



**TRANSFORMING
PERIURBAN
FUTURES**

VIRTUAL CONFERENCE
18th – 19th January 2022

TRANSFORMING PERIURBAN FUTURES

Virtual Conference Report

18-19 Jan 2022

SaciWATERs
University of Cologne
TUDelft
School of Planning and Architecture Bhopal

2022





Overview

The conference aimed at provoking discussions on pathways for sustainable transformations of periurban areas and exchanging on the complex nature and vulnerabilities of these areas.

Objectives and expected Outcomes

The conference pulled together voices and perspectives from multiple sectors and stakeholders –government, academia, international development sector, and the grassroots civil society, - to understand both common and contested solutions and directions towards sustainable periurban futures. Understanding of periurban transformations was emanated from the four core themes of

- Water
- Gender
- Governance
- Disaster management

The outcome of the conference was to frame specific policies for periurban spaces based on the discussions.

Program Details

Opening Plenary Session

Session 1: PERIURBAN WATER RESOURCES

Session 2: GENDER IN THE PERIURBAN

Session 3: PERIURBAN GOVERNANCE AND INFRASTRUCTURE

Session 4: DISASTER AND RESILIENCE IN THE PERIURBAN

Closing Session



Conference Summary

The two-day online conference was co-organized and supported by local, national, and international organizations, including School of Planning and Architecture, Bhopal; South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), Hyderabad; University of Cologne; and the Delft University of Technology. The virtual conference was held between the 18th and 19th of January 2022. There were five 1.5 hours long sessions held that started with the Opening Plenary session followed by the 4 thematic sessions.

The aim of this conference is to provoke discussions on pathways for sustainable transformations of periurban areas. The periurban space presents a transitioning socioecological space which offers both obstacles and opportunities for transformation to sustainability. These areas are characterised by complementariness, segmentation, heterogeneity, where both opportunities and exclusions are created. The two-day online conference pulled together voices and perspectives from multiple sectors and stakeholders –government, academia, international development sector, and the grassroots civil society, - in order to understand both common and contested solutions and directions towards sustainable periurban futures. Understanding of periurban transformations emerged from the four core themes – (1) access to water and water management, (2) changing gender roles and societal structures, (3) infrastructure and governance and (4) disaster preparedness and risk management.

This section gives a brief description of each session. Each session was summoned by a chairperson who introduced the session, its concept, and the speakers. The overall session was moderated by a moderator. Each thematic session had four expert panelists both national & international, followed by a discussion moderated by the discussant experts. Twenty-five national and international experts from various domains of land, water, infrastructure Indian projects participated in the 2-day session. A key outcome of the conference is a series of policy briefs, which will be released at the end of March 2022.

I. Day 1: January 18th: Opening Plenary Session – Periurban Transformations

Introduction

The opening Plenary Session of the virtual conference was held on Jan 18th,2022. Dr. Sridharan summoned the session and introduced the concept of the conference and the panel experts for the session. The experts of the session were

- Dr. Surendra Bagde - Additional Secretary, MoHUA
- Dr. Rumi Aijaz - Senior Fellow, ORF
- Dr. Bhuvanewari Raman - Professor, OP Jindal Global University
- Dr. Shiraz Wajih - President, GEAG
- Dr. Carsten Butsch - University of Cologne
- Dr. Leon Hermans– TUDelft

Linkage of Periurban Areas by Dr. Surendra Bagde

Dr. Surendra Bagde was the chief guest of the Opening Plenary session. He is specialized in the application and linkage of Sustainable Development Goals SDGs 11 with SDG 6. He shared his experiences about periurban transformation in Maharashtra and Mumbai. He emphasized that the focus of the development activities must be citizens and inhabitants of the periurban areas; the need for bridging the infrastructure provision differences; interlinkages of regional areas, periurban areas, and city centers; and preparation of action plans before the development.

