is important to note that, without being recognised as such, most of these examples are of issues that arose in relation to peri-urban spaces, whether because of location of waste treatment units at what was then the periphery but later became part of the city proper, relocation of the poor of the city and the polluting industries at the periphery of the urban area, or because of the rural/forest and urban interacting under conditions of stress, such as the conditions creating the plague epidemic in Surat town in 1994.

The urban restructuring of Indian cities since the late 1990s also gave birth to different kinds of activism and alliances in urban areas across the country. For example, in Delhi there were two prominent

alliances in the late 1990s and 2000s, *Delhi Janwadi Adhikar Manch*[3] and *Sajha Manch*[4]. Among others, the most notable alliances in Mumbai include the Society for the Promotion of Area Resource Centers (SPARC)[5] and *Ghar Bachao Ghar Banao Andolan.*[6] Kumar (2008) analysed such initiatives as 'new social movements' which correspond with the change from a welfare state to a more neoliberal economic model in the 1990s. These movements characterise themselves as being 'non-political and non-partisan', as opposed to earlier social movements, often led by left wing parties. These movements generally have a more heterogeneous membership and are often focused on localised issues (Kumar 2008: 79-91). While analysing the work of SPARC, it is argued that the alliance's main approach has been to seek negotiations with the state, rather than to oppose the state directly. This approach opens a set of important possibilities for political engagement, but also closes off other possibilities. The Alliance's emphasis on 'non-party alignment' has in practice led to engagement with whatever party is in power, with little consideration of their ideology. The alliance has been critiqued for addressing the symptoms, rather than the causes of poverty: for being a 'development alternative', rather than promoting 'alternative development' (McFarlane 2004: 907–910). Such criticism has some validity, but each alliance has its own advantages and limitations. Another point of contention is that the creation of such alliances is a result of failure of political parties to address the issues of urban poor and environment. Alongside the instances of these alliances of individuals and groups of similar worldview, there are also examples of mobilisations led by diverse groups of people. For example, the construction of a large sea-link bridge in Mumbai was opposed by fishermen, resident welfare associations and environmental groups who had different interests and different modes of mobilisations but did constitute an unforeseen interest group (Tawa Lama-Rewal and Zérah 2011). Similarly in Delhi, a middle class resident welfare association and a waste pickers' association, two organisations with very different interests, aligned together to protest against the waste to energy plant in Okhla (Demaria and Schindler 2016).

Alliance making across class interests, across the political ideological spectrum and among organisations and actors addressing a diverse array of issues has, in the past three decades, increasingly become one of the modes of enlarging the impact of actions for change. Lokayan, an action research project of the Centre for the Study of Developing Societies, pioneered such dialogue and alliance making in the 1980s on issues of development and democracy. It was constituted by academics and socio-political activists together and generated dialogic processes between these two segments across the country, contributing to some new civil society action and social movements with policy impact, some of the strongest being on the Forest Conservation Bill (1980) and the displacement by big dams, including on the Narmada (Hiremath *et al*. 1994; Kothari 1995). The recognition that existing ideological streams and transformative institutions have run out of steam and are unable to address the complexity of new challenges, especially those of global nature such as the ecological crisis, violence based on social identities and consumption inequalities with the rising influence of global capital on national and international policies, has led to attempts at bringing together diverse streams for creating synergies and evolving new thinking and strategies. Deliberative democracy has been posited as allowing for a greater voice of citizens in developmental decision making relative to merely representative democracy as has been created in most countries over the past century. The concept of 'ecological democracy' takes this forward in relation to environmentalism, explicitly prioritising pathways to both

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[3] An alliance of activists, trade union and academicians established in late 1990s on the issues of industrial closure and slum clearance in Delhi.

[4] A Delhi based platform of activists, NGOs, trade unions, planners and academics etc. created in 1999 with an objective of advocating an alternative vision of the city from the perspective of urban poor.

[5] It is one of the largest Indian NGOs working on housing and infrastructure issues for the urban poor. SPARC's philosophy is that if we can develop solutions that work for the poorest and most marginalised in the city, then these solutions can be scaled up to work for other groups of the urban poor across the country and internationally.

[6] Created by National Alliances for People's Movement (NAPM) in 2004. It is an initiative of slum dwellers, SRA and unorganised sector workers against the forceful slum demolition and other kinds of dispossessions by the state.

environmental and social justice. It takes into account the relationship of human beings to nature, as well as the social, economic and cultural context of diverse groups and the socio-political structures and processes that allow constant and ongoing dialogue and contestation (Mitchell 2006; Priya 2017). The pathways to ecological democracy may eventually require a societal shift in paradigm, but needs to be built through incremental steps impacting on policy and planning processes as well as common lay perceptions across classes and interest groups. Alliance making as a means of deepening the democratic processes for developmental decision making are aligned to these concepts. In the 2000s, the World Social Forum (WSF) represents one of the largest red-green alliances at global level, created counter to the World Economic Forum, challenging the trends of liberalisation, privatisation and globalisation of the 1990s. Countering the aggressive propagation of globalisation as the pathway for which 'There is No Alternative' (the TINA syndrome), the WSF slogan 'Another World is Possible' has facilitated much dialogue and alliance making internationally. Our earlier study in peri-urban Ghaziabad was an attempt at the co-production of knowledge through collaboration between researchers and community members to understand how residents are attempting to deal with the rapidly changing economic, social and environmental conditions. This provided us with insights about the role of peri-urban agriculture, especially vegetable cultivation as livelihood options for the poor, migrant and women workers. Additional learning was gained about the environmental challenges related to water, soil and air pollution faced by these groups. In working towards influencing urban policy and administrative actions to support agriculture and to improve environmental conditions, we decided to explore the potential for peri-urban farmers and other residents to build alliances with civil society and social movement groups to make greater collective impact. This study takes a step towards this goal by exploring civil society groups and their alliances at the local level.

The survey of literature on social movements and environmentalism shows that there is substantial attention on understanding rural and urban environmentalism separately. Contrary to the earlier rural and forest dwellers environmental concerns that linked ecological and social justice issues to over consumption by the urban and elite classes for which the rural/forest dweller paid the price, urban environmentalism is either a bourgeois concern or, if it raises the issue of equitable access to environmental amenities for the poor, the implication is that is causes the redistribution of urban resources and amenities across classes based on high consumption models. Thus it does not question the consumption of environmental resources that are drawn beyond the capacity of the city itself, resulting in the degradation of other, neighbouring and distant, ecosystems (Baviskar 2003; Priya 1993). However, we draw upon the Geddesian vision of bottom upward and grounded urban planning (Geddes 1915; Priya 1993) to make the contention that redistribution is a necessary but not sufficient measure, since the dominant urban infrastructure development models do not address the social and cultural contexts of third world urban areas, expect financial outlays that are difficult to come by and do not allow for environmental rejuvenation by the natural ecological cycles thereby over shooting the carrying capacity of the region. This problem of inappropriate models requires a revisioning of urban spaces with more ecological, socially just and economically viable approaches. Peri-urban areas, largely lying at the growing edge of towns and cities, provide some insights for re-visioning to fulfil these requirements for sustainable transformation.

The survey of literature also suggests that several issues of environmental justice have been looked at as a part of the urban environment, but their specificity as having been born out of developments in the erstwhile peri-urban sites has been ignored. In other words yesterday's peri-urban has become today's urban. But nowhere in the literature have environmental challenges of peri-urban spaces been discussed. Mortimore and Wilson used the term 'peri-urban' for the first time in 1965 while defining the area surrounding the Nigerian city of Kano. In Mortimore and Wilson's definition of the peri-urban they focused on the 'mosaic' of land use patterns, the accessibility of this area to the city, the diversification of household incomes, the proximity of markets, the availability of farm labour and the possibilities of off-farm employment (Mortimore and Wilson 1965). Fifty years on from this work, there has been substantial progress in conceptualising peri-urban. It has been used to define 'a place, concept or

process' (Narain and Nischal 2007). As a place, it is 'midway between urban centres and rural spaces' or a place 'lying between cities and countries' (Dupont 2005; Cadène 2005). As a process, it refers to the movement of goods and services between physical spaces and to the transition from rural to urban contexts (Friedberg 2001). And finally, as a concept, it refers to an interface between rural and urban activities, institutions and perspectives (Allen 2003). The peri-urban is thus characterised by high, and often increasing, population density, small landholdings, rich countryside homes, informal settlements, a lack of regulation, contested land tenure rights, uncoordinated conversion of farmland to housing, pollution, environmental problems, resource exploitation, considerable economic dynamism, a severe lack of service provision and a range of processes leading to the intensification of urban-rural linkages (Tacoli 2006; Marshall *et al*. 2009; Randhawa and Marshall 2014).

Over the past one and a half decade peri-urban challenges in India have attracted substantial attention, both from natural and social scientists. This scholarship is broadly focused on a range of issues including heavy metal contamination in the crops grown in peri-urban areas (Sharma *et al*, 2007; Marshall *et al.* 2003; Hussain and Hanisch 2014), usage of wastewater for irrigation (Jacobi *et al*. 2009; Amerasinghe *et al.* 2013), water access and management in peri-urban areas (Randhawa and Marshall 2014, Mehta and Karpozouglou 2015, Narain and Singh 2017), groundwater quality and security (Prakash *et al.* 2011; Adhikary *et al.* 2012; Verma and Pandey 2014) and changing patterns of land use (Narain 2009). No doubt a wide range of scholarship is emerging on peri-urban issues but so far the issue of nature of activism related to environmental challenges in peri-urban areas has not been dealt with. In this paper we attempt to understand what we call peri-urban environmentalism and also position it in the discourse on social movements and environmentalism in India through the following research questions.

- What is the nature of peri-urban environmentalism, and what has been the nature of its alliance-making for impact on policy?
- How does it relate to social movements, civil society and electoral politics?
- What role do local micro-mobilisations play with regard to issues of peri-urban agriculture, poverty, livelihoods, water, food and health?
- Where does the potential lie for creating alliances between elite environmentalism and issues of the poor?

The specific site for the study of peri-urban environmentalism was Ghaziabad, a brief description of which is given in the next section so as to contextualise the data we subsequently present.

3. Ghaziabad Town: Delhi's Backwaters

Ghaziabad District (henceforth Ghaziabad) is a peri-urban area located on the eastern border of Delhi. There is a need to understand the process of urbanisation in India in order to perceive Ghaziabad as Delhi's Peri-urban area. The urban population in India grew from 217 million in 1991 to 377 million in 2011, or 31 percent of total population of the country (GOI 2011). Of the total numbers of people living in urban areas, 43 per cent live in cities or urban agglomerations (UAs).[7] The remainder of the 57 per cent of the urban population in India lives in 'statutory towns' and 'census towns'[8] with the highest urban growth rates over the decade of 2001–2011 being in these areas, especially in the ones located at the periphery of cities (GOI 2011). Statutory towns are towns with municipalities or corporations, whereas census towns are villages that have grown to a population size more than 5 thousand with not more than 25 per cent adult males engaging in agriculture and a population density of 400/sq. km or more, but are not recognised as urban areas by the civil administration. They do not have urban governance structures or requisite urban infrastructure such as sanitation and roads. These towns are the outcome of urbanisation of former villages or the reclassification of rural areas following the extension of city boundaries (Bhagat 2011). Such towns in India occupy an important position in the rural-urban continuum. Sixty nine percent of the Indian population continues to live in the rural areas, depending largely on agriculture as a source of livelihood. It is not the cities but these towns which act as a base for collection and subsequent distribution of agricultural products of the surrounding region. Originally these towns might have been rural centres, but in the course of time they gradually assumed urban characteristics by virtue of their nodality, function and services (Sharma 2016). Historically Ghaziabad has also been one such *mandi* town (town growing around a market for agriculture produce) that enjoyed patronage of the Delhi Mughal *darbar,* but it grew once it became an important railway junction in the late 1860s and was administratively recognised as a statutory town. However its surrounding areas remained largely agricultural and modern industry entered only after 1947. Despite its industrialisation and urban development, large parts of it continue to have those characteristics where urban and rural activities and institutions are juxtaposed along with additional features of changing land use patterns, environmental degradation and others, which are typical to peri-urban areas.

Ghaziabad town with a population of 1.6 million is located within Ghaziabad district (GOI 2011). The river Hindon flows through the town dividing it into a Cis-Hindon area on the east and Trans-Hindon area on the west adjoining Delhi. Owing to its proximity with Delhi (with barely 25km between their centre points) Ghaziabad has developed as a satellite town of the capital city of India. It has experienced processes of rapid transition in various phases of development since the 1950s and 60s, being one of the fastest growing cities in the 2001–2011 period. Without its own overall planned development, the changes resulted in very mixed features that characterise it in large parts as a typical peri-urban area with rural and urban economic activities as well as social structure and cultural processes and ambiguous governance arrangements. Locally, the popular perception divides its area and people on either side of the river. The Cis-Hindon area is perceived as socio-culturally a part of UP while the Trans-Hindon, even while being located in UP, has the image of being more a part of the metropolis of Delhi.

Ghaziabad's proximity to Delhi gave it the advantage of early development in post-independence India. Its history of industrialisation and urban development in the Nehruvian era of the 1950s and 60s, and

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[7] Among the 53 UAs, the three largest UAs or megacities (with a population of more than 10 million) are Greater Mumbai UA (18.4 million), Delhi UA (16.3 million) and Kolkata UA (14.1 million). These are followed by Chennai UA (8.7 million) and Bangalore UA (8.5 million).

