



Mistra Urban Futures PROGRESS REPORT

2010-2014

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LIST OF ACRONYMS

ACC: African Centre for Cities
AHRC: Arts and Humanities Research Council (UK)
AURI: Africa Urban Research Initiative
Chalmers: Chalmers University of Technology
COP: Centre Operational Plan
CTLIP: Cape Town Local Interaction Platform
EPSRC: Engineering and Physical Sciences Research Council (UK)
ESRC: Economic and Social Research Council (UK)
GAPS: Governance and Policy for Sustainability
GMLIP: Greater Manchester Local Interaction Platform
GOLIP: Gothenburg Local Interaction Platform
IFHP: International Federation for Housing and Planning
IPP: International Pilot Project
KLIP: Kisumu Local Interaction Platform
KPI: Key Performance Indicator
KTP: Knowledge Transfer Project
LIP: Local Interaction Platform
QME: Quality Management and Evaluation
SHLIP: Shanghai Local Interaction Platform
Sida: Swedish International Development Cooperation Agency
SIRCUS: Salford Interdisciplinary Research Connecting Urban Society
SOCA: State of the Cities in Africa
SURF: Sustainable Urban and Regional Futures
WISE: Well-being in Sustainable cities

The Progress Report is prepared in collaboration between the Secretariat and the Local Interaction Platforms and in consultation with the Board of Mistra Urban Futures.

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Executive summary

The world's cities are rapidly growing into hubs of innovation, creativity and wealth – but also into places of environmental degradation, lack of sustainability and accessibility, where poverty and bad health are increasing, solutions and transformative processes are badly needed. Co-creation and co-production of knowledge, sharing experiences and forming new policies in a collaborative way are necessary. Mistra Urban Futures contributes significantly to the global responses and efforts to meet the challenges, in practice and in research.

Since it was established in 2010, Mistra Urban Futures has launched a wide range of projects and programmes, organised a series of significant events, refined the methodology of knowledge co-production and published a considerable number of reports, articles and conference presentations. Mistra Urban Futures' international platforms have been set up and engaged widely with stakeholders and local partners. The Centre has achieved a position at the cutting edge of urban research in partner cities and beyond, and is developing into a global player for changing and challenging discourses and practices in sustainable urban development.

Mistra Urban Futures is in the midst of a decade-long effort to revitalise and revolutionise academic research and practice in urban settings. Today's cities are typically managed within traditional organisational structures, but the urban challenges go beyond the capacities of separate departments of policy-making, planning, administration and academic knowledge production. The Centre was founded with the aim of addressing a variety of city-based challenges at global and local levels, drawing on the wide array of knowledge and expertise of various stakeholders and participants in sustainable urban development. Ending poverty, and creating a sustainable urban future for 3 billion people call for collaboration and open minds to build on new knowledge.

Mistra Urban Futures was formally established in early 2010. An agreement was signed between Mistra, the Swedish Foundation for Strategic Environmental Research, and Chalmers University of Technology to fund and host an international centre for research and practice on sustainable urban development. The Gothenburg Consortium¹, which consists of seven partners including municipal and regional public authorities, and the two universities in Gothenburg, agreed to match the Mistra funding. The Swedish International Development Cooperation Agency (Sida) contributed additional funding specifically to support the Centre's activities in Africa.

Five pilot projects were carried out in 2010–2011 to implement and evaluate a methodology for knowledge co-production, which was to become the signature approach of Mistra Urban Futures. The pilots were formulated by the Consortium partners in the application to Mistra, based on shared challenges. In addition to Gothenburg, Local Interaction Platforms (LIPs) in Greater Manchester, Kisumu and Cape Town were set up to reflect their local contexts and issues and a further LIP was planned for Shanghai.

¹The Gothenburg Consortium: Chalmers University of Technology, Göteborg Region Association of Local Authorities (GR), City of Gothenburg, University of Gothenburg, IVL Swedish Environmental Research Institute, the County Administration Board of Västra Götaland, Region Västra Götaland

Based on the experiences from the pilot projects in Gothenburg and the international LIPs, the first Strategic Plan was produced in 2011, covering the period 2012–2015. The focus areas - Fair, Green and Dense - were introduced, which covered the social, environmental and economic dimensions of sustainability.

The Centre is financed according to the principle of co-funding. The total budget for the period 2010–2014 was SEK 235 million, of which Mistra and the Gothenburg Consortium each funded approximately 30% and Sida 11%. The LIPs have also attracted external and in-kind funding, reflecting their increasing visibility and embeddedness within their host cities. About 600 people have been engaged in the Centre over the past five years. More than 70 projects have been carried out or are proceeding, resulting so far in more than 400 publications.

A bibliometric study carried out in December 2014 points at more than 500 citations with a considerable geographical spread for the approximately 400 publications that were published or submitted at the time.

Knowledge co-production

Societal problems, particularly those at the urban level, are increasingly complex and require transdisciplinary research from different fields of knowledge and from multiple actors inside and outside the university. The idea of ‘knowledge co-production’ has therefore attracted increasing interest. Knowledge of how to address urban challenges must be collected and developed in dialogue and collaboration between different stakeholders that represent practice, communities and academia. This methodology is the basis for all activities at Mistra Urban Futures.

A central output of the Centre is an anthology entitled ‘Co-Producing Knowledge for Sustainable Cities: Joining Forces for Change’ which bring together experiences from the different partners involved in Mistra Urban Futures. It was written by participating researchers and practising professionals to generate understanding of the dynamics and drivers for co-production in different urban contexts and support mutual learning and ongoing research.

A core mission of the Centre is to create joint arenas to develop, support, translate and communicate locally specific and globally generic knowledge on sustainable urban development. This has meant experimenting with different structures and approaches to foster collaborative work between the Centre’s platforms.

Global engagement and cross-platform initiatives

Mistra Urban Futures is a key partner in a global campaign to develop a specific urban perspective in the Sustainable Development Goals, the Urban SDG, which will replace the UN Millennium Goals in 2016. This illustrates the potential of the Centre to play a leading role and strengthens its profile and position in the global arena.

The Governance and Policy for Sustainability (GAPS) project is the main cross-platform initiative for Mistra Urban Futures to date. The project examines the challenges and transition pathways for sustainable cities across the LIPs and includes a comparative review of the governance and policy dimensions of urban sustainability challenges. The GAPS project reflects the philosophy of the Centre. The work has led to the identification of several criteria for better policy-making, such as the importance of making joint spaces for discussions. Two stages have been completed. A third stage is being planned for 2015, focused on developing a general framework needed to understand how sustainability knowledge is identified and collected.

Gothenburg Local Interaction Platform (GOLIP)

The first Local Interaction Platform was set up in Gothenburg after Mistra had accepted the bid. GOLIP was developed during the build-up phase in 2010-2011 especially through the initial five pilot projects. The platform is made up of the seven Consortium partners (see footnote page 5) together with three associated partners: the Swedish Transport Administration, SP Technical Research Institute of Sweden, and 'White' – an international architecture consultant.

Critical urban challenges were identified and defined by academic and non-academic partners in the Gothenburg Consortium, including segregation and gentrification issues, as well as adaptation to climate change. GOLIP addresses these core issues by supporting the development of projects and joint knowledge production. Creating and supporting processes to capture both scientific and practice-based knowledge to address sustainability-related challenges have been priorities.

The role of GOLIP is to be a catalyst. It has been able to offer an environment both for initiating projects and networks, and for communicating results and findings. Major research themes include social integration; sustainable urban lifestyles; integrated social and ecological urban systems; business-driven sustainable urban development; and spatial urbanisation and competition for urban resources. One example of direct impact is the influence on the City's climate strategy.

Greater Manchester Local Interaction Platform (GMLIP)

In Greater Manchester, previous research at the University of Salford Manchester's Centre for Sustainable Urban and Regional Futures (SURF) was the building block for developing co-production processes to support the new LIP.

A core objective of GMLIP is to question and understand how the urban sustainability agenda is changing in the context of multiple urban crises. A second objective is to bring together the knowledge and skills from various stakeholders to integrate this knowledge and develop more sustainable pathways for Greater Manchester. The GMLIP draws on an intellectual background focusing on urban transition theories, including the so-called "right to the city" perspective. Questions of access and inclusion are central in the research of the GMLIP.

In 2013, the terms of reference for the Greater Manchester Partners (GMP) group were agreed to and the group formally constituted. Matching funds for Mistra Urban Futures activities at GMLIP have been provided by the University of Salford Manchester, as well as by local partners, including the Greater Manchester Low Carbon Hub and Creative Concern. Specific projects have been supported by the UK Research Councils for Engineering and Physical Sciences, Economic and Social Sciences and the Arts and Humanities, as well as by Carillion, a private sector company.

Kisumu Local Interaction Platform (KLIP)

Moving from the Global North to the Global South, Kisumu in Kenya is a different environment from those of the first LIPs. Yet, the concept of knowledge co-production is seen as a tool to develop the economy and the well-being of citizens, the city and the county in a sustainable way. Key development challenges in Kisumu are urban safety, poverty reduction, social sustainability, the empowerment of youth and women, and environmental conservation and protection. As in many other cities, urban population growth is leading to an increased pressure on natural and other resources.

Two key themes at KLIP are Ecotourism and Marketplaces. Each theme encompasses the need for capacity building, knowledge production, networking, sharing and

participation. Several projects have been generated within these themes, which are carried out in collaboration with local partners and stakeholders.

Through collaboration between KLIP and GOLIP, Mistra Urban Futures has piloted the Mistra Urban Futures Research School. A core team, comprising four Kenyan and three Swedish PhD students, is central to the ongoing research work at KLIP as part of the collaboration with GOLIP. In addition to this, local postgraduate support has been strengthened with 24 PhD and 45 MSc students involved in project work at KLIP.

An important result of the activities in Kisumu is the establishment of a permanent knowledge centre in the form of the KLIP Trust, which represents a broad circle of stakeholders including residents, public and private sectors, civil society and academia. Activities at the KLIP are funded by Sida and receive increasing in-kind contributions from local partners.

Cape Town Local Interaction Platform (CTLIP)

In Cape Town, the CTLIP is housed at the African Centre for Cities (ACC) at the University of Cape Town. The ACC facilitates critical urban research for the promotion of vibrant, democratic and sustainable urban development. ACC's partnership with Mistra Urban Futures has enhanced and diversified its already established engagement in knowledge co-production.

The CTLIP builds on existing ACC programmes that have a proven track record, including the CityLab Programme with a focus on empirical research that brings together researchers and practitioners from different disciplines and professions to build sustainable human settlements. The Knowledge Transfer Programme, introduced as a direct outcome of the establishment of the CTLIP, is a partnership programme with the City of Cape Town. Generating knowledge that is both policy relevant and provides alternate theoretical perspectives grown out of local experiences and evidence, are the key objective met through an exchange programme between city officials and researchers who spend periods of time at each other's work places.

Dedicated funding from Sida has added a further geographical dimension to the CTLIP's work, by broadening the focus to include urban processes, particularly poverty reduction and inequality, across Africa. The Africa Peer Learning and Dissemination Programme has supported the development of the African Urban Research Initiative, a network of urban research centres across the continent focused on capacity building and strengthening of institutions. The Urban Africa Portal is a web based platform that has also been supported to widen the dissemination of research results and news on urban developments across the continent.

Shanghai

Mistra Urban Futures has engaged in negotiations to launch collaboration with Tongji University in Shanghai which was originally intended to form the basis for a Local Interaction Platform. The cooperation was built on an existing partnership between Chalmers and Tongji and was also supported by the sister-city relationship between Gothenburg and Shanghai. Whilst an active Local Interaction Platform has not been established, a number of research projects have been initiated and other forms of possible partnership have been explored.

Communication and dissemination

In order to create added value for partners and result in policies and actions, knowledge co-production must take into consideration the tools, methods, structures and organisational set up necessary for the dissemination and sharing of knowledge. Networking, games,

events, online technologies and social media are important tools to complement reports, articles, conference presentations and other traditional tools.

Mistra Urban Futures has established a structure for dissemination and communication, with the website as the hub. The site was redesigned in 2013 to provide a better access to publications and project updates. Furthermore, the 'Platform' website in Greater Manchester was established as a portal for sustainability, designed to bridge the gap between decision-makers and citizens in the city-region. The 'Urban Africa Portal' in Cape Town was established in 2012 as a multilingual platform and additional communication channel for urban news, research, commentary and tools across Africa.

A wide range of events and activities have been initiated, developed and carried out at the LIPs. They include a well-attended series of 'Urban Lunch-time' presentations in Gothenburg as well as organising 'Arena Hållbar Stad' – the final conference for the Swedish Government Delegation for Sustainable Cities, international workshops in Greater Manchester, the 'KLIP Event Days' in Kisumu and 'Urban Debates' in Cape Town. The Centre has also actively participated at international events such as Rio+20, World Urban Forum 6 and 7 and a recent International Federation for Housing and Planning (IFHP) conference.

Outcomes

Mistra Urban Futures has had significant impact according to a range of measures and criteria. Outcome studies carried out at all the LIPs in 2014 demonstrated the impact of the work to date and the potential to generate further positive impacts as projects conclude in 2015.

The data collected in Gothenburg highlight increased and enhanced interaction among stakeholders. Mistra Urban Futures has operated as a facilitator of this networking and interactions, not least through early dialogues between citizens and policy-makers. Increased engagement among partners and stakeholders is also reported from the other platforms, including spin-off effects from the Knowledge Transfer Programme in Cape Town which has gained recognition in a wide context. The work carried out by Mistra Urban Futures has had direct impacts on agenda setting and policies, influencing development plans and budgets in all cities of the LIPs.

Individual and institutional learning has been significant through Mistra Urban Futures programmes. The embedded researchers and city officials in Cape Town, the PhD students in Kisumu, and the practitioners and policy-makers in Gothenburg and Manchester have all found the opportunity for learning through experience, reflection and exchange of knowledge highly valuable and appreciated. Researchers have gained access to new research questions and knowledge. Across the different cities, Mistra Urban Futures has also contributed to systemic capacity and urban change, especially through creating new spaces for institutional learning and actively transforming the existing structures and processes of universities and other partner organisations. Collectively, these experiences build momentum for change and new ways to address urban development issues.

Lessons learnt

Through Mistra Urban Futures, strong partnerships have been built in four LIPs. The Centre has developed its management by learning from experiences of cultural differences as well as readjusting expectations and ambitions. Working methods, processes and structures have been adapted in response to feedback and knowledge gained during the process of carrying out a diverse and rich project portfolio.

All LIPs have had similar experiences with co-production: it takes time, and requires careful management of the expectations of all parties involved. Other lessons include the need for extended partnerships, a more focused thematic approach, and administrative efficiency.

Through all this, the learning and experiences from creating and managing projects, collaborating with partners and raising funds have allowed the Centre to establish itself at its current position at the cutting edge of urban research in partner cities and beyond. An international network has been built; working partnerships have been established by all local partners; the co-production methodology has been refined and is being put into practice; results from the research have been presented in numerous publications and events; and examples of impact on governance and policies can be identified in all partner cities.

Furthermore, the Centre and its partners, engaging over 600 people from academia and practice, have developed an efficient management structure for their collaboration; have continued to improve quality control, and have established administrative routines to safeguard proper financial control and follow-up of procedures and results.

The experiences gained by the Centre since the start have formed the Mistra Urban Futures of today. In particular, the operations of the Centre have been evaluated and thoroughly discussed with various stakeholders throughout 2014. The lessons learnt, summarised above, are important points of departure for the Strategic Plan for 2016–2019 and for strategic decisions on the future of Mistra Urban Futures.

Overview

Mistra Urban Futures is a research centre and a platform for changing and challenging the discourse and practices in sustainable urban development. Since its establishment in 2010, the Centre has transformed the traditional academic model for producing new knowledge in the field of sustainable urban development through a collaborative and innovative endeavour, one that is both scientifically valuable and relevant in practice. Mistra Urban Futures has become a space for interaction and closer collaboration between researchers and practitioners.

Mistra Urban Futures is a distinctive Centre which co-produces new and integrates existing knowledge relating to sustainable urban development to develop academically excellent and practically relevant outcomes. This work constitutes the heart of the Centre's research, partnerships and activities over the past five years.

The projects and publications of Mistra Urban Futures have generated benefits and added value for a wide range of stakeholders. This knowledge and understanding cuts across many scientific disciplines and fields and has been published in journals in diverse areas of scholarship, including urbanisation, environment, humanities and science, business and innovation, and methodology.

An independent societal outcomes study, carried out in Gothenburg in 2014, confirmed that Mistra Urban Futures has created a platform for interaction in which researchers and practitioners and their organisations have come closer together at a practical level: 'This activity and its outputs generate benefits and positive outcomes for a wide range of stakeholders'. Participants in Mistra Urban Futures see that the endeavour 'plays – and aims to play – a more transformative role, exceeding knowledge production in a traditional academic sense'. According to the report, Mistra Urban Futures today serves as a platform for changing and challenging the overall discourse relating to urban development practice (see Annex 4 for details).

Mistra Urban Futures has come a long way since its establishment in 2010, as the programme and its participants continuously learn from their experiences. Today, the Centre has reached a position at the forefront of urban research, with established partnerships in many parts of the world. The Centre's specific co-production methodology has been successively improved and is tested in practice. Research findings have been disseminated locally and globally. Tangible and sustainable outcomes can be identified in all partner cities.

"Mistra Urban Futures is a hub of knowledge. It makes it easier for us as politicians to add sustainable urban development to the political agenda"

MAYOR ANNELI HULTHÉN

Voices on the Centre

Mistra Urban Futures is becoming progressively more global in influence and reputation. Gothenburg is the city where the story started. A strong local and regional consortium realised the need for different kinds of knowledge for sustainable urban development, and was prepared to match the funding by Mistra to establish this new Centre.

‘Mistra Urban Futures is a hub for knowledge’, says Anneli Hulthén, Mayor and Chair of the Executive Committee of the City of Gothenburg. ‘It makes it easier for us as politicians to add sustainable urban development to the political agenda.’

‘The network is invaluable’, says Ulf Moback, an urban planner who led a project on climate change and adaptation specifically focused on sea level rises for the City of Gothenburg and Mistra Urban Futures. ‘I couldn’t have done this study without the support from Mistra Urban Futures’. Moback’s work has been able to elaborate the view on how a city can adapt to climate change based on alternative approaches: attack, retreat and defence. The results of the project have been assimilated into city planning and gained attention in other urban regions.

In Greater Manchester, the Association of Greater Manchester Authorities (AGMA) is partnering with GMLIP to examine sustainable urban development issues particularly around climate change mitigation and adaptation. The Director of Environment for AGMA, Mark Atherton, says, ‘I was keen to engage because I wanted to get greater interaction with the local universities, harness their expertise and bring this to support development of regional policies. But also I wanted to broaden out the engagement the Greater Manchester Low Carbon Hub had with people in Greater Manchester. There is now greater rigor in how we go about testing and understanding what changes are occurring, and what change is required. Mistra Urban Futures gives me outside voices and access to expertise’.

Researchers from the Centre for Sustainable Urban and Regional Futures (SURF) at the University of Salford in Manchester and the Gothenburg Consortium had met during the application process. The two organisations clearly complemented one another, and so a partnership in Greater Manchester was established, soon to be joined by AGMA and others.

From there, the program took off in Africa. The partnership in Kisumu (KLIP), based on long relations with two local universities, has flourished under Mistra Urban Futures. The Minister of Tourism for Kisumu County, Rose Kisia Omondi, said in a recent interview that KLIP’s Ecotourism project ‘will definitely supplement our efforts to make Kisumu County the destination of choice in Kenya. Ecotourism should lead to a vibrant tourism industry, which in turn should contribute to employment creation, increased income, cultural exchanges, opening up of remote regions and general improvement in infrastructure in the remote areas [and] communities’. Furthermore, the independent outcomes study conducted in 2014 concludes that KLIP’s ‘activities are improving the livelihoods of the local communities and are successfully addressing urban challenges such as food insecurity, climate change, poverty reduction and urban insecurity within Kisumu City and its surroundings’.

The African Centre for Cities at the University of Cape Town became the second partnership in Africa for Mistra Urban Futures. The embedded researchers in the city administration within the Knowledge Transfer Project, carried out by the CTLIP, have had an important impact on local development. ‘Cape Town has a greater ability to address energy and climate change issues and implement programmes because we have academic institutions engaging with the City’, says Sarah Ward, Head of Energy and

Climate Change, Environmental Resource Management Department of the City of Cape Town. ‘It has been helpful to have a person dedicated to focusing on commenting on policy and strategy coming from local, provincial and national government which city staff often does not have the time to do: from the National energy efficiency Strategy, to the National Climate Change Response policy, to the proposed carbon tax’.

Mistra Urban Futures must aim high to reach its goals. The Centre must continue to conduct quality research within its existing projects and partnerships, while building new partnerships in different places to build and apply the knowledge gathered in real-world situations. As Lisa Bomble, a PhD student at Chalmers and GOLIP, says, ‘If knowledge isn’t used, then what use is it? I think there’s a lot of academic knowledge buried that only peer reviewers see. If it stays buried, then we keep reinventing the wheel. I don’t see why we shouldn’t always connect research to practice, as we do at the Centre’.

More voices from the projects are presented in Annex 1.

The challenges, then and now

The ideas, thoughts and initial work that led to the establishment of Mistra Urban Futures date back to 2008–2009, culminating in the final proposal from the Gothenburg Consortium submitted in March 2009. Mistra, the Swedish Foundation for Strategic Environmental Research, had observed the advanced but somewhat fragmented Swedish research on sustainable urban development, and wanted to support the formation of a world-class research centre in the field. In parallel, similar ideas were being developed in the Gothenburg region, by stakeholders that eventually formed the Gothenburg Consortium, consisting of seven partners, including the two universities.

The challenges then, as perceived by both Mistra and the Consortium, were described as a need for long-term focus and commitment to sustainable development. A key challenge was that the way knowledge was produced needed to be changed, including the development of education strategies that support collaboration between research and practice.

Now, five years later, numerous valuable contributions towards addressing these challenges have been made by researchers and practitioners within the Mistra Urban Futures network. At the same time, it is fair to say that the challenges remain – not least thanks to a more widespread understanding and engagement in sustainable urban development on a global scale. Mistra Urban Futures has an important role to play, building on the experiences and knowledge of the first phase.

There is evidence from within the global field of sustainable urban development that the call for trans-disciplinary research is gaining momentum. The Centre has demonstrated how the goals of academic excellence, relevance and impact are not exclusive and can be achieved through new different approaches to co-production. However, trans-disciplinary research and co-production are still not fully recognised and reflected, for example, in academic journals and it can still be a challenge for co-creators of knowledge to publish results with high scientific impact. We are at the vanguard of these new developments and theoretical and methodological debates.

A number of prospective future partners are emerging around the world, in cities and regions with strong research platforms and engaged and committed public sectors, who recognise the distinctive and experimental nature of the Mistra Urban Futures centre. Cities with an interest in these issues include Houston and Los Angeles (US), Curitiba (Brazil), Bangalore (India), and Melbourne (Australia). The success and global visibility

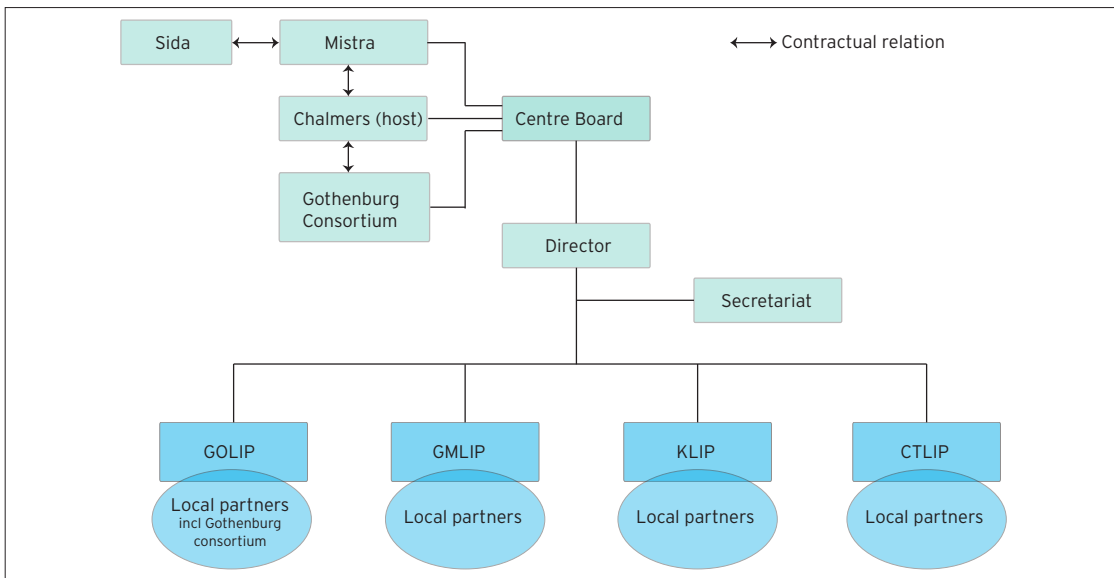


Figure 1. Mistra Urban Futures – a Centre built on partnerships

of Mistra Urban Futures has made possible the extension of the Centre to include new partners or LIPs for next phase (from this list or elsewhere). This will proceed in terms of criteria established in the Strategic Plan.

The outline of this report

The following chapters will take the reader through the development and activities of Mistra Urban Futures, starting with an overview of the Centre’s development, from the call for proposals until now. Establishing partnerships globally and locally are key elements of the Centre, which also are described in Chapter 2.

Conditions and context are different in the four current partner cities with established LIPs. Chapter 3 describes the application of co-production and the specific challenges and research questions that are addressed by tailored research agendas and project themes in the four cities. Main findings to date are also summarised here. Information on the projects is found in Annex 2 and information about publications is presented in Annex 3.

The trans-disciplinary knowledge co-production process, that distinguishes Mistra Urban Futures from most other research centres, puts specific demands on the tools, methods, structure and organisation of dissemination. This is captured in Chapter 4, which also highlights major outcomes, identified through evaluations and outcomes studies carried out at all four platforms. These studies are presented in Annex 4. Events for communication and dissemination, which the Centre has organised or been engaged in, are listed in Annex 5.

The Centre and its partners have developed efficient management in their collaborations and continued to improve both quality and financial control. These issues are described in Chapter 5, followed by the Centre’s financial arrangements in Chapter 6.

Chapter 7, finally, summarises the main reflections and lessons learnt at both global and local levels. These findings lead the way towards the Mistra Urban Futures Strategic Plan for 2016–2019.

Building a centre for sustainable urban development

Mistra Urban Futures has come a long way since its inception in 2010. Today, it is a well-functioning Centre, with a set of established partnerships in different parts of the world, and well on its way to becoming a highly recognised player at the cutting edge of sustainable urban knowledge production. This is achieved through a distinctive ethos and methodology of trans-disciplinarity, the active partnership between academic researchers and partners in the public and private sectors and civil society, and co-production as detailed in Chapter 3. This chapter surveys the processes and organisational aspects of the Centre's inception and first operational phases in a broadly chronological perspective.

FROM CALL TO OPERATION

The call from Mistra

In 2008, the Swedish Foundation for Strategic Environmental Research, Mistra, invited Swedish universities to form consortia with non-university partners to develop proposals for a centre for urban futures. A requirement of the call was that these consortia should be founded on the principle of matching funds, where the consortia and Mistra would contribute equal parts.

The 'Call for Urban Futures applications' motivated the Centre for Environment and Sustainability (Göteborgs Miljövetenskapliga Centrum, known as GMV), a joint centre between the University of Gothenburg and Chalmers, to initiate an application and to form the Gothenburg Consortium. At an early stage GMV invited researchers from the Chalmers and University network and five other key actors within urban development in western Sweden to join them. The task was to look beyond the immediate future and to focus on significantly furthering international research, knowledge and capacity for integrated urban development. An important aspect of this international focus was to initiate the establishment of an international network of partners.

"Transdisciplinarity is the active partnership between academic researchers and partners in public and private sectors and civil society."

The Gothenburg Consortium was formed between seven partners. Among the public authorities, the City of Gothenburg and the Gothenburg Region Association of Local Authorities (GR) represent the local and metropolitan levels. Representatives of the regional level include Västra Götaland Region (VGR), the provincial political body, and the County Administration Board, which is the regional arm of the national government.

The research and educational organisations include the host institution Chalmers, the University of Gothenburg and the Swedish Environmental Research Institute (IVL) a leading institute for applied environmental research and sustainable solutions.

The final proposal was submitted in March 2009. In August 2009, the Mistra Board awarded the bid to the Gothenburg Consortium. Soon after, Mistra signed an additional agreement with the Swedish International Development Cooperation Agency (Sida) to join the initiative as a co-funder for specific elements. The Mistra Board decision was for a possible 10-year commitment, including a build-up phase in 2010–2011, a first fully operational phase in 2012–2015, and a second phase in 2016–2019. The commitment is subject to evaluation and decision of funding between the two operational periods and this Progress Report on the first phase forms part of the mid-term evaluation.

In Gothenburg the consortium also accepted four associated partners to the Centre, the Swedish Transport Administration, the Swedish National Board of Housing, Building and Planning, SP Technical Research Institute of Sweden and White Architects.