Conditions and Issues of Periurban Areas by Dr. Rumi Aijaz

Dr. Rumi Aijaz gave an overview of periurban Areas and their typologies in India; prevailing conditions, government policies, and issues to be addressed in periurban areas and their growth. Indiscriminate land-use conversion, unregulated development, unplanned areas, inferior quality of life, population displacement, weak mobility & connectivity, and socio, economic & environmental adversities are the prevailing conditions. He suggested measures such as scaling existing reforms – local, state, and national; implementation at the local level; rural-urban cooperation; statutory planning, and detailed engineering.

Periurban Areas as Special Ecological Zones by Dr. Shiraz Wajih

Dr. Shiraz Wajih discussed the characteristics and issues prevailing in periurban areas. He acknowledged the fact that networking deliberations on periurban issues would bring about changes in policies and programs. He emphasized the significance of periurban areas as dynamic special ecological zones that create resilience and sustainability to cities and their inhabitants. He also specified that periurban areas could be in the form of land, rivers, water



bodies, hills, forests, wetlands, etc. He added that they must be an integral part of urban areas to reduce the climate change impact, disaster risk reduction, microclimatic changes, saltwater intrusion, the impact of groundwater, monsoon floods, and water-logging.

Dr. Bhuvanewari Raman – Transformations of new technologies in spatial governance

Dr. Raman discussed the periurban transformations with the case of the Chennai floods. She stated that periurban landscapes are not just fiscal but ecological resources. She emphasized the need for land-water regulation, coordinated planning and implementation of infrastructure development; land valorization, and integrated governance. And the sustainability and resilience of cities depend on reconciling the ecological, social and political goals.

H₂O – T₂S - Water Transformation to sustainability in periurban India

Dr. Butsch & Dr. Hermans discussed Water transformation to sustainability in periurban India based on the findings of the H₂O – T₂S two-phased project. Dr. Butsch quoted that periurban spaces are fluid spaces, characterized by a mosaic of land uses, urban-rural features, a multiplicity of stakeholders. The dynamic water governance and institutional settings impacted livelihood and spatial, social, and economic access to water as a consumption good in periurban areas. He demonstrated the contextual issues, analysis, and findings of the project. Dr. Hermans discussed the planning approach required for periurban areas with the case of Phase 2 of the project. He stated that an adaptive-participatory planning approach with multi-criteria analysis would be suitable to anticipate the dynamic changes. He demonstrated the Hybrid Delphi Analysis.

Summary

Dr. Sridharan summarized the plenary session and thanked all the speakers. He quoted several upcoming initiatives of the Government of India in the dimensions of the census, digitization of village habitats, infrastructure provision with the periurban perspective.

II. Thematic Session 1: PERIURBAN WATER RESOURCES

Introduction

Periurbanisation in most cases results in changing and increasing pressures on the water as a resource. Therefore, this session sought to explore, how periurban waterscapes can be transformed sustainably. This session was moderated by Dr. Carsten Butsch. The experts of the session were

- Shri G. MathiVathanan - Principal Secretary, Housing and Urban Development. Govt. of Orissa
- Dr. Victor Shinde – Team Lead, Water and Environment NIUA
- Dr. Priyanie Amerasinghe - Emeritus Scientist, IWMI, Sri Lanka
- Ms. Sarah Luft - University of Cologne
- Dr. Shamita Kumar - Professor, Bharati Vidyapeeth University
- Dr. Alexander Follman - University of Cologne

Tool for measuring water quality and management of water bodies by Dr. Victor Shinde

Dr. Shinde explained the design philosophy, principles for the selection of indicators, and overview of the tool for assessing water bodies which was developed by the National Institute of Urban Affairs. He explained the various outcome and process-based indicators, evaluation, and standardization procedures of the tool; and also, how the tool has been used for reviving and rejuvenating the water bodies. He mentioned that the tool was linked to the AMRUT scheme – Urban Water security mission.

Wastewater as a Resource by Dr. Priyanie Amerasinghe

Dr. Amerasinghe threw light on the societal, ecological, and environmental impacts of periurban transformation. She emphasized the significance and protection of periurban landscapes such as hills, valleys, rivers, water bodies, forests, and wetlands. She explained the dynamic nature of periurban areas and their vulnerability to disasters and environmental hazards. She insisted on the need for water resource management; ecosystem services; integrated institutional governance, action plans, and policies in the periurban areas. She also highlighted the significance of wastewater as a resource.