[8] The number of statutory and census towns in India increased from 5,161 in 2001 to as many as 7,935 in 2011, with a population of 215 million.

its incorporation into the National Capital Region gave it a developmental edge over other towns. Later, however, these same processes, and its receiving Delhi's polluting industries as Delhi sought to clean up its own environment, culminated in the negative consequences associated with peri-urbanisation in the globalisation period of the 1990s and beyond. The town and its periphery became a backwater of Delhi, the 'new town' development catering to the expansion of housing for the middle class of Delhi as suburban expansion increased, and the peri-urban villages allowed for setting up of the industry that was pushed out of Delhi.[9] Environmental pollution has been documented there at least since the 1990s and the depletion of water and loss of water-bodies became a citizens' issue at least since early 2000s.

The majority of the population of Ghaziabad was dependent on agriculture before a series of land acquisitions happened for industrial and real estate development. The acquisition of land for defence installations and industrial development started in the 1960s and has continued till the last decade. The most recent phase of land acquisition for industries happened after the closure and relocation of hazardous industries in Delhi in the years 1995 and 2000 respectively. According to the latest figures, Ghaziabad now has 14,160 small scale and 145 medium and heavy industrial units (UPSIDC 2016). The real estate speculation and lack of affordable middle class housing in Delhi encouraged property development in Ghaziabad. Alongside acquisition of land for industrial development, in 1983 and 1987 major tracts of agricultural land were acquired by the Ghaziabad Development Authority (GDA) and Uttar Pradesh Housing and Development Board in order to develop residential areas. Later many private developers also bought land from the villagers to build housing and commercial complexes. Middle class colonies and high-rise housing complexes have been constructed adjoining the Delhi border in the Trans-Hindon region[10] offering flats to middle class dwellers who often work in Delhi, at approximately half the price of flats in Delhi. Beside the growth of industries and middle class colonies, there was also an expansion of informal colonies in the region inhabited by the poor, mainly due to the migration of manual workers that took place due to expectations of increasing livelihood opportunities in Ghaziabad (Randhawa and Marshall 2014).

Alongside these new middle class dwellers and migrants, the erstwhile villagers both rich and poor, with or without agricultural landholdings, continue to live in Ghaziabad. Our earlier research shows that, even though Ghaziabad has been declared a municipal corporation and most of the erstwhile villages have been converted into municipal wards, agriculture continues to be a source of livelihood for significant numbers of people in the villages that have so far survived the land acquisition. Our research also shows that even though upper caste inhabitants own most of the agriculture land, farming is actually done by women, lower caste and migrant farmers. While women of the landholder's family may engage in some activities related to agriculture, it is largely women of poorer households, lower caste and migrants who get involved in farming by taking agriculture land on lease from landholders (Marshall *et al*. 2017). Despite being powerful in the village, it is noteworthy that the middle class upper caste farmer cannot be equated with the urban middle class for two reasons. First, they do not have social capital and cultural capital of the urban middle class that is required in a globalising world and second, compared to the urban middle class, they share more closely the impact of industrialisation and urbanisation on the region's natural resources, environment and social structure with the small or low caste farmers.

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[9] This is in contrast to Gurgaon where industrialisation began in the 1970s and urban upper class residential expansion from Delhi occurred rapidly after the year 2000 as market led processes. This transition in nature of industrialisation and urbanisation has probably impacted negatively on Ghaziabad's earlier industries, leading to several closures and left it with informal sector, small and medium scale factories that largely supply local and ancillary needs.

[10] Some of the popular middle class colonies include Koushambi, Vaishali, Vasundhara, Indrapuram, Shalimar Garden, Lajpat Nagar, Rajender Nagar

The major process of industrial and real estate development in Ghaziabad has resulted in a rapid degradation of the environment. Due to excessive extraction of groundwater and depleting water table, the Central Ground Water Board (CGWB) has declared Ghaziabad as a dark zone and a critical zone. According to the Comprehensive Environmental Pollution Index (CEPI) Report, Ghaziabad has been declared the third most critically polluted place in India (CPCB 2009). Another report by CPCB on air and water quality of 10 most polluted areas of India mentions the criticality of air and water quality in Ghaziabad (CPCB 2014). Besides official data gathering, there have also been scientific studies which have found high levels of heavy metals in the surface sediments of the Hindon River in sites close to industrial and commercial locations, highways and a waste dumpsite (Chabukdhara and Nema 2012; Chabukdhara and Nema 2013), Water quality parameters in the Cis-Hindon region show that it is contaminated well beyond the acceptable limit (Sajjad 2014).

The environmental degradation has had major impact on different sections of people in Ghaziabad. All kinds of dwellings of the middle class and poor close to industrial areas suffer from air and water pollution. Groundwater in different parts of Ghaziabad has become contaminated due to excessive dumping of industrial effluents under the ground or into the river. As a result, those who can afford them either have Reverse Osmosis (RO) water filters in their houses or opt for bottled water for drinking purposes (STEPS and Sarai 2010). Depletion of the water table is mainly due to over exploitation of ground water and the loss of ponds, the traditional method of water harvesting in rural and urban areas, which were not only a source of surface water but also helped in recharging the groundwater. This has a major impact on availability of water for irrigation. In the absence of availability of ground water for irrigation, some villages use domestic wastewater for irrigating their fields (Marshall *et al.* 2017). Agricultural fields close to river Hindon use contaminated water from the river to irrigate their fields. Recently it was reported in the media that heavy metals in the Hindon River might be causing bent legs and spines in Western Uttar Pradesh (Singh 2016). Such a grim scenario of environment and its impact on the people is giving birth to different forms of local citizens' action on different aspects of the environment, agriculture and the poor in Ghaziabad. The next Section presents data from our study that tries to unpack the nature of environmental activism in Ghaziabad and the potential for forming broader alliances for enhanced action on the problem of environmental degradation and transformations to sustainable development.

4. Citizen Environmentalism in Ghaziabad

4.1. Methodology

The fieldwork undertaken specifically for this paper involved three meetings of environmental activists of the area and 14 interviews, six in May-June 2016 and 12 in Nov-Dec 2016. Among the interviewees 11 were from Ghaziabad and working in the area, thereby fulfilling our criterion of being 'local citizen activists' on issues of environment and/or the poor. Interviewees included one environmental activist with an NGO and a mass organisation. Others included activists with organisational affiliations such as; two belonging to a trade union; two explicit members of a political party; one in an organisation working on farmers' issues in the villages; one in a Gandhian organisation working on water issues; one in an NGO, two in a trade union; and three who worked as independent activists specialising in public interest litigation on environment related issues. Interviews with three civil society actors who were in the lead in their respective organisations (one in the national leadership of Jal Biradri, one from a left-affiliated organisation and one who was central to the WRG alliance on rejuvenation of the Hindon) were analysed separately since they were not activists of Ghaziabad. However, they provided further insights into the various streams and their efforts. Several informal conversations with other activists of the area also informed our understanding.

Based on prior fieldwork study and media article reviews from Ghaziabad, names were identified through past contacts and informants, as well as through informal conversations and repeated media reports, for the meeting organised in May 2016 on environmental issues in the Ghaziabad region. We began the initial exploration from this meeting to understand the opinion of environmental activists on urban environment, agriculture, health, livelihood and poverty alleviation, and also to map any interventions on these or other related issues being undertaken in the area. Based on this, we held one round of interviews with purposively selected key actors who reflected the diversity of actions and ideological positions reflected in the proceedings of the meeting. A second meeting was then organised in October with a specific focus on the health of River Hindon and related actions by various groups. We followed this up with selecting more respondents for interview and conducting a second round of interviews. Through leads in our fieldwork in this meeting as well as from our respondents who were being interviewed, we received information about a multi-stakeholder meeting on 'Rejuvenation of Hindon River' organised by Water Resource Group (WRG) in November, which was attended by our research team. We then attempted to find action groups/activists that work among the poor and interviewed three among them to understand their approach to the same issues as the environmentalists, i.e. of urban environment, agriculture, health, livelihoods and poverty alleviation. Lastly, secondary literature and grey material on environmental issues, civil society organisations and action in Ghaziabad have also been useful in our research.

The field data was analysed through a collective exercise by the research team. Interview transcripts and documentation of discussions in the meetings we had organised as well as the WRG meeting provided the data for the analysis. Since ecological issues set the frame in our research questions, our analysis drew inferences from how the activists approach ecological issues (taking water as primary focus since it was most foregrounded across all the categories) with respect to their conceptualisation of the problems, their visions for change, as well as the nature of actions taken. Together with this, their individual biographies, where they live, their issues of concern, how they deal with poverty and livelihood issues, how they look at environment and health issues, their ideological affiliations, their expectations from the State or the way they work with or challenge the state, the nature of alliances they build and their sources of knowledge, all led to the emergence of categories as a way of understanding the data and answering our research questions.

With this analytical approach five categories of ecological framings were identified, based primarily on three criteria: the location of issues addressed (rural/urban); the class(es) whose issues were being addressed; and the approach adopted to deal with the environmental issues:

A. Urban middle class centred conservationist framings;
B. Rural–urban middle class conservationist framings;
C. Rural–urban across class ecological framings with community based social mobilisation and legal activism;
D. Rural–urban across class ecological framings with specific environment and health related technological solutions;
E. Urban industrial worker-centred with no expressed ecological framings.

We also observed that issues such as caste and gender were not explicitly addressed by the groups we interviewed. The activists themselves were male (except for one female respondent from the urban ecological conservationists, Category A). The majority were from upper caste backgrounds. A table was created to categorise the themes and used for analysis (see Annex). A description of each category is given below.

4.2. The Varied Streams of Citizen Environmentalist Framings

4.2.1. Urban Middle Class-Centred Conservationist Framings

From the interviews, we included two members in this category. They were part of civil society as members of the Resident Welfare Associations (RWAs) which represent their middle class neighbourhoods. The geographical scale of activist alliance on environmental issues seemed mostly to be their neighbourhood and a federation of other similar middle class RWAs. They opposed industry and real estate corruption as part of their environmentalism, but they expressed mostly apathy towards poverty issues as well as peri-urban agriculture, as seen below.

Both the respondents in this category were office bearers in their respective RWAs, one being the Vice President of the regional RWA. Their work began post-retirement from the early 2000s. Both have an army background (one was an officer and the other's father was in the army). The former also claimed to have formed *Rashtriya Sainik Sanstha* (National Armymen's Organisation), an organisation which apparently has a presence in 22 states of India. They referred to their work as 'social service' and one of them, the only woman in a leadership role that we came across in our fieldwork, identified her work in the NGO tradition. She also worked with other NGOs run by women, which could be seen as her network or alliances. She cited such experiences as visiting Anna Hazare's model village and planting several trees in Mumbai's middle class neighbourhood. Part of her youth college activities as part of the National Service Scheme (NSS) involved composting in a pit in parks.

The water issues they were concerned with range from industrial pollution of the water that they and those in other middle class colonies consume, to the introduction of rainwater harvesting in their colony. Their environmental action was largely in terms of tree plantation around their colony and keeping out water for birds. The Vice President of the regional RWA had also been actively involved in the Lohia Nagar industrial pollution case, where the colony residents found their bore-well water bringing up dark coloured water and a factory close by was found releasing its chemical effluents into the ground water through reverse boring (where a borehole is used not to bring water up but to send waste down). Reportedly, people there faced a cancer outbreak along with the water crisis. The two interviewees also spoke of builders not adhering to the regulations for water harvesting systems in the housing complexes they build. They had concerns for environment and health issues related to water and air pollution but their actions were limited to their neighbourhood through middle class solutions.

It is in the solutions proposed that concerns emerging from an urban middle class neighbourhood perspective were seen. When the factories which were meant to be sealed due to the pollution were reopened, the solution was to be reconciled to their existence 'in my backyard' but fining the industries and using the funds to invest in '200 CNG buses' and CCTV cameras for Ghaziabad. It is also important to note the nature of their environmental action in relation to access to bodies like the pollution control board:

> Lohia Nagar is in the center of Ghaziabad city, after this news came in front of people, a committee was formed and I was member of that committee. This committee has couple of meeting with pollution control board, as a result Shri Ram Piston company was closed. The owner of this company then came to (PCB) and told that they will take corrective action of it. After this so called corrective action this company again started functioning.
> Interviewee Category A

Other activities which illustrate the urban middle class perspective are such things as a car free day organised to decrease air pollution (where street vendors were also supposed to be cleared out), controlling traffic along with trees, and installing water pots for birds in the area.

Their self-confidence, which may be attributed to their background, had them identify not only clear causes but the mention of 'the enemy' in the form of industries and builders, who also have the same class background. However, in their ecological imagination, urban spaces must be a combination of colonies surrounded by greenery (trees), birds, surveillance, smooth and speedy roads along with a model village somewhere far away to visit or farms in a childhood memory which would benefit from the shade of the trees.

An interesting sense of authority in terms of 'constructing' their environment was reflected in their work, if one sees parallels in the 'installation' of trees and the vision to install CCTV cameras out of the CSR compensation imagined as a solution to fine polluting industries. One of the members of this group actively expressed concerns about environment gaining a 'political dimension'. What came out in the interviews with this group was the lack of concern for issues of the poor with whom they shared an identical stance, 'according to me there is no poverty in Ghaziabad', and the idea of peri-urban agriculture as undesirable.