Partnerships built on commitment and joint responsibility

Given the diversity of mandates and goals of the Consortium partners, it was especially important to develop clear strategies to ensure commitment and joint responsibility to the Centre. Strategies to keep the partners engaged and connected to the work include the following guiding principles: co-financing, shared leadership, and the promotion of similar methods and ethos of working.

Co-financing has been reformulated from being a requirement for Mistra funding to being a central strategy for promoting joint responsibility and commitment to the Centre. In practical terms, the requirement for co-financing in times of limited economic resources meant that all of the partners have to justify prioritising funds for the Centre within their respective organisations. This has created a financial stake in the organisation and outcomes of the Centre that promoted active involvement in the application-writing process and the subsequent organisation and leadership of the Centre. In this way, the work of Mistra Urban Futures is directly linked to ‘wicked problems’– problems that are difficult to solve because of incomplete, contradictory, and changing requirements – under the mandates of the consortium partners.

The second strategy, built directly upon the first, is to focus on joint leadership and ownership. Here the requirements for co-financing were translated into joint leadership processes where all of the public and research organisations share in the decision-making and management of the Centre, from the very start of the application-writing process. Joint leadership has further been operationalised by recruiting Centre staff from both practice and research, as well as through the co-leadership of projects, where practising professionals and researchers are jointly responsible for project development; data collection, analysis and communication; and implementation of project results.

A third strategy to ensure a high degree of commitment and responsibility is to focus on developing and testing the Centre’s trans-disciplinary research approach through knowledge co-production, both within management and leadership, and in projects, activities and implementation. This final strategy is based on operationalising the Centre’s ethos: namely, that everyone is a knowledge bearer, producer and user. Thus the responsibility and mutual commitment needed to create shared purposes and processes were supported by the requirements for matching funds from all of the Consortium partners, were based on the joint ownership and leadership of the Centre, and were promoted through inclusive and engaged processes for knowledge co-production.

The set-up phase 2010-2011

After preparatory work during 2009, Mistra Urban Futures officially began operations in February 2010, when Mistra signed an agreement with Chalmers, whereby Chalmers consented to host a new centre for sustainable urban development. The Centre was prepared during 2009 by an interim Board and working group, and set up in line with the proposal to Mistra. The new centre was funded by Mistra, Sida and the Gothenburg Consortium. In addition, the activities that would be carried out by local partners in Cape Town, Kisumu, Greater Manchester and Shanghai would be supported with local co-funding. A vision was stated in the Consortium application:

A world leading Mistra centre in Gothenburg that provides innovative solutions for sustainable urban development in its globally varying forms and contexts that are academically excellent, practically effective and socially relevant.

The vision was supported by four goals:

- To integrate diverse knowledge and experience from research and practice that can more effectively and accountably promote social change for sustainable urban development.
- To develop knowledge, methods and instruments for research and practice that can be translated and implemented in different urban development contexts.
- To increase the institutional capacity for dealing with long-term uncertainties and complex environmental and social goals.
- To establish the necessary structures of support for comparative case studies and international knowledge exchange and applications.

During the start-up of the Centre in 2010 and 2011, a large number of stakeholders in Gothenburg were involved in the creation of the research agenda, as well as in five pilot projects that were started to test different ways of working with co-production. The pilots were outlined in the application to Mistra, and prepared during 2009. The spirit was positive and many were curious about the new Centre and the idea that 'everyone is a knowledge producer'. Such interest raised expectations and put pressure on the participating researchers and administrative staff at the core of the Centre. At the same time, sizable efforts were made to organise the Centre with regard to cooperative agreements, administration, quality control and, not least, building the partnerships with the local and international partners.

During the initial stage, an interim director was appointed. In 2011, a permanent Centre Director was appointed. A Board was appointed in 2010 and 2011. Retrospectively, the first two years established great momentum in terms of commitment and interest for the Centre, through the partner's engagement in financing, structuring and organisation of the Centre participation in the pilot projects, as well as through the development, application and evaluation of a framework for trans-disciplinary co-production. However, it can also be concluded that the size and complexity of the operation was underestimated, by Chalmers, the rest of the Gothenburg Consortium and Mistra, which led to a diverse and somewhat disparate idea of the Centre's role and priorities. This disconnect, together with the need for improvements regarding administration and quality control, was highlighted in an independently commissioned start-up review in 2011.

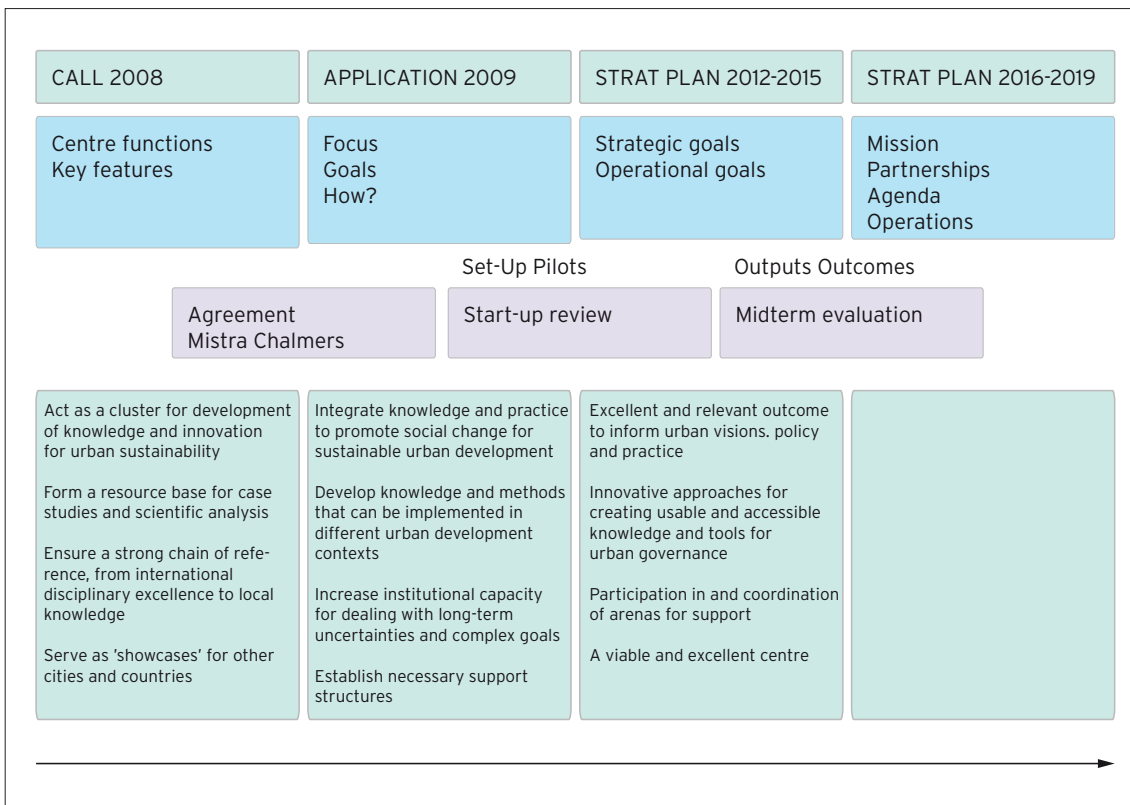


Figure 2. From Call to Action

In February 2012, Mistra informed the Centre that the budget and total funding for 2012–2015 would be reduced from the previously decided SEK 88 million to 64 million, because the initial establishment of the Centre had taken longer than estimated. In February 2013, given the positive results and improved operations and systems of the Centre, Mistra decided to increase the total to SEK 75 million.

The strategic plan for 2012-2015

The experiences from the pilot projects in Gothenburg, the activities in Greater Manchester and Cape Town and the start-up review collectively informed the development of a strategic plan. This was prepared for 2012–2015 with a clear vision and research agenda, as well as goals that were at both a strategic and an operational level. Furthermore, administrative staff were hired for the Centre, which developed an organised yearly planning process, as well as routines for economic and content-oriented follow-up.

The Strategic Plan for 2012–2015 reworded the vision to better reflect the needs and role of the Centre:

The vision of Mistra Urban Futures is to increase capacities to transform current, unsustainable urban development pathways to more sustainable urban futures in the global South and North. This vision will be met by an internationally leading research and knowledge centre which produces cutting edge practice and research.

The vision was backed up by a mission statement:

The mission of Mistra Urban Futures for the years 2012–2015 is to increase the capacity among individuals and institutions to deliver new knowledge, approaches, tools, and arenas needed to provide fair, green, and dense urban environments. By this we mean cities that are just and prosperous, green and healthy, and liveable and effective.

The plan further elaborated the focus on Fair, Green and Dense. Each area was considered to represent a component of sustainable urban development practice and research that is critical to Mistra Urban Futures research. These three areas encompass the three dimensions of sustainable development – social, environmental, and economic, with applicability to urban challenges

FAIR Cities: Securing urban equity, social inclusion and urban commons. Examines how things can be done differently to achieve greater fairness in future cities, with a focus on access, rights and opportunities.

GREEN Cities: Managing resource constraints and climate change. Addresses the critical need to develop localised responses to resource constraints and their distribution, and tackle global risks in cities of the global South and North.

DENSE Cities: Promoting access to urban qualities and services. Explores the implications of urban density, both conceptually and contextually, thereby enabling alternative approaches to the densification of cities using the diversity of urban qualities, equitable urban access and liveability as key concepts.

Furthermore, the plan envisaged that the programme should be based on ideas of co-production (referred to as ‘modes’² throughout this report) and that knowledge should be packaged and disseminated in user-friendly ways (referred to as ‘tools’). The following four strategic goals, backed up by ten operational goals, were set:

The provision of excellent and relevant knowledge-based outcomes to inform urban visions, policy and practices

1. Create expertise and knowledge within the three focus areas FAIR, GREEN and DENSE at all five Local Interaction Platforms with a focus on both policy and research contexts. This will be initiated through developing the state-of-the-art within both science and practice in the Local Interaction Platform (LIP) contexts.
2. Develop an arena for international comparative projects, synthesis and knowledge exchange in collaboration with existing and new partners. This will integrate local, trans-local and international levels by linking local and generic knowledge production

The provision of innovative approaches for creating useable and accessible knowledge and tools for urban governance

3. Develop research and expertise within trans-disciplinary knowledge production where research and practice collaborate on equal terms. This includes developing and applying innovative theoretical and methodological approaches for joint knowledge production.
4. Develop new tools and skills for knowledge application, dissemination, and learning in order to build capacity for effective translation and active implementation of results in the LIP contexts.
5. Establish a Research School in Sustainable Urban Futures active at all LIPs, in support of the Centre’s PhD students.

² Modes is one of five main concepts in the Strategic Plan: Fair, Green, Dense, Modes and Tools, where Modes stands for joint knowledge production and problem-solving and Tools for means and methods for knowledge application, dissemination and learning.

The participation in and coordination of arenas, forums and partnerships that can support and channel the economic, material and human resources needed for sustainable urban transformations

6. Develop the consortia partnerships as well as become a key actor, supporter, and participant for European and international outreach via networks, arenas and forums for knowledge and capacity building for urban development.
7. Ensure broad communication of centre output through a well-functioning and effective communication strategy and plan.

A viable and excellent Centre with effective organisational structures and leadership, efficient fundraising, and transparent quality management and evaluation

8. Establish an effective organisation regarding leadership, decision-making, staffing and administrative and economic systems at both the Centre and LIPs.
9. Develop and implement fundraising strategies for the Centre, including tailored strategies for the different LIPs and establishing consortia.
10. Develop and implement a trans-disciplinary system for quality management, evaluation and impact analysis which combines social relevance and effectiveness with scientific excellence and innovation.

The first operational phase

The Strategic Plan for 2012–2015, as approved by Mistra and Sida, outlined the way forward after the start-up phase. An overall qualitative evaluation of the Centre's performance in respect to the operational goals, set in the Strategic Plan, is presented in Table 4, Chapter 7.

Considerable results have been achieved in the creation of a unique Centre as shown in the following chapters. Learning from experiences of creating and managing projects, collaborating with partners and raising funds, has allowed the Centre to establish itself in its current position at the cutting edge of urban research in partner cities and beyond. Indicators of success include that: an international network has been built up; partnerships have been established by all local partners; the co-production methodology has developed and is being put into practice; results from the research have been presented in a great number of publications and at events; and examples of impact on governance and policies can be identified in all partner cities. Furthermore, the Centre and its partners have developed efficient management in their collaborations; put a communications strategy in place; continued to improve quality control; set up a database of relevant organisations and people; and established administrative routines to safeguard proper financial control and follow-up of procedures and results.

LOCAL INTERACTION PLATFORMS – STRUCTURED COLLABORATION AROUND THE WORLD

A specific feature of the Centre is the network of international nodes that have been established to extend understanding of different urban sustainability challenges and of knowledge co-production in the Global North and Global South. It was clear that the presence of these nodes around the world would be an important basis for making an impact locally as well as globally.

A local presence, engaged with both academia and practising professionals, was a prerequisite for Mistra Urban Partners to build knowledge and capacity tailored to regional conditions. An international presence was also important to achieve the objectives set in

the original call for research from Mistra. These platforms were based on strong existing relationships in relevant parts of the world.

Each local partner of Mistra Urban Futures, called Local Interaction Platform (LIP), contributes to common goals and uses co-production methods in projects responding to local priorities and contexts. Today, four LIPs are well established and active, with solid organisational structures that support researchers conducting the Centre's specific trans-disciplinary research. The LIPs were selected from the start and gradually have been incorporated into the Centre, to provide research opportunities and solutions with both local and global impacts.

Establishing Local Interaction Platforms

An important first step was to establish a LIP in Gothenburg, the city that hosts the Secretariat of the Centre. Starting with the Gothenburg Consortium, new partners were identified mainly among already established networks, either by the two universities in the consortium, Chalmers and the University of Gothenburg, or by the City of Gothenburg.

While developing its call for a centre on sustainable urban development, Mistra had invited members of the Centre for Sustainable Urban and Regional Futures (SURF) at the University of Salford, Manchester, to be part of the process. SURF researchers met the Gothenburg Consortium during the application process; the two organisations clearly complemented one another, and so the second LIP was established in Greater Manchester.

Once these two platforms were selected in Europe, the searching started for partners outside the Global North. When Mistra Urban Futures was being set up, the City of Gothenburg and Chalmers already had ongoing and well-functioning relationships in some of the cities that were selected as locations for the LIPs.

Researchers and students from Chalmers had been working in Kisumu, Kenya, since 2006, as part of Reality Studios, an academic design programme established by several partners and then taken over by Chalmers in 2008. The initial objective was to build local capacity and included cooperation at Maseno University, with which Chalmers had a signed memorandum of understanding. Later on, the newly started Bondo University, now renamed the Jaramogi Oginga Odinga University of Science and Technology (JOOUST), became part of the local partnership in Kisumu. The support of Kisumu Action Team (KAT), a civil stakeholder group, established by the Mayor of Kisumu, meant a solid local anchoring of the platform in the City.

Chalmers and the Tongji University in Shanghai, China, also had an existing agreement (and later a dual degree programme). In addition, the City of Gothenburg and Shanghai have had sister-city arrangements for more than 25 years (the latest agreement was signed in April 2013). Through Chalmers, Shanghai became part of the application to the original Mistra call for proposals, together with Gothenburg, Kisumu and Manchester.

As the Centre was about to be established, Sida contacted Mistra to inquire whether it would be interested in resuming some of the recently concluded urban research that it had been financing for several years in cooperation with the University of Cape Town. Sida proposed that the university's newly established African Centre for Cities (ACC) would strengthen the Centre's capacity to work with urban questions on a regional level in Eastern and Southern Africa. This was very much in line with the Centre's ambition of a global presence and outreach and thus Cape Town became an additional LIP. The cooperation between Mistra Urban Futures and the ACC started with funding the recruitment of a deputy director at ACC to increase the institutional stability and strength. From that point since, the cooperation has expanded and grown in scope.

The sections later in this chapter describe the chosen research questions and challenges, operational structures, funding and partnerships in the LIPs. While Shanghai has yet to establish an active partnership, the other LIPs in Gothenburg, Greater Manchester, Kisumu and Cape Town are flourishing.

During the first years of the programme, there was a need to meet in order to establish cooperation. All the LIPs met once or twice a year with the Secretariat in Gothenburg, Rio de Janeiro, Kisumu, Greater Manchester, Naples, and Cape Town. The meetings have focused on research questions, coordination and on developing the Centre. Since 2013, the annual or bi-annual face-to-face meetings are complemented by monthly telephone conferences in order to achieve a more regular contact.

The original aim — and an important cornerstone for the Centre — was to establish collaboration between the hosting cities and the LIPs. Various initiatives and organisational structures have been enacted to institutionalise these forms of bilateral collaboration.

As opposed to Gothenburg, where the Consortium and associated partners were established at the outset, the approach in Greater Manchester and Cape Town was conducted in two phases. The first phase has involved developing strong local platforms at the universities, with indirect collaboration and knowledge sharing through joint meetings, the GAPS project (the international pilot project “Governance and Policy for Sustainability”, described in chapter 3 below) and the “Modes” collaboration efforts. The second phase is about deeper collaboration with the cities which will also inform the strategic plan 2016–2019. The Kisumu LIP on the other hand was built on an established relationship with the City authorities and other local actors.

Structured collaboration

In order to further international collaboration and learning, the Urban Futures Arena was established in 2012 as a part of the Centre Secretariat in Gothenburg. The objectives were three-fold. First, the Arena was designed to develop and carry out innovative approaches to knowledge production, dissemination, implementation and learning, in line with the overall Centre ethos. Second, the Arena emphasised creating local and global knowledge within the focus areas Fair, Green and Dense, developing Modes and Tools, and providing a forum for international comparative projects, synthesis and knowledge exchange in collaboration with existing and new partners. Third, the Urban Futures Arena was conceived as a space to integrate local and global levels by linking knowledge production and results in comparative projects among LIPs, as well as in international projects involving all LIPs. This was important in order to ensure that context-specific knowledge developed in the LIPs could be applied to other settings and, vice versa, to ensure that general knowledge built on the international level could also be useful in specific local settings.

Discussions, meetings and opinions expressed over the course of the first few years focused on how to enable a higher level of LIP involvement in the development of the Centre and how all parts of the Centre could be included to take part in important strategic discussions. A learning lesson from the early piloting of the Arena was that global and local processes would be better integrated within each LIP to ensure an alignment of strategic and specific priorities. As a result, an organisational change, effective from September 2013, was made to integrate the activities of the Urban Futures Arena into the overall Centre structure. Projects based in Gothenburg were transferred to the GOLIP, including those directed from Gothenburg, but carried out in Kisumu and Shanghai.

The Urban Futures Arena was successful in developing key joint projects to foster collaboration between the different cities and research groups. During the reorganisation,

these joint projects were renamed and are now considered ‘common processes’ that run throughout all parts of the Centre. These include the Governance and Policy for Sustainability (GAPS) project³, the Modes work (including an Anthology published by Routledge), and the co-creation of this Progress Report and the Strategic Plan for 2016–2019. These are all examples of our evolving common purposes and processes.

Today, ongoing and well-functioning informal collaborations are set up between GOLIP and KLIP, as well as between CTLIP and KLIP on poverty reduction and between CTLIP and GMLIP on universities and urban transformation. Other collaborations, such as between the Gothenburg and Greater Manchester LIPs, are currently being developed on themes such as green infrastructure, cultural heritage and knowledge mobilisation. In 2014 the first joint international bids were submitted between LIPs and this is a key area for development in the Strategic Plan for 2016–2019.

The Gothenburg and Kisumu LIPs are jointly piloting a Research School, where four PhD students from Kisumu, supported by JOOUST and Maseno University, and three PhD students from Gothenburg, supported by the University of Gothenburg and Chalmers, collaborate and support the ongoing research at the Kisumu platform. In addition to this group of PhD students, local postgraduate support has been strengthened with 20 PhD and 45 MSc students involved in the two projects. The activities of the students focus on the implementation stage of research, including field and pilot studies. A course on co-production targeting all students was arranged in Kisumu in 2013. This Research School is supported by faculty teams from Sweden and Kenya. Professors from Sweden, drawn from Chalmers and the University of Gothenburg, have so far been able to offer trans-disciplinary training to the PhD students at KLIP.

This pilot constitutes a start towards meeting Operational Goal 3 under Strategic Goal 2 for 2012–2015, namely the establishment of a Research School in Sustainable Urban Futures active at all LIPs, in support of the Centres PhD students. Altogether, Mistra Urban Futures has partially or fully funded 43 PhD students over the period 2010–2014, of which 24 are based at KLIP, 11 at GOLIP (including three on the GOLIP-KLIP cooperation mentioned in the previous paragraph) and 8 at CTLIP. (See details in Annex 6). These students have all been embedded within the work of the respective LIPs, in many cases actively engaged in or studying elements of the co-production approach. This represents a very substantial investment in enhancing LIP capacity, building research capacity of young researchers (some of whom are or might be employed by the non-academic partners within the respective LIPs) and of Sweden, Kenya and South Africa more broadly.

By the end of the current Strategic Plan period, 10 of these students are expected to have submitted their theses, with the remainder due in 2016–2018 (23 at KLIP, 9 in GOLIP and 2 at CTLIP). Therefore considerable scope remains to expand the existing pilot Research School between KLIP and GOLIP. Under the new Director, efforts will be made during the 2014–2015 academic year to address this expansion, and where feasible, including CTLIP students, who will be submitting their theses during the South African 2015 academic year.

Gothenburg

The Gothenburg region, which consists of 13 municipalities joined in a regional association, had 958,000 inhabitants at the end of 2013. The commuting area, or labour market region as it is referred to, comprises another 7 municipalities with a total of 262,000 people. This can

³ This was originally called the International Pilot Project, but renamed GAPS in 2011/2012.

be compared to the 2.2 million in Greater Stockholm. The largest municipality is the City of Gothenburg with 533,000 inhabitants, whereas the other 12 have between 77,000 and 12,000. The city area covers 463 square kilometers (km²) and the region 3,695 km². A large part of the 13 municipalities is still rural, even substantial parts of geographic area of the City of Gothenburg. The inner urbanised area is located within parts of four municipalities.

The port of Gothenburg, as the largest in the Nordic countries, accounts for 30 % of Swedish foreign trade, and is also an important port for Norway. This region, together with surrounding areas in western Sweden, is still the industrial heart of Sweden, home to automotive, petrochemical and other manufacturing industries. Exports from the region are much larger than from other parts of the country.

Until the elections in September 2014, the City of Gothenburg was ruled by a labour, leftist and green coalition, whereas all the other municipalities in the area had majorities to the centre-right. After the elections the political situation became more unstable, as in the rest of Sweden, with unclear majorities in several municipalities, including Gothenburg, and increased representation of the "Sweden democrats", a xenophobic, populist party.

The regional association of municipalities, as a regional planning body, sets up a 'structure image' for the urban region with which the individual municipalities have pledged to align their spatial planning. However, the association is a voluntary form of collaboration which means that it can only deal with issues where the 13 municipalities can agree. The official regional structure (the counties or regions) covers different areas, and the Gothenburg urban region straddles two counties.

Institutional build-up of GOLIP

Building the GOLIP has gone hand in hand with the build-up of the Mistra Urban Futures Centre in Gothenburg.

Major political and administrative restructuring took place in western Sweden in the late 1990s and early 2000s. A major change was that three counties and the corresponding public institutions were merged in 1998–1999, which affected government offices, county councils and other agencies at the county level. This restructuring did not take part in the rest of the country, apart from the merger of two counties in Skåne. At the same time, various responsibilities, such as regional development, infrastructure planning, public transport and culture policy, were transferred from the national civil service or the City of Gothenburg to the newly created Regional Council. Furthermore, the Göteborg Region Association of Local Authorities was created in 2001 as a cooperation and regional planning agency for the 13 municipalities of the city region. The establishment of new organisations and institutions often makes possible, as well as requires, creativity and innovation to find the right forms and processes for action, and thus these shifts offered fertile ground to form a consortium to create Mistra Urban Futures.

One of the most important characteristics of Mistra Urban Futures is the organisational idea of the Centre itself. As previously described, this organisation is based on co-funding, shared ownership, and joint leadership from public, academic and research funding organisations. The Gothenburg Consortium is the base for the Centre as well as for GOLIP. The seven partners include the four governing and regulatory levels in Sweden, as well as three research organisations as previously described. An additional four associate partners joined the Gothenburg platform in 2010, which further broadened the partnership. These included two national agencies: the Swedish Transport Administration and the Swedish National Board of Housing, Building and Planning⁴. The other two

⁴ The latter is currently without a formal association agreement, but participating in several projects.

partners that were associated with the Centre were SP Technical Research Institute of Sweden, one of Sweden's leading research institutes, and White Architects, Scandinavia's largest architecture firm with a strong profile in both research and sustainability issues.

The role of the Consortium as owner of the Centre is exercised through the Consortium Council, which comprises one representative of each of the seven partners. The Council meets regularly, normally three to four times per year. Chalmers hosts the Centre, and is responsible for all formal administrative decisions concerning the Centre. However, these decisions are taken in consultation with Mistra and the Council.

Early on, a forum to address issues of a more operational nature at the GOLIP was established. Each Consortium partner, as well as the associate partners, selects a coordinator for their respective organisations whom they finance in-kind. The coordinators meet in this forum, which has met since its initiation once a month, to discuss ongoing projects and project development, as well as more generally the development of the platform and, finally, to prepare the meetings of the Consortium Council. The four public partners have organised internal networks in their respective organisations in order to anchor the Mistra Urban Futures work to that of the decision makers, to ongoing strategic processes and to accessing relevant competence. The group of coordinators is led by the Director of GOLIP. The coordinator network is generally regarded by the partners as a success factor for GOLIP.

During the build-up phase, a project leadership forum was created for mutual learning, which has been maintained throughout. Here the project co-leaders meet regularly to exchange experiences and discuss the specific challenges they encountered with co-production in their various projects. The purpose is also to establish links between the projects in order to promote learning and cross-collaboration between the various projects.

Greater Manchester

The Greater Manchester Metropolitan Area has a total population of 2.71 million people spread across 10 metropolitan districts, including Manchester, Salford, Trafford, Tameside, Stockport, Wigan, Bolton, Bury, Rochdale and Oldham. The commutable "travel-to-work" population extends to 7 million, across urban and rural areas, which makes it the largest conurbation in the UK outside London. Its economy generates about £50 billion per annum (compared with £1.34 trillion in UK and £338 billion in Greater London) and employs 1.33 million people, mainly in business, finance and professional services, health and social care, education and creative and digital industries. Geographically, the area covers 1,276 square kilometres of mostly higher density urban areas but also including rural, semi-rural and low density suburbs. Economic activity is focused on the central business district, including the centre of Manchester and parts of Salford and Trafford, but most of the districts have a business centre with outlying suburbs.

Greater Manchester prides itself on being the birthplace of the industrial revolution and now celebrates its distinctiveness as the 'Original Modern' city. An ageing infrastructure sits side by side new developments such as Media City in Salford Quays. The main challenges are economic, social and political. Two of GM's districts are in the 20 most deprived districts of 326 in England and Wales – Manchester (4th) and Salford (18th) – and 37% of the overall population of GM live in 30 % of the most deprived neighbourhoods in England and Wales.

The UK is by tradition a centralised country and local authorities have limited mandates and budgets, which makes it difficult for them to address local statutory and non-statutory

matters, particularly since 2010 with austerity measures and wide-ranging public sector reform. The ten local authorities collaborate through the Greater Manchester Combined Authority, which has power over economic development, regeneration and transport and is currently negotiating more devolved powers with central government. A central challenge is how to manage complex policy issues across different sectors as well as the roles and responsibilities of different levels of governance.

Institutional build-up of GMLIP

The GMLIP grew out of the existing relationships and networks of the Centre for Sustainable Urban and Regional Futures (SURF) at the University of Salford Manchester. SURF is an internationally recognised urban research centre within the School of the Built Environment and had been successfully working at the research-practice interface for a decade prior to the development of the Mistra Urban Futures centre. In the start-up phase (2010–2011), SURF was centrally involved in the strategic development of Mistra Urban Futures, developing the GAPS project to pilot international collaboration and contributing to developing the concepts of a ‘local interaction platform’ or ‘knowledge hub’.

The launch of Mistra Urban Futures coincided with a series of far-reaching changes in the political, economic and social climate in the UK. In 2010, a new Conservative–Liberal coalition government was elected, quickly followed by a deep financial recession and the implementation of a public sector reform agenda. Existing city-regional policy processes were complex and opaque, with new structures and policies layered on top of old. Knowledge, skills and expertise were widely distributed, with only partial attempts to involve stakeholders and different community groups in formal governing arrangements. City-regional efforts to institutionalise relationships between universities and public-sector bodies had met limited success.

The city-region faced three challenges: addressing fragmentation and institutional confusion; interrogating different visions and pathways for sustainable urban development; and re-shaping the relationship between research and practice through the concept of co-production. In response to these challenges, the GMLIP was developed as an ‘intermediary’ space in which to integrate existing and emerging new knowledge to inform sustainable urban futures.