Planning for livelihoods under hydro-social uncertainty in periurban Pune – H2O- T2S in Urban Fringe Areas by Sarah Luft

Ms. Luft discussed how uneven development transforms the local waterscape and alters the preconditions of water-based livelihood. She explained the hydro-social cycle and its uncertainties like multiple governance actors, uneven access, and use to water. These uncertainties result in climatic variability, insufficient hydraulic infrastructure, lack of rights, stress on water resources, rising urban demand and resource competition, unsustainable water usage,



disappearing water-based environment. She emphasized scenario-based contextual planning of periurban areas.

Discussion

Dr. Kumar and Dr. Follman were the expert discussants. They summarised the session and steered the discussion. Dr. Alex discussed the functioning of water governance in periurban areas owing to the dynamic changes and multiplicity of governing institutions. He emphasized the linkage of land use planning and its implementation, integrated governance, and context-specific proactive approach.

III. Thematic Session 2: GENDER IN THE PERIURBAN

Introduction

Gender in the periurban session was intended to understand the changing processes of production and reproduction of gender relations in the periurban context, emerging gendered vulnerabilities and opportunities, and pathways for transformations in gender relations in periurban spaces. This session was chaired by Dr. Sucharitra Sen and moderated by Ms. Shreya Chakraborty. The experts of the session were

- Dr. Sucharita Sen - Jawaharlal Nehru University
- Ms. Shreya Chakraborty - Senior Fellow, SaciWATERS
- Ms. Nupur Rashi Panna - IAS, RURBAN Mission, Chhattisgarh
- Ms. Krati Sharma - UNWomen
- Ms. Mukta Naik - Fellow, Centre for Policy Research (CPR)
- Ms. Chirantana Kar - Project Director, NAARI
- Dr. Vishal Narain - Professor, MDI, Gurgaon
- Dr. Poulomi Banerjee –SaciWATERS

Demographic Characteristics of Periurban Hyderabad by Shreya Chakraborty

Ms. Chakraborty set the context for the session and discussed the significance of the urban-rural continuum. The periurban migration issues like resource depletion, water access resulted in gender vulnerability in the form of increased dependency rate of women and children; decline in female work participation rates. The socio-economic disparity increased gender vulnerability for women.

Caught in a governance tangle: Women in the urban periphery by Ms. Mukta Naik

Ms. Naik discussed the impact of access to water on women in periurban areas. Inequality in the public service provisions in periurban areas such as water, sanitation, and transportation impacted women. She emphasized the need for spatial and legal inclusion of periurban areas in planning and policy, integrated governance, enhanced public service provisions, and a fit-for-purpose approach.

RURBAN Mission of Chattisgarh by Ms. Nupur Rashi Panna

Ms. Panna discussed the various aspects of the RURBAN mission of Chhattisgarh. She elaborated various provisions such as access to basic physical and social infrastructure, agricultural services, employment generation, digital literacy, Self Help Group formation. She highlighted the need for women's empowerment and inclusive planning in periurban areas.



Roopantaran - Building Women Entrepreneurs by establishing linkages between reproductive health and livelihoods in rural/ periurban areas by Ms. Chirantana Kar

Ms. Chirantana Kar discussed the impact of migration on gender inequality and the vulnerability of women. She emphasized the need for access to health and land rights; financial independence; women empowerment, capacity building for entrepreneurship and decision making; and updated skill set development. She specified that Sexual and Reproductive Health plays a very critical role in empowerment and gender equity.

Urbanization and Migration by Ms. Krati Sharma

Ms. Sharma discussed the access and safety issues of public services in periurban spaces. She emphasized the need for creating gender-responsive, socially inclusive safe cities and public spaces; socio-cultural transformations in the attitude and behavior and people; access to essential services and public infrastructure; comprehensive legislation and policies; and strategic intervention in urban development.