To position their stance in an overall picture in our research we found that, while health was an issue for which they would challenge industry, not just because of the effects within their own backyard, there was a narrowness that limited their spatial imagination in terms of ecological impact. They were the one category among our respondents that espoused the dominant image of a completely 'urban' development, similar to that which Baviskar (2003) has described as 'bourgeois environmentalism'. They were really part of suburban Delhi that is located in the newly built areas and reflected no characteristics of the peri-urban in their framings, except that they were concerned with environmental impacts whose principal burden falls in peri-urban spaces, and which also affected other peri-urban actors. In terms of their access to the State, they were the one category that, even in their environmental action, reflected Chatterjee's civil society as direct beneficiaries of State-led development. Therefore, their involvement in any action, even not far away from their backyard such as the Lohia Nagar case, leads to interesting possibilities in terms of alliances and impact.

4.2.2. Rural-Urban Middle Class Conservationist Framings
We included three of our respondents in this group: a landed agriculturist and teacher in a village school affiliated to the *Rashtriya Swayamsewak Sangh* (RSS) (a right wing national organisation), a practicing advocate and an office bearer of the RSS affiliated right wing political party that is in power in the Central Government, and the senior environmentalist in Ghaziabad who is well known locally for his work. The rural school teacher was concerned about peri-urban agriculture but in terms of action there wasn't

much involvement. Along with other interviewees, their work seemed to be largely centred on urban issues such as pond revival and tree plantation in the cities, though at least one of them was also engaged with, at least some extent, rural pond revival. Their relationship to the state ranged from none by the rural schoolteacher, to active advocacy and collaboration with state agencies by the other two. They had some concern for environment and health and referred to issues in the area. The variation in the range of affiliations was fairly high in this group, with the more senior respondent being recorded on international platforms like the Guinness Book of World Records for the number of trees planted, to another having links via the party with national level party members such as the Minister for Water Resources, River Development and Ganga Rejuvenation in the Union Government, to local rural power positions such as *Sarpanch* or *pradhaans*. This group approached the issue of water primarily as one of conserving water quantity and quality. They saw it as a stand-alone issue, without linking it to broader concerns, but were also responsible for its local mainstreaming.

The landed agriculturist and teacher started by stressing the issue of wastage of water in his own and neighbouring villages. The second, the office bearer in the right wing political party, who lives in the more urbanised Ghaziabad had mainly worked on pond revival in urban and rural areas, for which he had met with bureaucrats and party officials in towns like Meerut and Ghaziabad. The senior environmentalist in Ghaziabad is well known locally as 'Green Man', the name given to him by former US Vice-President Al Gore after a training course in Melbourne attended by those who had been identified as one of the '500 climate leaders of the world'.

All three described past experiences that helped to lead them to take conservation seriously. Starting from the 70s, 'Green Man' recalled the *Chipko* movement that was embedded in his childhood memories. The office bearer in the right wing political party recalled having met famous Gandhian environmentalists and social movement leaders in his youth when he was leader of the youth wing of his party (which may have been late 80s). He joined an environment NGO on the directive of his party in the early 2000s and over one or two years he began to understand its relevance and became interested eventually in environmental issues. The school teacher saw a shift in the village water supply systems (from wells to hand-pumps to the more mechanised submersible pumps used for drawing underground water at a very fast rate), moving from small scale to large scale development (*vikaas*), and the increasing withdrawal of underground water with destructive wastage (*vinaash*).

Besides drawing their inspiration and knowledge from the earlier movements and meeting with national level environmentalists as part of their exposure to environmental issues, the right wing political party office bearer mentioned literature in which he had read about the significance of ponds and the revival of these water bodies, *Aaj bhi Khare Hain Talaab* by Anupam Mishra. He said he makes all his associates read it. The knowledge obtained from the book also made him recognise the limitations of the state model in response to the demand for rejuvenation of ponds. The state response had been to install a pond with concrete walls and water from an underground source, thus being detrimental to the very object that the benefits of the ecology of a pond provide. For another member of this category, the landed agriculturalist and school teacher, local knowledge came through his own experience and observation of transitions in the village with a destructive *vikaas* taking over and the newer generation being more alienated from agriculture and therefore in turn agrarian and river ecology (cows, bullocks, birds, snakes, fish).

Two of the respondents, the right wing political party office bearer and the right wing affiliated school teacher, also said they worked closely together, with the party person seeing the other as doing ground level work on 'the rural front', 'schooling' people in his village about water wastage. The latter also spoke about the former as 'discovering him' when he read about his work in a newspaper and being able to find him in the known right wing affiliated school. The senior person in this group did not give his interview alone, he insisted on calling the interviewers to a right-wing affiliated school where he sat surrounded by the principal and teachers in a master-disciple manner.

This senior person runs an NGO for environmental activities. Massive tree plantation driven through a network maintained by use of social media and sensitising children in schools to environmental issues are his everyday activities, as well as the revival of the Goriya/sparrow bird by distributing artificial bird houses to people, and raising the issue of cutting down trees by the National Highway Authority of India at the National Green Tribunal (NGT). He had also taken up a massive signature campaign on banning polythene which he mentioned he personally took to the then Prime Minister, having tried to push for it as a bill in the Parliament. Some version of it is legally binding today but it is not being implemented. The right-wing party office bearer, besides having worked mainly on pond revival as well as the riverside ponds for Hindon River rejuvenation, had also attempted to mobilise urban middle class people through initiating performance of traditional Hindu rituals at the river bank on a regular basis so as to restore the citizens' traditional relationship with the river and have them reconnect to environmental values. As part of pond revival in the town of Ghaziabad, sitting on a hunger strike was part of the actions taken, while for the others, confronting the administration with lack of access to information on water bodies, filing RTIs, filing court cases in NGT, or submitting drafts of information they would gather as a team to the DM, organising events on World Environment day were some of the activities undertaken. The village school teacher spoke about going from village to village, gathering people in groups of 10 to 12, which included the village headmen, and discussing issues around water wastage as well as organising rallies with children from his school on the issue.

The relationship with action on water in terms of activities undertaken may differ: one may take up massive signature campaigns; another may file a case in NGT (along with other groups) for the State's role in encroachment of ponds; and another may be doing village to village meetings with small groups on wastage of water. However, the role that this group attributed to pushing for a governance mechanism from within is important and unifying. Its members organise advocacy through individual meetings, and relationships with high officials in the existing state structure. In this, the role of awards, media and newspapers is part of the political aspiration that may further these networks. Two of this group saw their personal leadership role as central to the work they do and the large numbers they are able to mobilise. The member of the right wing political party noted that he attempts to bring together people working on the cause of water, whatever their ideological or organisational affiliations. However, for all three this work was also important for their individual projection and image building in the popular imagination. The journey of their individual careers came out as quite central in their interviews. Statistics were important for them and they described their work and achievements in terms of numbers: 22 ponds revived, or five lakh trees planted, or 80 villages where the *sarpanches* (village head) were mobilised to decrease wastage of water.

To elaborate on the point mentioned above with regard to this group approaching water as a stand-alone issue, the causes that they attributed to the condition of water were, largely, community ignorance, the loss of people's relationship with the river and a lack of those values that sensitise them to nature, as well as the civil administration's apathy to environmental issues. In addition, another feature of this group is that even though they would mention other issues, like land acquisition or industrial pollution in continuity with their analysis of environmental issues, in terms of concrete action they themselves do not initiate action against industries or land acquisition, even though they have occasionally undertaken collective action for demands from the municipal authorities.

The above could be analysed in light of their relation with numbers mentioned before and a general mainstreaming of environmental issues in the region, nationally and internationally. It also raises important points about mainstreaming, where popularity of individuals who represent certain issues is also evocative of how these issues may have gained currency in the public discourse (mainstream politics, news, media, schools, international platforms), without acknowledging the socio-political spatial transitions of the peri-urban region that are linked to ecosystem changes, such as loss of forest cover or traditional rural and urban water systems. There is a danger with this sort of issue-based environmentalism that it may draw deserved attention to the issues of concern, but at the cost of

creating an unproductive competition among different approaches to environmental improvement, rather than building alliances or allowing reasoned choices among them.

We find then that the actors in this category ally with a range of other actors whose interests may not support ecological concerns. So, for instance, the senior environmentalist gave us a pamphlet of their NGO partnering with a bamboo manufacturing company, which was meant to be beneficial for the environment as it is involved in planting more trees. However, while the bamboo would indeed result in more trees, it is being posed as another 'universal solution', when an ecological perspective requires more context specific solutions with the understanding that the resulting changes may even be counter to the beneficial ones found in particular contexts. For instance, the intensive bamboo cultivation could, in the overall ecosystem in some contexts, be negative due to the relations of the bamboo growth with other species, with the water systems they would use, with the livelihood concerns of the people they were employing. Similarly, the right wing political party office bearer had brought an industrialist with him to a meeting organised on the state of the Hindon River. The industrialist was interested in reviving the cultural values associated with the river and yet he openly acknowledged that the foundry he had inherited from his father always bought its way through to bypassing environmental regulatory requirements. Lastly, even though the landed agriculturalist and school teacher shared his deep concerns about land acquisitions and urbanisation in relation to environmental degradation and *vikaas* (development) leading to *vinaash* (destruction), his action was limited to concerns around water wastage without linking it to alternatives for the overall changes in the region.

Here, if one compares the rural elite (i.e. the landed school teacher) to the urban elite (i.e. our RWA representatives in Category A), we find that even though the landed rural agriculturists seem to have little sympathy for migrants doing agriculture work and see their role only hierarchically as a necessity for farmers of the region, his location as a farmer having lost his land has lead him to recognise the impact of peri-urbanisation on the village ecology, the landed farmers and the quality of food.

Thus actions such as spreading awareness in terms of wastage of water or stopping construction on areas which had a traditional pond, even though done with the intention of gaining political mileage for his own election campaign or simply to benefit his immediate neighbourhood, contribute to a broader ecological consciousness in a peri-urban area. Land acquisitions and the changing demands of the farmers, from a time when they wanted to stop acquisitions, to now when they protest only for raising the compensation value featured in the interview of the school teacher, mark a cynicism and helplessness about the urbanisation processes in the area. For the other two, espousing the cause of traditional ponds in urban and rural areas gave them a different imagination from the 'neatly manicured […] urban spaces'. For the RWA representatives of Category A there was an erasure of such spatial breadth of the peri-urban situation in their ecological framings, which was reflected in their envisioning for the future.

4.2.3. Rural-Urban Across Class Ecological Framings

There were four respondents in this group, one from a Gandhian affiliated people's organisation focused on rejuvenation of water bodies through community action. The remaining three were very active on environmental protection through litigation. Their work was spread across the rural and urban context. They viewed the environmental issues as arising out of wrong developmental approaches and lack of public oversight, with the state agencies being complicit in the environmentally degrading practices. They attempt to counter the environmental degradation and depletion through community mobilisation for constructive alternatives or challenging the state to perform its responsibilities towards enforcement of environmental regulations through legal activism. Occasional journalistic writing in the popular media or advocacy with state agencies is also attempted. They referred to environment and health issues, with one member having a relationship with community, and the rest tending to work more with formal civil society and professional groups.

The Gandhian respondent, unlike the others, works mostly in an organisational structure in which his own inspiration came from the successful river rejuvenation work done in a village in Rajasthan by the leading member of that organisation (who also happened to be a senior family member). It had inspired him to do the same in his village and made him join the organisation. A campaigning day would have him travel from his village to other villages for mobilisation around issues of water bodies. For instance, on the day when the researchers joined him in his village they accompanied him on a visit another village where he reviewed the performance of a play as part of a campaign to save water, which was organised by a young urban educated professional who had moved back to the village. Then they went to meet the older men of another village who had gathered as part of a social event. The young professional has left a lucrative IT job, was currently running a library for the village children and has aspirations of creating an NGO. The other three members in this category, while having both peri-urban and urban professional bases, are working through legal activism. They mentioned regular visits to the NGT in Delhi or the High Court in Allahabad for instance, and gathering more data or information on a new violation by either a state body or the industry.

While all of the members of this group mentioned NGT action, it was the Gandhian one who spoke about having fought over a pond encroachment in the village with the support of the DM and *yatras* (walks) along 400 villages in the area which included both mapping water issues such as industrial and domestic waste around the river, as well as doing film screenings to engage with the communities who they felt they had lost their relationship with the river. This also may have had a bearing on the plans proposed in the ruling party in the Province, the Samajvadi (Socialist) Party manifesto as well as the WRG initiative. The legal activists had very specific knowledge about industry violations, but in terms of action and impact of their legal activism, there was a stay by the NGT over construction of an elevated road over a notified wetland and bird sanctuary along the Hindon River, besides an ongoing case on the infrastructural system that was discharging untreated sewage into the rivers Hindon and Yamuna. One of them mentioned that their strategy was not to target the industry directly but to use the legal system of the NGT to ensure government enforcement agencies were monitoring and regulating the industry correctly. Besides this there were other cases which had to do with the city forest, or groundwater contamination through drainage systems. At least one member had a vision of Ghaziabad's development through a proposed city Master Plan that he felt was not being implemented.