The conditions established by SURF, with its strong national and international track record for engaged urban research, fostered the GMLIP within the University of Salford. The signing of a memorandum of understanding between Salford and Chalmers universities was a key achievement in laying the foundations for the subsequent development of the GMLIP. Through SURF, the GMLIP was also able to integrate with a broader UK urban research community via funded projects with the Engineering and Physical Sciences Research Council, Arts and Humanities Research Council and Economic and Social Research Council, acting as a portal to partner universities across the UK.

In 2012, a series of bilateral partnerships were set up to enrol new stakeholders and test innovative ways of working. In addition, the memorandum of understanding between Salford and Chalmers universities was extended until 2015 as a result of successful negotiations between the two institutions and support at the highest levels.

In 2013, the terms of reference for the Greater Manchester Partners (GMP) group were agreed and the group formally set up. The GMP was designed to bring the leaders of work streams together three times a year, initially to report on progress but increasingly to look for funding and coordinate reporting and forward plans for the Centre. The GMP group

is supported by project operation groups that meet to discuss the specific projects and a wider GMLIP Network. A new digital infrastructure for communicating sustainability in Greater Manchester Platform (<http://www.ontheplatform.org.uk>) has been created and is used as means to share knowledge between the partners and others in the city-region. More broadly, the GMLIP has begun to integrate into other city-regional structures, such as Manchester: A Certain Future and the Greater Manchester Research Forum, as well as initiate national and cross-national networks with universities across the North of England. In 2014, the first bid was submitted for external funding to a European funding agency under the Joint Programming Initiative Heritage Plus, with academics in Gothenburg and Salford Universities, building on GMLIP and GOLIP projects.

Kisumu

Kisumu is a port city on Lake Victoria in Kenya. It is the third largest city in Kenya, and according to the 2009 national census, it had a population of 409,928 spread across a total area of 417 square kilometers (km²) of which is 297 km² is land and 120 km² is water mass. Kisumu started at a trading post when the colonialists established a railway network that reached the region in the year 1901. Kisumu lies within the equatorial zone and as a result the weather is hot all year round, with two major rainy seasons from April to June and October to November. Kisumu's international airport makes accessibility very easy. The most commonly used intra-urban road transport is the fourteen-seater motor vehicles commonly referred to as 'matatus' and – as elsewhere in East Africa – motorbike taxis called 'boda boda' are replacing bicycles. Water transport is by boats, connecting Kisumu county to the adjacent counties Siaya and Homa Bay through Lake Victoria.

The city has good tourist attractions ranging from the small tented camp at the shores of the lake, bird-watching sites, animal sanctuary, museums and Dunga beach. In spite of Kisumu's rich natural resources and strategic location within the East Africa Community, most of its inhabitants live in poverty. Unemployment levels are high and residents have very limited access to basic social services. The rapid increase in population without commensurate development of infrastructure has led to a strain on existing infrastructure such as water and sewerage services and the transport network, especially the roads.

Institutional build-up of KLIP

The KLIP has been built on a conceptual approach aimed at developing an institution that focuses on understanding the obstacles that inhibit people, international organisations, non-governmental organisations and, to an even greater extent, governments from achieving their goals. The KLIP also aims to enhance the abilities that will allow these actors to achieve measurable and sustainable results. In alignment with Mistra Urban Futures, the KLIP embarked on establishing an organisational structure, developing a strategy, and eventually acquiring skills and resources to realise these goals.

Assembling all relevant actors implies having roundtable discussions with sometimes competing partners, each of which may operate at different levels and have different agendas. However, the KLIP had success during the start-up phase by attaching equal value to each partner. The KLIP has reached out to all stakeholders, including civil society, the private and public sectors, academia, community-based organisations, and women's and youth groups.

An important tangible result of the activities in Kisumu is the establishment of a permanent knowledge centre in form of the KLIP Trust. The origin of the trust was the Kisumu Action Team (KAT), an independent all inclusive local informal stakeholder organisation, which acted as Advisory Board to KLIP before the foundation of the KLIP

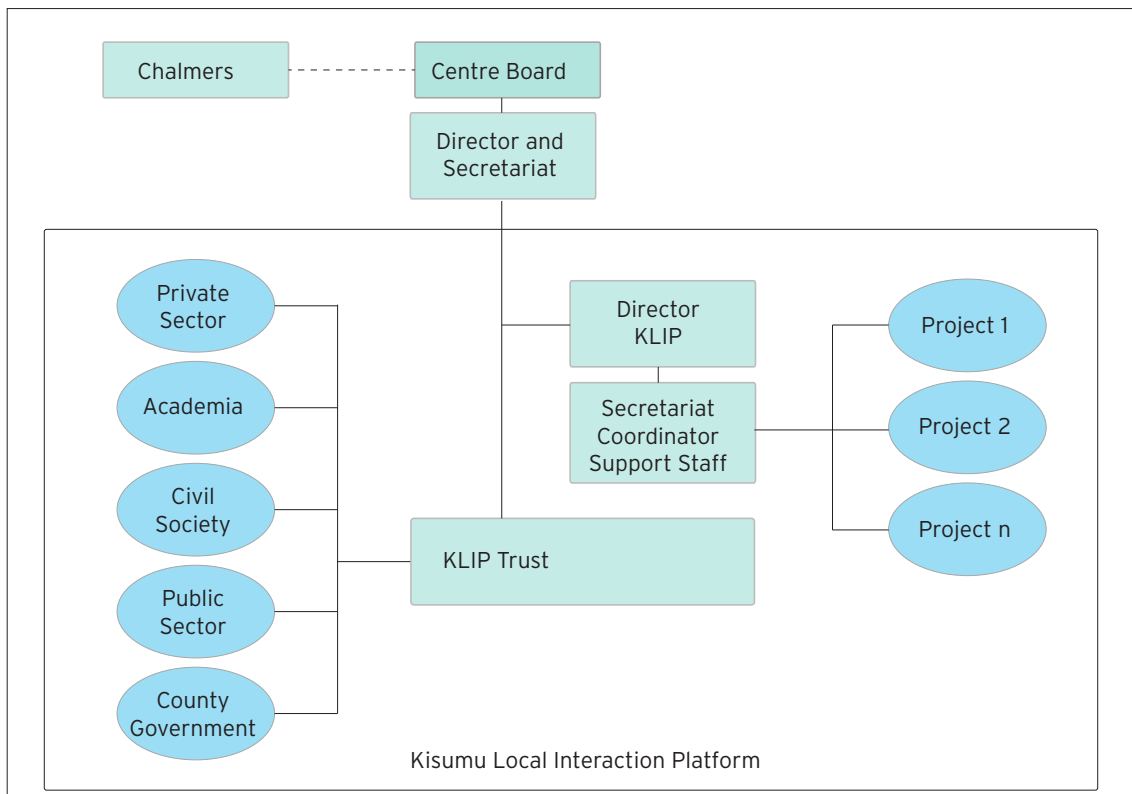


Figure 3. Organisational set-up of KLIP

Trust. Bondo University and later JOOUST acted as the interim legal unit and contract partner to the Centre until March 2014, when this role was taken over by the KLIP Trust. The registration of the KLIP Trust, which represents a broad circle of stakeholders including residents, public and private sectors, civil society and academia, contributed immensely to strengthening and even further developing future institutional networks for the KLIP. The Trust now has a legal backing and can forge ahead without necessarily relying on partnering academic institutions and other organisations to initiate and negotiate its networks and links. The ability to initiate and maintain such networks has been demonstrated at various levels, ranging from local to international.

Useful regional links were strengthened during the build-up period. For example, KLIP has partnered with the African Centre for Cities at the University of Cape Town in developing a joint proposal towards urban food security, which has received approval for funding from the UK Department for International Development. Such links have acted as platforms for idea exchange to strengthen KLIP and have anchored it with partnering institutions locally, regionally and internationally. Similarly, the joint PhD programme co-managed by KLIP and GOLIP continues to create an environment for North-South collaboration from a unique point of view. A core team, comprised of four Kenyan and three Swedish PhD students, participates in and supports several KLIP activities within the areas of Ecotourism and Market Places.

Cape Town

The City of Cape Town, spanning 2,461km², is one of 9 metropolitan municipalities in South Africa. The municipality has a population of 3.86 million. In Cape Town, prosperity and poverty sit side by side. Cape Town's household income Gini co-efficient is, according to the City's own figures, 0.59. Cape Town has an average density of about 15 dwelling units per hectare, although this density varies considerably between settlement types,

resulting in a distorted spatial structure. Commuting times as a result of disjunctures between residential areas and economic opportunities are above the world average.

Although Cape Town is located in a global “biodiversity hotspot” it experiences a number of negative environmental impacts including water shortages; extensive fire damage; flooding triggered by heavy rainfall events; coastal erosion and inundation from large winter storms and sea surges; and ill health from episodes of hot spells, high concentrations of air pollution and cold, wet winter conditions. Transitioning to a more equitable, efficient and sustainable future is essential for the sake of the City of Cape Town and all its citizens, whether rich or poor.

Institutional build-up of CTLIP

Early partners of the ACC included Sida, as well as the South African National Research Foundation and its Swedish equivalent. Through a Swedish–South African collaborative project, researchers from ACC were key voices in the Stockholm Resilience Centre bid for Mistra Urban Futures. Although the bid was unsuccessful, the ACC was proposed by Sida to collaborate on the research with the Gothenburg team.

The Mistra Urban Futures partnership was negotiated during 2009 and cemented in 2010, building on ACC’s relationship with the City of Cape Town, particularly the Climate Change Think Tank. A formal working agreement was drafted in 2010 and later adopted in 2011. Shortly thereafter, the CTLIP, based at the ACC, negotiated with the city, producing a memorandum of understanding to explore a different way of co-producing knowledge. This partnership, in the form of the Knowledge Transfer Programme (KTP), explicitly addresses academic and practitioner calls for engaged scholarship and policy development. The KTP is a CTLIP flagship project that emerged as a direct result of the partnership with Mistra Urban Futures. It uses multiple entry points for engaging practitioner and academic knowledges to co-produce defensible and legitimate responses to policy challenges. In addition, the partnership, through co-funding arrangements, provided the scope to include the already established CityLab Programme addressing various urban issues in Cape Town and the ACC’s programme of activities to foster debate, dialogue and dissemination on urban issues in South Africa more broadly.

The ACC is an interdisciplinary research programme at the University of Cape Town, focused on critical scholarship regarding the dynamics of unsustainable urbanisation processes in Africa and the global South. The ACC facilitates critical urban research and policy discourses for the promotion of vibrant, democratic and sustainable urban development in the global South from an African perspective. ACC’s partnership with Mistra Urban Futures has enhanced engagement in knowledge co-production in order to address these research and policy agendas locally but also at a regional level and context.

The governance structures of the ACC reflect its commitment to co-production and trans-disciplinarity. The Executive Committee oversees strategic and private development and finances, as well as ACC’s relationship with Mistra Urban Futures. An advisory board oversees the progress of the ACC. The board has a less internally focused governance structure and includes representatives from outside academies, the public and private sectors and civil society.

At a programme level, the Mistra Urban Futures Project Steering Committee and the Project Advisory Committee direct the KTP between ACC and the City of Cape Town. The Project Steering Committee is comprised of City of Cape Town and ACC representatives, as well as representatives from the private sector. The Project Advisory Committee is comprised of four ACC and four City representatives.

Another prong of the CTLIP work through ACC is the Africa Peer Learning programme. In its first incarnation, the programme, through the State of the Cities in Africa (SOCA) project, pivoted on collaborative research between civil society, practising professionals and academics in four African cities (Dar-es-Salaam, Addis Ababa, Gaborone and Accra) to help define Africa's urban agenda and to frame instruments for monitoring urbanism and building the knowledge, capacity and institutions for redressing unsustainability and urban poverty. The programme ran in parallel with the urban planning syllabus reform project of the Association of African Planning Schools (AAPS) hosted at the ACC. With its own elected officers and committees, AAPS promotes new approaches to urban planning in 50 African cities, and (re)training city planners. Both projects have led to and been supported by wide and open debate in ACC's African Cities Reader series and by its web portal UrbanAfrica.net. In 2013, these two Africa Peer Learning initiatives of CTLIP started coalescing into a second generation programme, the African Urban Research Initiative (AURI) aimed at scaling up urban research based on co-production.

ACC boasts diverse partnerships with numerous research institutions and universities around the world. Within South Africa, partnerships have been established with other academic research institutes focussing on urban sustainability themes. Through AURI, AAPS, and Women in Informal Employment: Globalizing and Organizing, as well as individually, ACC researchers have ties with over 58 universities and research institutes around the world, and with 45 civil society organisations. The ACC has received project funding from more than 30 local and international sources.

Shanghai collaboration

The collaboration with Tongji University in Shanghai was built on a Memorandum of Understanding between Chalmers and Tongji University valid for three years from May 2011. The collaboration started on the basis of an interim work program. In 2012, several discussions on relevant joint research questions resulted in three main themes: Mobile Metropolis, Smart Metropolis and Knowledgeable Metropolis. A pre-study on an Interactive Research Platform for communication and collaborative purposes was initiated. In parallel, at the suggestion of the local partner, various modes for managing collaboration in Shanghai were explored by the Centre, including establishing a local presence of Chalmers in the form of a Representative Office. Furthermore, a Swedish Resident Coordinator was engaged by the Centre. Eventually, using the administrative services of Tongji University was found to be the most practical and cost-effective of managing the project finances.

In the beginning of 2013, a detailed research agenda was elaborated during a one-week-long joint workshop in Gothenburg with representatives from Shanghai and Gothenburg platforms. Three projects, which had been prepared by each platform, were selected for the first phase of cooperation. The participants completed detailed work plans and budgets. A principle cost-sharing model and a work program for the projects were agreed on. All projects were planned to be carried out in collaboration between Shanghai and Gothenburg platforms with researchers from both platforms in each project, in contrast to other LIPs processes that are generally carried out solely within each LIP. Additional inputs by the Shanghai platform Director resulted later on in some modifications of the work program.

In the spring 2013, the Centre's Director and representatives from GOLIP joined a delegation from the City of Gothenburg on a visit to its sister city, Shanghai. Seminars arranged on the three cooperation themes were well attended. During the visit, a formal agreement on the inclusion of Shanghai Local Interaction Platform (SHLIP) in Mistra

Urban Futures' activities was signed between Chalmers and Tongji University. The parties agreed that a local action plan should be presented by SHLIP, which has yet to materialise. For this and other reasons, the cooperation was put on hold. The new Director of the Centre, who took up the position in mid-September 2014, has actively addressed the situation and since his efforts to resolve the impasse have not been successful, the attempt to establish an active LIP in Shanghai will not continue. The possibility of more limited collaboration on specific projects will be kept open.

Research activities have continued to a certain extent in both cities. In Gothenburg, these projects include the 'Public Bicycle Scheme' (included in the 'Mobile Metropolis' theme) and 'From waste to resources'. Two books – 'One Earth, One UN in a Chinese Garden' and 'Design Harvests' - based on research at the Tongji University have been published, and scientific publications have been written by the GOLIP team. Furthermore, a study on electrical buses is being carried out at Tongji with funding from Volvo AB.

LOCAL PARTNERSHIPS AND FUNDING

Gothenburg LIP

When cooperation began during the application process to Mistra, the seven local partners forming the Consortium agreed on a number of challenges on which they wanted to collaborate under the Centre's 'umbrella'. Along the way, the additional four associated partners became involved in the Gothenburg platform. Besides the formal partnership (see the previous sections in this Chapter), the platform engages a variety of organisations that participate actively within specific projects.

The Consortium contributes in several ways to the operation of the Centre and of GOLIP: Apart from the cash financing of the Centre as a whole, the partners take part in the development of the platform, as well as in the projects themselves, through both cash and in-kind financing. The latter is a foundation for the co-production processes of the Centre. This also goes for the associated partners who actively contribute to both project development and the various projects. In addition to the partner financing, projects are financed by a number of different set-ups. An essential source of financing is applications to national research funders, such as Formas. Other national public institutions also provide project funding, such as the National Board of Housing and the Swedish Energy Agency. Regional public bodies, mainly Region Västra Götaland but also counterparts in other Counties, provide substantial funding, not least from regional development and growth programmes. EU funding has been obtained in some cases, but this will be developed further in the future as urban development is now mainstreamed into the EU structural programmes. In several cases also the private sector, mainly real estate operators, have provided funding.

The GOLIP way of initiating, developing and financing projects has developed over the years. All partners can initiate projects. The platform provides a forum and infrastructure to help organise and facilitate the collaborative work in the early phase. If an idea turns out to be worth exploring, seed funding can be allocated to define the research questions, attract external resources and set up a full scale research project.

All projects are supported by the Secretariat in terms of administration, arranging seminars and meetings as well as continuously disseminating results. Furthermore, support is provided in finding and establishing new networks and partners. The platform sets up meetings for sharing and learning across the projects in order to develop the collective knowledge of trans-disciplinary work.

When there are tangible results, established communications channels are used to spread the findings. Representatives for the partnership and networks at the platform are of great importance to link the results into different forums for implementation.

Greater Manchester LIP

The University of Salford Manchester has provided match funding to the GMLIP since 2010 as a co-funded initiative with Mistra Urban Futures and to GAPS since 2012. Through the partnership with the University of Durham, match funding for the GAPS project has also been secured from the private sector company, Carillion. Other external match funding has been accrued through associated academic projects financed by the UK Research Councils on Urban Retrofit (Engineering and Physical Sciences Research Council) and the Creative Urban Economy (Arts and Humanities Research Council), which has enabled cooperation across these programmes, for instance, in funding international workshops in 2012 and 2013. Funding from the Economic and Social Research Council was secured for an exhibition on ‘Sustainable Stories’ in 2012.

In 2012, the GMLIP programme enrolled a large number of stakeholders from diverse organisations and sectors. Partners actively engaged in the Mapping the Urban Knowledge Arena project including, for instance, those in strategic positions, such as the Director of Environment, Leader of Manchester City Council, Chief Executive of Stockport Council, business leaders in Arup, the Chair of the Manchester and Pennine Waterway Partnership and the Chair of the Greater Manchester Nature Partnership. The GMLIP worked with community and non-state groups, such as Seedley and Langworthy Trust, Manchester Environmental Research Centre Initiative, Creative Industries in Salford and the eco-schools team of Temple Primary School in North Manchester. A team of community researchers, resident in the local area, worked on the programme.

Since 2013, the GMLIP has sought out a number of deeper engagements with selected partners. The ‘anchor’ partners are the Association of Greater Manchester Authorities’ Low Carbon Hub; the Greater Manchester Centre for Voluntary Organisations; Creative

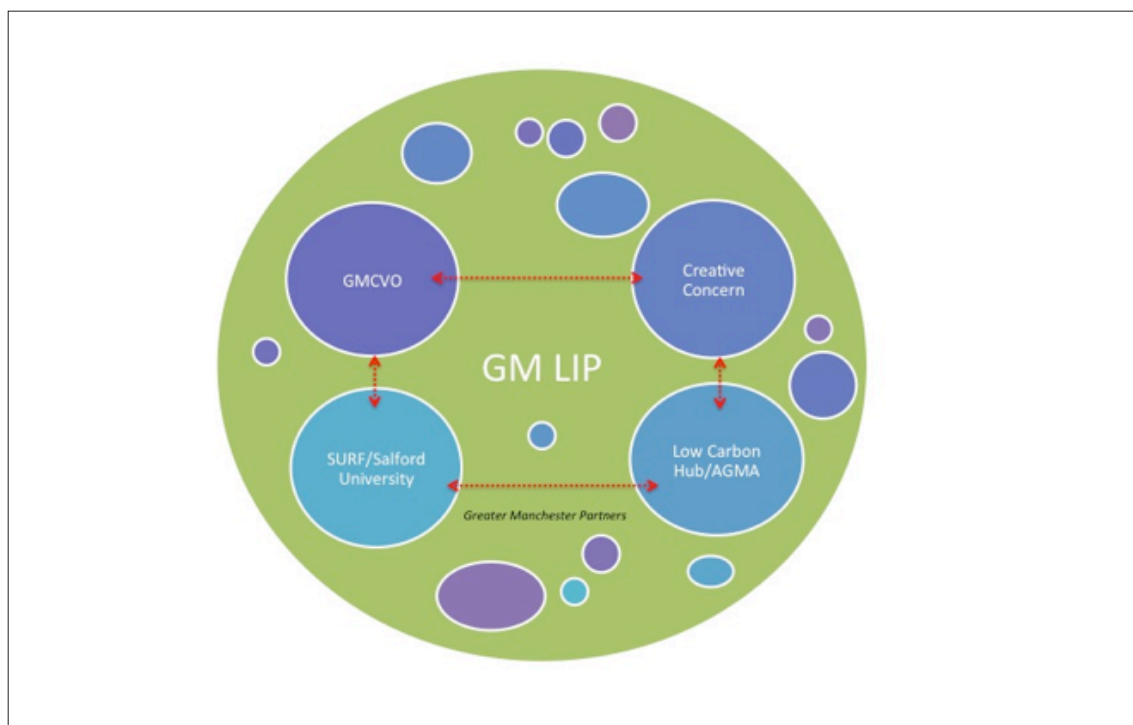


Figure 4. Collaborations in the Greater Manchester LIP

Concern, an ethical communications company; the Social Action and Research Foundation, the Biospheric Foundation and the SURF Centre in the School of the Built Environment at the University of Salford Manchester. A second tier of partners include those involved in specific projects, such as ten Community-Based Organisations (CBOs), the district climate change leads in local authorities across Greater Manchester and the Manchester Arts and Sustainability Team. The GMLIP has engaged academic researchers and fostered interdisciplinary collaborations across the University of Salford Manchester, in other Greater Manchester universities and across the UK.

Strong partnerships have generated substantial additional match value, as the balance of Mistra Urban Futures to local funding has altered over time. Local co-funding has increased from half to nearly two-thirds of the total budget, as the University of Salford Manchester has been joined by local partners making external in-kind contributions. In 2014 a project on food austerity and digital transformation was launched, largely funded by the Engineering and Physical Sciences Research Councils Communities and Culture Plus Network, as a direct result of the GMLIP's pump-priming activities and partnerships.

Kisumu LIP

At the policy level, the regional government incorporated KLIP work in decision-making regarding the integrated strategic plan for Kisumu County and the City of Kisumu in particular, which proves the relevance of KLIP's key flagship thematic areas of ecotourism and marketplaces. KLIP has been involved in policy formulation, especially by the ecotourism project team, in preparation for the Kisumu County Tourism Bill and information dissemination to various stakeholders. Waste management is a key component of KLIP activities and is another area that demonstrates joint efforts. Through the Kisumu Urban Project, the Kisumu community has agreed to fund urban waste management to keep Kisumu clean and improve the quality of life there while encouraging tourists to visit.

Other ecotourism collaborations take place through community-based tourism organisations. At Simbi Nyaima, for example, such a partnership with the KLIP led to a lake management plan that included business development plans, launched in March 2014. Another community partnership that included the county government of Homa Bay embarked on investment promotions for Ecotourism. And the KLIP Ecotourism Team collaborated with the Dunga Ecotourism and Environmental Team and other local organisations in the western region of Kenya, to train tour guides, brand Dunga as a tourist destination, and build environmental education and entrepreneurship.

An ecotourism project, that might become a development model for other sites to adopt, is a prototype for an eco-lodge. Local consultants from the private sector, researchers from JOOUST and the Miyandhe Beach Management Unit joined the KLIP in engaging the local community through the site's development. A KLIP research team undertook a baseline study for environmental impact assessments for national approval and licensing.

These efforts help position the people of Kisumu for enhanced income streams and better livelihoods, as do other efforts within the private sector and the KLIP Marketplaces theme. For example, collaboration with Zingira Community Crafts has been strengthened and has led to capacity-building and training that improved skills of local artists and crafts persons. The industrial sector also provides viable prospects for cage fish farming, with possible private sector sales and appropriate technology for local fish processing. Discussions under way with Peche Foods could open up exports to the European Union, American and Asian markets.

Interest in public sector collaboration with KLIP has also strengthened, for example, with the signing of a memorandum of understanding between Maseno University, one of the KLIP Consortium Partners, and the City of Kisumu. And another public initiative with the Museum of Kenya and Kisumu County will investigate developing a Kisumu Urban Museum. The KLIP project will highlight numerous cultural heritage attractions in Kisumu City, including prehistoric settlements and historic sites. Knowledge of the past has very important links to eco-tourism, leading to this partnership, as well as to equality issues.

The activities at KLIP have been fully financed by Sida since 2013. This funding is matched by a growing in-kind contribution by local partners.

Cape Town LIP

Support for the CTLIP is for a combination of activities at the African Centre for Cities, all of which are premised on different approaches to co-production of knowledge in pursuit of sustainable urban transitions. Whilst some activities preceded ACC's partnership with Mistra Urban Futures (and therefore receive co-funding from other sources), the Knowledge Transfer Programme (KTP) is fully funded through Mistra Urban Futures. CTLIP's support is from both Mistra Foundation and Sida, which has shaped the activities in ways that are unique at the Centre. In addition to funding arrangements, governance and participation in each of the CTLIP activities are informed by different combinations of partners.

The KTP receives significant in-kind contributions from the City of Cape Town. Key local partners in the CTLIP have been the African Centre for Cities (which co-ordinates the CTLIP) and the City of Cape Town (which co-manages the Knowledge Transfer Project). The Climate Change Think Tank has been closely associated with the KTP, and has been co-funded by the City of Cape Town, whilst being managed by The African Climate and Development Initiative.

The Africa Peer Learning programme is co-funded by Sida, together with Urban LandMark and international sources including Cities Alliance and the Rockefeller Foundation. The activities of the AURI network are co-supported by the Sida funding, allowing for the engagement of a number of urban research centres across the continent.

The Urban Debates programme predated the Mistra Urban Futures funding, with contributions from the City of Cape Town and the Western Cape Government's Department of Local Government and Department of Human Settlements. The activities in this programme have strengthened and diversified with the addition of the funding through the Centre.

In addition to Sida, the funding for the CityLab Programme comes from the International Development Research Centre, the German Society for International Cooperation (GIZ) and local partners including Western Cape Government's Department of Human Settlements, the Community Organisation Resource Centre & Slum/Shack Dwellers International, and the Violence Prevention through Urban Upgrading programme.

Through the payment of various staff members at the University of Cape Town involved in the CTLIP, the University of Cape Town and the South African National Research Foundation have provided co-funding across all of the CTLIP programmes.

Knowledge production

This chapter sets out the Centre's intellectual and methodological approach to contemporary urban challenges and its research agenda. Its themes and projects, major findings and outputs are presented. Mistra Urban Futures is built on the basic premise that various forms of knowledge co-production can lead to new critical insights and tools that more effectively promote long-term positive urban change. The Centre believes that this approach is necessary for the successful transformation of cities in the future. So far, the research projects of Mistra Urban Futures have been demand-driven to a great extent. This has resulted in over 70 projects addressing a variety of relevant local research questions related to sustainable urban development and with the findings documented in more than 400 publications of diverse types.

THE CONCEPT OF CO-PRODUCTION

Today's cities are typically managed within traditional organisational structures, but contemporary urban challenges go beyond the capacities of separate departments of policy-making, planning, administration and academic knowledge production. Current challenges in urban areas - such as poverty, social polarisation, unsustainable lifestyles, climate change, inefficient resource use, financial instability, weak institutions and governance and urban sprawl - engage a variety of stakeholders, involve different decision levels in a city's administration, deal with both national and global contexts, and involve multiple disciplines and a plethora of sectors. Today, no single actor has the capacity or the power to fully grasp or address this complexity. Furthermore, the knowledge needed to address these challenges is fragmented; existing expertise needs to be integrated and new knowledge created.

A central starting point for Mistra Urban Futures is that there are no templates or ready-made solutions for how urban challenges of today are to be met. Nor are there any set ways for how to include and involve all actors in a city, how to incorporate different types of knowledge into a whole, or how to create arenas for transformation. Knowledge that can contribute to creating sustainable cities, according to the philosophy of

"Today's urban challenges go beyond the capacity of separate departments of policy-making, planning, administration and academic knowledge production"

Mistra Urban Futures, has to be created or collected in dialogue and cooperation between different users and interest groups, including both academia and practice, across different political and economic agendas. To maintain openness to many different approaches and to emphasize the focus on practitioner involvement, the Centre uses the term trans-disciplinary co-production or just co-production.

Trans-disciplinary research is an example of a research approach that has gained increasing popularity during the last decade as a response to the changing demands on science and the role of knowledge institutions in societal problem-solving. While it is defined and used in many different ways, the definition used at the Centre focuses on participatory and stakeholder based forms of knowledge production, where the inclusion of multiple disciplines and non-academics in knowledge production processes is central to the ability of the research to create socially relevant knowledge. Co-production is an umbrella term that refers to collaborative approaches to knowledge production that draw upon interactive and participatory research methods for societal problem-solving. In other words, co-production is a research approach that creates new knowledge by combining different sources of knowledge to increase the social relevance of the knowledge produced for policy/practice action and for new academic practices. The research at the Centre thus addresses urban complexity through promoting mutual learning and action across diverse urban development contexts and conditions.