Discussion

Dr. Vishal Narain and Dr. Poulomi Banerjee were the expert discussants. Dr. Narain discussed the significance of urban-rural transition coexistence; the impact of land-use change. Dr. Banerjee discussed the socio-political resource pressure in periurban spaces; the need for gender-sensitive policy intervention. The session chair summarized and concluded the session.

IV. Day 2: January 19th: Thematic Parallel Session 3: GOVERNANCE AND INFRASTRUCTURE

Introduction

The “Periurban Governance and Infrastructure” session aimed to develop and nurture new governance arrangements that can support a periurban transformation towards a sustainable future. The session was chaired by Dr. Sudhir Krishna and moderated by Dr. Leon. The experts of the session were

- Dr. Sudhir Krishna - Ex. Secretary, MoHUA
- Dr. Tathagata Chatterji - XIM University, Bhubaneswar
- Mayur Kulkarni - Planner, MMRDA
- Monica Bahl - Senior Advisor, GIZ
- Dr. Sharlene L. Gomes - TUDelft
- Aparna Soni - SPA, Bhopal
- Partha Banerjee - The Researcher, Kolkata

Periurbanization of medium-sized town by Dr. Tathagata Chatterji

Dr. Chatterji discussed the governance challenges in water bodies in the periurban context with the case example of Bhubaneswar. He said that the periurban spaces are complex due to their constant flux which has economic, ecological, and social impacts. The institutional overlays, the multiplicity of plans, absence of statutory development plans, lack of data about the migrating population, civic infrastructure delivery deficiency are the various governance challenges in periurban areas. He emphasized the need for considering the implication of land-use changes for orderly transitional development in periurban areas.

Governance and infrastructure in periurban areas of Mumbai by Mr. Mayur Kulkarni

Mr. Kulkarni discussed the governance, planning, infrastructure provisions, and policies in the periurban areas of Mumbai Metropolitan regions. He stated that the unorganized development due to rapid migration has caused deficit infrastructure provision in these areas. There is an increased dependency on mother cities for resources due to less accessibility and poor Quality of Life. He emphasized the need for optimal utilization of shared resources, restructuring of local self-government, sustainable transformation of periurban areas.

Strengthening Governance for sustainable infrastructure by Ms. Monica Bahl

Ms. Bahl discussed the need for inclusive, participatory, and multiscale spatial planning; cross-sectoral urban planning; institutional strengthening and governance; reducing the development



pressures on periurban areas. Lack of amenities, access to basic services, unregulated land use conversions, and unplanned development are the various governance issues. Integrated planning and inclusive governance are needed for strengthening the functioning of periurban areas.

Water-related infrastructure needs in the future by Dr. Sharlene L. Gomes

Dr. Gomes discussed the water-related infrastructure need in the future with the local perspective from the periurban areas of Kolkata. The periurban transformation involved changes in land-use, socio-economic, ecological, environmental aspects in addition to heterogeneous social composition. The institutional voids resulted in water-related risks, climate hazards. She specified the need for context-specific policy level changes. She also discussed the adaptation pathways strategy used as part of their H₂O-T₂S project.

Discussion

Ms. Aparna Soni & Mr. Partha Banerjee were the expert discussants. They discussed the two frontiers of periurban areas, emphasized the policy development on both frontiers, and participatory management for resources. The significance of local-level governance was mentioned. The chair summarised and concluded the session. Integrated, participatory, adaptive, and inclusive planning of periurban areas is essential for harmonious balanced development. Maintenance of periurban areas' identity, culture, and infrastructure are essential for improved Quality of Life and the mutual benefit of cities and periurban areas.