The Gandhian organisational network seemed to have formed a large part of the shaping of the ecological concerns in the belt. While it used walks along the river for sensitising community members to its condition, the experience gained through these *yatras* along the river were also seen as a mechanism for knowledge gathering. Even among the legal activists however, their concerns, goals and areas where they took up issues would depend on their background and motivation. For instance, those who had an experience of first hand land acquisition (peri-urban based bordering on Delhi) made more references in their interview about the shifting of industries as being the cause of water pollution. It is important to note that two of the three legal activists were really 'in-between the rural and the urban' in some sense. They were from rural areas which had urbanised fairly early on. Whereas the one with more professional bearings in the city and an environmental science education, had less anti-industry sentiment, but worked in collaboration with the other legal activists and would have participated in such action from a more ecological point of view. The Gandhian activist also moves from ponds, to rivers and industrial pollution in his interview through his organisation's journey, which literally also meant journeying through villages. This shift also paralleled the shift from the more direct action based work and mobilising people in the villages for directly implementing environment friendly measures to the recent emphasis on advocacy with the state and coming together of *Raj aur Samaj* (state and society).

The three legal activists worked in collaboration with each other in the realm of litigation in a body like the NGT, which has recently gained a name for taking faster than previous insitutional arrangements for legal and administrative action on environmental issues. While legal activism was occasionally used by those in the previous group as well, most members in this group stood out for their professional

expertise in this sphere and these skills were the basis of other local environmentalists forming working alliances with them.

The four respondents were categorised together under this theme because their approach to water as an issue in terms of their concrete actions and visions covered a relatively broad ecological and social purview. Thus, the person from the Gandhian affiliated organisation which worked largely on water, was able to take into account a multiplicity of water issues, and undertake a wide range of diverse actions. Similarly, while the legal activists may have stuck to one form of action, their ecological concerns widened to include more issues as they gained more knowledge and empowerment through their action. They all seem to have potential concern around environmental issues of the poor.

This category then, while linking environmental issues to the socio-political in its own analysis of the problem, seems to be shying away from confrontationist positions with the industry or directly questioning modes of production and urban over-consuming life styles. It has, however, attempted to use state mechanisms to get environment protection related measures implemented. As we shall see later, it is the national leadership of the Jal Biradri that has promoted the WRG alliance making at state level, while it is viewed with scepticism and contested by some of its own local environmentalists, reflecting the paradoxes and dilemmas of this stream. On one hand it engages in mass mobilisation of the affected people in peri-urban areas and on the other has experienced the limitations of doing so on issues that challenge the dominant development agenda and the powerful elite such as industry. Thereby they look to alliances with the state and international agencies, or of challenging the state to perform its responsibility towards enforcing regulatory laws.

4.2.4. Rural-Urban Across Class Ecological Framings with Specific Environment and Health Related Technological Solutions

The two respondents in this group were working directly with small and middle-scale farmers in the villages in Baghpat area. One of them initially worked in an NGO and then initiated his own NGO. He claimed that they have no political affiliation and consciously remain equidistance from all political parties and work with whichever is in government. The other worked in an ideologically left-oriented youth and farmers' organisation.

The NGO activist spoke about starting out as a volunteer in a large NGO called the Janhit Foundation, and being deeply influenced by the founder. Working for non-governmental organisations was considered an unconventional field in his family, and therefore discouraged. The exposure to the issues of decreasing water tables and changing patterns of agriculture in Yamuna and Ganga basins were issues that motivated him to take on this work further. He also shared how he gained environmental knowledge and expertise through the work even though his educational training wasn't in this field. The left affiliated activist spoke about the beginnings of his work on environment in the context of the shifts in industrialisation in the area and industrialisation of agriculture in terms of the green revolution in the late 1960s and how that affected the farmers' relationship with water. Both spoke about industrial waste as being a problem.

In a meeting where the state of the River Hindon was being discussed (co-organised by the JNU-Sussex research team), the NGO activist voiced the immediacy of concerns about farmers' health issues (such as lung and throat cancers) as being a greater priority than the planning about 'biodiversity or 'land use survey'. He also mentioned that RO water filters were being provided by his organisation to the homes of villagers where there had been cancer cases. The organisation has documented health problems in the area and put the data in the public domain. He also mentioned that he had taken a minister along to the two affected villages in Muzzafarnagar. Later in an interview he shared, that as part of the Hindon committee set up by the Commissioner of Meerut Region, a US based organisation called Water Collective was providing for the RO water filters. The left-wing organiser on the other hand shared many individual stories of people working with them or others falling very sick and the medical services/camps

organised by the government not reaching the people. But instead of any collective action on the issue, which was a form they said they supported on farmers' livelihood issues, they approached doctors from Meerut University to organise medical camps in the villages (from where the hospitals were very far away), which also led to more knowledge about some issues, for instance, doctors linking up skin diseases to river pollution. Surveys by their own activists, and linkages with members in the village who maintained records, were used to illustrate the enormous number of cases (some leading to deaths) due to the recent Chikungunya and Dengue outbreaks in the village, which were also not reported by the media.

The NGO's work on other issues that also impacted on environmental pollution included: experiments in composting which received government support for implementation in other villages; having farmers shift from sugarcane to other crops; moving from POP and other pesticide usage; and encouraging organic farming through state authorised certification being provided by the NGO itself. The left affiliated organisation's other work was more in the form of everyday intervention through meetings in the libraries they ran (Bhagat Singh library), or holding village panchayats and plays on social issues, especially communal disturbances which had recently become a grave issue in the area. Achievement was expressed as managing to not have communal riots in areas where they had a presence, despite violence occurring in a neighbouring area. They also spoke about a campaign against land acquisition, but among the challenges they faced was the divide along caste lines, with the landless not coming out in support of their position on land. They were however bridging across caste lines because of the apparent shifts in the social and economic structure of the villages, with the landed castes losing their lands and the agricultural labouring castes no longer working in the villages but instead going to the cities to work in the day and returning at night. This is the one category where work of both members was regularly situated in specific villages in Baghpat area. Both also mention a concern in the villages around outmigration. The left affiliated activist also spoke about how a large population of the earlier agricultural labour was living in the villages but would travel every day to the city for work, so much so that the earlier conflicts between the landed and the labourers over wages have disappeared.

The NGO activist was part of the local and regional networks which included some of the members from our other categories. He was also chosen by the Commissioner of Meerut to popularise concerns of the region towards enhancing the initiatives of citizens in the town. A similar idea was then proposed to be taken for the Hindon River, which is elaborated on in the next section on alliance formations. The left affiliated activist spoke about being part of a formation called the *Paryavaran Lok Manch* (Environmental People's Platform) which included people from different places in UP such as Allahabad and from Haryana who were active on similar issues and cited an anti-dam tribal movement in Sonbhadra as well as survey done together on a thermal plant in Panipat which they supported.

The work of both members of this category with water arose as a response to the emerging health and livelihood issues of farmers living in these villages. While the left affiliated activist spoke about not working exclusively on the question of environment, the same was reflected in both their work. Their responses differed according to their location: the NGO activist worked on projects supported by the government and was an NGO representative on committees which involved the government and private members, and had linkages to international organisations. He described the NGO as a body that provided ground level ideas for schemes to the government as well as gaining authorisation to provide a certification to farmers (participatory guarantee scheme) and informing farmers about relevant schemes. On the other hand, the left affiliated activist spoke about organising an intellectual class from the cities, involving, for example, doctors who would address the issues of the rural poor, and did not mention any engagement with or expectations of the State. Also, even though the left affiliated activist knew about traditional ponds that had been lost over the years through conversations with older people in the villages, and mentioned the efforts/schemes by the Haryana Government for their revival, he only mentioned how that hadn't reached the village in which they work. In terms of action, one could trace his views in the support cited above under the Paryavaran Lok Manch where challenging the state was

more explicit. While the NGO worked equally across all socio-economic sections in the village, the left-affiliated activist had a greater focus on the poorer segments.

4.2.5. Urban Industrial Worker-Centred with no Ecological Framings
The two representatives of an industrial workers' trade union in one of the older industrial areas of Ghaziabad were interviewed under this category. They mainly spoke about the issue of contractualisation, where permanent employees are replaced with temporary workers, and a more general trend of decreasing jobs in the local industry. The trade union's attempts were to get the laid-off workers back to their jobs. Their current membership is about 10,000 but they mentioned a marked decrease in their membership due to the shutting down of industries in the area, with the industries gradually moving to Uttarakhand, or building of malls instead.

It was election time and when asked about the issues they were campaigning on they spoke about minimum wages, the workers' access to rations through the public distribution system (PDS) and sanitation. However, when asked more specifically about working and living conditions and further on the issues of sanitation and environmental pollution by the industries, nothing very concrete was said except for one dharna (demonstration) on the supply of water to workers' colonies. With respect to agricultural migrant workers, they mentioned mostly wage-related issues and clashes with landlords that were dealt with by the left-wing party's farmers' wing. When asked about issues of worker's health, as well as compensation in accident cases, improving the conditions of dispensaries was on their agenda. However, besides submitting a memorandum to the concerned body, they didn᾽t have very concrete demands or plans on their election agenda for this. When asked about the Hindon, they spoke disparagingly about the *aartis* (Hindu rituals) being organised by the rightist ruling party as being part of the latter's election strategy. They also conceded that the contamination of water was a problem largely caused by industry which should be dealt with by treatment of industrial waste. However, in terms of action there was nothing they had undertaken. They did not mention any specific environmentalists in the area and didn᾽t work with any. However, they occasionally worked with other left aligned parties on workers' issues.

No environmental health concerns were elaborated upon which showed that issues of water, sanitation, industrial pollution and health concerns were seen as distinct from livelihood issues. Challenging state agencies through political action was mentioned as the dominant form of action. However, they did not share any instance in the past that may have brought any impact, except on the issue of firing contract workers. They had state and national level alliances with other left aligned parties or through their party networks and locally came together with other workers' left-wing trade unions. However, there is a possibility that environmental and occupational health hazards and water pollution are becoming issues for them, as they have in recent years for the left affiliated activists of Category D. Given the magnitude of the environmental problem in Ghaziabad and the increasing role of trade unions in environment and health, especially with regard to sustainable development nationally and internationally (ILO 1999), we see the likelihood of these gaining on the trade union᾽s agenda in coming years. This process may be locally facilitated by interaction between the environmentalists and the trade unions.

4.3. Nature of Alliances for Environmental Action

Based on prior fieldwork and media article reviews from Ghaziabad, names were identified for the meeting organised on 16 May 2016 on environmental issues in Ghaziabad entitled 'Urban Environment, Health, Agriculture, Livelihoods and Poverty Alleviation: A Ghaziabad Citizens--JNU Initiative'. One of our key informants, who also introduced us to other environmentalists in the area, was the legal activist on environmental issues from the rural-urban ecological framings (Category C) and another who actively worked as co-organiser for the two meetings was the right wing political party office bearer belonging to the category with rural-urban middle class conservationist framings (Category B). Another member of Category B, who was widely seen as the most senior and respected environmentalist of the town, was requested to chair the meeting. We noted the diversity of views and actions reflected in the

statements made by speakers at the meeting. Observations about the pre-existing roles and dynamics between people being played out in the meeting also provided leads for follow up. The stories of how some of them (those with whom we conducted interviews later) got involved in environmental action in the area unfolded over the interviews, part of which also threw light on the nature of their various forms of alliance formation.

The second meeting with Ghaziabad activists was held on 22 October 2016, this time specifically on the issue of health of the river Hindon. This meeting provided information about the new alliance formation efforts around the rejuvenation of the river Hindon, as well as adding to our earlier observations about the plurality of perspectives among the environmentalists and the dynamics between them. Through our continuing communication with some activists over the phone, we had already learnt about new initiatives being taken around the Hindon, but had little information about what they were. We got to know more about them during the meeting and subsequent interviews, and they included an exhibition and a committee being formed with the involvement of the government and civil society actors. In the meeting itself we learnt about a Hindon Council being formed and a parallel Hindon Committee, the relationship between the two being unclear. Gradually, through attending a meeting organised by 2030 Water Resources Group and subsequent interviews, the story of the two alliance formations emerged. One platform of civil society actors was being initiated by the Water Resources Group through the 'Hindon Yatra' and Council and the other by the Meerut Commissioner called 'My Hindon, My Initiative'. The actors involved in these, both those who had positive expectations and those who were critical but also involved, largely belonged to rural-urban middle class conservationist category (B), rural-urban ecological category (C) and rural-urban ecological category with technological solutions (D). Urban middle class-centred conservationists (A) were absent from this process, probably because their residential colonies are not directly linked to the Hindon River. Those affiliated with the trade union (E) and the left-wing activist on farmer's issues from (D) were also not part of this process, nor did they not know about the initiatives.

This meeting was followed up with another round of interviews and the meeting organised by the WRG in November, again followed by interviews. Our understanding of the alliance formation is thus on the basis of this brief field work, which suggests to us the need for a deeper enquiry.