Overall, the Centre focuses on bringing together research and practice, and creating joint processes and arenas for social learning between academic researchers and practising professionals. Projects within the Centre draw on both theory and practice in equal measure, and are carried out by researchers from different disciplines, working together closely with practising professionals. The definition of co-production used by Mistra Urban Futures is therefore a strategic approach to knowledge production that combines scientific perspectives with other types of knowledge sources such as knowledge and experiences from the public sector, business and community life. The use of different types of strategies for joint ownership, leadership and joint financing of knowledge co-production processes distinguishes Mistra Urban Futures from many other examples of trans-disciplinary research. The overall work with co-production is summarised in the anthology *‘Co-producing knowledge for sustainable cities: Joining forces for change’*, which is being published in 2015.

Applying co-production in Gothenburg

As noted above, a great deal of work occurred in the start-up years in developing and testing trans-disciplinary co-production in Gothenburg. This was done via a number of methods and approaches which included both research and innovative dialogue and participatory processes to engage the wide diversity of practitioners and researchers that make up the Gothenburg Consortium. At the start of the Centre, the work in Gothenburg was especially sensitive to the need to create a research centre that was actively trans-disciplinary. Despite the analytical importance given to the involvement of practitioners in the call, many of the involved practitioners and researchers had experienced research that was initiated and run by researchers and/or scientific and research institutions where practitioners were relegated to reference groups. In Gothenburg, the need to secure joint funding and commitment resulted in testing another research approach, namely one where researchers and stakeholders own, initiate, manage and carry out the research processes together. The joint responsibility for the research process is seen as a way to secure the ownership, relevance and effectiveness of the results. Knowledge co-production is defined in the following way:

Knowledge co-production is a trans-disciplinary research approach targeting real life problem solving. Knowledge is co-produced through the combination of scientific perspectives with other types of relevant knowledge and experience

from real world practice including policy-making, administration, business and community life. Co-production occurs through practitioners and researchers participating in the entire knowledge production process including joint problem formulation, knowledge co-generation, application in both scientific and real world contexts, and mutual quality control of scientific rigor, and social robustness and effectiveness.

A research framework for co-production was designed, applied and tested on five pilot projects in Gothenburg from 2010–2011. This framework included five focal areas and three phases. These can be summarised in three main strategies. The first focused on identifying and entitling participants with relevant contextual values, and situated knowledge and know-how from both practice and research to participate fully in the projects. The second was to establish groups and processes that support the sharing and integration of these positions and knowledge, by promoting both the creation of shared understanding and frames of reference, and the generation of empirical material and joint analysis. The third strategy focused on usability, through identifying and engaging the situated knowledge and expertise necessary for designing, carrying out and implementing the project results. All three strategies were applied through a lens of reflexivity, via continual individual and group reflection regarding the choices and decisions made in the projects.

Based on the experiences from the five pilot projects in Gothenburg, a manual for joint knowledge production was written in Swedish in 2013, and translated into English in 2013. A number of processes for project initiation were tested after 2011, including open calls for projects that were evaluated by a wide group of Consortium partners, and more focused practitioner based processes concerning specific topics. The work that supports co-production also includes learning forums for project leaders, as well as workshops and seminars on trans-disciplinary co-production with project leaders and working groups.

Applying co-production in Greater Manchester

The SURF centre in the School of the Built Environment at the University of Salford, Manchester was formed in 2000 to generate understanding about how political, economic, social, technological, cultural and environmental changes interact to affect urban and regional futures. SURF had always operated in the ‘missing middle’ between research and practice as a critical friend, actively interpreting and mediating between different values and motivations for urban development. The ethos was based on producing knowledge that was both *excellent* and *relevant*, making SURF an ideal catalyst for the development of the GMLIP.

Given the distinctiveness of the Mistra Urban Futures vision and the complex political and economic context described in Chapter 2, the emphasis in 2010–2011 was on preparing the ground for co-production through enrolling potential partners in the ethos and rationale of the Centre, as well as raising the profile of the programme. Efforts were made to ensure that previous knowledge and research carried out at SURF could be harnessed to inform and shape the development of the Centre. The launch of the ‘International Pilot Project’, later renamed ‘Governance and Policy for Sustainability (GAPS)’ with the Greater Manchester Low Carbon Hub using an action-research approach was an important first step in enrolling and embedding the GMLIP in the policy arena.

In 2012, the central task was to map the boundaries and limits to existing knowledge and activities in the city-region to ensure that Mistra Urban Futures could add distinct

value and not duplicate initiatives within the landscape of sustainable urban development in Greater Manchester. Entitled ‘Mapping the Urban Knowledge Arena’, this exercise included a number of different approaches to working bilaterally between researchers and practising professionals, characterised as ‘distributed’ knowledge production. Different approaches were tested to give insight into the processes of co-production, including working with practitioners, communities, artists and school children; commissioning practitioner essays; and co-curating a research exhibition. Out of this large scale, multi-partner project, a series of themes crystallised, around which further flagship projects could be co-designed.

Now, in the midst of the third stage (2013–2015), ten additional GMLIP projects have been designed with different partners, resulting in a ‘sliding scale’ of joint knowledge production that is sensitive to different kinds of expertise, roles and responsibilities. One example is the digital sustainability portal, “Platform”, which has been jointly conceptualised, led and managed by SURF and Creative Concern. Another is the project with the Greater Manchester Centre for Voluntary Organisations, which has been co-designed, researched and analysed, on the value of community hubs in the context of austerity and welfare reform. New networks and spaces for peer-to-peer learning have been created through using action-learning sets which value the informality of shared learning and problem-solving between different expert groups. Traditional academic methods, such as interviews, have been reconceptualised as reflexive spaces which inform collaborative enquiry. Co-analysis is a central part of the approach involving joint academic-practitioner presentations at conferences such as the Royal Geographical Society and Salford International Media Festival, as well as co-writing and the co-production of practical frameworks for action. In 2015 academics, practitioners and policy-makers will work together to summarise the lessons of GMLIP for the city region, intellectual debates and the ongoing development of the Strategic Plan.

Applying co-production in Kisumu

The involvement of academic researchers with practicing professionals from the private, public, industrial and all other key stakeholders through constructive dialogue, discourse and joint project activities is the bedrock for co-production of knowledge within the KLIP. The leadership of the City of Kisumu and by extension Kisumu County is represented at the KLIP Trust, which thus grants the Trust a privileged position in shaping policy in the direction of sustainable urban development. Currently, the KLIP has two flagship themes: Ecotourism and Marketplaces, which complement the Kisumu County government in the ministries of Tourism and Trade, respectively. The KLIP staff and researchers are often called upon by the city administration to offer solutions to urban challenges.

Meetings conducted with the local community, community based organisations, and women’s and youth groups have provided an opportunity to validate the findings of various studies. This engagement has therefore led to participation on matters relating to market management and ecotourism such as proper waste handling, sustainable use of ever-diminishing environmental resources, and environmental conservation. The KLIP is also collaborating with stakeholders to train workers in water hyacinth production, for example.

The KLIP strategy on co-production involves regular contact with stakeholders to avoid duplication of effort, while aligning the activities of each partner towards increased quality of life for the local community. This strategy has proved essential both for KLIP’s

visibility and for demonstrating the evidence base for policy development. Seminars, workshops and conferences involving other practising professionals and policy-makers have been a valuable tool to effectively disseminate information and success stories. These events also have acted as tools for networking and opening debate about the direction of current and future activities. Venues and materials for such meetings consistently take into account accessibility issues to facilitate the participation of different target groups, such as the business community and marginalised groups.

Special attention has been given to communication with local communities and target groups, as they represent the everyday environment in which KLIP operates. The community has been provided with essential and regular information about KLIP achievements, and they have been also engaged to create a feeling of ownership.

Applying co-production in Cape Town

Co-production has been a central part of the ACC from its inception in 2007 as an interdisciplinary research centre, and was established in the Faculty of Engineering and the Built Environment at the University of Cape Town. The CityLab Programme was ACC's first foray into knowledge co-production. The CityLabs were collaborative research programmes which involved interaction between academic researchers from numerous disciplines and practitioners from government and elsewhere and from a range of sectors.

The Knowledge Transfer Program (KTP) aims to make decision-making processes more transparent in Cape Town, in order to make sure policy is defensible and sustainable. In partnering with the City of Cape Town, knowledge from both institutions is harnessed in new ways in order to find different pathways to sustainable transitions. The KTP has 'embedded' PhD researchers at the City of Cape Town, where they work closely with

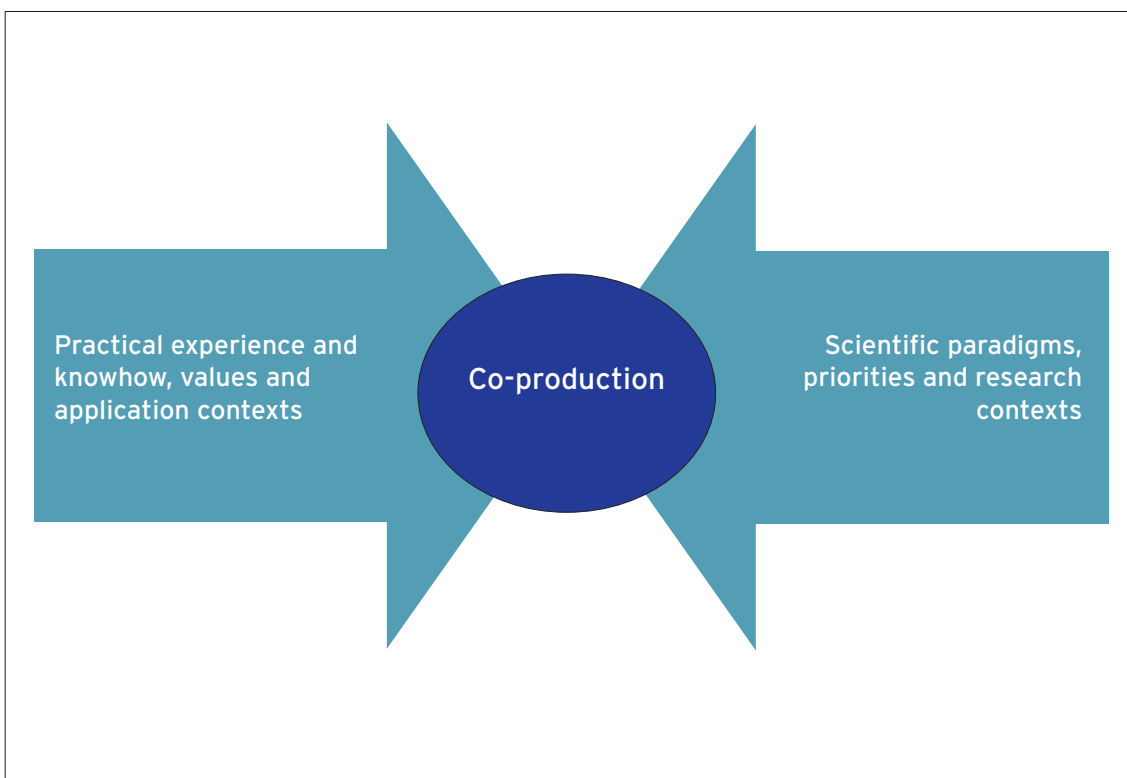


Figure 5 Knowledge co-production

city officials on policy areas that complement Mistra Urban Futures' Fair, Green and Dense themes. In turn, city officials are invited to apply to the City Officials Exchange Programme, for an academic sabbatical at the University of Cape Town.

Now that the first fully operational phase of the Mistra Urban Futures is coming to an end, the ACC and the city are working on how to continue developing partnerships within the rubric of Mistra Urban Futures so as to maximise the outcomes and consolidate the work that has been undertaken by all partners.

COLLABORATIVE PROJECTS

A core mission for Mistra Urban Futures has been to create joint arenas to develop, support, translate and disseminate locally specific and globally generic urban knowledge within and between the platforms. Promoting joint knowledge production was a central pillar of the Strategic Plan, initially reflected in the Urban Futures Arena. The intention was to introduce projects that would involve all Centre platforms, to create structures and processes for mutual learning regarding co-production, and to set up a joint research school. Collaborative learning is a long-term process that takes time to achieve at scale, particularly given the institutional complexity involved in setting up the LIPs and creating structures and funding for collaborative projects and processes. The central tasks for the Arena in 2012–2013 needed, therefore, to focus on building trust between the platforms and creating new structures for involving the LIPs more centrally. Two collaborative projects were developed to create the basis for further in-depth comparison in Phase 2 of the Centre. The Modes anthology involved a process of mutual learning to understand the LIPs' previous experiences of co-production and how theoretical perspectives and practical experiences inform the development of the Centre's distinctive approach. The Governance and Policy for Sustainability project (GAPS) was developed as an 'international pilot project' to develop a baseline for comparison through understanding similarities and differences in the LIPs' urban conditions and contexts. The Arena's approach of developing pilots in Phase 1 to inform the long-term development of the Centre can also be seen in the efforts to test the development of the research school between GOLIP and KLIP, covered elsewhere in this report.

Modes: Developing co-production at the Centre

All of the LIPs were chosen because they had experience in and commitment to different approaches to participatory knowledge production, from a variety of disciplinary starting points and in distinct and widely varying urban development contexts. The initial work with co-production therefore focused on mapping this diversity and creating processes for mutual learning about the different approaches already in operation at the different platforms. The work started in Gothenburg where one of the goals for Phase 1 was to provide innovative approaches for creating usable and accessible knowledge. During 2010-2011 much of the work of the Arena occurred in Gothenburg in developing and supporting the co-production pilots and other activities at GOLIP. As these pilots were finished, the emphasis was on how these lessons related to the other LIPs and understanding local co-production processes in a global context.

Co-production has been a topic of regular debate at the yearly international meetings. Besides this, a book proposal for an anthology was written and submitted to Routledge in 2012. This includes chapters from the LIPs in Cape Town, Gothenburg, Kisumu, and Greater Manchester, one from Melbourne and a selection of cities in Southeast Asia,

where two researchers, involved in the Centre, also contributed. The main focus of these city chapters is on the specific drivers and motivations for different types of knowledge co-production that is needed for solving urban sustainability problems in different urban development contexts. Each city is situated in its historical context and includes highlights of the particular social, environmental, political and economic trends, which create and influence current challenges. Each city chapter is written from a particular critical lens from practice and research approaches. They describe a number of specific examples, of different types of knowledge co-production, and conclude with a summary of the experiences of co-production in the different contexts. Reflecting the Centre ethos, several chapters were written with the input of both academics and practitioners.

The conclusions to the anthology were written from input from all of the co-authors and other representatives from the Centre. They summarize the value of co-production across the LIPs, difficulties and barriers to co-production, and outline topics for future research. The anthology, entitled 'Co-producing Knowledge for Sustainable Cities: Joining Forces for Change' will be published by Routledge in 2015. The Modes work from Cape Town and Greater Manchester was also presented at the Institute of British Geographers/Royal Geographic International Conference in London in August 2014 and at a special international workshop supported by Mistra Urban Futures on 'Universities and urban transformation' in Manchester. Additionally two scientific articles on co-production have been published in Sustainability Science and Futures, and several more are underway and will be coming out in 2015.

Tools and skills for knowledge application, dissemination and learning

Knowledge co-production involves a variety of practitioners and researchers in different stages of the process, including dissemination. Working in a trans-disciplinary way means thinking about the appropriate strategies for knowledge exchange, communication and learning in order to create added value for users with different background and needs. Knowledge and information must be accessible in timely, transparent, and user-friendly ways. The first Strategic Plan for the Centre therefore included a supporting infrastructure of tools and skills for knowledge application, dissemination and learning. The focus was on increasing the accessibility to knowledge for different groups through adaptation and awareness of the Centre partners' knowledge, learning and capacity building needs. This area of work, called 'Tools', involved developing activities and products to make available the knowledge and information created at the Centre to both practice-oriented city officials and academic researchers. Examples include web-based repositories and interfaces, visualisation tools, computer games, networks, workshops, and personal contacts – for research, innovation and development, as well as for practical use and application in urban environments and organisations. The work with Tools was also integrated closely with the communication strategy, as well as with events, and the many informal and formal workshops, seminars and courses at the Centre and the LIPs.

The content and interfaces within the Tools work were developed in close collaboration with the LIPs, especially in Gothenburg, and the various partners of Mistra Urban Futures. Visualisation, computer games and web-based technologies have been developed and tested by both the Centre partners and associated partners, thus reflecting not only the state of knowledge, but also pioneering ways in which knowledge dissemination and use can be designed through joint processes of knowledge creation. This work is still in development and the objective to ensure the usefulness and user-friendliness of knowledge created will remain a central priority in the next Phase of the Centre.

GAPS: a cross-LIP project

The Governance and Policy for Sustainability (GAPS) project, initially named the International Pilot Project (IPP), is a comparative review of current urban sustainability challenges and of knowledge and governance for urban sustainability challenges. In Phase 1, Gothenburg, Greater Manchester, Kisumu and Cape Town were involved. The project set out to develop a baseline of key contexts, challenges and conditions in each LIP to inform the development of the Centre. By looking at local and regional policies and governance, the project mapped what challenges cities face, which solutions are used and how policies can be more effective through the inclusion of different forms of knowledge.

The main research questions included: What is the understanding of the governance of and policies for urban sustainability in each of the LIP contexts? How are the knowledge and skills of different individuals, groups, communities and organisations integrated within urban sustainability policies in each context, and what are the implications for practice? How can we understand the different challenges facing each of the LIPs and possible transition pathways for each?

Design and process

In Phase 1 (2012), a baseline assessment was designed to understand the specific challenges of urban sustainability in each LIP context; the content of formal policies designed to address urban sustainability; the roles of different organisations, groups, communities in formulating policies; the forums and mechanisms for consultation and participation in formal policy making-processes; the mechanisms for and barriers to ensuring that policies are implemented and assessing their effectiveness; the evidence base for urban sustainability policy and what relevant activities and groups remain ‘outside’ of the formal policy process.

Each LIP sets up a Project Advisory Group with stakeholders and identified relevant geographic scales for the project. Each team undertook workshops, interviews, focus groups and secondary analysis of existing data and policy documents. At the end of Phase 1, LIP reports, with identified policy stakeholders, were produced. Five examples of activities illustrated different approaches to sustainable urban development in the city-region, along with the reasons for their selection in order to add to comparative learning within and between the teams. In Gothenburg, this project phase was largely based on the work in the GOLIP pilot project on multi-level governance.

In Phase 2 (2013) the LIPs examined how different individuals, organisations and communities view the challenges of urban sustainability. The research then considered different possibilities and responses to those challenges, as well as potential pathways to address them. The project design included: interviews in each LIP with a range of different stakeholders; focus groups with a range of participants around the challenges of urban sustainability and possible pathways to alternative futures and a final workshop to bring different stakeholders together to discuss and refine the report. Each LIP then published a version of those in their cities.

The GAPS project embodies the ethos upon which Mistra Urban Futures was set up. It was fundamentally designed to link the questions about what is needed to develop more sustainable cities to how those challenges could be met. The purpose was to examine the relationships between theory and practice in urban sustainability and contribute to making policies and practices more effective. The teams had to build relations of trust between partners which needed time, negotiation and a clear understanding of orientations towards knowledge and context itself. Policy-makers and practitioners attended team meetings, provided perspectives and are involved in the writing of articles.

Key findings – a basis for comparative research

The GAPS project engaged academic, policy and non-formal urban stakeholders in understanding complex urban challenges and how they might be addressed. In many of the LIPs this provided an important foundation for other projects on specific themes and issues. The work was considered to be highly relevant to each urban context, and the testimonies from stakeholders have been very complementary in this respect. The research identified key ingredients for better policy-making in the future, including: enhanced reflexivity in how issues are conceptualised and discussed; the importance of making joint spaces where issues can be discussed away from instrumental constraints of everyday contexts; valuing different forms of knowledge; providing alternatives to top-down governance and distinguishing between ‘strong’ and ‘weak’ forms of sustainability. The project identified challenges and how these are reflected in policy formulation, consultations, deliveries and practices and examined how particular knowledge and skills inform the conception of urban sustainability.

The project process required a different mode of operation from traditional forms of research and contributed to embedding the ethos and practice of co-production within each LIP. This is an important outcome in itself and enhances the reputation of Mistra Urban Futures around the world. The GAPS reports, testimonies and processes have met the criteria of policy and practice relevance to those outside of academia. Tangible impacts and evidence can be seen in how Mistra Urban Futures work is referenced in key policy initiatives in different LIPs. In Gothenburg, the city-regional sustainability strategy was found to be based on ‘weak’ sustainability and hence not responding to the major challenges, notably increasing social polarisation. The findings were discussed with senior officials of the city region, as well as presented at an open conference attended by leading city-regional politicians and officials, as well as several interested parties. In Manchester, GMLIP was a key partner in the Annual Low Carbon Hub Stakeholder forum and is working closely with the GM Low Carbon Hub to inform the refresh of the Greater Manchester Climate Change Implementation Plan through hosting workshops and updating the evidence base.

The results have been presented nationally and internationally, including at the Royal Geographical Society Annual Conference (London 2014) and informed the international workshop on ‘Universities and urban transformations’ (Manchester 2014). Journal articles have been produced for: ‘Urban Research and Practice’; ‘International Journal of Knowledge-Based Production’; ‘Policy Futures in Education’ and ‘Regions, Regionalism and Entrepreneurship’. The work has informed the book ‘Social Research: Issues, Methods and Process’ (McGraw-Hill 2011) and publications have appeared in the following edited collections: ‘Handbook of Qualitative Data Analysis’ (Sage 2013); ‘After Sustainable Cities’ (Routledge 2013); ‘Public Innovation Through Collaboration and Design’ (Routledge 2014); and ‘Production and Use of Urban Knowledge: European Experiences’ (Springer 2013).

In future plans, publications are in production for several journals, including ‘Urban Studies’. The work will also inform two books: ‘Reflexivity: A Guide for Social Scientists’ (Sage 2015) and ‘Cities and Knowledge: Promise, Politics and Possibility’ (Routledge 2016). Finally, we are pleased to report that a special issue proposal has been submitted by the coordinators and accepted for publication in ‘Local Environment’ (2015). Edited by the coordinators with contributions from the LIPs, this is significant recognition by the academic community for the work undertaken by the team as a whole.

GOTHENBURG LIP

Urban challenges and local research agenda

The projects conducted at the GOLIP address critical urban challenges defined by the local consortium. Such problems include growing social polarisation especially through segregation and gentrification; environmental issues such as climate change adaptation and mitigation; insufficient transport infrastructure; and the need to promote local and regional economic growth.

Three main challenges for sustainable urban development in the Gothenburg region were described by the GAPS project, as follows.

First, the main threat to a socially sustainable development is the challenge of increased polarisation (segregation). Segregation appears in housing, on the labour market, in schools and within and between families. The lack of varied types of housing in the regions' different urban districts is one reason for the growth of polarisation. Gothenburg faces comparatively large problems from segregation, mainly segregation between areas: For people born in Sweden chances of having a foreign-born neighbour are 16 %, but for someone born abroad, they are 39 %. From 1992 to 2011, average income in the richest district increased by 314,000 SEK, whereas it decreased by 10,000 SEK in the poorest part of town. Life expectancy for women is 7.5 years longer and for men 9.1 years longer in affluent areas compared to the least favoured ones.

Public transportation in Gothenburg is very sensitive to disruption, is slow and has insufficient carrying capacity. The railway system has reached its capacity limit. Air pollution is an additional problem. The proportion of journeys made by public transportation is much lower than in comparable cities elsewhere.

Rising temperatures are expected to lead to rising sea levels and increased water flows which will increase the risk of flooding and hence of landslides along the Göta River. High water flows also increase the risk of salt water contamination of the river, which is the city's main source of fresh water.

The platform and its partners have also gradually focused GOLIP projects on areas where the knowledge and implementation gaps are perceived as the widest, and where other important initiatives have not already been taken within the city region. For example, the field of 'urban mobility' is covered by several other research activities in the region.

Since the start of Mistra Urban Futures, the GOLIP has had a pragmatic, challenge-based approach to project development — 'to water where it grows' — hence, strengthening the links to strategic processes within policy-making organisations. Testing different methods for project development proves that the most suitable approach to fulfil the mission of Mistra Urban Futures is to build strong, diversified teams over a longer period of time. Ever since the application process to Mistra, issues have been brought to the table by partners, and the local research agenda has, over the years, been reframed compared to the original application. This is in line with the need for Mistra Urban Futures to be a responsive, learning and adaptive organisation. Projects initiated at the GOLIP are primarily within fields of strategic importance for which a limited amount of existing resources are available, where Mistra Urban Futures can act as a catalyst to attract funding and create new knowledge and new ways of working.

Knowledge themes and projects

Among the most important activities during the first two years of the Centre (2010–2011) were five pilot projects initiated by the process leadership group during the application-writing phase. These cover a broad range of urban challenges: ‘Multi-Level Governance’, ‘A City Structure Adapted to Climate Change’, ‘Urban Empowerment’, ‘Business-Driven Sustainable Urban Development’, and ‘Urban Games’. Each partner began or supported one or several of the pilots. Overall, they focused on creating processes to promote the integration of cultural differences and various types of scientific and practice-based knowledge that capture the substantive and practical complexity of specific sustainability-related problems. A manual that supports the projects and draws on their experiences of co-production was initiated in 2012 and is continually updated.

With local and regional challenges as the starting point, projects are initiated at GOLIP primarily within fields with ‘research potential’ where there is a limited amount of knowledge. Mistra Urban Futures can act as a catalyst to increase knowledge in these fields while complementing the existing resources available. The GOLIP offers an environment for carving out complex issues from organisations and provides the opportunity to think outside the box.

When projects were initiated for the first fully operational phase 2012–2015, partners were invited to propose new projects. Out of these numerous proposals, a small number were selected and developed into Mistra Urban Futures projects, characterised by dual leadership and participation from research and practice. The dimensions ‘Fair, Green and Dense’ were present in all projects selected, but in different ways and proportions. ‘Green’ was explored by several new projects, such as WISE (see below). The four public partners felt that the dimension ‘Fair’ was not represented to the extent corresponding to the challenges that they had identified. Therefore, they jointly developed the project ‘Knowledge about and Approaches to Fair and Socially Sustainable Cities’ called the KAIROS project (see below). As to the sustainable densification aspect, several avenues were explored, which resulted in several projects being developed, such as: ‘Urban rail communities’ (a gradually developing knowledge process with several sub-projects created to date), the case ‘Kommersen’ (cultural densification, see below), ‘Eco-system services and urban greenery’ (green densification, see below), the case ‘East Hospital – sustainable city district’ (densification of a 1970s hospital complex).

The projects that were developed during phase I, now allow the researchers within GOLIP to identify a set of knowledge themes on which to focus, some of them rooted in the pilot projects and others identified by project development work over the duration of the phase. In each theme, critical questions at the intersection between research and practice include:

1. Social integration

- To what degree is inequality manifest in different urban structures and how can these structures be understood, developed, built and managed differently to reduce unfairness and to strengthen access and social inclusion? How can urban practice (re)shape visions and realities towards fair cities?
- What roles do public involvement, dialogue, participation and influence play in creating more sustainable cities? What mechanisms are needed for capacity-building, citizen empowerment, governance and finance?

2. Sustainable urban lifestyles

- What do localised responses to the call for zero-carbon resource-neutral cities look like? What are the key constraints and barriers? What types of social innovations and technologies would play key roles?
- In what ways do citizens, families, urban governments, corporations, and financial and insurance institutions understand and respond to issues of resource scarcity and global risks such as climate change?
- Can urban production and consumption be decoupled from resource depletion and environmental degradation?

3. Integrated social and ecological urban systems

- What are the priority product groups, sectors and functions with high environmental impacts in the municipalities' metabolism?
- To what extent can municipalities influence environmental impacts from consumption of resources and products?

4. Business-driven sustainable urban development

- How can civic, public and private sector activities and investments co-produce sustainable urban development without prioritising individual gain, tax revenues and profits over urban liveability and prosperous livelihoods?

5. Spatial urbanisation and competition for urban qualities

- How can notions such as 'quality' and 'access' be reconceptualised and concretised to facilitate a more dynamic and constructive approach to urban density?
- How can dense cities, in terms of increased access, be shaped without endangering green urban environments, ecosystem services and urban biodiversity; encroaching on socio-cultural space; or creating barriers reinforcing segregation? How can cities grow in a sustainable way, and without sprawling?

Since 2010 and the start of Mistra Urban Futures, 45 projects have been carried out at the Gothenburg platform, ranging from small feasibility studies to full-scale research projects conducted over several years. Below is a selection of projects and descriptions of research corresponding to the different knowledge themes in focus at the Gothenburg platform - one or more projects derived from each theme. Several of the larger projects will be finalised by the end of 2015; hence, this is a summary of the most important findings to date.

Knowledge about and Approaches to Fair and Socially Sustainable Cities (theme 1)

This project, with the acronym KAIROS, focuses on driving forces, conflicting goals and power structures as possible explanations of the deviations between political ambitions and the actual ongoing socioeconomic development in cities. In this regard, attention is drawn to some of the local consequences stemming from the changed role of the state and the implied new methods for governance. Furthermore, the project aims to identify more specifically how conflicting goals can be dealt with and the counteracting forces that could possibly ease the negative impact and economic vulnerability that might follow export-oriented economic growth and strengthened globalisation.