V. Thematic Session 4: DISASTER AND RESILIENCE

Introduction

Rising water stress and the increasing occurrence of urban flooding in the last decade have called for understanding the resilience of different systems to cope up or recover from these. This session on 'Disaster and Resilience to water' focused on ecosystem services of periurban areas and their role in enhancing community resilience to water stress and urban flooding. The session was chaired by Shri. G. Padmanabhan and moderated by Dr. Rama. The experts of the session were

- Shri G. Padmanabhan - Ex-head, DMU, UNDP India
- Dr. Anil K Gupta - Professor, NIDM
- Dr. Anant Maringanti - Executive Director, Hyd. Urban Labs
- Dr. Rohit Jigyasu - Project Manager, Urban Heritage, CC & DRM, ICCROM
- Dr. Rama Pandey - SPA Bhopal
- Prof. S. Janakarajan - MIDS / SaciWATERS
- Dr. Animesh Kumar - Head, UNDRR, Bonn

Symbiotic relationship of Periurban areas with the urban centers by Shri G. Padmanabhan

Mr. Padmanabhan discussed the importance of urban centers and their interaction with periurban areas. Inadequate planning has increased the physical, social, ecological, and environmental vulnerability of periurban areas. The conversion and depletion of green spaces and water bodies into physical structures has resulted in various climate change impacts and disasters. He emphasized the need for robust developments through policy framework; risk-informed developments; and energy and water conservation.

Institutionalizing Periurban governance by Dr. Anil Gupta

Dr. Anil discussed the periurbanization patterns of different tier cities. He stated that these areas are used for institutional and social infrastructure developments, and tourism apart from the conventional utilization of waste management. He explained the disaster vulnerability of periurban areas with several examples. He emphasized the need for extension of the disaster management plan to periurban and rural areas; integration of new land uses and watershed-landscape based planning, and cross linkages.

Hyderabad Floods – Periurban Implication by Dr. Anant Maringanti

Dr. Maringanti demonstrated the chronological transformation in the landscape of the Hyderabad settlement area. He discussed the various issues of periurban areas due to their location, dynamic and constant shifting, changes in land use, and its categorization. Periurban



areas are prone to floods and other disasters due to disruption of natural resources, connectivity and drainage channels of water bodies, wetlands, and watersheds. He emphasized the need for resolution of land categorization and the property-land relationship.

Territorial approach for managing disaster risks and building resilience– learning from traditional knowledge by Dr. Rohit Jigaysu

Dr. Jigyasu discussed disaster risk management and resilience-building through several national and international indigenous knowledge systems of living with water. He stated that the heritage core of the urban areas is also adversely impacted by urbanization. It is accompanied by a complex climate change crisis and disasters due to loss of landscapes, local ecosystems; traditional linkage, and connectivity. He emphasized the historic urban landscape approach that helps in interlinking nature, culture, and people to reduce the disaster risks and their impact.

Water Resilience and Spatial Planning by Dr. Rama Pandey

Dr. Pandey discussed water stress, causes, consequences, and its approach in the Indian context. Water stress has resulted in groundwater depletion, water scarcity, large infrastructure deficit, and water contamination of drinking water sources. Encroachment on the natural channels, water bodies; Land use and land categorization changes; ecological loss, and depletion of natural resources have resulted in water stress. She emphasized the need for an ecological approach and restoration of degraded ecosystems to increase the resilience capacity of the periurban areas.