4.3.1. Local Organic Alliances Across Framings

We observed during the meetings that there was a level of familiarity among the environmentalists even across actors with diverse framings and organisational affiliations. The environmentalists obviously knew each other personally, and referred easily to each others' work and about how they had undertaken some activities together. Repeatedly, we heard from different sources about activities in which they had come together for shared concerns. We learnt that they came together when there was a need of specific skills or information and contacts as well as when public programmes were undertaken locally. Thus, the two members of the first conservationist category (A), two of the more rural conservationist category (B), and the legal activists in the rural-urban ecological category (C) had worked together previously in the case of a factory polluting underground water of a middle class residential colony. Similarly, members of Categories B and C had worked together on issues of protection and revival of water bodies. Those of the two categories working among rural and urban communities would bring ground level information that would then be used by the legal activists of Category C to file appropriate cases with the NGT or courts. Members of Categories A, B, C and D had also shared platforms for public events to spread mass awareness and popularise issues of concern. However, those affiliated with the trade union (E) and the left-wing activist on farmer's issues from Category D were not part of this local informal network on environmental issues.

Most of those who were part of this local informal alliance seemed to recognise that their work complemented each others' even though their perspective or approach to environmental issues differed. In the meetings it was observed that no one attempted to convert others to their own views

even while stating their own environmental perspective and ideological/political affiliations clearly. Granting the differences and yet working together seemed to be the implicit principle. As one meeting attendee stated, 'We work with anyone who shares the concern and works honestly, we do not go by their political colour'. For instance, from remarks made informally during side interactions of the two meetings, and later on social media platforms, we learnt that one of the legal activists was very critical of the party that the right-wing political party office bearer belonged to, and he was public about his opinions. However, this did not stop them from working together, or from his legal activism being appreciated by the other. From our interview, we also found him extremely critical of the WRG initiative which he expressed in terms of its ecological unsustainability.

In meetings organised by JNU we observed that those who formed informal alliances, whilst not holding back from articulating differences of opinion and ideas, were able to work together on environmental issues. Through the interviews we learned more about the different perspectives. Through retrospective analysis of the discussions in the meetings we found them reflecting disagreements among the various actors articulated in the language of issues. For instance, from the rural agriculturist and school teacher's interview, concern around asserting independence in his views and his difference from those who merely 'tagged along' with the right-wing political party office bearer in meetings became apparent and reflected his emphasis on rural ecological issues, which he felt were marginal to the mainstream right-wing political party.

In the round table discussion on the Hindon, the co-organiser from the rural-urban middle class conservationist category (B) presented in a positive light the new initiatives around WRG, the Hindon council and the Hindon yatras. This was followed by a sharp comment (after a few others had spoken) by one of the legal activists from the rural-urban ecological category (C) on how, 'he doesn't see that anything is possible in near future. People will continue doing research and studies but nothing has happened so far'. Interestingly, this was the same person who has been most active on filing cases in NGT around air pollution, Hindon River pollution and more. He is also the same person who has worked with the one who positively presented the new initiatives, to file litigation for the revival of ponds. But here we saw that this sharp scepticism on behalf of the legal activist was a way of expressing criticism around the initiatives proposed, even though he didn't himself propose an alternative. A close ally of his, who is also a legal activist cited in the same category, felt that a version of the master plan had been drafted with better proposals for the Hindon rejuvenation, again expressing scepticism of the initiatives of which our co-organiser (and right-wing political party office bearer) from Category B was part.

The two other participants in the meeting who also expressed concerns with the right-wing political party office bearer did it in a way as to emphasise the concerns of 'local rural people' who were being missed out in these more top-down initiatives. One of these two participants was the NGO representative from the rural ecological category (D) and the other was from the same group as the right wing political party office bearer with whom he worked closely, i.e. the rural agriculturist and school teacher.

From the NGO representative we also sensed tensions in roles and leadership positions and power struggles within alliance making processes that full understanding would require a longer period of observation and study, as well as more frequent interactions with the people involved. From interviews and preliminary observations, we feel that there were power struggles, ideological differences and other factors articulated in an issue-based discourse in the meeting which we may have not keyed into. This issue-based discourse in a collective platform then throws up questions and criticisms seeking further deliberation for the dialogue to continue.

We also saw how the issue of agriculture was dealt with in the group when the same NGO representative (above) was emphatic about the plight of the farmers and the immediacy of the need for them to be provided ROs for their survival, whereas another person, who was part of the organisation of the senior

environmentalist from the rural-urban conservationist category (B), critiqued the wastage of water with ROs and posed remediation through cultivation of bamboo and other plants as a more ecological solution. He also remarked disparagingly that it was the migrant workers who used dirty domestic water for cultivation and thereby produced contaminated products. However, since we had ourselves presented our research concerns around agriculture initially, we reiterated that these problems were livelihood issues of the migrants who were forced to use domestic waste water and contaminated underground water due to lack of viable options. Several participants immediately responded to affirm our statement, supporting peri-urban agriculture and saying that the migrants should not be blamed. The person who had made the remark seemed to then backtrack, though he may not have changed his views which demonstrated to us the possible influence of such dialogue across ideological perspectives in this non-threatening fashion. This has also to be seen in light of the very emphatic statement made by the RWA office bearer in the first meeting that he and his members were clear that agriculture was not a desirable part of the town. We saw how the discussion unfolded in a way that people spoke from their own locational concerns, but once other issues or perspective was brought to the table there was a possibility of engagement with it even though the degrees of concern differed. During the interactions, we observed that a majority of the members from the middle groups, i.e. B, C and D had a shared cultural and social milieu (and a largely shared class, caste and gender).

Similarly, the respect shown publicly by others towards the senior environmentalist (also well known for his work), even while some of them were critical of him as seen in their personal interviews, also showed the nature of these alliance formations as embedded in a certain cultural context. Most of the members in the meeting were only comfortable in Hindi language so, knowing this, phone conversations and other communications for organising the meeting were also in Hindi. We translated our presentation and the concept note for the meeting into Hindi. This was the same for the local environmental discourse, which largely happened in the vernacular.

4.3.2. Multi-Stakeholder Platform Created by Water Resource Group
The Water Resource Group (WRG) is a public-private-civil society initiative established at the global level by International Finance Corporation (IFC) of the World Bank. In Uttar Pradesh WRG has been establishing a multi-stakeholder platform. The work in Hindon is one of its ongoing schemes. Hindon Rejuvenation is part of the larger mission of Ganga River Rejuvenation. The WRG is trying to develop a model for participatory river rejuvenation, which could be replicated across the Ganga basin. There are about 35 local stakeholders involved across the river Hindon basin. Many government agencies are involved at different levels, from the national level, down through various intermediate levels, to the municipal level. The private sector is also involved and there are different industries that are working with this initiative. The other big actors who are part of this alliance include India Water Partnership and Federation of Indian Chambers of Commerce and Industries (FICCI).

According to WRG, Rajendra Singh (a well know water conservationist, also known as Waterman of India since he received the Magasaysay award for his work) approached them in May 2015 to support a participatory process to rejuvenate the Hindon. The India Water Partnership and WRG played a role in bringing all the stakeholders and communities on board; FICCI has brought the corporate private sector on board; Jal Jan Jodo Abhiyan has been instrumental in bringing in the communities; and the Millennium Alliance has opened up a funding window for river rejuvenation. The WRG has held several field missions and meetings with stakeholders from government, civil society, industry and academia. In the process, WRG has documented twenty case studies of best practices in the Hindon basin (Prakash and Laninga 2016). As a part of this alliance, a Hindon Yatra (travelling exhibition and symposium) was organised which demonstrated these positive efforts being undertaken by stakeholders across governments, civil society and the private sector for rejuvenation of the Hindon. The Yatra travelled for three months through different towns adjoining the river namely Saharanpur, Shamli, Muzaffarnagar, Baghpat, Ghaziabad and Greater Noida (WRG 2016).

In the process of documenting and understanding the ongoing work on Hindon by different stakeholders, the WRG has also prepared a vision document on rejuvenating the river for which it is seeking support from funding agencies, central government and other actors. As a part of this process, Millennium Alliance and WRG have signed an MOU to give initial support to some selected projects for the duration of two years. In order to operationalise the activities of the vision document, the process of formulating a Hindon Council has also been initiated by WRG. Alongside the representatives of civil society group, the council is expected to have representation from the government, private sector and academia.

We observed that there were a range of expectations and views on this platform and process coming into the scene in Ghaziabad, with potentially different implications for local environmental activists depending on how their framing of water issues matched that of WRG. The most active and positive proponent of the WRG initiative was a member from the Category B, the right-wing party official. As the group most interested in the mainstreaming of environmental issues, this was not surprising. WRG has positioned itself as a powerful actor which would take on board a range of stakeholders. There was also an expectation of funding to support their work. From Category C on the other hand, there appeared to be more ambivalence. The member belonging to the Gandhian organisation (which also had Rajender Singh as one of its chief founders) expected resources for up-scaling their own day-to-day work, and a more general re-energising of activity around the issue. However, at least one of the legal activists from the same category seemed very critical of the plan and its ecological viability. The NGO representative from Category D who was coordinating the other platform, 'My Hindon, My Initiative', has some participation in the WRG initiative, but also expressed heavy scepticism. He also gave his explanation of how it was that the individual leaders in the field of water body rejuvenation who promoted the WRG initiative when the ruling party at the centre eased him out of the Ganga authority and he got together with the State Government (of an opposing party) to promote the WRG. He felt, thereby, that the WRG initiative was backed by political motives and so his organisation was not formally part of the initiative even though their case study had been documented by it as one of the best practices in the Hindon basin. Locally, there is apparently some power struggle between the two parallel platforms that attempt to bring the same actors together. He said in his interview:

> Critical views about the WRG initiative, which this same NGO representative was keen on pointing out, may also have arisen from the hype build-up around the initiative and the resultant inflation of expectations from it. He said that earlier people (including the government) expected the WRG to provide funds for the projects that they were encouraging people to propose. However, it transpired that the WRG was itself seeking funds from various sources, did not yet have much to give support to the proposals.
> Category D Interviewee

4.3.3. *Meri Hindon Meri Pehel* (My Hindon My Initiative)
Before the creation of the multi stakeholder platform by WRG, the Chief Secretary of the UP government guided the Commissioner of Meerut and Saharanpur to constitute a joint platform of various stakeholders, the Hindon Committee, to rejuvenate the River. The committee is comprised of government officers, NGOs and private sector. A representative of WRG is also a member of the committee. The government departments represented on the committee include the Pollution Control Board, Jal Nigam, Irrigation Department and urban local bodies. These departments mainly deal with the issue of industrial and domestic wastewater.

Meri Hindon Meri Pehel aims to involve civil society representatives on the committee in the activities which the government departments are unable to perform on their own. The NGO representative from Category D was made the coordinator of this initiative. Alongside government's interventions, the objective of this initiative is to associate the local communities in efforts for rejuvenation of the river. The initiative aims to cover the entire Hindon basin in the seven districts of Uttar Pradesh. A seven

member centralised committee has been constituted to carry forward this campaign. These members are representatives from the seven districts of Hindon Basin. This campaign has started making volunteers from the villages located on the bank of the river. These volunteers have been undertaking several activities such as construction of ponds and tree plantation.

According to WRG, during the initial stage of formulation of this initiative, the NGO to which the member from Category D belongs, sought funds from them but they had to refuse it because it would have discouraged other stakeholders involved with WRG's multi-stakeholder platform. WRG representatives interviewed said they don't have any particular problem with such parallel initiatives. In fact, they encouraged the NGO to take it forward and in future they will see if they can provide any kind of support to them. Thus, there were two parallel alliances being created for the Hindon basin.

4.3.4. Alliances outside Ghaziabad and the Hindon River Basin

Several of our respondents mentioned wider alliances with like-minded groups outside Ghaziabad or national campaigns initiated by their parent organisations. The national level RWA federation, the national level alliances of which Category C members were a part— *Jal Jan Jodo Abhiyan* (Relating People to Water Campaign) of the *Jal Biradari*, and the formation of an 'Alliance for Culture and Environment' that was in the offing with membership across north India—as well as the Environment Action Platform of which the CBO in Category D was a member, are illustrative. Alliances of the industrial workers' trade union were within the party of which it was an affiliate organisation, and with other trade unions in the area. Such alliances undoubtedly give strength to the local activism, but may also guide their ideological positions and the activities they undertake, sometimes going against local priorities. We have not examined any of these alliances and therefore are unable to assess their potential, though they clearly matter to the local activists and influence their work.

4.4. The Potential to Address Issues of Poverty and Peri-Urban Agriculture in Ghaziabad's Environmentalism

As elaborated in the discussion section, we feel that issues of peri-urban poverty alleviation and agriculture require a re-envisioning of the idea of urban sustainability. While the local alliance building among the Ghazaibad activists as well as other alliances that they were forming were encouraging deliberation on issues, a deeper re-envisioning of the direction of peri-urban/urban development does not emerge from these alliances. This could also be attributed to the marginalisation of 'peri-urban' as a conceptual category in governance and in academia. The fact that peri-urbanisation is a dominant form of urbanisation nationally prevalent is not a part of the consciousness of these alliance formations. This is also reflected in the interview of the member of a national organisation like *Jal Biradari* who, even though exposed to regional mass mobilisation, was unable to bring in the development discourse unfolding nationally to thus question these broader trends.