The team has organised the work in three sub-projects that address the following research questions: Which are the main driving forces, conflicting goals and power

structures behind increased segregation, discrimination, income and health gaps, as well as decreased political participation that characterise the present state of affairs in the city? How do the dominating conflicting goals and power structures manifest themselves on the local level and what are their main consequences? How could the identified conflicting goals be dealt with in order to enhance social sustainability and to what degree is the development responsive to political conditions?

Summary of findings to date

The point of departure for this research is increasing differences in health, child poverty, incomes, working conditions, empowerment and participation. The city region is experiencing severe challenges that result from the increasing differences that are connected to three major processes – globalisation, migration and urbanisation - which are interlinked and mutually reinforcing. This restructuring of society creates new and unclear structures of power in which decisions and influence to an ever larger degree are removed from the democratic system and shifted to network structures on all levels. Within these, democratic influence is limited. Instead other structures are reinforced in power and influence. This leads to increasing differences in empowerment and living conditions.

The research carried out so far has underlined the importance and validity of the research questions, as well as whether these questions are possible to research. Important interfaces have been created with other similar initiatives taken by the Consortium partners in order to come to grips with increasing development gaps and lack of social sustainability. KAIROS knowledge production through co-creation is a process in progress. The research findings are not yet finalised. The project contributes to an ongoing discourse and co-learning process on perspectives and concepts that KAIROS members see as pivotal for a socially sustainable and fair development.

A report on Power and Dialogue in Just and Socially Sustainable Cities (2013) highlights these issues, particularly focussing on influence and participation, electoral turnout and the crisis in representative democracy in an increasingly heterogeneous society. Dialogue is needed to confront these issues, and to challenge and make visible the differences in values. This dialogue needs to be ongoing and to reshape identities and visions, if a socially sustainable development is to happen. Two other important reports include a briefing on segregation and a report on the ‘Democracy Square’ of Västra Götaland Region, which particularly focuses on the youth perspective.

Divided city - Shared city (theme 1)

One of the key challenges for cities of today is social polarisation. It is essential to arrive at a deeper understanding of the critical role urban form plays in social segregation and how architecture and urban design can contribute to a less segregated city. The aim of the research project ‘Divided City’ is to demonstrate and operationalise this urban research in the City of Gothenburg while bridging research and practice. Within the framework of Mistra Urban Futures, the City of Gothenburg has initiated the project in collaboration with the Royal Institute of Technology (KTH, School of Architecture) and the Swedish National Board of Housing, Building and Planning. The project explores methods and approaches in studies of four neighbourhoods included in the national Urban Development Initiative. In late 2015, the project will continue and expand to include the cities of Stockholm and Malmö.

The work is organised around three themes. The first focuses on spatial analysis foregrounding social aspects, establishing potentials and constraints in the urban

environment. The second theme aims to reveal what interventions will have a positive influence from a social perspective. The third theme analyses how the social dimension within urban design is addressed and described in certain key documents and policies.

Summary of findings to date

The core of the project is to test and adopt methods and approaches applied within research to practice and more specifically to the municipal processes. A central aim is to build a model that allows network analysis that takes urban form into consideration and, at the same time, can be linked to land use (business, resources, facilities, census data etc). The challenges in doing this relate to increasing the knowledge of the advantages and the limitations of the methods, as well as to build a geo-data base, that includes relevant data and statistics. A scientific paper has been produced, peer-reviewed and presented at a conference. Others are planned (abstracts have been submitted). The project has met with a vast interest in the approaches and methods; courses have been requested, and hence preliminary plans are made for teaching these topics. Furthermore, the great interest from other municipalities – such as Stockholm and Malmö –resulted in an additional research project called ‘Metropolitan Cities in Collaboration’ carried out during the autumn of 2014. The three cities have had the opportunity to share experiences on working with urban design as a strategy to counteract segregation, closely linked to the national ‘Urban Development’ initiative. Other municipalities have also asked to be a part of that work, and the possibilities for this are being investigated.

A central finding of the project concerns the way in which results can be presented, illustrated and represented to ensure that different users can understand and act on the research. As a result, jointly interpreting the empirical findings has been given more space in the work, reflected in both text and illustrations. The case study is a good example of how the methods and approaches may be applied in a specific neighbourhood and function as a support for urban design. When municipal officers are involved during the whole process, they develop a sound understanding of the different steps of the process and of the benefits; they therefore become ‘carriers of knowledge’.

Well-being in sustainable cities (theme 2)

The discussion on the transition towards ecological sustainability is dominated by the view that technological improvements will have to “do the job” in order to avoid lifestyle changes that would imply sacrifices. But what if a stronger focus on well-being could be a driver for sustainable development? Results from the emerging field of well-being research suggest, for example, that the link between the level of private consumption and well-being is weak in affluent societies, whereas factors such as time pressure and certain practices like commuting may have negative effects. This may open new pathways that combine a high level of well-being with decreasing emissions. Can a low-carbon society be achieved with maintained or increasing levels of human well-being?

‘Well-being in sustainable cities’ (WISE) is carried out in a close cooperation between Chalmers, the City of Gothenburg, the Swedish Transport Administration and the Region Västra Götaland within five sub-projects:

1. Low-carbon Gothenburg
2. Radical policies: well-being effects of congestion charges
3. Decision models for executing sustainable transitions
4. Redefining urban progress
5. Work-time innovations

Summary of findings to date

The overall aim of the WISE project is to facilitate the process towards low-carbon urban lifestyles. The scientific objective is to increase the knowledge of the relationships between low-carbon lifestyles and individual well-being. The following summarises the preliminary main findings thus far.

A consumption perspective on greenhouse gas emissions is essential for a comprehensive picture of the goal of low-carbon urban lifestyles (the geographical perspective does not include imported goods and international travel, for example). Analysis shows that the main factors to explain the differences between different individuals' carbon footprint are: household income, housing type, and distance to work and service.

The results of scenario calculations for the residents of Gothenburg indicate that the current focus on technological change is not sufficient to achieve low-carbon urban lifestyles. However, analyses of potentials indicate that technological and behavioural changes combined can be sufficient for achieving low-carbon lifestyles by 2050. This scenario includes e.g. technical changes regarding energy efficiency and phasing out of fossil energy for heating, power generation and transportation fuels, as well as behavioural changes regarding air travel, meat consumption, working hours and the share of services of the total consumption.

Quantitative analysis shows that people with a low-carbon footprint do not experience lower well-being than others. No significant correlations have been identified between subjective well-being and specific emissions-intensive practices such as car driving, air travel, consumption of red meat or accommodation size. Instead, the research confirms the established picture that socialising with family and friends, and having good health and to have a job largely determine the level of well-being. As long as these factors are not adversely affected in a low-carbon transition, there is no reason to believe that it will influence well-being. Instead, shorter working hours and increased service consumption are factors that could lead to higher well-being.

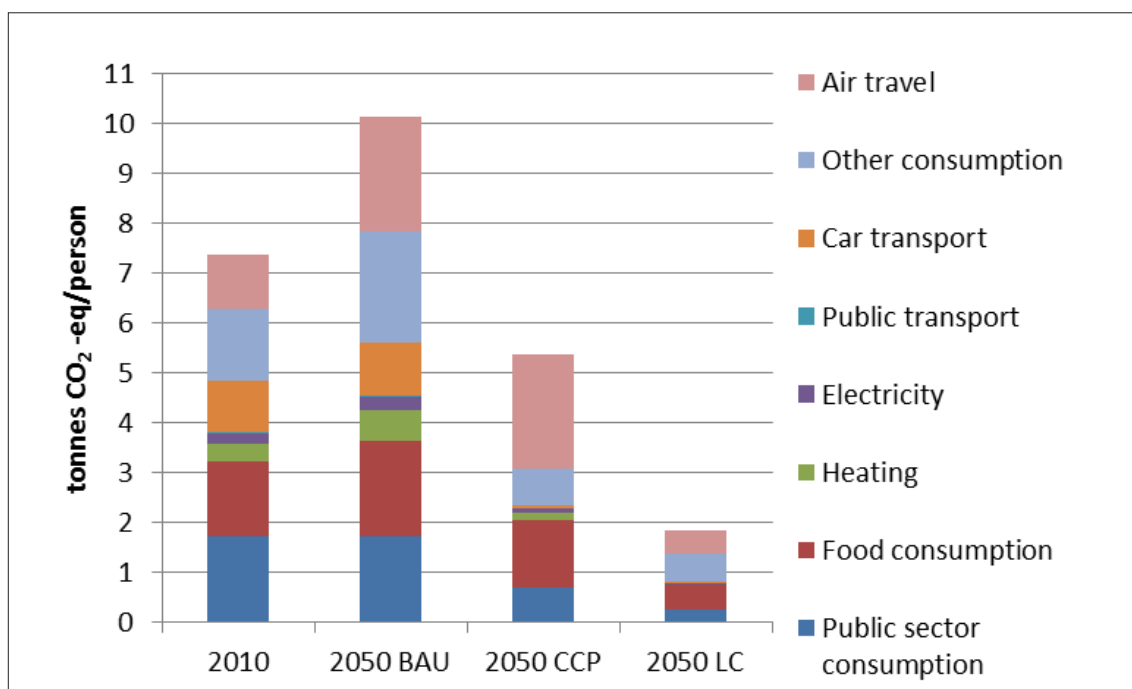


Figure 6. Three scenarios for 2050: BAU Business As Usual; CCP Current Climate Policy; LC Low Carbon Transition

Because carbon emissions, from a consumption perspective, have not decreased in Sweden during the last decades, it is clear that new radical policies are needed in order to achieve low-carbon urban lifestyles. In order to increase knowledge of radical policies, analysis has been made of a new policy: the congestion fees in Gothenburg. The results show that the implementation of congestion fees was not associated with any significant changes in satisfaction with daily travel or with the overall well-being in the studied groups. This can partly be understood by the fact that those who changed transport modes were those who had already reported having good opportunities to avoid using transportation by car.

In addition, two sub-projects were recently started within WISE: 'Redefining Urban Progress' and 'Work-time Innovations'. A number of workshops with the participation of researchers and practitioners have been carried out and joint activities have been launched in which the work is ongoing.

From waste to resources (theme 3)

To help waste management convert to a sustainable resource management system, a clear framework is needed that helps structure and coordinate efforts by the different parties involved. A Licentiate thesis in June 2014 presented a material flow diagram that expands the traditional boundaries of waste management systems to include production systems and the use phase of products. The model draws from previous models for material flows through society and serves to help visualise what part of the resource system should be strengthened (e.g. resource recovery in general, communication between producers and waste handlers) or suppressed (e.g. landfilling, incineration, consumption) in order to support more circular use of material resources. The thesis concluded that there are two relevant gaps to address in order to improve resource recovery: (1) the connection between waste management and production systems and (2) the connection between the users and the waste system.

An initial interview study was conducted to discover the current state of collaboration between waste management and product design. It targeted people involved in waste management and designers who had worked with waste issues. The study showed that some collaboration exists, but it is too small still to have any influence over current waste streams. A second study focused on one aspect of the existing gap between production and waste management; the possibilities of designing with so-called difficult waste. Stena Recycling offered materials that they obtain but cannot recycle today, so that students could use these materials for product development. The main barrier to designing with waste was found to be the lack of reliable material knowledge. It was also made clear that designing with waste is a palliative solution. Difficult materials, reaching the waste system, should be avoided to the highest possible degree. In the case of pre-consumer waste, this could be achieved by broader adaptation of industrial symbiosis and stricter production regulations. For post-consumer waste, difficult waste should be avoided by significantly improving waste sorting and collection systems.

A third study followed to address sorting and collection systems, which mainly investigated the relation between the users and the waste management system. It was carried out in collaboration with Poseidon AB (the City of Gothenburg's public housing company), with whom the researcher focused on their current sorting solutions and observed in detail the current situation through waste characterisation, interviews, field observations and surveys. The study found that solutions that are in line with users' interactions with discarded materials are more easily adopted by the users, while solutions that generate value for the users could be a way to significantly improve user engagement.

Biodegradable waste is currently insufficiently recovered, constituting a large portion of the discards that are incinerated. Possibilities of recovering bio-waste will be explored in future work. Different suggestions for improvement were presented to Poseidon AB, which has already started testing separate collection of textiles and organising second-hand markets in different districts.

Green production (theme 3)

Demand is growing for locally produced and organic food in Sweden today. At the same time previous studies show that self-sufficiency of for example vegetables, in the region of Västra Götaland, is less than 10 % for many vegetables. The region has a small number of ageing producers, based in small-scale companies, subject to competition from large enterprises. These offer imported food at low prices, thus reducing profitability for the local producers.

The farming on allotments and by cultivation associations within the city is mostly a hobby, but can contribute to the consumption of small groups and individuals. Unfortunately these farming initiatives are difficult to scale up to create new jobs and a real source of income and food. At the same time, the City of Gothenburg intends to look at today's land use and possibly open up some areas for commercial cultivation and farming. It therefore welcomes new initiatives.

In cooperation with key stakeholders, the project 'Green Production' identified two main areas that can strengthen and create opportunities for local food production that is financially viable within and around the city: (1) new business models linking producers with consumers and (2) training that links farming and entrepreneurship. By focusing on these areas and creating a number of activities and venues around the two focus areas, the project has contributed to starting new collaboration between important actors and increased the knowledge of these issues.

To increase local food production to become an important source of food in urban areas and in this project specifically in and around Gothenburg, one of the core issues is to establish collaboration with key stakeholders, networks and other ongoing projects with similar purpose in order to create a critical mass. Especially the cooperation with the County Administrative Board of Västra Götaland has been favourable and has facilitated contacts with the existing local food producers, as well as those who plan to become producers. The cooperation also created an important link between urban and rural areas.

Community Supported Agriculture (CSA) was identified as a key business model for producers. This concept is well known over the world, but relatively unknown and untested in Sweden. The project spread the concept of CSA mainly in western Sweden, but also in other parts of the country. This effort has already created new contacts and partnerships between consumers and producers. The work so far has shown that there is a lot of interest from both the producers and consumers, but long-term continuity to disseminate and implement the business model is required.

For that reason, additional funding was obtained from the Region Västra Götaland. The new project is called 'Andelsjordbruk – säkrad avsättning för lokalproducerade livsmedel' (CSA - guaranteed provision for locally produced food). The County Administrative Board of Västra Götaland is the lead partner and the new project will start in 2015 and continue for three years. The aim is to promote commercial and local food production by developing the CSA concept and business model in the County of Västra Götaland. The project, which involves both producers and consumers of locally produced food, will support at least three pilot projects using the CSA concept.

Training, entrepreneurship linked to primary production and processing were highlighted as key factors to strengthen the viability of locally produced food. Green Production has initiated a partnership and led a process where several public and private stakeholders and educational institutions have participated to discuss how such training can be initiated and operationalised.

The partnership has resulted in an application to start a programme for higher vocational training in Gothenburg called 'Food Maker'. The aim is to provide training closely connected to employers and industry in food production in, or at the outskirts of urban areas, that are part of a growing urban food movement. Food Maker will give the students the knowledge and capabilities to run a Food Maker business, in primary production (agriculture or animal keeping) or/and food processing. Alternatively, it prepares employment in an agricultural or food processing company – or within the public sector where knowledge of locally produced food is needed.

Valuation of ecosystem services provided by urban greenery (theme 3)

The overall objective of this project, financed by GOLIP, the City of Gothenburg, the Swedish Transport administration and Formas (a Swedish research funding administration), is to develop knowledge and methods that identify, assess and integrate ecosystem services (ESS) provided by urban greenery in urban planning and risk management. Specific objectives are to (1) analyse the spatial distribution of urban greenery as a basis for assessing a number of primary ecosystem services (biodiversity, climate regulation, noise reduction, air, soil and water management, recreation and well-being), (2) quantify and value the services current, as well as historical and potential quality, (3) examine how these ESS interact and based on this develop a method for assessing the integrated value of ESS provided by urban greenery, and (4) develop and propose innovative strategies for using urban greenery to promote sustainable urban development today and in a future climate.

Methods include spatial data analysis, field measurements, modeling, a questionnaire, expert judgments and multi-criteria analysis (synthesis). Seven green spaces in Gothenburg have been used as case studies. Examples of green spaces include vegetation along rivers and roads, parks (old and newly established), allotment gardens, green courtyards with common gardens and urban woodland. The ESS in the seven sites were assessed during 2014.

Main findings to date

The findings of this project will be included in the final assessment of ESS using multi-criteria analysis. Preliminary findings from the questionnaire show that the sites are used all year round, although most frequently in summer and spring (several times a week). The most important reasons for visiting the sites are to get fresh air, take a walk and enjoy the greenery. The well-being among city inhabitants varies between the different cities studied.

Preliminary empirical findings from the measurements also show that biodiversity as a supporting ESS varies between the sites; for instance, bird diversity was highest in a central old park but the highest vegetation density was found in a peri-urban site and in a city woodland. A study showed that the regulation ESS of pollination (abundance and diversity of bumble bees) was enhanced by urban gardens and ornamental flower beds. The cooling ability of trees is another ESS. However, during hot and dry summers (like 2014) trees loose many leaves, which affect their cooling ability when it is needed

the most. Although largely reduced, the nocturnal transpirative cooling effect, on the other hand, can be substantial after sunset at street level. By increasing the amount of permeable surfaces, the water supply and thus the transpiration rate are enhanced. Finally, it was shown that the effect of urban vegetation on air pollution concentrations is small, although it seems to exist for NO₂ in a traffic polluted environment.

Business-driven sustainable urban development (theme 4)

Cities, citizens, corporations, non-profit organisations and academia are all stakeholders that need to be included when negotiating sustainable urban development. The one type of collaboration that stands out as not having been critically addressed by academia or by practitioners in a significant way, with regards to the quality of the knowledge and to what degree it is critical, is between cities and corporations. Given the need for deep cooperation in order to realise high sustainability ambitions, it is surprising that existing knowledge tends to focus on consensus and partnership-building, without understanding the different goals and logic that characterise public and private interests and how these may be managed.

The theme 'Business-driven sustainable urban development' (BOSUD) is a direct spinoff from one of the pilot projects, which was developed to address challenges singled out by the Consortium partners during the application process. The research team has collaborated in a number of projects within Mistra Urban Futures, and the project forms an important foundation for working within this knowledge theme.

The most important research questions addressed by the team can be summarised as follows: how can cities collaborate with corporate interests in building projects so that they do not jeopardise inherent democratic values, while at the same time drive toward an efficient realisation of high sustainability standards? How can cities support the development of companies that deliver new technologies or demonstrate unique capabilities needed in realising a sustainable urban development? What kind of organisational capabilities, designs and resources are needed in order to manage the type of corporate collaboration described above? What business models and corporate cultural attributes support collaboration regarding sustainable urban development?

The relevance of these questions to practice is exemplified in support from at Swedish national scale. Vinnova, the Swedish innovation agency, granted funds for the development of four innovation platforms for sustainable and attractive urban development in Lund, Malmö, Gothenburg and Borås. These started in July 2013 and will be finalised in June 2015 and they aim to support collaboration between municipalities, research actors and the business world. Mistra Urban Futures and the research team behind BOSUD were commissioned to develop participatory research that analyses the development phase of the platforms. The researchers are following and describing the innovation platform activities, analysing data from an innovation perspective, and feeding the results back to the innovation platforms and Vinnova. The aim is to achieve a better understanding of innovation processes related to sustainable urban development and enhanced learning between the platforms, which all have different prerequisites and strategies for reconstruction.

Mistra Urban Futures is also one of three core partners - with the City of Gothenburg and Johanneberg Science Park - in the Gothenburg innovation platform for a sustainable and attractive city. The aim is to create a clear structure to utilise applicable new ideas which generate valuable change in the River City areas. Important outputs from the project will be a strategy for the City to promote innovation and meet the vision of making the

River City a world class arena for test and demonstration of new solutions. The project is framed around three innovation themes: sustainable lifestyles, socially mixed housing and smart energy systems. Within the platform, a number of new test and demonstration projects will be initiated and synergies found with existing ones.

Summary of findings to date

Experts have limited awareness of the need for a more structured approach for deep corporate collaboration in sustainable urban development and the risks associated with inaction. To a large degree, this stems from a limited understanding of the corporate conditions for doing businesses and the means to foster these in a favourable way. Different models for collaboration analysed by the project will be demanding to implement for urban and corporate representatives alike, as their success depends to a very large degree on the capacity and experience of the participants. The capabilities of participants can also be seen as structural capital embedded in the organisations. A central finding relates to the need for a shift in the professional skills and requirements for urban developers.

Cities as value networks (theme 4)

In 1950, the urban centre of Gothenburg was home to 140,000 residents, and 30 years later, the population had halved. In the 1980s, the population started to increase again, but today, it is still less than it was 60 years ago. This situation reflects fluctuations of urban populations all over Europe and North America. Urban centres today have not yet fully recovered from the flight from cities seen after the Second World War, though city centres are increasingly seen as attractive places to live and work. The project ‘Cities as value networks’ (CAVN) aims to investigate the mechanisms that might make cities expand in population size again. What features of urban environments do residents, visitors and entrepreneurs value? How do they form their judgments about the value of a place or a property? How are urban values manifested in planning, real-estate management and event industries and in the everyday use of spaces? The project group has representatives from academia, real estate, the City of Gothenburg, interest groups and the city region working closely together.

Summary of findings to date

The project is currently in the midst of its analysis and write-up stage; hence, it is not possible to formulate main findings. However, preliminary findings suggest that there are discrepancies between, on one hand, the value networks implicit in regional policies (sustainable development through growth) and, on the other, statistics showing a drain of tax base – and therefore a diminishing foundation for the financing of services – within the Gothenburg municipality. This finding suggests that these numbers show a potential imbalance in regional dynamics that “was not planned for” by the bipartisan regional network of the Gothenburg city region. Publication of a book presenting the findings is planned for 2015.

Embedded research for the Gothenburg River City process (theme 5)

River City Gothenburg is composed of central Gothenburg, along the river, and large areas of brown fields and old industrial land that is to be transformed into a living, attractive inner city. The area is one of the biggest urban development projects in northern Europe. In 2010, the task of producing the vision and strategies for redeveloping the whole area was commissioned by the City Council under the leadership of the City Executive Board.

An extensive consultation and concept process was initiated and followed by a Mistra Urban Future research team.

The team's focus was the practices of drafting visions and strategies for a sustainable city. How can different perspectives and interests collaborate and together create policies for the sustainable city? How are different interests to be translated into one strategic document? The researchers had access to essential forums, thereby allowing them to make recommendations to the project management throughout the process. The work of the researchers has been highly appreciated and the City of Gothenburg will use Mistra Urban Futures as its platform over the next three years for learning in the first implementation phase.

Summary of findings to date

The research put the crucial role of politicians into a strategic context. To be visionary is difficult in an organisation where there is not much room for strategic thinking; the day-to-day business gets in the way. The role of political leadership can be described as a management vacuum, since political leadership desires neither to manage nor be managed. The research found that this vacuum paradoxically allowed other actors to find mandate to act and to develop their organisational roles. The involvement of citizens is important, but the right questions must be asked. The risk is that the participation of various actors strengthens the process, but not the outcome. On the other hand, the process provides future projects with a method for working together with citizens, and methods can then be refined and put into use again. The role of the city (officials, politicians) to question existing paradigms cannot be overestimated. One way to achieve that is through a strategic, formalised document and decision-making process.

Urban cultures - Case 'Kommersen' (theme 5)

The density of a city is currently a hot topic of discussion. A dense city with mixed functions offers people the ability to move around within a limited area where everything is close by, allowing them to meet and interact with each other in their everyday lives. The role of culture is important for the development of dense and sustainable cities.

The objective of the project 'Urban Cultures: Case Kommersen' was to find new ways to realise the vision of the sustainable city. The starting point was that urban culture and cultural densification can be seen as a prerequisite for the sustainable city. By trying to define and use a new term, 'cultural densification', the project contributes to the wider debate on urban development. The project developed a case study of an urban flea market to examine how markets contribute to sustainable urban cultures.

Summary of findings to date

Arguably, markets can play important roles in contributing to sustainable urban development, depending on particular market mechanisms, organisational features and socio-cultural dimensions. The concept of sustainable cultural densification was defined as a series of complex processes of layering of values over time. These values could be seen as solutions to different problems residing in cities, and a lens through which to perceive sustainable urbanisation.

The urban area where the flea market Kommersen is located will be the focus for a renewal process the coming years. The results from the feasibility study have been highly appreciated by the city, as well as by real estate owners and developers. Together with a real estate company, the city has financed a second phase of the project in order to visualise how the cultural value of Kommersen can be used as an asset for the whole area.

The report Culture Analytical Planning, North Masthugget, Kommersen 2.0 introduces the notion of 'place character' that is applied as a tool for urban development with a specific focus on this city area. The project focused on local knowledge, experience and existing networks, but also on a specific aspect of the area – the importance of civil society actors and civic engagement. The study represents the many non-profit organisations and actors who put their mark on the area. Space character as a tool in urban development adds a new dimension by highlighting local political, cultural and historical aspects. Aesthetic and artistic processes are made visible – many with hints of participation and civic engagement – which allows the unexpected and vibrant to happen. A community-based aesthetic practice also provides many educational opportunities. These are important elements of the cultural and social sustainability of cities, that often get overlooked.

Planning in dialogue - Dialogue in planning (theme 5)

Participation in planning is a new and hot topic, as participation in local contexts as well as in policy-making on a global level is required in order to meet the challenges in terms of sustainability and resource distribution. A study of municipal efforts in the municipality of Lerum has focused on several questions about participation for sustainability's sake. A relevant question is: Are earlier results and findings about successful participation still valid or is new knowledge needed as new aims and reasons are being developed? The research has also studied the planner's own professional role in relation to successful participation in planning. The expertise held by the planner has been found to be invaluable in facilitation and interpretation of material in participatory processes.

In the case of Lerum, the research has provided the municipality with new ways of discussing its practice, in particular by elaborating the difference between the 'early stages' of a planning process and 'the earliest stages'. The first refers to the early stages within a process, and the second describes a current state in the local context, establishing a common report and set of conditions. As a result, the municipality now tries to avoid 'first meetings' and instead tries to fit all meetings into larger contexts and processes in order to build a sense of moving forward rather than "starting over" in every new project. The research project has introduced narratives and storytelling as an accepted communication form for local knowledge and other results from the study have clearly influenced the municipality's way of discussing participation.

The project has been conducted in close collaboration with the municipality, which has enabled results of the research to be directly implemented in the municipality's practice. Examples include changing administrative practices and a new forum which has been put in place, in order for politicians to leave the administrative side to officials and to focus on political and visionary issues in participatory interviews and workshops. Previously, there was an imbalance between sustainability efforts at the political level and for inhabitants, while the administration seemed to lose interest as it was considered to be an extra burden on top of everyday affairs. After showing the relationship between successful participation and a functioning relationship with administration, the pilot was given an overhaul to strengthen its organisation within the municipal everyday practice.

Main findings to date

The municipality is often seen as a single actor by inhabitants, which results in confusing communication, as different offices and sectors of the municipal organisation speak in

many voices. Regardless of which method is used in participatory interviews or workshops in a planning process, inhabitants will share their knowledge in the form of narratives. Understanding the linkages and causalities in these narratives is therefore crucial to the interpretation of the material.

Inviting local stakeholders to participate is in itself a means to share power, as information and common understanding of the local context leads to deepened understanding of the problems identified and solutions designed, and thus to more constructive criticism or input by the stakeholder. Successful participation starts before the planning process has even begun in the earliest stages, where continuous communication in some sort of arena for social learning is the key for a common context from which problem formulations and choices can be made. Local networks of inhabitants and actors can be the basis for such a forum for social learning. Prerequisites and obstacles for sustainability can easily be identified and solutions found through participation and shared-power networks. Having a participatory network of any kind in place is already a step toward sharing power and encouraging better decision-making processes.

GOLIP publications

GOLIP publishes reports, papers and briefs in the Mistra Urban Futures series. For details, refer to project summaries in Annex 2 and the list of publications in Annex 3.

So far, the Gothenburg Platform projects have also produced 34 (of which 15 are forthcoming) peer-reviewed scientific articles, 43 conference papers, more than 67 reports/papers/briefs and guidance for working in trans-disciplinary projects. Reports from the GOLIP are published on a continual basis and contain results from the projects. Papers are shorter and primarily published in English and should be widely accessible. Some publications are also published in the library databases of Chalmers and the University of Gothenburg, thus making them searchable more widely. Briefs are shorter summaries, focusing on conclusions and recommendations, and are targeted at policy and decision-makers.

GREATER MANCHESTER LIP

Urban challenges and local research agenda

Two central questions were framed to guide the GMLIP: What is happening to the sustainable cities agenda in the context of the economic, political, social and ecological crises of the 21st Century? In this context, how can the knowledge and skills of different stakeholders and communities be brought together to support a more sustainable urban transition in Greater Manchester? GMLIP draws on an intellectual background focused on critical urban theory and practice, urban governance and urban transitions.

The GMLIP projects contribute to both understanding and establishing the conditions for alternative forms of sustainable urbanism to emerge, as well as their relationship to mainstream institutions, policies and practices. Shaped by the initial work on the joint Governance and Policy for Sustainability (GAPS) project, urban governance is a central thread throughout all of the projects, with a particular focus on questions of access and inclusivity, digital and social media transformations, the knowledge base and the roles of universities and urban spaces for learning and reflection.