Discussion

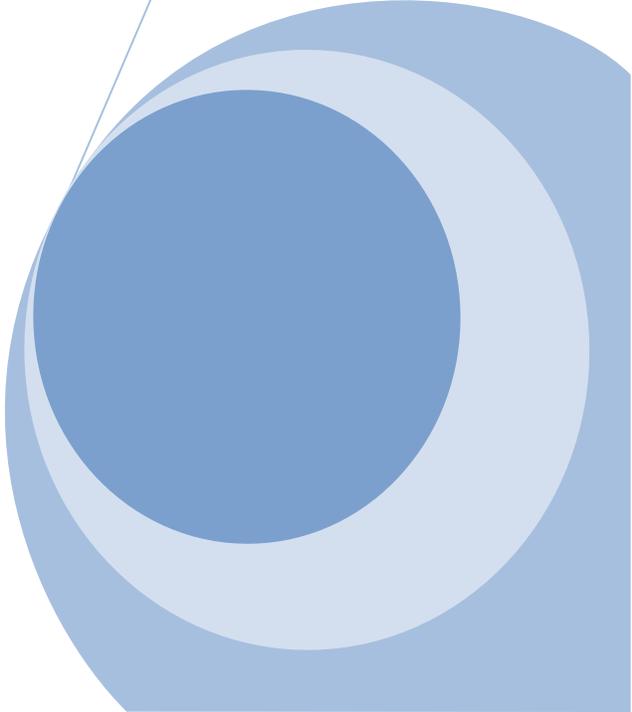
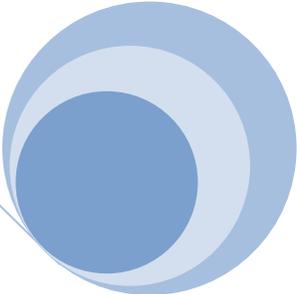
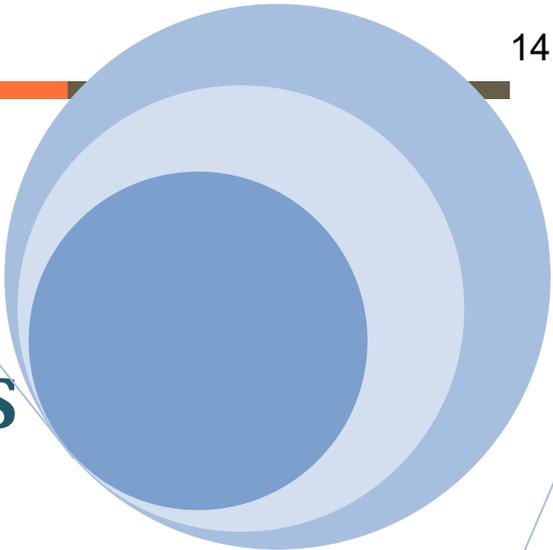
Dr. Animesh Kumar and Prof. S. Janakarajan were the expert discussants. They shared the reflections of the session. Process-centric risk management has to be focused rather than event-centric in Disaster Management. Floods can be considered as an opportunity with effective management. Synergy adaptation of Disaster resilience, climate change, and waste management is essential for reducing disasters.

VI. Closing Plenary

The final plenary compiled policy lessons from all the sessions towards the preparation of policy briefs.



ANNEXURES



TRANSFORMING PERIURBAN FUTURES

18 – 19 January 2022

CONCEPT NOTE AND
SCHEDULE

CONCEPT NOTE

The aim of this conference is to provoke discussions on pathways for sustainable transformations of periurban areas. Thus, it aims at exchanging on the complex nature and vulnerabilities of these areas. These analyses are the basis for discussing the need for specific policies for periurban spaces, which have a very specific character.

Currently, in India periurban spaces are experiencing the highest pace of transformation. Urban centres as engines of growth have become the focus of policy, investments, opportunities, migration, and resource demand. The rapid expansion of these large cities brings with it an expanding need for resources. As core cities become increasingly congested, much of the new urban growth takes place at the margins or the peripheries of the cities^{i ii iii}. The periurban space makes for a unique contested resource space with mixed urban and rural characteristics, functional linkages with the city, and reciprocal flows of people, resources, and services. Urban actors, land uses, services often compete with rural livelihoods, land uses, and institutions for periurban resources^{iv}. In the binaries of urban and rural categories in planning and policy, the unique complex character of the periurban is easily overlooked^{vii}. They fulfill important tasks within the respective larger urban agglomerations and need recognition as a separate type of spaces and a conceptualization beyond “urban to be”.

As cities expand, their future sustainability will be closely determined by how sustainably periurban spaces develop and transform towards ecologically and socially sustainable outcomes. The urbanization process manifests on the periurban space transforming it, being “simultaneously sustained and imperilled by the urban dynamics”^{viii}. The periurban space presents a transitioning socioecological space which offers both obstacles and opportunities for transformation to sustainability. These areas are characterised by complementariness, segmentation, heterogeneity, where both opportunities and exclusions are created^{ix}. The marginalisation and vulnerabilities created in the process of periurbanisation are well documented in literature. However potential directions and initiatives towards creating sustainable periurban futures have received significantly lesser focus.