As far as the WRG initiative is concerned, at least superficially, it sounds very promising in terms of bringing together and supporting existing civil society environmental initiatives in the river basin. It appears to not come with its own solutions but wishes to facilitate upscaling of indigenous local mobilisations and activities. However, in the larger context of political economy there appear questions about the potential of such an initiative to making alliances addressing the concerns of the poor and peri-urban agriculture. Earlier World Bank projects in India have largely focused on promoting public private partnership with an objective of restructuring various sectors of the economy in order to facilitate the process of private investment and centralised policy implementation. The WRG may be a variant of earlier World Bank initiatives undertaken in the name of 'democratizing river basin governance' (Sneddon and Fox 2008), gathering together civil society efforts at community mobilisation for awareness raising and behavioural change, but not involving with those challenging the state through legal activism or political action. There is also the issue of how far it would be possible to regulate industries with FICCI as one of the key actors in the platform. It is clear from the field data that the majority of individuals who are associated with the WRG initiative do not expect it to be

transformative, partly because they are aware that 'such initiatives appear quickly and disappear suddenly'.

Meri Hindon Meri Pehel is linking existing activities on the ground. The NGO that is coordinating this initiative (from our Category D), is already working with farmers on sustainable practices of agriculture. Thus, this alliance has the potential to address the issues of peri-urban agriculture. As far as the issue of eliminating poverty is concerned, there is a possibility of this being addressed only from the point of view of small land holding framers but not from the migrant or landless farmer's perspective, since none of the existing members have worked directly on poverty issues. However, if as part of the larger platform they get involved in the work in other areas where migrant workers are present in significant numbers, they may also begin to be sensitive to and address their issues.

5. Discussion: Local Citizen Environmentalism as Potential for 'Ecological Democracy'

Environmental issues have the potential to reinvigorate democracy and its modes of governance in several positive ways (Dryzek 1997; Mitchell 2006). Firstly, most environmental issues cannot be individualised and are viewed as collective problems that require collective answers. Secondly, when environmental problems lead to local mobilisations, they can result in the emergence of various forms of deliberative democracy. Thirdly, avenues for citizens᾽ assertion and the exercise of participatory democracy can emerge through attempts to address the environmental injustices reflected in the concentration of pollution and its impacts in certain regions, neighbourhoods and among certain groups – injustices are particularly evident in rapidly industrialising areas (Mitchell 2006). However, there are no guarantees that efforts to address environmental burdens and injustices will result in deliberative democracy, or that exercises in deliberative democracy will extend to addressing environmental values and ecological degradation. Thus, these potentials may not be realised. This is where the concept of ecological democracy becomes meaningful.

Similar to Scoones recommendations for sustainable development, ecological democracy will require linking bottom up knowledge generation to decision making processes and re-configuring societal visions:

> Constructing pathways to sustainability and development, the literature shows, is inevitably a normative struggle, rooted in political and moral choices […].It must also relate to a focus on people᾽s agency and the social relationships that constitute society. For it is through these processes that transformations are constructed – in networks, alliances and coalitions, both formal and informal and connecting diverse actors, in citizens' movements, among state actors, in business, among the scientific-technical elite and so on […].The focus must be therefore on how local knowledges and practices are connected with wider transformative change.
> Scoones 2016: 309

Our study attempted to examine the potential of local citizen environmentalism for addressing environmental and social justice issues, with special attention to issues of peri-urban agriculture. We began this research after we had studied conditions in a peri-urban village situated between Delhi city and Ghaziabad town and found that peri-urban agriculture is strategic for sustainable urban development, since it can contribute to the greening of urban spaces while enhancing the livelihoods of the poor, recycling urban waste and production of perishable food items for the urban populations. Recognising a certain level of local citizen environmental action in Ghaziabad, we wanted to understand the potential role it could play in dealing with the environmental crisis facing the district (and region), and in ways that are inclusive of the perspectives of those engaging in agriculture in the region, especially the small and migrant farmers and agricultural workers. In other words, we attempted to examine their potential for contributing to 'ecological democracy' (Mitchell 2006). We set out four research questions for ourselves, and will now analyse our data further to answer them.

5.1. The Nature of Environmentalism and Alliance-Making

5.1.1. Urban or Peri-Urban Environmentalism?
We began the study as one of urban social movements, but soon came to realise that what we were witnessing was not 'urban' in the way urban environmentalism is understood in literature. The environmentalism did not focus preferentially on urban environments but raised issues that cut across and bridged the rural and urban contexts. Most of the environmentalists we interviewed and groups we found working on environmental issues were either linking urban and rural issues or were working in peri-urban villages and drawing upon urban resources to deal with problems created by the urban/peri-

urban industrial, domestic and agricultural pollution. Except for the two ends of the spectrum, i.e. the RWA members and the industrial worker union activists, none of the others were bound within the precincts of the town. Their articulation of environmental problems and solutions drew upon relationships between the rural and urban. While most of them currently lived in the town, they related their own biographies and their environmental concerns with rural links. Therefore, we think it better termed as 'peri-urban environmentalism'.

Literature on urban environmentalism shows that researchers have sometimes included problems of what we are naming as peri-urban areas, but they have not recognised the specificity of this rural-urban interface nor analysed the nature of environmentalism related to it as distinct from urban environmentalism. Our study finds that Ghaziabad town, neighbouring a metropolis and giving up large tracts of land for building suburbs of the city, itself bearing a large number of industrial units and thriving markets, educational institutions and the like, is still surrounded by villages with continuing agricultural activity. This creates the conditions for a thriving 'peri-urban environmentalism'. The spatial location, with proximity to the rural and agricultural ecosystems and inadequate development of urban infrastructure and amenities seems to shape the peri-urban environmentalists' concern with nature. The peri-urban areas are spaces where both rural and urban environmental issues coexist, and as such they are a sort of microcosm of the country's, or indeed the world's, environmental challenges. This is also what makes their politics potentially more relevant than rural and urban environmental politics alone. This does raise the question as to the sense in which urban agriculture should be central to peri-urban environmentalism, perhaps not so much in the sense of being the most important element, but more in the sense of being a necessary element along with others, but one that is in danger of being neglected. The neglect will lead to its being displaced by urban construction, unless special measures are adopted to protect and support it.

Even though themselves coming from middle-class backgrounds, the civil society environmentalists' location also provides an imagination for what issues they raise and the solutions they demand for or attempt to adopt, that is different from the standards of a well-organised, ordered and manicured city. While the RWA members represent the conventionally understood urban middle class elite and its 'bourgeois environmentalism', the majority of environmentalist groups in Ghaziabad are not bound by the urban boundaries, and look to ecological rejuvenation by measures such as developing open ponds in both rural and urban areas. Traditional ponds that provided water supply for the town are also not part of the modern contemporary dominant vision of urban spaces but protecting Ghaziabad's central pond has been an important issue for citizen mobilisation and campaigning with the civic authorities. Ponds provide for water recharge which is critical since underground water is one of the major sources for the town, and cool down air temperatures of the town during the hot summers (Bassi *et al.* 2014; Mishra 1993).

Ecological remediation is also sought through organic farming and cultivating plants such as bamboo. Simultaneously, they take up issues of setting up sewage treatment plants (STPs) and industrial effluent treatment mechanisms. Again, except for the RWA members, the rest are not raising issues of degradation 'in my backyard' but are addressing issues of wider concern. River water pollution is a conventional urban environment issue. However, the consequences of the pollution for agriculture and natural ecosystems is a more distant issue from a conventional urban perspective, but is an integral part of the peri-urban. We also found that, while in Delhi city the activism is about how the Yamuna needs to be rejuvenated by cleaning up the effluents of the city, in the case of activism in Ghaziabad for rejuvenation of the Hindon, issues raised linked upstream rural and urban sources of pollution and sought solutions there in addition to measures for cleaning up the effluents of the town before they were discharged into the river. Whatever the reasons, what this reflects is the potential of peri-urban environmentalism to contribute to creating a different, more eco-social, imagination of urban spaces. While the present peri-urban areas soon tend to become a part of the urban mainstream, if the peri-urban land use is allowed or encouraged to retain its peri-urban characteristics even while it gets located

within the town/city, it would contribute to the town a different relationship with nature. In the Indian context, peri-urban/urban agriculture would absorb some of the local poor and rural migrants and thereby also contribute to poverty alleviation and more inclusive urbanisation.

5.1.2. Vernacular Urban Environmentalism

While rural/forest environmentalism has raised issues of the damaging environmental consequences of urban overconsumption, urban environmentalism has a tendency to take form in either bourgeois environmentalism, blaming the poor as illegitimate polluters, or pro-poor environmentalism, demanding access to urban amenities and increasing consumption of natural resources by the poor. As noted earlier, this is often linked to demands for redistribution of amenities within the city across classes, and can splinter support for environmental action. There is only a limited literature on peri-urban issues as environmental and socio-political concerns (Marshall *et al.* 2009; Mehta and Karpozouglou 2015; Simon 2008), and yet it is in peri-urban areas that local consequences of urban overconsumption are most evident, and peri-urban environmentalism can potentially play a bridging role across class interests, generating more inclusive and sustainable visions for urban spaces.

Furthermore, within environmental movement literature, there is also almost nothing on 'everyday environmentalism' and no documenting or analysing the 'vernacular' urban environmentalism, i.e. of the largely local language speaking and reading activists who may not be comfortable using English in their conversations and writings, and do not gain a presence in academic circles. The peri-urban has little power relative to the urban core to influence societal visions and decision making, having been marginal in consideration of urban spaces, with marginalisation of agriculture in the economy and increasingly with the weaker social segments engaged with peri-urban agriculture.

What was highlighted for us is the difference we will have to make between the middle class of the rural, urban and peri-urban areas and their environmentalism. The large agricultural landowning rural middle class naturally relates to issues of agriculture, landholdings, environmental quality and livelihoods, while the peri-urban middle class tends to give primacy to the environmental quality which incidentally relates to its implications for agriculture and livelihoods, and the urban middle class does not relate environment to livelihoods at all. The poor rural–urban migrants in peri-urban areas in turn give primacy to peri-urban livelihoods dependent on agricultural resources which are entwined in environmental quality.

5.1.3. A Spectrum of Ideological Framings

We find diverse ideological framings across the environmentalist spectrum in Ghaziabad, leading to a range of civil society activism. The spectrum of framings allows for variations in the manner in which environmental issues are addressed, and there is clearly a move from the rightist orientation of those is category A and B groups to the centrist and left-of-centre orientation of those in category C and D groups, to the leftist orientation of those in category E group. Yet most of them exhibit the depoliticisation of issues that analysts of civil society and social movements have written about (Sheth 2014; Chandhoke 2002). However, we considered each one as having some potential to address issues of environment, health and/or the poor and therefore also attempted to understand that potential.

The urban middle class-centred conservationist framings of the RWA office bearers, as reflected in our Category A group, relates its own environment to wellbeing, but also tends to become explicitly anti-poor in its vision for the urban space. However, within the Indian social structure, it is the one which has conventionally had the most legitimacy and power to influence state implementation of policy approaches and regulations (Chatterjee 2004). Therefore, it has the potential to be a useful ally in actions for holding the industry responsible for its environmental impact.

Category B group, of 'rural and/or urban middle class conservationist approaches', tended to espouse an 'environmental stewardship' that is not naturally sensitive to issues of the agriculture of peri-urban

farmers. However, it does contribute to spread of environment friendly ideas among the middle class, both rural and urban. Since the group does have rural links and its members are also inclined towards populist image making and alliance making, it can get sensitised to issues of the agriculture of peri-urban farmers, particularly as it relates to its core issues of environmental degradation and water quality. The elections for the State assembly that occurred after our field work was completed have changed the political situation dramatically, with the rightist party ruling at the centre getting a large majority. However, with the contingencies of electoral politics, the party had wooed the lower caste and poorer sections as its electoral strategy pre-elections (which are not their traditional or 'natural' supporters) and after coming to power, among the first acts of government has been to waive the bank loans of all farmers. Whether or not the Ghaziabad environmentalists will be able to use this populist process strategically to create a sensitivity to agriculture, livelihood and environmental related issues in the coming months remains to be seen.

The Category C, 'rural and urban across class ecological framings with community mobilisation, social and legal activism' group, viewed environmental degradation as a central issue affecting people's livelihoods and health, linked to the consumerist lifestyle, unregulated industrialisation and inadequate attention to basic needs such as water, sanitation and food security. Its members had been addressing environmental issues of farmers and villagers in the peri-urban regions on the largest scale and depth, especially those related to water. Community mobilisation for non-state community-based action, as well as advocacy and legal activism, to pressurise the state agencies into action have been the strategies employed. Without explicitly espousing issues of the poor, this Category has addressed issues that affect all classes and engaging with the state on them. They seem to have had the greatest impact in moving state agencies to act on environmental issues since they have been working for the longest period of time on these issues at relatively large scale and effective approaches with strategies and linkages to impact at the local, state and national levels.

The Category D group, that of 'rural across-class ecological framings with specific environment and health related technological solutions', viewed environmental health impacts as outcomes of industrial and agricultural chemicals and a priority issue, whether from a village community perspective or that of the under privileged sections of the village. Its members have been taking up environment related health issues while working on rural development in general, thereby they were already attuned to issues of the peri-urban farmers, with regard to agriculture and livelihoods, water and health. They were working in small pockets on concrete solutions to the health problems or mobilising for opposition of the polluters. Since they were linking up with larger networks they could provide the grounded experience of their experiments, data gathering and micro-mobilisations to others in the civil society and movements spectrum. However, their focus was on micro-level technological solutions for short-term relief/redressal, even while they have started to work with wider alliances for long term ends.