Knowledge themes and projects

The projects explore the conceptualization and contestation of the ‘sustainable cities’ agenda and efforts to construct alternative pathways for sustainable urbanism. Four themes cut across GMLIP research and are reflected in each of the projects. ‘Contesting Cities’ explores the conceptualization and contestation of different perspectives on sustainability and their implications for cities and city regions. ‘Governing Cities’ examines the relationships between formal governance structures and informal governing practices and how the governance of sustainable urban development is changing in post-austerity Britain. ‘Knowing Cities’ explores how knowledge is produced, exchanged and used; the values and dispositions needed to underpin sustainable urban development; and the implications for urban sites of knowledge production. ‘Transforming Cities’ provides a mechanism for collectively exploring the relationship between urban research and practice and alternative forms of sustainable urbanism.

These themes are represented and analysed across specific subtopics of a broad ‘sustainable urban development agenda’ which connect with central GOLIP themes, including: participatory governance and citizen dialogue; climate change and low-carbon societies; urban food and agriculture; urban retrofitting; digital and social media; cultural sustainability; knowledge-based development and innovation; social inclusion and poverty; and asset-based community development. To date, 11 projects in total make up the local portfolio of the GMLIP.

Mapping the Urban Knowledge Arena

In 2012, the ‘Mapping the Urban Knowledge Arena’ project sought to develop a baseline assessment of perspectives, initiatives and governing arrangements in the city-region. The intention was to understand the pre-existing trajectories and configurations of actors and initiatives in Greater Manchester in order to contextualize the work of the GMLIP and identify partners with whom to co-develop projects. A series of pilot studies were carried out. Informed by the local work for the GAPS project, further projects were subsequently developed in three categories, some responding to a practice-need, some linking with associated projects and others designed to provide coherence to the overall programme.

Platform: A Digital Portal

The first practice-led project is the design, development and launch of a digital platform for sustainability with ethical sustainable communications company, Creative Concern: <http://www.onthepatform.org.uk>. Strongly engaged in city-regional sustainability strategies, Creative Concern were concerned about the loss of knowledge and skills in Greater Manchester, particularly following the closure of the Regional Development Agencies in 2012. They noted the proliferation of websites and fragmentation of the evidence base to underpin coherent, integrated action on sustainability. This coincided with a research need to consider the role of digital transformations in developing more sustainable cities. In 2012 a feasibility study for a digital platform was undertaken, leading in 2013 to the launch of ‘Platform’. By autumn 2014, Platform had already made substantial progress in becoming *the* portal for Greater Manchester-wide sustainability communications.

Realising the Potential of Community Assets

In 2012 Seedley and Langworthy Trust in Salford had collaborated with SURF on a study to understand ‘community research’ as an alternative mode of producing knowledge which valued the skills and expertise of people living in urban communities as well as traditional

'experts'. The study also revealed that community organisations were struggling under conditions of austerity, welfare reform and public sector change. They were being 'squeezed' by increasing demands for their services, whilst traditional funding sources were being cut and governance arrangements were uncertain. The challenge was to realise the potential of community assets and raise the profile of the voluntary and community sector in contributing to sustainable urban development. Through 2013, a partnership was established with the Greater Manchester Centre for Voluntary Organisations (GMCVO) to look at the values of and for community hubs. This involved an academic placement, joint research and analysis activities and the initiation of an action learning set with the community hubs to help them network and support peer-to-peer learning.

Urban Food: Evidence, Policy and Practice

The GAPS project revealed a need to examine how community and lay knowledge can better inform the evidence base for urban policies; remove barriers to local action through the creation of an enabling policy framework and consider how to address the 'governance' gap between decision-makers and citizens. This spin-off local project explores these concerns through the lens of 'urban food'. This is an emerging interest for cities around the world as they seek to develop food policies, in part because it resonates with multiple stakeholders: from community groups, to industrial players, to policy-makers and academics. The project brings together academics across the University of Salford Manchester, independent researchers, the Biospheric Foundation and the Social Action Research Foundation to produce case studies of complex ecological urban food systems, understand everyday food cultures, examine the evidence base for an 'urban food' policy in Greater Manchester and consider the lessons from practice which should inform local developments.

#digitalbiospheric: Food Austerity and Digital Transformations

A new associated project was started in October 2014 funded by the Communities and Culture Plus Network at the University of Leeds, as part of the EPSRC Digital Economy programme. It stems directly out of the practice-led projects of the GMLIP to look at how digital transformations can build long-term community capacity to address food austerity. The emphasis is on a case study of the Biospheric Foundation in Blackfriars, East Salford, an area of high food poverty, through working with practitioner-researchers. A central output, in April 2015, will be the co-production of a Digital Action Plan. This project has been pump-primed by the GMLIP and involves a small amount of MISTRA Urban Futures co-funding.

The SIRCUS: Salford Interdisciplinary Research Connecting Urban Society

Universities are central stakeholders in urban development through their status as large organisations, their direct and indirect economic and social impacts and the knowledge they produce. A pilot study in 2012 on 'Knowledge for Sustainability' had identified the need to better organise research in order to facilitate the flows of knowledge between research and practice. 'The SIRCUS' was developed to examine the challenges and tensions in different modes of organizing knowledge between universities and external stakeholders and to consider how alternative modes might exist to enable more positive transformations for urban communities. This involved a set of multi-scale explorations of the relationship between university knowledge and urban policy at international, pan-Northern, inter-institutional (within Greater Manchester), intra-institutional (within

Salford) and local levels. Key partners have included universities in Leeds, Durham and Sheffield; the Greater Manchester Low Carbon Research Forum; Salford University's Sustainable Housing and Urban Studies Unit and the Social Action Research Foundation.

Creative Urban Environments

In 2012 the GMLIP carried out two pilot studies which highlighted the importance of creative methods for engaging citizens in debates over sustainable urban futures. The first supported a film-maker to work with the eco-schools team in Temple Primary School to examine their ideas on 'Fair, Green and Dense' cities in their local area in North Manchester. The children produced large artworks, a stop-start animation and a short rap. The second combined funding from the ESRC to produce an exhibition on 'Sustainable Stories', conceived of as a living research space, animated by visual artists, a speakers' corner and community researchers. This informed a further association between SURF's AHRC project on 'Cultural Intermediation' and the GMLIP's programme of work. A project was developed to explore the contributions and potential impact of the creative and cultural sector to sustainable urban development, from social, economic and environmental perspectives and hence to inform policy objectives to create a 'low carbon culture'. Activities have included a case study with Biospheric Foundation, collaboration with Manchester Arts and Sustainability Team, Julie's Bicycle and, through the AHRC funding, with Ordsall Community Arts to produce a large wirework marrow to highlight the importance of everyday growing in the city.

Remaking the Material Fabric of the City

This associated project built on SURF's 'Urban Retrofit 2050 project', funded by the Engineering and Physical Sciences Research Council, which explored the conceptualization of 'retrofit' through the lens of buildings, spaces and infrastructures around Greater Manchester and in cities across the UK. A series of alternative retrofit activities in Greater Manchester were identified and published on the online sustainability portal, Platform, looking at retrofit in churches, community arts centres and pubs, across waterways and green infrastructure routes, community gardens and hydro projects. In addition, match funding was developed to host an international workshop on 'Comparative Urban Retrofit: Purpose, Politics and Practices' in September 2012.

Cross-Cutting Projects

There are three cross-cutting projects on the GMLIP. *Comparing Urban Futures* is a collaboration with an independent researcher and policy fellow designed to interact with debates on UK national urban policy and to locate the experiences of Greater Manchester in a national context, through exploring case studies of the governance of urban sustainability in Leeds, Birmingham, Leicester and Bristol. *Values and Learning in Urban Environments* creates a space for looking across the different projects to critically evaluate their impact, as well as examining how the city region can better learn, reflect and engage its citizens in developing more sustainable futures. This project supports a formative evaluation process, through reflexive interviewing with stakeholders and developing local systems to monitor quantitative and qualitative impacts. *Univer-city* was designed to synthesise the experiences of building the GMLIP as an action-research programme of work around critically-engaged urban research practice. The GMLIP is a case study in how to develop work with different communities of knowledge and practice and the experiences of interactions at the 'messy interface' of university-city interactions.

Summary of findings to date

Framed as an intermediary space, a three-step process underpins the GMLIP projects: raising the visibility of alternative forms of sustainable urbanism, giving voice to those alternatives and contributing to the articulation of different values for city regional futures. These steps are central to understanding, challenging and building capacity to transform contemporary pathways for urban development.

Urban change is complex and fluid: formal governance structures and existing policy tools are inadequate for addressing these challenges, particularly when considering uncertainty, risk and competing knowledge claims. This constitutes a crisis of urban governance. Under conditions of austerity and public sector reform, the roles of different urban actors are being recast, with conflicting evidence of both the undermining and reassertion of state control. The GMLIP's activities shows that this is a time of constraint because of austerity, but also a time of opportunity, where interventions in the city region may help to develop alternative governing practices.

A central issue emerging is the relationship between formal governance structures and informal governing practices. This is a particularly high profile issue, in light of the Scottish Referendum in September 2014 and the contemporary debate about the future of English city-regions. A key finding of the research is the gap between city-regionalism and everyday activities in Greater Manchester in the context of an emerging crisis of representation and participation. These issues highlight the need for greater transparency, communication and engagement and the relevance of different scales of action for more participatory decision-making. The GMLIP's work feeds into an increasing set of debates about alternative forms of sustainable urbanism and the conditions through which urban alternatives and experiments emerge and take root.

The GMLIP experience to date has revealed the limits of and opportunities to co-constructing knowledge with urban communities. New practices have been introduced through co-produced projects that contribute to sustainable urban development in the city region. The GMLIP is part of an international community of scholars working on the research-practice relationship and the role of universities in urban societies, but is distinctive in combining theoretical development with grounded experience.

GMLIP publications

The GMLIP has 13 books, 18 book chapters and over 35 academic peer-reviewed journal articles produced or in production. Topics include co-production methods, the low-carbon economy, sustainability and recovery in times of austerity, and more. See Annex 3 for details on these publications and others.

KISUMU LIP

Local challenges and key research questions

Key research questions for the KLIP interrogate dimensions of the Mistra Urban Futures themes of Fair, Green and Dense cities with respect to urban safety, poverty alleviation, food security, social sustainability, environmental conservation and protection, and the empowerment of youth and women.

Urban violence is believed to be escalating worldwide, documented in UN Habitat reports with growing concern, alongside increasing crime and insecurity among residents of cities around the globe. As a growing city in the developing world, Kisumu is grappling

with urban safety as one of its research questions that need urgent attention. Urban safety is closely linked to high rates of poverty in urban centres. Such concentrations of poverty are the result of rapidly swelling informal settlements mostly occupied by the urban poor.

Kisumu joins many other cities that will be affected by shifting environmental resources and climate change. These issues need to be addressed, as urban populations grow and put increasing pressures on environmental resources. Most of the population that will be affected by these issues in Kisumu is composed of youth and women. In the developing world, these segments of society still lag behind in terms of economic empowerment and access to social justice. In order to create a society that is self-reliant and fair, massive investments must be channelled toward empowering women and young people.

All of these questions are deeply intertwined in the City of Kisumu. At the conception stakeholders' meeting, key challenges and research questions were identified and summarised into two programme areas: Ecotourism and Marketplaces. The KLIP addresses the above questions through these research themes and through the incorporation of others in the coming years.

Operational challenges so far include managing stakeholder expectations in terms of quick returns. The public — the community and local residents — expect immediate benefits from projects, and researchers must be innovative to create unique solutions that clearly focus on quick, tangible returns. Another challenge is how to gather resources for a common goal, where county government, partnership associations, and the KLIP can harmonise their operations with repeat initiatives and create collective outcomes to reduce the risks of competition and repetition.

Knowledge themes and projects

The two initial key themes, Ecotourism and Market Places, were designed to assist the people and the ecosystem of Kisumu. The people are affected by environmental degradation, severe poverty, food insecurity, gender issues, and inaccessibility of financial capital for youths due to age profiling, and loss of indigenous knowledge and biodiversity.

The two key themes were aligned with national and county government interests, following the 'Kenya Vision 2030', the Kenyan national government's draft vision for 2030, and in liaison with the Kisumu county government, which is a devolved system of governance. The alignment of the two themes ensures they address the following priority areas: capacity building for stakeholders, linkages and networking, knowledge production, sharing and utilisation, partnerships and participatory interventions. The two thematic areas have nurtured several projects, each addressing specific societal issues and challenges, in order to ensure Kisumu County and its environs develop into a Fair, Green and Dense city.

Through the sub-thematic areas, cultural and natural heritage sites have been identified as sources for economic empowerment and poverty alleviation, which also will address some aspects of the youth and women's agenda. To realise these projects, the Ecotourism research team has worked closely in collaboration with relevant stakeholders and has been entrusted to help generate knowledge for sharing and adoption of solutions and practices. Eleven PhD students have been part of this thematic area.

Research on governance of local authorities has been carried out, bringing together over 50 participants in focused discussions on how to make local authorities much more accountable, result-oriented, transparent and able to better deliver services. Notably, urban planning, financial management skills, efficient and effective revenue collections,

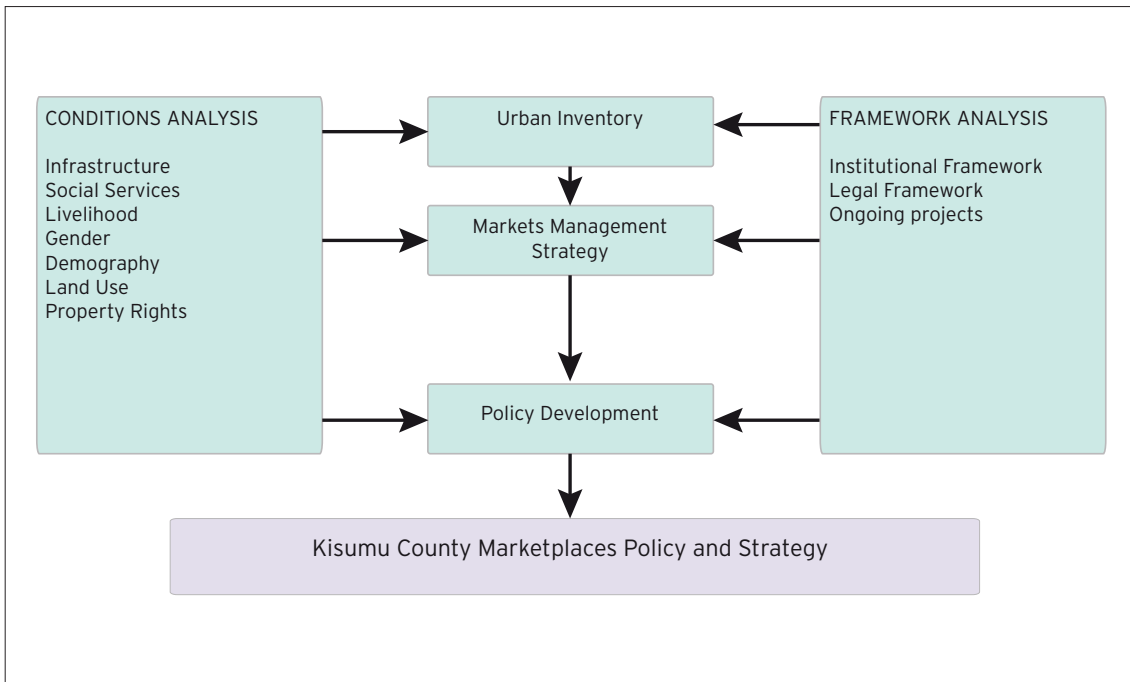


Figure 7 Schematic presentation of the Marketplaces project activities

customer relations, security, waste disposal and timelines in service delivery have been identified as some areas that needed quick interventions. Capacity-building in the local governance at all levels is certainly needed for operations and policy. The City Manager is part of the KLIP Trust Board, which infuses the practical challenges into the trajectory of activities undertaken by the Trust in collaboration with the various sectors in the City.

The Marketplaces research group has been looking critically at the situation. The theme considers conditions analysis, legal frameworks, urban inventory, land use, social services, solid waste, market management and policy development.

In supporting the thematic project activities undertaken by KLIP, PhD and Master's students have been very important. The students are drawn from both JOOUST and Maseno University. In addition, through a special collaboration, KLIP and GOLIP formed a creative cooperation in which a smaller team of seven PhD students jointly enrolled from Gothenburg and Kisumu (the Core Group) has been closely supervised and supported by the faculties from both KLIP and GOLIP. This concept fulfilled the desire to establish a Research School in a model partnership of North-South cooperation, as described in Chapter 2, and, when expanded, will have greater impact in terms of sharing of knowledge and skills. Several priorities were identified by the Core Group (Figure 8).

The Kisumu platform at the initial stages also took part in the international pilot project, later re-named the GAPS Project. The private and the public sectors, academia and civil society were all integrated into this project. Of critical relevance was the identification of possible areas requiring urgent interventions, ongoing initiatives supported by various organizations, and the overarching constraints towards sustainable socioeconomic urban development.

In organising the research activities, KLIP went through a series of transformations, commencing with an informal network, called Kisumu Action Team, and later forming a consortium, before eventually establishing a Trust. Food security, urban poverty and improved service delivery formed the pillars around the major goals in tandem with the pillars of Fair, Green and Dense.

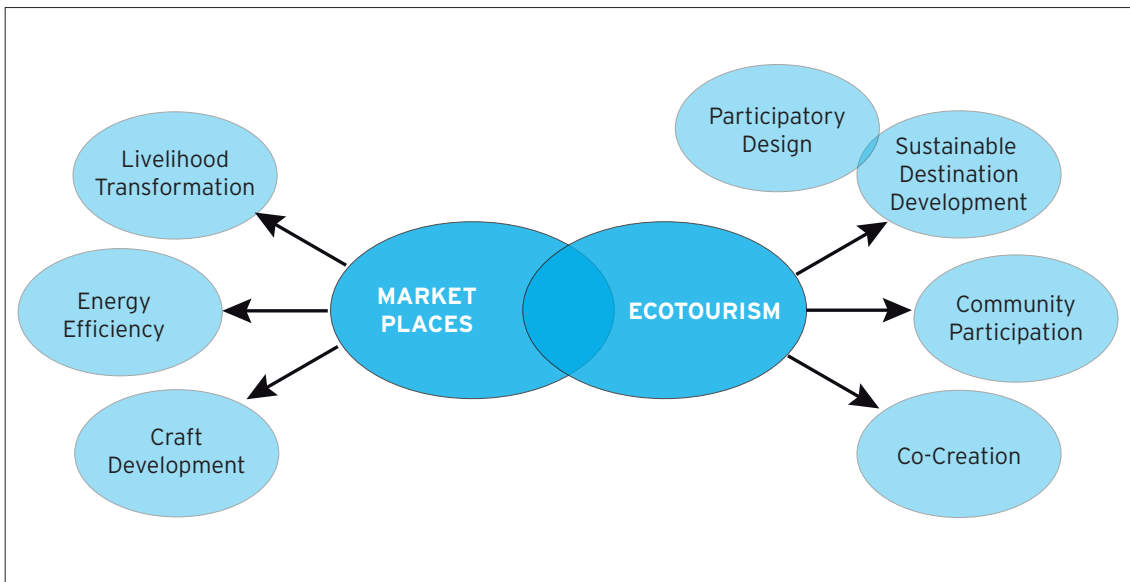


Figure 8. Research activities outlined in respect to the two thematic areas at KLIP

The Marketplaces research team has interacted with several stakeholders in order to make use of knowledge from their diverse backgrounds; despite their dissimilarities, these stakeholders have a common interest in improving the livelihood of Kisumu residents. As a result, a number of projects have been initiated, including those on institutional frameworks, market access and the spatial growth of markets. In addition, sustainable design models for markets have been created. Technology for processing water hyacinths has been developed for economic empowerment and technology transfer. Capacity-building has been a cross-sector element in all of the activities. Thirteen PhD students have been engaged during the implementation stage of the various projects. Again, their work is part of the joint Research School pilot.

A project on separation of solid waste has led the resident association to engage in solid-waste management, hence creating both a healthy environment and alternative business opportunities. Efficient and effective functioning of the projects is underpinned in transforming ecotourism for sustainable livelihoods. Business plans created for sustainable development of urban archaeological and cultural heritage attractions are important to preserving the community's past and supporting its current livelihood.

Summary of findings to date

The overarching objective of KLIP is to establish a process that addresses the specific needs of the local population and that results in a step towards prosperity. Against this background, the KLIP has reviewed the expected deliverables of the two main themes against actual findings so far, the existing gaps, and how they will be addressed going forward.

To achieve the targets of the two main themes, KLIP has worked hand in hand with the key stakeholders to ensure smooth and effective implementation of the projects. With regard to the local county government strategic plan and the draft national government vision 2030, collaboration with the public sector has been proven to lead to ease of implementation and incorporation of outputs in policy formulation. The involvement of KLIP in policy formulation processes at the government level has demonstrated this outcome. Close collaboration among the participating academic institutions has been established through regular consultations and meetings, thus improving the scope of

the KLIP projects. The Core Group, comprising Kenyan and Swedish PhD students from the Research School pilot, has demonstrated that bilateral cooperation is viable and sustainable despite cultural diversity and the challenges of distance and different academic backgrounds.

Involvement of the community during the research implementation stage, e.g. in developing prototypes, has proved vital to co-production of knowledge and gives insights into community dynamics at various levels. Incorporating the community at all levels eventually eases community acceptance and fosters ownership of the final product. This approach allows for community-managed activities rather than community-based activities. Ecotourism leads to the protection, conservation, and branding of destination sites and is a prerequisite for enhanced tourism and more visitors, and eventually results in revenue generation and sustained improved living conditions. A functioning eco-facility at the scenic lakefront of Miyandhe Beach has evolved into an eco-adventure recreation destination, leading to increased employment and revenue generation for the community and to community empowerment. The facility will further open up the area to tourism activity as an alternative source of livelihood.

KLIP publications

The research has resulted in twenty five publications in scientific journals. Similarly, three proceeding reports have been produced covering 2012–2014 from the KLIP Conferences and Event Days held since the commencement of the programme in 2010. On the other hand, as part of the results, book chapters on specific topical issues have been published, as one way of emphasising the importance of the two thematic areas, Ecotourism and Marketplaces, in Kisumu County. One such initiative is the book *Ecotourism in the Digital Century*, meant to illustrate the potential, opportunities and strategies to make Kisumu recognized as a Virtual City through digital tools. The theme Marketplaces has also been the subject of a book, *Market Places – Experiences from Kisumu City*, describing the impact of changing marketplace linkages on inequality and wellbeing in Kisumu. A part from the articles already published in the scientific journals there are tentatively six other manuscripts in various stages of publication process. The publications and the books have covered a plethora of topics, from the art of history with focus on the relationship of art, mythology and nature in the context of ecotourism to issues of fairness, green space and urban development as these relate to the young people with physical disabilities and their access to transportation. Other key research results cover solar powered urban agriculture, co-generation of energy from the solid waste, urban archaeology and cultural heritage. A list of all publications appears in Annex 3. Besides the journal publications, books and proceedings, prototypes from both ecotourism and market places have been developed and are in use.

CAPE TOWN LIP

Given the dual sources of funding for the CTLIP, there are two geographical foci. On the one hand, the CTLIP shares the goals of the other LIPs to understand urban processes and responses more sustainable futures. On the other, the Sida funding has made it possible to broaden the geographical focus to include a concern with urban processes across the African region with a specific aim of understanding processes of poverty reduction and inequality.

Local challenges and key research questions

In Cape Town, fortune and misfortune sit side-by-side. Historically, the southern tip of Africa where Cape Town is located has been called both the Cape of Storms and the Cape of Good Hope. Evidently transitions are possible; they are certainly still hoped for. Whereas many millions of people around the world know Cape Town as an idyllic tourist destination, tens of thousands of in-migrants have come to the city recently in search of a better life. A million or so privileged residents live the city's charms all year, but there are some two million Capetonians who call the city home yet who struggle with unemployment, violent streets, food insecurity, harsh weather, poor municipal services, and dangerous and unreliable public transport. Cape Town's status as South Africa's first or 'Mother' city can be questioned daily.

Transitioning to a more equitable, efficient and sustainable future is essential for the sake of the City of Cape Town and all its citizens, whether rich or poor. Planning sustainable urban development is a way of addressing Cape Town's diverse needs, including redressing past injustices. City planners and residents alike are adapting to new economies, demographics and geographies in the city, all aiming to create a city that is socially and environmentally just, and doing so in a way that is sensitive to the city's assets and risks.

The challenges of service delivery and sustainable urban development lie at the heart of the Cape Town Local Interaction Platform (CTLIP). The partnership between the African Centre for Cities (ACC) and Mistra Urban Futures examines the following: How is sustainable urban development understood and implemented in Cape Town? Who and what is the city for? Who are the actors in urban development and how do they perceive the sustainability agenda? What tools can facilitate more sustainable development pathways in the City of Cape Town, given its social, economic and political context? How can the Mistra Urban Futures team, through its projects and activities, make policy more understandable, and hence defensible, using knowledge co-production as a research methodology? How do existing and proposed policies and strategies work towards facilitating the transition to Fair, Green and Dense cities?

Regional challenges and key research questions

Africa is the world region with the highest rates of urbanisation (3.3% in 2010). The global context is such that the demographic 'tipping point' of over 50% of the world being urbanised has been reached. In Africa, over 60% of urban dwellers live in slum conditions. Furthermore, cities in Africa have been identified (by the IPCC) as the most vulnerable areas to environmental risk including the effects of climate change. Despite these profound economic, social and environmental constraints placed on people, communities and societies, as well as the profound constraints placed on them by the state – they continue to survive and innovate.

The Africa Programme is intended to contribute towards raising awareness and building capacity to respond to urban development challenges, specifically ways of monitoring and alleviating poverty. A key thrust of the programme is development of institutional and citizen awareness, capacities and techniques to monitor, anticipate and tackle urban poverty and its reproduction.

Knowledge Transfer Programme (KTP)

The Knowledge Transfer Programme (KTP) is premised on a methodology of knowledge co-production between the City of Cape Town and the ACC, with the intention of

contributing towards making policy and decision-making processes more legible and defensible, while at the same time, disseminating practice. To this end, four researchers based at the ACC have been seconded to the City of Cape Town for seven months of the year over a three-year period. Here, they work with City counterparts on City of Cape Town processes, strategies, policy documents and the implementation of these; they attend meetings, interview stakeholders both within and outside local government, and document the process of policy development for their research, while contributing theoretical background and data analysis. The focus areas of the researchers, namely the green economy, climate change adaptation, the space economy and energy governance, were jointly selected by the ACC and the City as priorities in urban sustainability that could benefit from a knowledge partnership.

Also contributing to the KTP is the City Officials Exchange Programme. Officials working on issues of urban sustainability are invited to apply to spend up to two months at the University of Cape Town, working with an academic writing partner to document their reflections on City projects and processes for dissemination through a peer-reviewed journal article. This programme not only shares knowledge that might otherwise have been isolated to City officials, but also builds the capacity of the individual, and ideally, the new knowledge learnt is shared with other City colleagues. Two rounds of exchange have occurred during the KTP's existence, with 14 officials spending time at UCT and participating in the writing programme. The third round of exchange is currently being reconfigured to reflect the learning gleaned from the first two rounds, making it more targeting towards a single publication output.

Summary of findings to date

This first stage of the partnership has been about building a relationship of trust between the two institutions in order to go about doing research that is necessary, and at times critical. That the City of Cape Town has allowed this partnership to occur at all is a great achievement.

The four academic researchers are heavily involved in the City's inner workings and aspects that are not usually accessible to the average researcher or consultant. Similarly, city officials have been afforded time away from their city roles, at the city's expense. Both situations are unusual—academic inputs take place inside the city's structure, and academic outputs exist outside the City's usual dissemination tools. Knowledge co-production is thus happening in new ways.

The fact that city officials have been successful at producing academic publications, and that the city values publications above policy briefs as a means of dissemination, is an interesting finding. This indicates that the city is a knowledge institution and that academic knowledge creation is not the sole preserve of academia. The extent to which first hand experiences gained by researchers through the close relationship between the City and the researchers have been included in publications, teaching and PhDs, indicates that academic scholarship is enhanced through this collaboration.

This is not to say that the process has been seamless — we have learned that a programme such as this one is built on the individuals who take part in it. Finding the right fit between the researchers and their city counterparts took time. The programme also requires close supervision to ensure that roles remain distinct. The representatives of the City of Cape Town that sit on the Project Steering Committee have expressed a willingness to continue so that the momentum built over the past three years is directed into further examples of knowledge co-production.

Africa Peer Learning, Knowledge and Dissemination Programme

The CTLIP's Africa Regional Peer Learning, Knowledge and Dissemination Programme (referred to as the Africa Programme) is intended to contribute towards raising awareness and building capacity to respond to urban development challenges in Africa, specifically ways of monitoring and alleviating poverty. Projects include the Africa Urban Research Initiative (AURI), the State of the Cities in Africa (SOCA) Project, and communications programmes.

AURI is concerned with monitoring, understanding and alleviating urban impoverishment by reforming civil society, institutions and governance. Its work takes place through case studies in cities across the continent, through co-production of knowledge.