The two-day online conference will pull together voices and perspectives from multiple sectors and stakeholders –government, academia, international development sector, and the grassroot civil society, - in order to understand both common and contested solutions and directions towards sustainable periurban futures. Understanding of periurban transformations will emanate from the four core themes –

- Water
- Gender
- Governance
- Disaster management

The two-day online conference is co-organized and supported by local, national and international organizations, including School of Planning and Architecture, Bhopal; South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), Hyderabad; University of Cologne; and Delft University of Technology.

CONFERENCE SCHEDULE

Time	Session Details
DAY 1: 18th January 2021	
02:00 -03:30 pm (IST) 9:30 – 11:00 am (CET)	<p style="text-align: center;">Opening Plenary: PERIURBAN TRANSFORMATIONS</p>
04:00-05:30 pm (IST) 11:30-01:00 pm (CET)	<p style="text-align: center;">Thematic Parallel Session 1: PERIURBAN WATER RESOURCES</p> <p>Concept: Periurbanisation in most cases results in changing and increasing pressures on water as a resource. First, in situ more water is needed, because water related activities increase. These are often conflicting and result in struggles over the scarce resource for different purposes – irrigation water, input for industrial processes and drinking water. Additionally, the growing urban centres demand more water and release grey or waste water into the periurban. Thus, specific periurban waterscapes emerge. New and old rules, new and existing infrastructures and external and internal actors create a landscape waterscape in which changing flows and qualities of water reflect the different demands, rules and regulations, and power structures. This session seeks to explore, how periurban waterscapes can be transformed in a sustainable manner.</p>
	<p style="text-align: center;">Thematic Parallel Session 2: GENDER IN THE PERIURBAN</p> <p>Concept: Gender relations are determined not only through social structures, but also through physical and spatial resource relations. Urban growth processes manifest on the periurban through rapid superimposition of new urban landscapes on the old rural ones, with an accompanying export of resources to the city core and increasing urban and industrial pollution of the decreasing stock of resources. Hegemonic geographical and resource spaces that are produced from these economic processes reflect and reproduce persistent social and gender relations. The unique social and political pressures and milieu of the periurban space mediate this co-production of space, resource, and gender. This session intends to understand the changing processes of production and reproduction of gender relations in the periurban context, emerging gendered vulnerabilities and opportunities, and pathways for transformations in gender relations in periurban spaces.</p>

CONFERENCE SCHEDULE

Time	Session Details
DAY 2: 19th January 2022	
	<p style="text-align: center;">Thematic Parallel Session 3: GOVERNANCE AND INFRASTRUCTURE</p> <p>Concept: Periurban areas are highly dynamic in nature and are not well-served in the traditional governance classification of urban and rural institutions. This is closely linked to the governance of infrastructures, as infrastructures typically represent collective goods and services. The dynamic context-specific and spatially distinct trajectories of the different periurban areas mean that simply creating a new third category for governance and planning is not necessarily a panacea. This session on “Periurban Governance and Infrastructure” will discuss and compare how different periurban areas, for different domains and challenges, develop new and promising governance arrangements, with a particular focus on infrastructure provision and management. The underlying question is how to develop and nurture new governance arrangements that can support a periurban transformation towards a sustainable future.</p>
<p>02:00 -03:30 pm (IST)</p> <p>9:30 – 11:00 am (CET)</p>	<p style="text-align: center;">Thematic Parallel Session 4: DISASTER AND RESILIENCE</p> <p>Concept: Rising water stress and the increasing occurrence of urban flooding in last one decade calls for understanding the resilience of different systems to cope up or recover from these. The periurban areas being rich in natural resources plays an important role in minimizing the urban flooding risks and addressing the water stress related concerns. The dynamics of growing pressures on scarce resources such as land and water in periurban areas is adversely affecting the inherent resilience provided not only to local dwellers but also to the densely populated urban areas. This session on ‘Disaster and Resilience to water’ will focus on ecosystem services of periurban areas and their role in enhancing community resilience to water stress and urban flooding. The deliberations will contribute to understanding the community resilience from the perspective of ‘static resources’ that acts as a buffer to reduce vulnerabilities and the qualities of ‘local dwellers’ that adapt and thrive in response to growing environmental challenges in the periurban areas.</p>
<p>04:00-05:30 pm (IST)</p> <p>11:30-01:00 pm (CET)</p>	<p style="text-align: center;">Closing Plenary: PATHWAYS FOR TRANSFORMING PERIURBAN FUTURES</p>