The last Category, of left affiliated trade unionists, gave primacy to industrial worker's employment and wage issues, and did not view environmental issues as being of much significance or priority. The closest that they came to speaking or raising these issues was on water supply and sanitation in residential colonies of the industrial workers. While these basic amenities were important rights to struggle for in the short term sense, not questioning the dominant models of these amenities could not allow for addressing the rights of the urban poor, or of the peri-urban and rural populations, in the long term. Further, while occupational hazards to workers and pollution due to the industry were acknowledged by the trade union activists, not acting on them demonstrated a lag in action on worker related environmental issues. However, since they were affiliated to a political party that is sensitive to issues of the poor, there was the potential of their engaging with environmental impacts on workers' health as they became more evident on the ground.

5.1.4. Characteristics of this Peri-Urban Local Citizen's Environmentalism
The Right to the City entails a whole systemic transformation, as Harvey visualises it:

> The question of what kind of city we want cannot be divorced from that of what kind of social ties, relationship to nature, lifestyles, technologies and aesthetic values we desire. The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanisation. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights.
> Harvey 2008: 23

Central to this transformation is therefore the issue of the re-visioning of urban spaces, their systems of land use, livelihood supports, living and working spaces, transport and communication systems, and their governance mechanisms. Reviewing the collective action situation in Latin American countries Walton (1998) traces two tendencies among them – what he calls 'clientism' and 'activism'. Clientism being attempts to gain rightful access to material goods and services by becoming part of the prevailing economic order, and activism being attempts to remain outside that order and change the order itself (Walton 1998).

The Ghaziabad environmentalism is not in the clientism mode for most of the groups (except Category A) and it does have a larger view outside the dominant developmental paradigm. While those with clientism tendencies would want to draw on resources for themselves, as do those in Category A, the rest of the peri-urban environmentalism of Ghaziabad provides a different vision. The complex interdependencies between the groups sets in motion processes that enable the formation of a new environmentalism in the peri-urban which goes beyond the binaries of bourgeois environmentalism and environmentalism of the poor (Baviskar 2003; Guha and Alier 1997). However, it does not seem to follow the full logic of its own understanding of causality and thereby questioning the developmental order itself or of its own solutions that require a re-visioning of urban spaces, but stops at what the various activists and groups think they can concretely do. This gives them the potential to move to 'activism' as identified by Walton, but will require a greater politicisation, i.e. a deeper conscious analysis, of the issues they deal with.

5.2. The Relationship between Civil Society, Social Movements and Electoral Politics

While there is substantial environmental action in Ghaziabad and neighbouring districts in the region, we came to realise that it does not add up to a 'social movement' or social movements. However, we would term it 'civil society' action.

Chatterjeeʾs (2004) use of the term 'civil society', as opposed to 'political society', denotes a socio-political structural analysis of Indian society. We use it here to cover activism by NGOs, grassroots organisations and community organisations (Mitlin 2001; Chandhoke 2002). Grassroots organisations and NGOs are considered to be increasingly significant groups within civil society. Grassroots organisations can play an important role for the improvements to their neighbourhoods but are rarely able to play a transforming role in the larger context. NGOs may wish to guide and influence grassroots organisations, to push professional solutions regardless of local views. At the same time, they may pre-empt community level capacity building as they take over decision making and negotiating roles. Sometimes NGOs are under immense pressure managing donor finance, with its emphasis on short-term project funds, on financial accountability and on tangible outputs (Mitlin 2001).

It is also argued, with some merit, that the notion of 'civil society' tends to belittle or totally ignore the vast arrays of often uninstitutionalised and hybrid social activities which have dominated urban politics in many developing countries. There is more than one single conceptualisation of civil society. Reductionism of the debates on civil society excludes and even scorns modes of struggles and expressions which are more extensive and effective than conventional institutions outside the state (Bayat 1997). Our data speaks well to Bayat's recognition of diversity and potential within civil society

as well as the conceptions of Sheth's 'non-party political process' and Kothari's 'million mutinies. Among the Ghaziabad environmentalists, all of whom were from the region itself, we found most of them working with community based organisations or as independent voluntary activists (with other sources of livelihood), some working through other avenues but also relating to an NGO, and very few working primarily as funded NGOs. This is what led us to consider it 'local citizen environmentalism', as distinct from the professional, livelihood source that NGOs in India have become as a 'fourth sector' of the economy.

Further, while state and civil society are two distinct entities, they are not completely autonomous as, 'the way in which the state interacts with citizens influences the way in which civil society organisations operate', and hence they have the 'capacity to represent themselves within engagements with the state' (Mitlin 2001: 163). But, as pointed out by Ray and Katzenstein (2005), with the withdrawal of the state, and Sheth's analysis of political parties reneging from raising issues of priority to the citizen's wellbeing, there is an increasing role that the civil society has to play in pushing for the interests of the poor, the environment and other such issues, which has in turn meant overlaps of the role of civil society and social movements.

Distinguishing the above from the 'global civil society, Chandhok (2002: 50) states that 'global civil society by and large prefers to work within the parameters of a system that has been found wanting by many critics both from the Third World and from the advanced capitalist world'. She further argues that 'global civil society in its constitutive context: [is] a state-centric system of international relations that is dominated by a narrow section of humanity and within the structures of international capital that may permit dissent but does not permit any transformation of their own agendas' (Chandhoke 2002: 52).[11] These are useful warnings for initiatives such as that of the WRG (Mitlin 2001; Chandoke, 2002), especially if hope can be seen in their potential to move towards a social movement(s) that contributes to sustainable urbanisation.

5.2.1. Nature of Action on Environment Related Issues
As we have seen, the local citizen environmentalism in Ghaziabad reflects a range of ideological perspectives, nature of activism and scales of operation. Ecology related activities have been undertaken that have raised awareness about environmental issues among the common people, from school children to traders and administrators, as well as mobilised community action to solve problems created by the impact of environmental degradation, whether it was depletion of water sources or the disease suffered by residents. It has also meant challenging the municipal authorities, for instance, in attempts to save the town's central pond which had traditionally been its main source of water, and forcing them to shut down a factory that was flouting environmental regulations and polluting ground water. There has also been strong legal activism, using existing environmental laws and regulations as well as agencies such as the National Green Tribunal challenging the government to enforce regulations by building required infrastructure, or monitoring and surveillance followed by disciplinary action against the industries that flout the law. This civil society action is reminding both citizens and the state of their responsibilities towards environmental integrity and facilitating the introduction of correctives. The scale of action has been from very limited localised mobilisation. For instance from a small group of middle class RWA members, to mobilisation in a few hundred villages on river rejuvenation, to tree plantation drives across the country that involved thousands of people through use of social media.

We also find that many of the Ghaziabad environmentalists have been inspired or informed by earlier environmental and social movements in other parts of the country (such as those inspired by Gandhian thought. The *Chipko* movement, *Tarun Bharat Sangh/JalBiradari*, and *Narmada Bachao Andolan* as well

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[11] This becomes relevant to our study data when we examine the nature of alliances being attempted to be formed by the WRG.

as the left-oriented *Sonbhadra* resistance were specifically mentioned). Some of them are attempting to upscale their work and mobilise large numbers for every-day acts of environmental protection with some success, while others are more focused on community mobilisation in relation to rejuvenation of water bodies on a river basin-wide scale, and yet others are focused on grounded work in a few pockets, for instance on issues of environment and health and promotion of organic farming. But together, they seem to have the makings for a geographically located 'social movement'. Whether they coalesce their efforts into one remains to be seen.

At present, we find that these are disparate everyday activities that are dispersed in the population, and so do not create the coherence of a social movement. Neither do they possess the width of involvement of people (especially the marginalised sections), nor the depth of political understanding (i.e. their environmental work linking consciously with other dimensions of political and cultural economy), that are seen as characteristic of social movements. As Sheth's analysis indicates, in the post-globalisation period, social movements are regrouping for 're-politicising development' and 're-inventing participatory democracy' (Sheth 2014). This calls for a depth of political understanding that we did not see in the Ghaziabad environmentalists. While there can be some elements of 're-inventing participatory democracy' visible in the micro-mobilisations and alliance making for advocacy or challenging the state to perform its responsibility, they are still nascent.

Yet it is important to recognise that they do relate themselves to social movements and to political party processes. The inspiring role of social movements has already been discussed. Several of our respondents were members of political parties but with completely divergent ideological orientations. Those of the second category affiliated to a rightist party raised environmental issues which helped them in a two-way dynamic, the environmentalism giving them a popular public profile and media coverage that is essential for electoral politics, and the political connections gave them greater potential for taking forward the environmental cause and its advocacy. Others have earlier been with left party organisations but moved out to work independently. However, those of Category E belonged to a leftist party and did not relate to environmental issues even while they espoused the case of industrial workers, thereby revealing gaps in the lens used in this research.

5.3. The Role of Local Micro-Mobilisations

Our third question related to what role local micro-mobilisations play with regard to issues of peri-urban agriculture, poverty, livelihoods, water, food and health. We have documented above the activities undertaken by the environmentalists and how they touch on some of these dimensions but do not consciously address them in a linked systemic way. The learnings about the links have come from community based studies including our own in Ghaziabad. However, the environmentalism in Ghaziabad has emerged from other sources than the solutions that communities of the poor are adopting in peri-urban areas, and therefore this gap in understanding of priorities and their linkages.

5.3.1. Relationship with Community Knowledge
The origins of local citizen environmentalism have come into being often informed by environmental movements elsewhere. The solutions are learnt from successful efforts elsewhere and attempts made to operationalise them in the local context. What our case studies show us is that the original movements had evolved their solutions through local community-led processes and mobilisations around them. The leadership of these movements had an understanding of the problem and its sources based on their ideological orientation (in our case studies, the inspiration had come largely from earlier Gandhian thought inspired movements). The immediate solution for conservation or restoration did not directly deal with root causes, but did mobilise communities to engage in constructive actions countering the environmentally destructive developments and behaviours being opposed, and to generate their own alternative solutions. These approaches are useful for sensitising people to the problem, bringing all sections of people together for symbolic acts, but do not lead to challenging the root causes arising from production systems. The more difficult challenge in the Ghaziabad

environmental context is, for instance, that of industrial pollution, but little action has been taken against it. There has been some questioning of unnecessary consumption and wastage of resources such as water, as well as on issues of waste management, but not to a significant scale or depth, probably because it will demand a readiness to question urban middle class infrastructure and life-styles that have become the dominant aspired developmental goal for all sections. How to develop community led solutions for both the industrial pollution and to issues of consumption is, therefore, a moot question for Ghaziabad.

In the context of community-led knowledge and action it is important the know that even the local solution evolved by communities in peri-urban villages—that of vegetable cultivation using domestic waste water—has not been recognised by any of the local environmentalists as an environment friendly solution that is worth supporting. The rejuvenation of urban, village and river-side ponds is a widely dispersed and live issue at present, getting both civil society and state support. Introduction of organic farming in some villages afflicted with high cancer rates by members of Category D and ideas of remediation through cultivation of plants/trees that help remove contaminants in soil as suggested by a member of Category B are experiments worth following for concrete solutions. Therefore, while there is potential among the majority of Ghaziabad environmentalists to recognise peri-urban/urban agriculture as relevant for re-visioning urban spaces, they will have to explicitly attempt to sensitise themselves to issues from the perspective of the poor.

Despite the potential of peri-urban environmentalism that we envisage, the present trends are not hopeful. The landed farmers' mobilisation has moved from opposing land acquisition to issues of compensation for the land. The Jal Biradari's earlier direct action was the major mode of action, but not getting adequate results, it has moved to more linking of *raj* and *samaaj* (state and society). Health impact is the one thing that has already caused concern and inititated moves towards some action. Linking the other dimensions together with health is the challenge of communicating our findings effectively. Further, if dialogue and alliances between poorer agriculturists and environmentalists can be forged, peri-urban environmentalists have the potential to become sensitised to their issues and accordingly to attempt make an impact on policies.

5.4. The Potential for Creating Alliances

In order to answer the question, where does the potential lie for creating alliances between elite environmentalism and issues of the poor, we have to examine the barriers to such alliances across class interface.

5.4.1. Structural Challenges
The special concerns of the poor peri-urban agriculturists, such as of urban areas drawing away water and land for a city forest, go unrecognised and unaddressed by most of the environmentalists. On the contrary, their environmentalism may even favour such 'greening' of the city, ignoring livelihood needs of the poor. From our data this can be seen to happen because those working on issues of the lower class tended not to view environment related issues as priority, and the environmental activists dealt with issues that tend to affect all classes, such as the contamination of underground water and quality of water in the river, but do not view these issues from the perspective of the most vulnerable sections dependent for their livelihood on natural resources in the area, i.e. the poor engaging in agriculture.

The other challenge that is still nascent, but has emerged even in the preliminary action against polluting industries, arises when the industry, instead of adopting clean practices, mobilises its workers to protest against the environmentalists. The workers are given to understand that the latter are taking away their livelihoods. Thus they pose a contradiction between environmental action and livelihoods of the poor rather than as environmental degradation affecting all sections including the poor. In fact, the workers are likely to be the most affected due to occupational exposures and their tendency to live in proximity to the factories.