The SOCA Project, now tapering and currently undergoing restructuring, was designed as a 10-year programme to support partner universities and coalitions of urban stakeholders, to define urban conditions systematically across the African continent. The SOCA Project's response to urban poverty acknowledged that African governments and stakeholders have a better understanding of the challenges they face, with the need for more appropriate tools and policies to be developed by stakeholders, practising professionals and researchers.

The project sought to produce a country-by-country series of baseline reports and develop a knowledge network accessible to urban practising professionals, policy-makers and scholars working to improve life in African cities. Based on principles of local capacity building, the first four years of the project concentrated on implementation of project support: bringing together stakeholders and offering ongoing financial and technical support to facilitate a sustained process of cooperation and dialogue on urbanisation at a country level. The SOCA Project has been instrumental in shaping a programme of baseline urban research on a national scale for the first time.

Summary of findings to date

As the Africa Programme is process-oriented rather than project-based, the main findings are based on the process of networking, peer learning and communicating about issues of urban poverty reduction in African cities. Reducing poverty reduction in Africa is an ambition that the research programme alone cannot address. The strategy therefore is to mobilise governments, academics and other key stakeholders to disseminate information and collaborate on research and solutions.

A key process finding has been that creating coalitions among universities, governments and NGOs to produce useful urban knowledge is unexpectedly difficult. Providing funding to enable meetings and collaborative tasks is only the first step in an arduous journey so easily interrupted by changes of personnel and temptations to shift from a co-production and capacity-building model to a consultancy model.

As it was designed, with a focus on local institutions and capacity, the SOCA Project needed a lot of time to gain currency and in some cases was overtaken by more traditional urban consultancies. The priority for the SOCA Project was to establish new ways of conducting research and developing knowledge products using local institutions, and this required a shift from all stakeholders involved. Due to a combination of factors, funding for the SOCA Project has been terminated. Only projects that have already received grant approval will proceed.

Contributing to broader urban debates in South Africa

The principal challenge of the Urban Debates in South Africa project is the lack of up-to-date, alternative and appropriate knowledge about South Africa's cities. The challenge is to feed and transform existing knowledge bases, and to help steer opinion in progressive ways.

Through a range of joint activities with diverse specialists, urban agencies and public entities, the ACC seeks to strengthen knowledge partnerships that allow sharing of data, innovative methods and avenues for dissemination. The aim is to create interdisciplinary and multi-voice spaces for discussion and strategizing; to learn about ways of intervening effectively in urban policy making; and to foster considered and evidence-led academic and public discussion about South African cities and about appropriate and desired interventions.

These objectives are achieved through hosting, co-hosting and attending relevant conferences, workshops and public dialogues. Co-production of edited volumes, a prime method in the CityLab Programme, underpins the Urban Debates project.

Summary of findings to date

Diversifying the spheres in which staff members participate in urban debates has been key to increasing and broadening the profile of ACC and CTLIP. The multiple fora for engagement, including the seminar series, publications, conferences and workshops have shown that different modes of interaction attract different combinations of stakeholders. As such, the wide ranging approach has served to ensure the widening of both the dissemination and the range of stakeholders the ACC is able to engage with.

This programme allows interaction with urban issues and through numerous debates that are relevant to the Centre's focus areas of Fair, Green and Dense. Over the years, engaging different stakeholders has been shown to bring different kinds of knowledge to bear on policy, research and practice, which is an essential aspect of engaged scholarship.

CityLab Programme

The CityLab programme facilitates the co-production of policy-relevant knowledge to reduce urban poverty and the ways urban poverty is experienced, through engagement with researchers, practising professionals and civil society in Cape Town.

The CityLabs bring together researchers and practising professionals in meetings and working groups to share their research or to undertake collaborative research. The CityLabs use different methods, but they all focus on bringing together different sectors and on co-production. Each CityLab is intended to culminate in an interdisciplinary co-produced book on that particular topic, with practical policy recommendations. The chapters of CityLab books generally are written by researchers from different disciplines and practising professionals from different sectors. The CityLab coordinators facilitate the co-production process and edit the books.

There have been a total of nine CityLabs, most of which are still ongoing:

- **Central CityLab:** This focuses on the central business district and adjacent areas in Cape Town, where issues such as urban regeneration, densification and inclusivity are important.
- **Philippi CityLab:** Philippi is a relatively well-located area of the Cape Flats with a concentration of dense informal settlements, considerable government investment in housing and facilities, and large amounts of vacant developable land, where policy decisions are highly contested.

- Climate Change CityLab: This now-completed CityLab engaged with issues of climate change adaptation and mitigation in the Cape Town city region.
- Urban Flooding CityLab: Flooding of informal settlements is a particularly big problem in Cape Town, and gives rise to a number of issues regarding risk reduction and water governance in Cape Town, investigated by this now-completed CityLab.
- Healthy Cities CityLab: This CityLab deals with the relationship between the physical urban environment and human health and wellbeing in Cape Town, and how the burden of disease can be reduced through the creation of healthier urban environments.
- Urban Ecology CityLab: This CityLab deals with the interface between the urban environment and the natural environment in Cape Town.
- Public Culture CityLab: This now-completed CityLab focused on issues of public space and public art in Cape Town in relation to the diversity within the city.
- Sustainable Human Settlements CityLab: This CityLab, in partnership with the Western Cape Department of Human Settlements, explores key aspects of housing policy and delivery.
- Urban Violence CityLab: This CityLab focuses on the relationship between urban upgrading and violence, and how upgrading can potentially reduce violence.

Summary of findings to date

An overarching finding is that knowledge co-production can bring different stakeholders together to create more holistic and more applicable bodies of local knowledge. Through these processes, practising professionals and policy-makers often experience significant changes in mind-set that open them up to more innovative approaches and to engagement with other stakeholders. Specific findings of the CityLabs are presented in the project summaries in Annex 2.

CTLIP publications

The CTLIP has resulted in a number of publications, both peer-reviewed as well as those that appear in more popular forms such as periodicals and blogs. The CTLIP has over the last five years published 10 books, including *Africa's Urban Revolution* (edited by Parnell, S. and Pieterse, E. 2014, Zed Books) and *Climate Change at the City Scale* (edited by Cartwright, A., Parnell, S., Oelofse, G. and Ward, S, 2012, Routledge). Fifty-one book chapters have been written by CTLIP team members on a range of urban issues in the global South. Approximately 75 journal articles have been or are in the process of being published in both international and local journals, including in *Urban Forum* (see in particular volume 25, 2013), *South African Geographical Journal* (see volume 96, issue 1, 2014) *International Journal of Urban and Regional Research*, and *Geography Compass*. Five issues of CityScapes and two African Cities Readers have been published. For details, see Annex 3.

BIBLIOMETRIC AND WEBOMETRIC STUDY

A bibliometric and webometric study of Mistra Urban Futures 2010–2014 has been carried out by Chalmers University of Technology Library by Maria Prager, David Minguillo Brehaut and Stina Johansson. The study is based on a publication list, dated 1 December 2014. The summary is presented below. The full report is found in Annex 3, Appendix 3A. The results of the study should be interpreted with some consideration, as the principle for selection of presented publications differs somewhat between the LIPs.

Nearly 400 publications have been produced since the start of Mistra Urban Futures in 2010, including peer-reviewed journal articles (28%) and conference papers (8%), book chapters (21%), books (7%), reports (29%) and theses (8%). Annual publication volumes are steadily increasing, and the number of journal articles has doubled in later years. The publication profiles of different Centre locations vary considerably, however, with Cape Town standing out both in terms of total output and journal article production. Total publication coverage in the Scopus database also varies between locations, but is overall low (21%). Unsurprising as this is for a highly applied project, it means that Scopus-derived impact and collaboration data reported here should be regarded with caution.

As a measure of visibility in a scholarly context, a total of 78% of journal articles were published in international scientific journals. Furthermore, 18% of articles appeared in journals ranked as highly prestigious publication channels in the Norwegian national system. Although too early for a rigorous citation analysis, the publications have received more than 500 citations showing a considerable geographic spread. Cape Town dominates the highly cited list, together with Greater Manchester, and University of Cape Town forms the centre of the derived co-authorship network. Overall, relatively few publications (23%) were internationally co-authored, however.

A webometric analysis of Mistra Urban Futures' visibility and impact in a web context showed that 27% of listed reports were available as full-texts. Mentions of these from different external websites and PDF documents have increased over time, and an average of 3.4 websites cite reports published in 2013. Among Centre locations, Gothenburg dominates both in terms of report production and web-based impact, especially regarding coverage in social networks, PDF documents and mass media. A large proportion of reports written in Swedish may explain why the relative share of external attention is slightly lower for Gothenburg than for Greater Manchester, however.

Outreach and outcomes

Mistra Urban Futures has a different knowledge production process from many other research centres. This requires specific tools, methods and structures to organise the dissemination of knowledge. The distribution of knowledge should add value for different user groups and should enable action to be taken, whether in practical projects, policy making processes or to influence different decision points. Effective communication also requires the active participation of knowledge users.

In order to effect change and to be useful, knowledge should be accessible, timely and transparent. In part, that means that knowledge needs to be distributed in user-friendly ways. Traditional dissemination methods such as publications, books and peer-reviewed articles alone do not match the Centre's way of conducting research. Networking, games, visualisation, events, internet-based technologies, workshops and social media are important tools that have been evaluated and used to showcase the findings and experiences from Mistra Urban Futures research projects.

The Centre encourages research teams as well as individual project members to publish their findings in academic journals and to assist in promoting the articles through the Centre's extensive global network. Yet, given the duration of the research projects and the complexity of the research questions, there is a significant need for early distribution of results from the projects, bringing visibility and credibility to the Centre and the authors.

STRATEGIES FOR EXTERNAL COMMUNICATION

An initial concept for disseminating and implementing the knowledge produced within the Centre was the idea of establishing a knowledge hub, which would collate knowledge and translate it for different audiences. One of the fundamental pillars identified was the ability to transform research-developed knowledge and experience into generic knowledge that could be translated and communicated to multiple stakeholders. In parallel, the overall vision for the Centre included establishing a reputation as a strong knowledge arena for sustainable urban development within policy and research networks.

The communication strategy therefore focused on establishing a strong Mistra Urban Futures brand, diverse communications channels and a well-functioning infrastructure for communication of news from and about the Centre and its research projects. Today the Centre has a well-functioning infrastructure for spreading news and research results via several established channels: a website, an external newsletter, a Twitter feed, a YouTube channel, and different seminar series. Targeted brochures to communicate the Centre's view on the themes of Fair, Green and Dense cities also have been produced, as well as Annual Reports in which ongoing projects and the cities involved have been highlighted. The Annual Report has also served as a 'corporate' brochure. Locally within the LIPs, digital technologies have been used to disseminate results, including the use of Twitter, websites and the hosting of interactive debates, events and exhibitions.



Figure 9. MISTRA Urban Futures target groups

Website, newsletter, social media and database

The Centre’s website (<http://www.mistraurbanfutures.org/>) is considered the hub for all external communications from and about the Centre. During 2013 the website was relaunched, with a new and modern design, thereby opening up the site to more interactive communication than previously possible. The website contains information about the Centre, including its organisation, the way we do research, the LIPs, and ongoing projects and publications. Furthermore, the site is used to disseminate news and to market upcoming events, seminars and workshops.

Across all communication channels, the Centre has a substantial number of followers, including up to 4000 monthly visits to the website, 1100 subscribers to the Swedish newsletter and 200 to the English version. Introduced in late 2012, the global Twitter channel now has over 700 followers. A YouTube channel was introduced in 2013 and so far almost 40 films have been uploaded and viewed over 2100 times. A database (using a customer relationship management or CRM system) was implemented in 2010. It now includes approximately 3900 internal and external contacts, structured according to roles and target groups. The Centre has been consistent in its introduction and implementation of a common visual identity in all communications, and a graphic design program is fully implemented across the whole Centre.

Taking a global view

International conferences

Presenting results, including abstracts and conference papers at targeted conferences, globally as well as locally, is important for the Centre, for the research groups and for individual researchers. Conferences and events are also an important part of the Centre’s communication efforts.

One focus has been on participating in international conferences within the area of sustainable urban development, both arranged by others and developed by Mistra Urban Futures. Some international congresses of interest where Mistra Urban Futures has actively participated are the Global Forum in Gothenburg, November 2011; Rio+20, June 2012; the World Urban Forum in Naples, September 2012; the International Federation for Housing and Planning World Congress in Gothenburg, September 2012; Stockholm+40, November 2012; the Urban Nexus Dialogue Café in Gothenburg, April 2013, and the Institute of British Geographers/Royal Geographic Society International Annual Conference, August 2014.

Mass Housing Competition

In 2013–2014, Mistra Urban Futures was an active partner in the ‘Urban Revitalization of Mass Housing International Competition’ initiated by Professor Mohamed El Sioufi at Chalmers and UN-Habitat. Teams from 66 universities in 36 countries participated in the competition, presenting ideas and solutions with the ultimate goal to attain a social, economic, environmental and cultural sustainability of cities.

The competition teams raised many issues and pointed towards innovative solutions, many of which were based on an increased exchange of knowledge, experience and advice between academia, the private sector, communities and policy-makers.

Urban Sustainable Development Goals

Mistra Urban Futures is a partner in the Urban Sustainable Development Goal campaign (#urbanSDG) that was launched in 2014 by the Sustainable Development Solutions Network. The network is closely connected to the United Nations through UN-Habitat, and the words of UN Secretary General Ban Ki-Moon summarise the basis for the campaign: “Our struggle for global sustainability will be lost or won in cities”.

The Sustainable Development Goals (SDG) will replace the Millennium Development Goals in 2016 as the primary UN and international targets for poverty reduction and development promotion. A specific Urban Sustainable Development Goal is being discussed to focus attention on the key arenas - cities - for interventions to address the environmental and poverty issues. Hundreds of local governments on all continents, including global cities like Rio de Janeiro, New York and Paris, will work together up to the Habitat III conference in 2016 to enable the convergence of the new development, urban and climate agendas.

Mistra Urban Futures co-funded an international workshop in London in August 2014 to redefine the draft content of the anticipated Urban SDG, and is now a member of the global Urban SDG campaign group. This position gives the Centre an excellent opportunity to play a leading role at the ‘global urban table’ and to raise the profile in an arena and fashion that is in line with the Centre vision.

In addition, the viability of a pilot project that would include Mistra Urban Futures’ LIPs in Europe and Africa is being discussed to test the Urban SDG targets and indicators. This would further strengthen the Centre’s profile and position in the global urban sustainable development context and communities.

DISSEMINATION

Gothenburg LIP

Since the start, the GOLIP project portfolio has been the most extensive in the Centre, dealing with a broad range of research questions in currently ongoing research projects. This variety requires different types of methods for dissemination. Dialogue cafés, knowledge seminars, congresses, workshops, political presentations, visualisation and dialogue tools, computer games, conference presentations and publications such as peer-reviewed articles and reports are just some of the established methods being used. GOLIP and the Centre have also been creative in developing and establishing new routes for disseminating research.

Seminars and presentations

The five GOLIP pilot projects conducted by during 2010 and 2011 delivered interesting results and findings. It was essential to find a new and innovative way to disseminate and discuss the results to a broad audience, both within academia and practice, as these pilots formed the basis for the coming projects and activities.

In 2012, GOLIP started the seminar series ‘Urban Lunch-time’ for networking, dialogue and dissemination of project results and findings. The events in this series are held once a month, attracting an audience of over 100 each time. The concept quickly found both its form and audience, and after presentations of the pilot projects’ findings, other ongoing projects have been given the opportunity to utilise Urban Lunch-time as a means to communicate with a broad audience. To date, 26 seminars have been held. The audience mainly consists of officials in the political sector, politicians, researchers and business representatives. For details, refer to Annex 5.

Throughout the years, projects and project members have presented their work at many different seminars, workshops and academic conferences within various fields. Some noteworthy examples are listed below.

In 2013, the GOLIP hosted two seminars at the Almedalen Week, the annual summer event in Visby on Gotland that is one of the most important forums in Swedish politics. The seminars covered the areas of refurbishment of the mass housing built in Sweden in the 1960s and 1970s and climate adaptation of our cities. The two seminars attracted a wide audience and were also well covered in Swedish media.

Mistra Urban Futures was one of the organisers of the national conference Arena Hållbar Stad (Arena Sustainable City), which was the closing conference for the Delegation for Sustainable Cities, an initiative funded by the Swedish government. The Arena was held at Chalmers and attracted more than 450 delegates and built awareness of Mistra Urban Futures as an important player in the field. The conference showcased activities within urban sustainable development. The consortium and the successful collaboration of the Centre were specifically highlighted.

In addition to the Urban Lunch-time series, GOLIP has also been part of a local event series called Mellanrum (Interplace), a monthly gathering for dialogue on urban development, mostly from a social perspective. The objective has been to give room for citizens to listen to and debate questions and areas of public interest. Started by the Gothenburg City Museum in 2011, around 60 seminars have been held to date. The first 50 seminars were compiled in a jubilee book published in 2014.

During 2013, the Urban Research seminar concept was introduced by GOLIP. The initiative is a collaboration between the Centre, the University of Gothenburg and Chalmers. The objective is to allow projects to present ideas and results to an academic audience for an in-depth discussion on the research, as a way of getting input on the processes and research questions. So far, five Urban Research seminars have been organised. The seminar series has attracted a core group of participants each time, who have highly appreciated the events. For instance, the WISE project seminar in May 2014 proved to be a successful way of establishing collaboration with researchers from the Dutch Research Institute for Transitions (DRIFT) in the Netherlands.

Mistra Urban Futures Seminar is offered as a concept for projects to reach various target groups to disseminate results.

Project dissemination – some examples

As one of the flagship projects within GOLIP, the WISE project has been successful in reaching out to different types of audiences. For example, when Sweden kicked off its national work as part of the United Nations' 10-Year Framework Programme on Sustainable Consumption and Production in April 2014, Mistra Urban Futures was one of the key participants. The coordinator for the WISE project presented the report 'Low-Carbon Gothenburg'.

The 'Urban Games' pilot project is an example of an innovative way of introducing urban sustainability issues to a younger audience. The intention was to investigate if games could help facilitate communication and learning. Presenting complicated systems like cities in a gaming format provides the opportunity to learn about urban development and sustainability. The project resulted in the game 'Gothenburg 2021', which was introduced to schools and young people. The game, made for iPads, appealed to young people who could create the future Gothenburg. The game has been demonstrated at several workshops and conferences.

GOLIP's 'Cities as Value Networks' project held a half-day seminar at the IFHP conference in Gothenburg in 2012. The IFHP, a worldwide network of professional institutions and individuals active in the fields of housing, urban development and planning, offered a relevant arena for the Centre's global outreach.

Another example is the Mistra Urban Futures PhD project 'Planning in Dialogue', where a PhD student works in close cooperation with the municipality of Lerum, in Gråbo. The aim of the project is to develop knowledge and identify success factors for how increased citizen participation can be initiated and supported. As in most municipalities, local officials are striving for greater citizen participation. Dialogue, cooperation and building capacity among residents are therefore seen as key parts of the work carried out in Gråbo.

Politicians: a crucial audience

An important target group, in addition to the civil society and private sector, is local politicians. Throughout the years, GOLIP has invited several groups of politicians and city officials to visit Mistra Urban Futures, to keep them updated on the exciting and forward-looking research conducted at the Centre. Issues around segregation, dialogue, mixed city use and business-oriented sustainable urban development are areas of high interest for that audience. Alongside presentations of ongoing research projects within these areas, the Centre has initiated discussions around how the research findings can be

implemented in practice and how city policies can be developed in collaboration between academia and practice. This work is of utmost importance, considering the extensive support the City of Gothenburg provides to the Centre through their participation in the Consortium.

Greater Manchester LIP

Knowledge exchange has been embedded through the institutional structures of the Greater Manchester Partners' group, working with practitioner and community researchers and embedding the GMLIP in the networks and debates of the city-region. This approach sits alongside a more traditional dissemination strategy. The GMLIP has produced academic outputs that directly acknowledge Mistra Urban Futures funding, including books, book chapters and journal articles. In 2015 the programme will develop a 'Writing Together' programme to bring academics and practitioners together in order to ensure that co-production is practised from cradle to grave – and rebirth – in the knowledge cycle.

Academic dissemination is designed to reflect the interdisciplinary nature of the research agenda, with publications planned in leading urban studies, geography, policy studies and environment journals. Presentations have been given at meetings in Belgium, Brazil, China, France, Germany, India, Italy, Kenya, Netherlands, South Africa, Sweden, the UK and the US. Highlights include presentations at Muncipalika in Chennai, India; attendance at the International Sustainable Development Research Conference, the International Conference for the Royal Geographical Society and Salford International Media Festival, UK; participation at City Futures in Paris; and invited talks at numerous UK universities, including University College London, Oxford University and De Montford University Leicester, the latter leading to participation in a special edition of 'Urban Studies'. In total, the global reach of the GMLIP has involved presenting the Mistra Urban Futures agenda at 13 countries between 2010 and 2014.

Events

The GMLIP hosted the international workshops 'Comparative Urban Retrofit: Purpose, Politics and Practices', in September 2012, and 'Universities, Cities and Transformation: Practices of Cultural Intermediation and Expectations of Knowledge', in September 2014. These have brought scholars from the UK and around the world to critically develop the research agenda around the 'what' and 'how' of urban sustainability. The GMLIP has held over 20 discrete project events on a variety of topics, including business and sustainable urban development, knowledge for sustainability and the value of community hubs. These have allowed for dissemination and discussion of results with local stakeholders. New kinds of 'events' have been developed, such as peer-to-peer learning workshops on urban poverty with the Social Action Research Foundation and action-learning sets with community-based organisations. 5 engagement events are planned for 2015 to raise the profile of the work that has been undertaken with different academic and non-academic audiences.

The GMLIP has also integrated with existing networks and events in order to participate in local discussions on sustainability. This includes over 30 events and networks attended in 2013 alone. Nationally, the GMLIP has collaborated with the British Sociological Association's Climate Change Study group in 2012 at a workshop in Plymouth, with Bristol University for the Society for Research into Higher Education annual conference and with the emergent 'Future of the North' academic working group with partners in Leeds, Durham and Sheffield universities. For details see Annex 5.

Websites and social media

The Platform website (<http://www.ontheplatform.org.uk>) has been established as a portal for sustainability in Greater Manchester, designed to bridge the gap between decision-makers and citizens in the city-region. Key GMLIP publications and articles have been disseminated using this media channel, including the Perspectives essays produced for the Mapping the Urban Knowledge Arena project. A database of 'Alternatives' has been produced on Platform and is being updated to include 100 initiatives by mid-2015. Platform is also being used to disseminate event reports, as a learning log in the city-region, through the series 'Turn Up the Volume'. GMLIP work has also been disseminated on other blogs and newsletters, including those of partners and via presentations. Following advice from digital media partner, Creative Concern, individual and group identities have been used on Twitter to disseminate the work. @Beth_Perry_SURF was set up in 2013 and has 659 followers (at December 2014). All new articles on Platform are tweeted @On_the_Platform, which now has 275 followers. An integrated social media strategy ensures that key tweets are retweeted via the @MistraUrbanFut Twitter feed.

Non-academic summaries

A series of non-academic summaries of the work are planned to be completed by the end of 2015. These will ensure that the work is communicated to different non-academic audiences including national and local policy-makers; practitioners; community organisations. Use of infographics, short films and visualisations will be favoured where this aids communication of complex ideas. In addition, the reports from the work will be produced in a consistent format to reflect Mistra Urban Futures and local partner funding.

Public engagement

In addition to Platform as a dedicated website for the communication of GMLIP and other sustainability-related activities in Greater Manchester, the GMLIP has hosted a panel debate as part of 'National Climate Week' in 2012; designed and co-curated a public exhibition on 'Sustainable Stories' (2012), with co-funding from the Economic and Social Research Council; and has produced a number of short video clips. In 2014 the first 'Platform Live' event was held as part of 'World Food Day' on October 16th and the start of Greater Manchester Poverty Week. Hosted and organised by the University of Manchester, this trialled a new approach to public engagement, with talks being filmed and live-tweeted @On_the_Platform.

Kisumu LIP

KLIP is constantly working on reaching out, maintaining and encouraging more stakeholders to come on board, in order to meet various target groups and populations, depending on the level of participation and ranging from decision-makers to community members. Varied methods include: consultations and interviews with the local community; workshops and conferences for training, verification, analysis, and validation leading to adoption of findings and recommended strategies; symposiums and exchange programmes for exchange of ideas by academia; publication of book chapters and in refereed scientific journals and other means of documentation.

Workshops and conferences

KLIP has organised several outreach activities in the City of Kisumu, including: a Fish Night Event at Dunga, a two-day Ecotourism in the Digital Century Symposium, KLIP

Event Day and Conference on Future Markets. KLIP actively participated in World Tourism Day in Kisumu in September 2013, as well as the 2013 Local Climate Solutions Congress for SMART Cities, held in Dar es Salaam, Tanzania, where KLIP collaborated with the Cape Town LIP, among others. KLIP Event Day in 2013 served as a major forum for imparting information and further advertising KLIP's presence. The Kisumu county government was well represented in the event by the governor, who led a team of ministers, chief officers and city officials at this function. Over 4000 participants took part in the event. It will be an annual event because of its ability to reach wider audience. At the latest KLIP Conference and Day event in 2014, scholarly scientific publications and presentations took place under the theme, 'Making cities sustainable – in the context of devolution'. Sub-themes were around wealth creation and business financing; Fair, Green and Dense in an urban setting; and co-production of knowledge.

Entrepreneurial training schemes on the use of hyacinth and waste materials such as recycled plastic bags have been explored, including local papyrus. Community members have been trained on the alternative use of the hyacinth, which initially was a menace to their livelihood because it is an invasive species that was choking off regional waterways and reducing fishing conditions.

Symposiums and exchange programmes

Several symposia and student exchange programs have taken place as part of the collaboration between KLIP and GOLIP. These have provided platforms for not only learning but also borrowing of ideas to address cross-cutting challenges between the two LIPs. Some of the applicable participatory tools that are being employed in such forums include focused group discussions, unstructured interviews and student lectures. The research team organised an ecotourism symposium in 2013 that brought together the stakeholders interested in making ecotourism part of the mainstream in Kisumu City and its environs. The symposium, 'Ecotourism in the Digital Century', represents a new beginning with a different view of the development agenda for Kisumu.

Consultations and interviewing

Through community action plans and business plan preparations, KLIP has mapped cultural sites such as Seme Kaila, Thimlich Ohinga, Abindu, Kit Mikayi, Luanda Magere, Simbi Nyaima, Dunga and Miyandhe. This work has established identities and images for these sites. Through interviews and broad consultations with local residents, community narratives have been developed as additional information for branding purposes. Community meetings involving leaders from, for example, beach management units have proved to be very viable modes of disseminating information because first-person responses can be elicited quickly and immediately.

Documentation

Participatory action learning was used as a methodology for developing documentaries and business development plans. The documentaries include:

- Reclaiming the Beauty of Lake Victoria: Insights into turning fisheries landing beaches into ecotourism sites, in view of declining fisheries resources and the need to protect and conserve the interface between human activities with natural habitats and the lake landscape.
- Ecotourism in Kisumu City and Its Environs: Exploring the cultural heritage as embedded in potentials for eco-ventures to empower the local community, youth and women and to preserve prehistoric and cultural heritage for posterity.

- **KLIP Day: Ecotourism Event:** A collection of various films of the two-day KLIP event. The film *Markets in Kisumu City* produced by the KLIP Marketplaces team describes the different markets in Kisumu, the importance of marketplaces and the challenges that they face.

Sports, games and other organised entertainment forums

Kisumu LIP has been successful in organising public entertainment events such as sporting activities. The local community and various stakeholders come together during these activities in one platform, and are actively involved by either participating in giving talks or competing for various awards. These forums pull in large audiences, and consequently information about Mistra Urban Futures and KLIP reaches a lot of people. One such event is the KLIP Day, which is unique and draws large crowds.

Cape Town LIP

Knowledge Transfer Programme — Embedded Researchers Programme

Knowledge produced by the embedded researchers has been disseminated using a range of methods and platforms. These include journal articles, conference papers, concept notes, policy briefing notes, blogs, magazine articles, videos, City of Cape Town media channels and reports. The embedded researchers have showcased their findings and insights at several conferences, panels, roundtable discussions, seminars and lectures and to a broad range of external stakeholders. Research relevant to the City of Cape Town has been presented at a number of portfolio committees, management meetings, specific project management meetings and workshops.

Africa Peer Learning and Dissemination Programme — AURI

Through a partnership forged with Cities Alliance, AURI meetings organised by the ACC have included a wide variety of actors from different backgrounds (i.e. academic, government, non-governmental) and different regions of Africa and the world. Reports on AURI meetings are circulated through the Association of African Cities Alliance.

Urban Africa Portal (UrbanAfrica.net)

The Urban Africa Portal (an online website, UrbanAfrica.Net) was established in 2012 as part of the Africa Programme with the intention of being a multilingual platform and additional communication means for urban news, research, commentary and tools across Africa. Two years of performance of the UrbanAfrica.Net site have yielded some important lessons pertaining to the presentation of data, and the need for a fully functioning site in order to attract users and returning traffic. Since the redesign of the website, it has attracted more than 5000 unique visitors with over 75% of those being new users. The site has commissioned well-written articles on at least nineteen African cities in fourteen countries that analyse key urban development challenges, providing a niche for UrbanAfrica.net. The initial goal was to establish a multilingual platform but for now, the site is populated with articles and information in English only. Partnerships have been brokered with organisations with similar agendas and commitments to quality urban research in Africa, and these have already shown dividends, yielding content for cross-posting and as a result, extending UrbanAfrica.net's reach.