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- ⁱ UNDESA. (2014). World urbanization prospects. 2014 revision. Highlights. New York.
- ⁱⁱ Kundu, A., & Saraswati, L. R. (2016). Changing Patterns of Migration in India: A Perspective on Urban Exclusion. In *International Handbook of Migration and Population Distribution* (pp. 311-332). Springer, Dordrecht.
- ⁱⁱⁱ Sheng, Y. K. (2018). Peri-urban transformations in Southeast Asia. In *Routledge Handbook of Urbanization in Southeast Asia* (pp. 31-42). Routledge.
- ^{iv} Dupont, V. (2007). Conflicting stakes and governance in the peripheries of large Indian metropolises—An introduction. *Cities*, 24(2), 89-94.
- ^v Allen, A. (2003). Environmental planning and management of the peri-urban interface: perspectives on an emerging field. *Environment and urbanization*, 15(1), 135-148.
- ^{vi} Simon, D. (2008). Urban environments: issues on the peri-urban fringe. *Annual review of environment and resources*, 33, 167-185.
- ^{vii} Mehta, L., & Karpouzoglou, T. (2015). Limits of policy and planning in peri-urban waterscapes: the case of Ghaziabad, Delhi, India. *Habitat International*, 48, 159-168.
- ^{viii} Freidberg, S (2001) Gardening on the Edge: The Social Conditions of Unsustainability on an African Urban Periphery, *Annals of the Association of American Geographers*, 91:2, 349-369
- ^{ix} Marshall, F., & Dolley, J. (2019). Transformative innovation in peri-urban Asia. *Research Policy*, 48(4), 983-992.



TRANSFORMING PERIURBAN FUTURES

A Virtual Multi stakeholder Conference

18th | 19th JANUARY, 2022



Note: Participation Certificates will be provided to participants who attend atleast 3 full sessions in the 2-day conference





TRANSFORMING PERIURBAN FUTURES

A Virtual Multi stakeholder Conference
18th | 19th JANUARY, 2022

**Register
by 16th Jan.**

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DAY 2

19th January

Parallel Session
GOVERNANCE &
INFRASTRUCTURE

Closing Plenary

PATHWAYS FOR
TRANSFORMING
PERIURBAN
FUTURES

4:00pm
-
5:30pm
IST

2:00pm
-
3:30pm
IST

Dr. Sudhir Krishna
Ex. Secretary, MoHUA

Dr. Tathagata Chatterji
XIM University, Bhubaneswar

Mayur Kulkarni
Planner, MMRDA

Monica Bahl
Senior Advisor, GIZ

Dr. Sharlene L. Gomes
TUDelft

Aparna Soni
SPA, Bhopal

Partha Banerjee
The Researcher, Kolkata

Parallel Session
DISASTER &
RESILIENCE

2:00pm
-
3:30pm
IST

Shri G. Padmanabhai
Ex-head, DMU, UNDP India

Dr. Anil K Gupta
Professor, NIDM

Dr. Anant Maringanti
Executive Director, Hyd. Urban Labs

Dr. Rohit Jigyasu
Project Manager, Urban Heritage, CC
& DRM, ICCROM

Dr. Rama Pandey
SPA Bhopal

Prof. S. Janakarajan
MIDS / SaciWATERs

Dr. Animesh Kumar
Head, UNDRR, Bonn

Closing Plenary

PATHWAYS FOR
TRANSFORMING
PERIURBAN
FUTURES

4:00pm
-
5:30pm
IST

Note: Participation Certificates will be provided to participants who attend atleast 3 full sessions in the 2-day conference



SCHOOL OF PLANNING AND ARCHITECTURE, BHO PAL



Delft University of Technology



SOUTH ASIA CONSORTIUM FOR INTERDISCIPLINARY
WATER RESOURCES STUDIES



University
of Cologne