While the trade union movement and other groups addressing workers conditions will have to handle this conflict of interest, what they can learn from is the sensitisation of their counterparts to the negative impacts of environmental degradation on the health of workers and their families, such as of those in Category D in our study.

The two issues that emerged clearly as shared concerns across all categories was the pollution by industries, and the health impacts of this pollution. These can be the points from which future dialogue and action could be taken forward, with deepening of the understandings and conscious search for alternatives. Given that this is an area that trade unions in India have left largely unaddressed, local environmentalists engaging with them on the issue would be of benefit to both.

As discussed above, the possibility of sensitisation lies inherently in the peri-urban nature of urbanisation and in the possibility of cross fertilisation of ideas through dialogue. The responses of civil society members in our meetings gave hope for the possibility that interfaces of the environmentalists with the peri-urban farmers would lead to issues of the latter getting integrated into the environmentalists' agenda.

5.4.2. Larger Relevance of Findings

The relevance of this study's findings lies in that the urban periphery in India is now acknowledged in official circles as being one of the key frontiers of urbanisation, with an emerging recognition that continued neglect will result in 'lock in' of unsustainable urbanisation trajectories (Tiwari *et al*. 2015). The urban expansion that is happening is only in part of the globalised city with world class infrastructure and the imagination of a 'smart city'. The majority of urban areas are emerging more like small towns, vernacular, expanding villages and will grow with the pressures of constraints on natural and financial resources, and also some of the opportunities that Ghaziabad reveals. Development policy and theory are also beginning to understand the need to tackle poverty in relation to urban expansion and its fringe areas. But to support sustainable urban development, initiatives must be closely linked to neglected issues of urban pressures on ecosystems and social and environmental justice. However, multiple government schemes, as they unfold, often under the banner of sustainability, further tend to exacerbate peri-urban inequalities. For example, by creating exclusive city forests and recreation of parks at the expense of community farms, agricultural land, or by developing industrial enclaves away from the middle-class areas of the city (Tiwari *et al.* 2015). Ghaziabad can therefore provide lessons.

Whilst challenging unforeseen environmental health concerns and multiple deprivations that emerge in the complex dynamics of the peri-urban, they should also be seen as 'hot spots of social learning and innovation, and as frontiers of transition and transformation. They are the places where the dynamics of sustainability are being worked out in conflict, through negotiation, or through chaotic evolution' (Marshall 2016). These poorly studied situations provide excellent opportunities to learn the lessons of recent urban development interventions and their implications for the environment, health, and social justice. A growing body of peri-urban literature also indicates that greater insights into these peripheries, which are subject to ambiguity, informality, and illegality in the context of formal planning processes, can elucidate alternatives to dominant planning and management trajectories.

6. Conclusion

What we set out to study was local citizen environmentalism in Ghaziabad as urban environmentalism. During the course of our research we came to recognise its characteristics as peri-urban rather than just generally urban, and in the form of civil society action.

While at one end, it provides an environmental imagination to a large number of Ghaziabad citizens through mobilisation of schools, media and the like, on the other it challenges the state through legal activism. It has moved from a tree conservation and plantation campaign mode to questioning industrial practices that are leading to soil, water and air pollution. Its impact is being felt in the town and beyond, and constitutes significant public action.

We find that this peri-urban civil society activism cannot be viewed in a binary fashion and it reflects a pluralist spectrum that allows for alliance building. This environmentalism in Ghaziabad is distinct from 'environmentalism of the poor' of the rural and forest dwelling groups, from the dominant elite urban 'green development' practices and discourses of 'bourgeois environmentalism', as well as from the urban politics of the poor. It reflects the possibility of creating bridges across sectional interests –rural and urban, red and green ideological streams – and across classes. It must, therefore, not be misappropriated by existing mainstream discussions of environmentalism. It has the potential for evolving into a viable social/environmental movement of its own, with all the various constituents contributing to its flowering and with linkages outside of the peri-urban areas. Besides the coalescing of various strands, a deepening of framings and agendas is needed to make this environmentalism into an environmental social movement in Ghaziabad.

The depoliticised or non-political framings and action make us interpret the environmentalism in Ghaziabad largely as civil society action. In our analysis, it has not acquired the width and depth of political framing of issues, or the width and depth of impact, that is associated with social movements. Yet, we think that it has the potential to become a social movement.

If all the strands of environmentalism continue as they are, there will certainly be a greater awareness raised about the environmental problems, and some good judgments on environment related issues may get penned. But these may not be enough to make any significant transformation on the ground. It may lead to adoption of some green technologies, or to merely 'medicalise' the problem by accessing medical services for the environment related health problems, or to localise the problem to 'not in my backyard'. But these measures can only mitigate the problem for a while and for some sections, not in a sustainable way for all.

Two issues that potentially have currency across the categories of framings are the health impacts of environmental degradation and the need for regulating the role of industry in causing the degradation. Mobilisation around these issues is linked, but will require a deeper appreciation of the economic policy frameworks, occupational and livelihood patterns, cultures of consumption and human relationship with the natural environment.

Politicising peri-urban socio-spatial issues for a social movement (or movements) requires acceptance of a different vision of what is meant by inclusive urban development. Even though there has been some contestation and politics around industrial location and health threatening pollution by urban environmentalism in Delhi, these issues have not been consciously theorised or adequately linked in action by the peri-urban environmentalism. However, the peri-urban environmentalism we have witnessed does draw our attention towards the necessity of reimagining urban spaces, their multiple functions, rationalities, meanings and diversified production of urban environments; different socio-ecological potentials with positive social, economic and ecological effects.

The varied environmentalism in Ghaziabad contains a spectrum of consciousness and action, which harbours inherent contestations as well. For instance, urban greening strategies grounded in an 'ecological rationality' like the city forests in Karhera in reality contribute to the increase of property values, while ultimately creating spaces of exclusion. This may unintentionally (if we are charitable!) ultimately bolster the neoliberalisation of urban peripheries.

Can we call this environmentalism a reflection of broader societal change towards a greater ecological consciousness? Or the creation of a 'peri-urban ecological citizenship'? Or is it an emergent movement generating an 'everyday environmental consciousness' among the majority of Ghaziabad citizenry who suffer the externalities of the dominant urban transformations but are still not mobilised through ecological consciousness? Can this then be moved towards a deeper level for re-imagining the urban and peri-urban spaces? Simultaneously, can more than 'everyday environmental actions' be initiated on specific issues of human health impacts?

In our analysis, we find that alliance building will be critical for any such endeavour. However, the nature, objectives and framings of the alliance will shape its orientation and outcomes. If the purpose of alliance making is with local concerns for their environment-linked wellbeing, there is a shared purpose. If the purpose of alliance making is funding action for environmental stewardship, then it is neither likely to enthuse all categories of existing environmentalism, nor bring in greater sensitivity to issues of the poor, livelihoods and peri-urban agriculture. It is likely to enhance a competitiveness among them rather than facilitate coalescing of the various strands. Thus the alliance making should be allowed to develop at its own pace, given that loose working relationships are already in existence. Simultaneously, it should be facilitated to deepen its agenda and become more inclusive, especially of the deprived sections, and cognisant of their community generated solutions.

For environmentalism of this kind to have an impact it is important that the local citizens and other actors take into account the potential of peri-urban agriculture which is under threat of being turned into jungles of concrete in the current context of neoliberal urban transformations, as the elite and middle classes expand their access to all resources. On the other hand, there are the peri-urban village residents who own land and lose it to the detriment of their own way of life and its dignity. Further to be considered is the ongoing migration process that is moving thousands of landless and marginal peasants to the urban peripheries, who face urban marginality but reproduce agriculture as survival strategy within these degraded peri urban spaces. However, peri-urban agriculture also has to contend with the issues of depletion of water sources, of industrial and domestic waste polluting the water and soils so that the agricultural worker faces occupational hazards and the food produced is contaminated. Measures for regulating industrial pollution as well as rejuvenating the water bodies are therefore essential for health of all and for livelihoods of the peri-urban poor.

Using the community knowledge garnered from the adaptive practice of peri-urban poor groups, and given the potential sensitivity within the framings of the various strands of environmentalists in Ghaziabad, can the environmentalism be enhanced to rekindle a process of politicising urban food production/agriculture through collective mapping of resources of land, water and collective knowledge production? Can it be based on a pro-poor, ecological, health and wellbeing based peri-urban rationality that can inform the visions of urban spaces and their planning? Can processes of deliberative democracy be initiated to make such moves towards an ecological democracy? We will have to wait to see what paths the various strands of local citizen activism take on environmental issues as well as on the wellbeing and livelihoods of the poor. It remains to be seen how far they will be influenced by the dominant globalising developments, or by the counter currents that are also making their presence felt from the global to local levels.

The environmentalism witnessed in Ghaziabad is, we contend, not a unique phenomenon of this town/district alone but can be found in varying degree and form in almost all parts of the country in

similar situations. Such citizen initiatives need to be recognised, explored for their potential to contribute to ecological democracy and supported without them losing their 'spontaneous', adaptive and bottom up characteristics. Support could come through a multiplicity of sources, including enabling knowledges from trans-disciplinary research, from the media popularising issues, from the state as policy. It remains to be seen how the various efforts at alliance building across civil society actors and groups unfolds in the coming years, but analysis of and/or engagement in these processes could be critical to understanding potential mechanisms for civil society led transformations to sustainability.

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Annex: Diverse Framings of Environmental Activism in Ghaziabad

Parameters	Urban middle class centred conservationist framings	Rural-urban middle class conservationist framings	Rural-urban across class ecological framings with community based social mobilisation and legal activism	Rural-urban across class ecological framings with specific environmental and health related technological solutions	Urban industrial workers centred with no expressed ecological framings
Water as a Priority Issue	Consumption based concerns of water quality in urban middle class colonies	Water depletion, wastage of water, water quality deterioration, river dying	Rejuvenation of river, ponds, water pollution (various water channels)	Implication on water; from farmers perspective	Low priority
Actions on Water and other environmental issues (taken or suggested)	Action against industry near colony for closure or effluent treatment; no-car days; tree plantation and water for birds	Educating people to stop wastage; Pond rejuvenation by and a Pond rejuvenation authority; STPS on drains before they discharge into the river; Tree plantation; citizen-friendly governance arrangements such as a point person for public complaints; regular holdings of religious rituals (*Arti*) at River Hindon	Organising *Yatras* (Walks) in the Hindon river basin; Pond and river rejuvenation; Tree plantation; case against railways for misuse of ground water; case against garbage dumping in Hindon; boycotted voting and polio campaign for action against industrial pollution	Promoting less water intensive crops; promoting organic farming and compost from agriculture waste; water quality test; survey of river pollution; protest against industrial pollution	Drinking water supply related demonstration against Municipality
Rural/Urban	Urban	Spread across rural and urban	Spread across rural to urban	Rural	Urban

Livelihood	No concerns for poor, Against PUA	Indifferent or low potential concerns for PUA	Potential concern for PUA	Concerns for small and middle PUA farmers	Works with industrial workers on their conditions of employment and wage issues
Relationship with the state	Greatest beneficiaries of state-led development; considered legitimate civil society that can be relied upon to support state activities/enforce 2% CSR payment by industry to use for CCTVs etc.	Advocacy and collaboration with the State	Community mobilisation & advocacy; challenging the state through legal action	One collaborates with the state and the other has no relationship	Challenging through political action
Environment and Health	Some concerns (not in my backyard)	Some concerns expressed	Reference of environment and health; request for good data gathering on health impact of environmental pollution in Ghaziabad	Envrionment and health are important concerns and issues for action	Not a concern
Sources of knowledge about environmental issues	General literature and media. Information about local conditions from urban middle class communities; other civil society groups	Information about local conditions from Rural and urban middle class communities and own observations; other civil society groups; experts from research institutions. Literature on environmental issues in hindi.	Social movements and other civil society groups for environmental issues; Information about local conditions from Rural and urban communities; other civil society groups; use RTI to obtain official data; scientific literature and reports; experts from research institutions	Information about local conditions from own surveys; government data and schemes; other civil society groups and and social movements; experts from research institutions.	Information about water supply and sanitation problems from industrial worker communities

Alliances: 1. **Relationship with Community/Civil Society/Political Society** 2. **Geographical scale** 3. **Linkages with WRG**	1. Civil Society; 2. Neighbourhood; 3. No links with WRG	1. Ranges from community to civil society to political affiliation; 2. local to international; 3. documented in the best practices list of WRG	1. One member works with the community, other three work as civil society; 2. local and national; 3. One member documented in the best practices list of WRG, others only attend meetings (sceptical of WRG)	1. Relates with the community, one also part of civil society; 2. Regional; 3. One member documented in the best practices list of WRG, others only attend meetings (sceptical of WRG)	1. Political alliances; 2. National; 3. No linkages with WRG
Number of years spent on working on environmental issues	Several years, post-retirement	Ranges from early 1980s to mid 2000	Early 2000s	One started in early 2000s, the other is more recent	Occasional action on water supply to worker colonies; not started working on environmental pollution yet
Ideological Affiliation	Did not express any	From being ideologically committed to strong part member (right wing)	One Gandhian and others no political affiliation	One has a former left party affiliation, the other has no political affiliation	Left political party affiliated