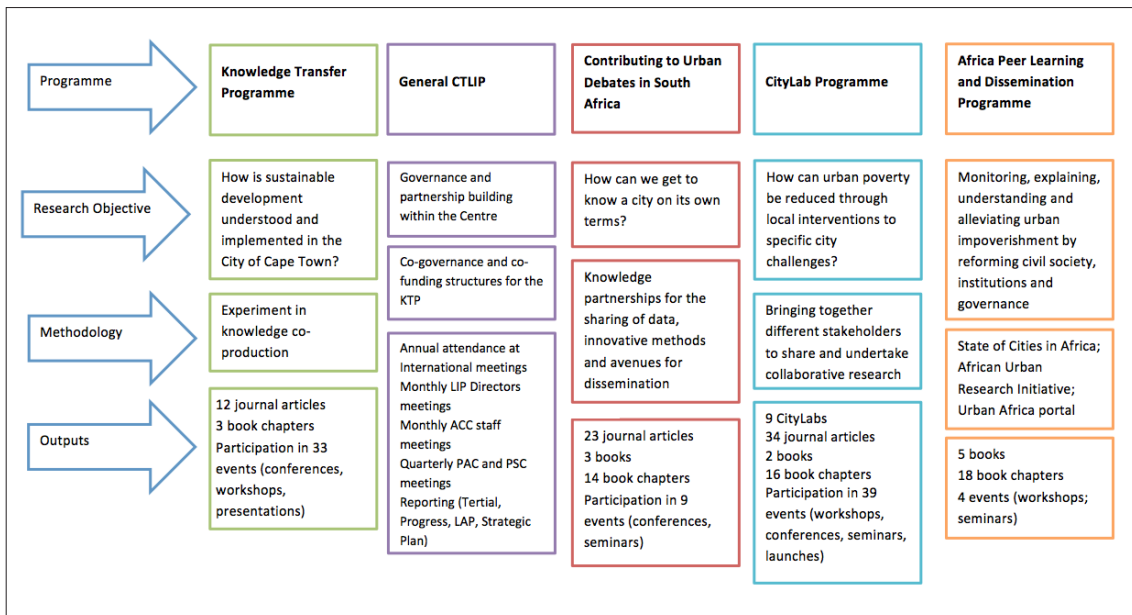


Figure 10. Programme overview at CTLIP

CityLab Programme

Through its various seminars and events, the CityLab programme has helped build the capacity of individuals through exposing them to other sectors and disciplines and to other perspectives. The Climate Change CityLab, which brings City officials and experts together to engage on issues of climate change adaptation and mitigation, was particularly successful in changing the mind-sets of officials with regard to climate change as something that need to be tackled across all the City’s departments (as opposed to the previous view of climate change as just an environmental issue).

Urban Debates

The ‘Urban Debates’ activity involves the ACC in existing debates about Fair, Green and Dense cities. Researchers speak at conferences and address select groups of scholars and officials, at home in Cape Town and abroad, among others in New York, Boston, Medellin, Sao Paulo, London, Paris, Uppsala, Dakar, Nairobi, Bangalore, and Tokyo.

ACC also hosts training courses and meetings on behalf of and with local and overseas partner organisations, such as the African Food Security Urban Network and the United Nations University. Less visible in the CTLIP are activities such as a series of advisory meetings with the Province around densification, facilitated by an inter-university consortium in Cape Town. Researchers affiliated with ACC and CTLIP who work on current urban issues such as African urbanisation, city-limit expansion, urban food security and the green economy have contributed to radio discussions (BBC, Al Jazeera, Cape Talk, Voice of the Cape, SAFM, Bush Radio), TV presentations (E-TV), newspaper articles and Op-Eds (Cape Times, Business Day, Farmers Weekly), magazines (Earthworks, Topos) and video-presentations by The Africa Institute (London), the Kapuscinski Foundation and UN-Habitat.

Online publication, such as the UrbanAfrica.net portal, described above, popular publications, including the African Cities Reader, Cityscapes publications as well as social media site interactions, join other informal interactions such as brown bag lunches and public talks through the city and university. CTLIP’s more formal outputs include

books, book chapters and papers for publication in journals (including Counter-Currents, Africa's Urban Revolution and Rogue Urbanism). Urban Debates continue in the classroom, through teaching and supervision by ACC researchers, who also contribute to UCT's Master's Programme in Urban Infrastructure Demand and Management.

OUTCOMES

Mistra Urban Futures is a unique research centre in that it brings together state-of-the-art urban research with practice through an integrated and innovative co-production methodology. The value of this approach is justified in the wide-ranging impacts achieved by the Centre, according to a range of measures and dimensions. Independent outcome reports have emphasised the high value of Mistra Urban Futures and its activities in all partner cities – evidenced in increasing levels of financial or in-kind contributions. Testimonies have stressed individual capacity development among decision-makers and the experience of doing research for city officials. New trans-disciplinary working groups and networks have been established and politicians and officials are meeting at arenas outside their own organisations. Furthermore, the co-production of knowledge has resulted in increased public dialogue. In particular, the activities have had direct impact on public policy documents and decisions. Identified outcomes are summarised below and verified through independent evaluations and outcome studies that were carried out at all platforms in 2014 (Annex 4). The development of the Centre and the contribution to the urban development agenda is a key outcome in its own right.

Gothenburg LIP

In April 2014, the Consortium partners of the Gothenburg platform of the Centre, commissioned Ramböll Management Consulting (RMC) to conduct a study of the GOLIP. The purpose of the study was to identify how the platform has contributed positively to society in terms of outcomes and benefits.

The data collection of the study consists of six group interviews carried out in Gothenburg during the period June to August 2014. In addition, RMC carried out 11 telephone interviews. The overwhelming majority of the respondents to this study consists of practitioners who work with urban development in public organisations in the Gothenburg region. A few interviews were conducted with politicians. All in all, 44 respondents were given the opportunity to contribute to the study.

In order to sort and present the data collected in this study, RMC developed an analytical framework consisting of two dimensions. The first dimension is the societal level where the benefits and outcomes play out. This study identified three such levels: the individual level, the organisational level and the policy level. The second dimension consists of four themes that are inductively deduced from the data collection and can be said to reflect different drivers for change needed to bring about societal change. The four themes — Interaction, Knowledge, Discourse and Momentum — are presented below together with the findings in the study.

Increased and enhanced interaction among stakeholders

The data collected in the study clearly suggest that Mistra Urban Futures has created a platform for interaction that has brought researchers and practitioners – and the organisations that they represent – closer together on a practical level. Respondents specifically highlighted the following perceived benefits and outcomes related to interaction:

- New interaction patterns and new means of interacting between researchers, practitioners and their respective organisations
- Increased interaction among practitioners and their respective organisations
- Developed internal dialogue among practitioners, particularly on interdisciplinary areas of knowledge and practice
- New practical solutions generated through enhanced knowledge and information transfer
- A potential to decrease stakeholder conflicts later on in the development process by establishing an early dialogue between relevant parties
- Mistra Urban Futures acts as a node in facilitating networking
- Mistra Urban Futures directly interacts with politicians which may create favourable conditions for influencing policy
- Strengthened interaction with citizens and external stakeholders

Impact through knowledge production

Producing new knowledge relating to sustainable urban development constitutes the core of Mistra Urban Futures. Findings from the study suggested that this activity and its output generate benefits and positive outcomes for a wide range of stakeholders. Four types of benefits and outcomes relating to knowledge production are highlighted among respondents to the study:

- Individuals seem to learn a great deal by participating in projects
- Joint knowledge production and individual learning seem to generate organisational spill-over
- Knowledge is dispersed to a wide range of relevant stakeholders through external events
- Knowledge from Mistra Urban Futures influence policy and decision-making. One example of direct impact on policies is the influence on the City's climate strategy by the WISE project.

New ways of approaching urban development

Many of the respondents to the study argued that Mistra Urban Futures plays — and aims to play — a transformative role that goes beyond knowledge production in a traditional academic sense. It is therefore suggested that Mistra Urban Futures to some extent works as a platform for changing and challenging the overall debate or discourse relating to urban developmental practice. The following outcomes and benefits relating to discursive change were suggested by the respondents:

- A new widened but more sustainability focused perspective on urban development
- Changing or defining concepts can impact on how stakeholders relate to urban development
- The exploratory ambition and working methods of Mistra Urban Futures has transformative potential for urban development practice
- A more equal practice in relation to the co-production of knowledge has led to increased reflexivity and critical-thinking attitude among practitioners

Building momentum to bring about change

Building momentum is often the key to bringing about change. Momentum is also one of the recurring themes in the data collection from the RMC study. Respondents

highlighted the following outcomes and benefits from Mistra Urban Futures relating to momentum as a driver for change:

- Mistra Urban Futures fosters personal drive and organisational momentum and develops new fields of knowledge that are all drivers for building momentum relating to sustainable urban development
 - The legitimacy that Mistra Urban Futures provides is key in building momentum behind issues relating to sustainable urban development
 - Mistra Urban Futures has an important role to play in attracting external funding
- The societal footprint of Mistra Urban Futures is summed up analytically in the framework presented in Figure 11.

Realising the potential of Mistra Urban Futures

In the data collection interviews, respondents were encouraged to discuss what they perceive as being key challenges and opportunities for Mistra Urban Futures. The following six key areas of development were highlighted among the respondents:

- Disseminating knowledge and increasing participation from participating organisations
- Increasing the involvement of the political sphere in Mistra Urban Futures
- Finding the right way to measure results and effects from Mistra Urban Futures
- Strengthening the national and international perspective and links
- Finding and adjusting the focus of Mistra Urban Futures
- Developing the organisation and activities of Mistra Urban Futures

Academic footprints

Some of the academic footprints from Mistra Urban Futures and the GOLIP are presented in an additional outcome study by Ramböll consultants. According to researchers that are involved in Mistra Urban Futures projects, the Centre enables access to new networks and collaboration. In the analysis all 20 interviewed researchers claim this.

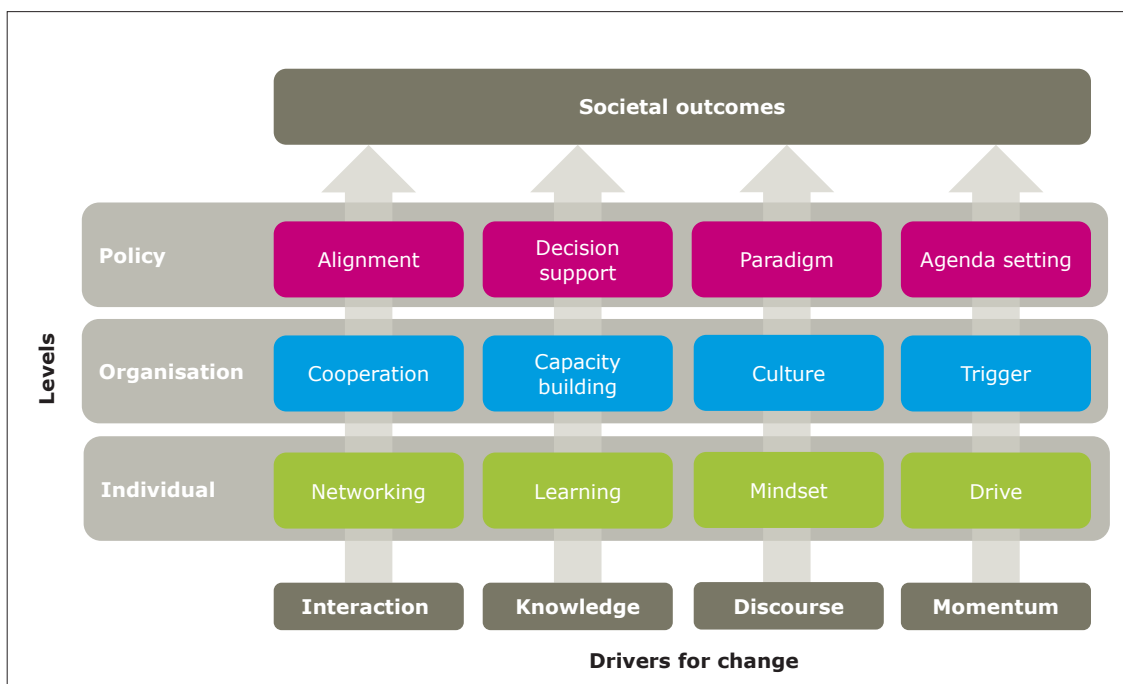


Figure 11. Analytical framework summing up various benefits and outcomes identified by the respondents (from the Societal Outcomes report – see also Annex 4)

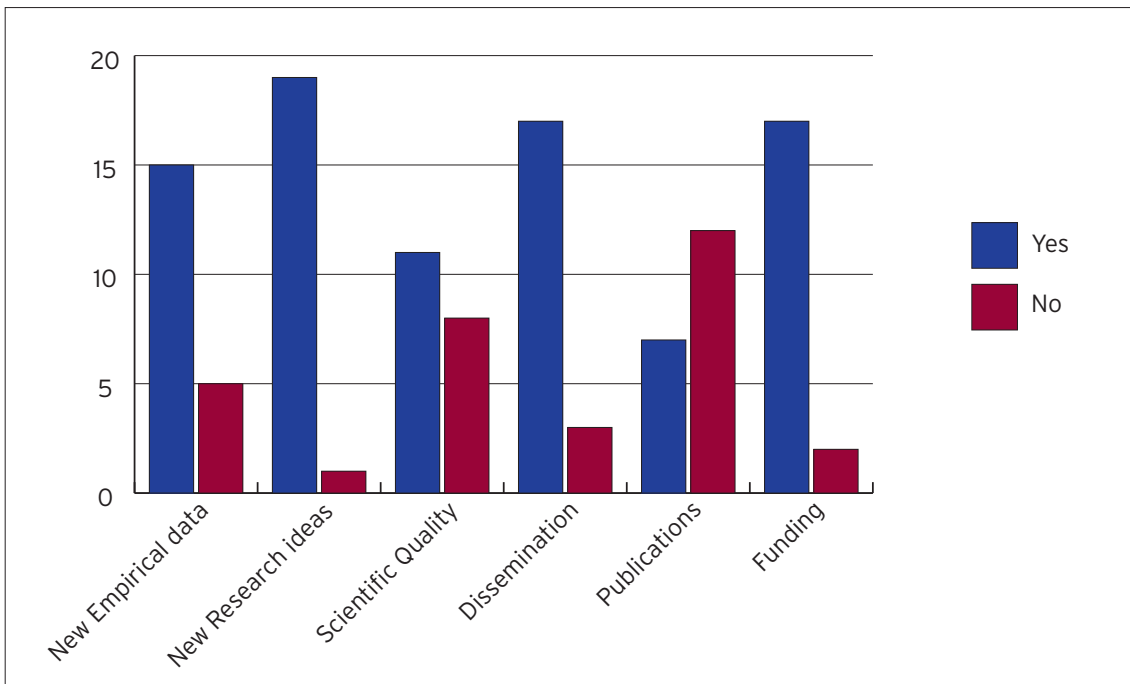


Figure 12. Interviews with 20 academic researchers, involved in Mistra Urban Futures

The cooperation and co-production between organisations have to a large extent, according to researchers, been characterised by collaboration between researchers, interdisciplinary collaboration and collaboration between research and public sector.

A vast majority of the interviewed researchers state that participating in Mistra Urban Forum has led to new empirical data, new research ideas as well as the dissemination of results and funding.

Greater Manchester LIP

The independent outcome report, commissioned in July 2014 from Quantum Strategy and Technology Consultants, highlighted the range of actual and potential impacts of the GMLIP already at this midway stage through the three-year programme. Echoing the GOLIP evaluation, key themes were identified: thinking without walls; alternative voices and unusual connections; and translating and transplanting. Like the other LIPs, concrete and tangible impacts can be identified, alongside these broader more systemic influences on the urban landscape.

Engagement

A high breadth of engagement in 2012 was followed by deeper partnerships with committed anchor partners. The engagement of these partners is demonstrated by the increased proportion of matching funding generated. A successful strategy has been implemented of increasing the proportion of cash to in-kind matching funding, and by pump-priming activities via initial transfers of resources to develop longer-term partnerships. The anchor partners have remained committed to engaging with the Greater Manchester Partners group; the host for the meetings has rotated between partners and the frequency of meetings increased at the request of the partners.

Outside the core partners, in 2012–2013 an estimated 180 organisations and 1400 individuals had contact with the GMLIP. The figures for 2014 - 2015 are still being generated. The digital portal, Platform, has a global audience: between October 2013 and January 2014 there were 3500 visitors, the majority UK-based but also from the US, Sweden and India; 250 people subscribe to the Platform e-newsletter. The wide enrolment of the GMLIP is reflected in the range of individuals who have engaged at different levels of seniority.

Influence on policy

The work of the GMLIP has had direct impacts on setting the agenda and shaping policy at Greater Manchester and Manchester levels in terms of communications, participation, consolidating the knowledge base and shaping the agenda.

- Communications: The Greater Manchester Low Carbon Hub; Manchester: A Certain Future; and Manchester Arts and Sustainability Team have all committed to use Platform as their primary communications channel. This constitutes a core contribution to the digital governance architecture in the city-region.
- Participation: The Greater Manchester Low Carbon Hub has held specific workshops with the third and voluntary sectors to consider how it engages with community interests and joint organised a stakeholder engagement event in December 2014 to inform the Climate Change Implementation Plan; Manchester City Council's restructuring of its neighbourhood support teams has been informed by the work of the GMLIP.
- Knowledge: The Greater Manchester Low Carbon Hub held two workshops with Greater Manchester Universities in 2013 and established the Greater Manchester Research Forum. Forum participants are considering how to support a horizon-scanning exercise with the Climate Change Implementation plan and identify priorities for the future.
- Work in progress is examining policy in three specific areas: urban food/agriculture; the role of community hubs in connecting with grassroots initiatives; and the roles of creative and cultural organisations in supporting a low-carbon culture in the city. Further impacts on the policy agenda can be anticipated from these projects in 2014–2015.

Members of the GMLIP have been invited to join the Greater Manchester Research Forum, the Sustainable Consumption and Production group of the Low Carbon Hub, and the steering group of Manchester: A Certain Future. The GMLIP was invited to join three bidding consortia for the Joint Programming Initiative Urban Europe and approached to develop new projects by a number of local organisations. In addition, the GMLIP has initiated new governance structures and forums: the online portal for sustainability is a key intervention in the digital architecture of the city-region. New contacts have been made across the international LIPs initiated by the GMLIP – examples include networking on green infrastructure with Cape Town and Sweden, looking at food policy initiatives across all LIPs and cultural urban economy and knowledge mobilisation training networks with Sweden.

Individual learning

Multi-disciplinary research teams have been established comprising over 60 individuals working in cross-organisational teams. Movement of personnel between research and

practice is increasing, for instance, via policy-makers reflecting on their own experiences through the Perspectives essays; public officials carrying out research activities; or these parties co-writing projects with practising professionals. One of our projects has involved placing an academic researcher with a partner organisation for a week to carry out dual literature review. Practitioner-researchers from the Biospheric Foundation and Social Action Research Foundation have worked alongside the SURF team. A joint presentation between practice- and academic researchers was given at the Royal Geographical Society International Conference in London in August 2014 on the value of community hubs and a second joint presentation was given at the Salford International Media Festival on the digital portal in November 2014.

Over time, practitioner partners have led and carried out more research activities themselves, co-writing briefs, giving presentations, carrying out interviews and hosting focus groups. Partners took part in only two workshops in 2012, while a year later, partners represented the work of the GMLIP at seven different events. Partners are initiating new collaborative opportunities on behalf of the GMLIP – the ‘Platform Live’ event is one example.

Spaces for individual learning and ‘time out’ from daily responsibilities have also been created. Many participants have commented on the value of these spaces for reflection and the unanticipated benefits that writing and co-reflection have brought to their practice. Practitioners have been reading and reflecting on academic texts, whilst researchers have had their assumptions and methods challenged. Alongside engagement with policy-makers and practising professionals, the research has involved community researchers and schools bringing new voices into the research process. In 2015, a series of ‘co-analysis’ activities will be launched enabling collaborative reflection and representation of the work.

Institutional learning

The GMLIP has catalysed the creation of new spaces for institutional learning via an emerging architecture for interaction between different interests. A central part of this architecture is the Greater Manchester Partners group itself, which brings together the main partners working across the projects. Previously disconnected interests are now in regular contact with one another. Beyond the current projects, the Greater Manchester Partners group provides a mechanism for embedding cross-institutional learning in the city-region.

A key value of the GMLIP is in intermediating between different community and policy interests and creating common spaces – such as the digital Platform – where these different voices can be expressed. Project-specific groups have also been catalysed, such as the editorial group for the digital Platform, the Greater Manchester Research Forum for the Low Carbon Hub and a group looking at the development of ‘urban food policies’ in the city-region.

Specific spaces for institutional learning have been created within and outside universities. Via the SIRCUS initiative, the GMLIP has held action-learning sets and peer-to-peer learning groups as well as sought to constitute a context for better integration between research and practice across the institution as a whole. This desire to ‘learn together’ is reflected in increased joint meetings and bidding. The experiences of the GMLIP have relevance for the University of Salford as a whole in terms of the organisation of research and ensuring that the lessons are embedded within the institution as a whole.

Civic use

Work is ongoing to develop the GMLIP as a platform for greater civic dialogue around sustainability in the city-region. The digital Platform is one first step, as is working with community hubs and using social media channels. In 2012, the GMLIP held two key public engagement events: the panel debate for National Climate Week and the ‘Sustainable Stories’ exhibition, part of the Economic and Social Research Council Festival of Social Science. This was part of a strategy of enrolment and engagement across the city-region. In 2013–2014, the emphasis has been on fieldwork, with plans to increase civic dialogue across the GMLIP in 2015. Working with community researchers has been particularly important in engaging directly with citizens. Community researchers worked in pilot studies in 2012 and captured insights for the exhibition and we are developing plans with community media organisations to increase the voices of residents on Platform.

Kisumu LIP

Engagement

The KLIP has been successful when it comes to engaging various sectors of society, starting with the composition of the KLIP trustees to the project implementation sites. Various stakeholder groups are represented in the KLIP Trust, including from academia, the public and private sectors, civil society and the local community. This wide and all-inclusive representation has made it possible for the KLIP to implement various projects without major hindrance or opposition. KLIP’s engagements have thus been able to achieve and make a mark by participation in waste management funded under the Kisumu Urban Project, thereby providing invaluable insights. The research team undertook a baseline study for an environmental impact assessment, submitted to the Kenyan National Environment Management Authority for subsequent licensing.

Influence on policy

The KLIP has influenced policy decision-making inside and outside of Kisumu County. In Homa Bay County, the Simbi Nyaima Lake Management Plan, which included business development plans, was launched in March 2014. In Kisumu, community involvement through group discussions facilitated the development of business plans for implementation in Kisumu City and its environs; the community in partnership with stakeholders and the county government has embarked on investment promotion for ecotourism. Kisumu County has allocated a considerable budget for County Tourism Transformation, which will have an impact on tourism development. This is partly due to KLIP involvement in policy formulation, especially the project team’s involvement in preparation of the Kisumu County Tourism Bill and in its dissemination to various stakeholders. A by-law that will facilitate transformation of tourism in the county has also been developed with the help of the ecotourism team. Through KLIP involvement, the county government of Kisumu has agreed to up-grade the Dunga road, which is the only access road to Dunga beach, a potential tourist site.

Individual learning

Mistra Urban Futures and KLIP support 23 postgraduate students at the PhD and Masters levels; their work leads to completion of concepts, proposals, manuscripts and publications destined for various relevant refereed journals. These successes are a clear indication of the development of individual capacity, through work in the two thematic areas of KLIP.

Civic use

The KLIP activities have resulted in practiced civic engagement through partnerships and collaborations that are mutually beneficial. Instances of civic involvement include community service programs, such as the development of the playground at Dunga, through community-based research and direct involvement of politicians.

Cape Town LIP

Knowledge Transfer Programme

Engagement

The KTP represented a remarkable engagement in itself. The four embedded researchers were not only welcomed into the City of Cape Town for three years, they were also given unprecedented access and asked to contribute to decision-making processes. Similarly, the act of allowing city officials the chance to withdraw from their day jobs and reflect intellectually and critically on their work within an academic environment designed to critique assumptions, represented an innovation of the engagement between the City and the university.

The innovative nature of the KTP has gained recognition outside of the City administration and ACC. The researchers have been invited by businesses, civil society organisations and a range of academic programmes to share the insights that the KTP has afforded. The KTP engagement has also created additional opportunities for City counterparts to present on topics and in forums that they might otherwise not have. The international and local regard with which the Cape Town KTP is held is a function of innovative nature of the university-city hybrid created by the CTLIP.

Influence on policy

The researchers embedded in the City have written a number of conceptual documents with the ambition to ultimately input into robust policy shaping the City.

Examples include a green economy concept piece that formed part of the City ‘budget cluster’s’ compliance with their key performance indicators; a carbon-offset concept note; and an environmental fiscal reform paper submitted to the ‘budget cluster’ providing a multi-criteria assessment for the selection of green economy projects in Cape Town. Other concept notes have been written on valuing green infrastructure and on facilitating green finance (written in reply to the request by the Provincial Government to establish a private sector ‘green fund’). Further work includes editing and revising Cape Town’s economic growth strategy based on the green economy position paper, and financial modelling work undertaken by one of the embedded researchers, which fed directly into the amendment of parking regulations to facilitate the development of more affordable, higher density housing. The embedded researchers have prepared comments, inputs and assessments on a number of policies, plans and studies within their fields of expertise at both local and national levels.

In focusing on conceptual contributions, the researchers have been able to influence decision making, raise awareness and redirect local government budget allocations in pursuit of a green(er), fair(er) and dense(r) city. This is evidenced in the hundred million rand that was allocated to the green economy, the recognition of the need to create employment for the ‘unemployable’ through, for example, waste-removal programmes, experimentation with waterless sanitation technologies, increasing investment in the novel

concept of ‘ecological infrastructure’, the approval of resource-efficient technologies within building and development processes, exploring the possibility of requiring all new developments to comply with resource efficiency criteria, setting up a policy framework and institutional structures to improve the efficiency and management of City operations, and the approval of a long-term plan for energy efficiency. Another example is that of emerging discussions about creating a new post within the City specifically mandated to focus on climate adaptation, which arise out of the embedded research focussed on this issue.

Research focused on energy governance offered a perspective and analysis of national policy for the City, and also developed various applications of national policy for the City’s own approaches to governance, and for its internal policies. The Economic Areas Management Plan (ECAMP), co-developed with members of the City, is the most visible outcome of this work.

Individual learning

The four embedded researchers have gained novel ‘fieldwork’ insight and can now claim high degrees of practical knowledge to add to their respective theoretical knowledge bases. The City of Cape Town is a complex institution and there are very few academics with a first-hand experience of the city’s inner machinations. The insights have already been infused into teaching curricula and research projects, and such incorporation is expected to increase once the researchers have reflected on and written up their experiences in their respective PhDs.

Individual learning is similarly evident among the city officials—both those who have been counterparts to the embedded researchers and those who have been afforded time at the university. This learning is manifest in the uptake of concepts in their daily discourse, in presentations to political counterparts and in their publications.

Institutional learning

It is too early to judge how the KTP has changed the City of Cape Town given the lead time for generating policy and the protracted process that constitutes institutional reform. Clearly, however, the process has continued to be supported by both the City and the University, and at times has been both innovative and disruptive, thereby creating the potential for change. Particular institutional learning processes that have been pursued in the course of the KTP include reflection and writing exercises by city personnel, which have become a new diagnostic tool for eliciting understanding of matters of policy and decision making.

The City has also adopted formal planning instruments such as building and development approval processes, solid waste monitoring procedures, and more. And the City is more engaged with the regulatory environment in respect of renewable energy and energy efficiency, particularly at the national level. In addition, the distinction between public and private goods in the context of market failure and local government intervention is clearer now within the Environmental Resource Management Department than it was at the commencement of the KTP. At a global scale, the City more fully understands the global carbon market and how it might benefit locally. Demonstrated through the Economic Areas Management Programme, a significant shift has been observed in thinking regarding the need to incorporate research and analysis of the space economy in the planning process.

The extent to which the university has been ‘disrupted’ is currently beginning to emerge, and the benefits remain to be documented. The efficacy of using the embedded

or institutional ethnography method for PhD studies will be tested when the candidates are examined (two early in 2015 and two in the following years). Nonetheless, the insights gained by the respective researchers have been incorporated in lectures and other educational processes.

Africa Peer Learning and Dissemination Programme–AURI

Engagement

AURI has been able to engage with a number of actors (including at least three regional funding institutions, eight bilateral agencies, four multilateral agencies, eight national governments, two international networks of local authorities, and two international governmental organisations) through the partnership formed between AURI and Cities Alliance. Cities Alliance has contributed financially towards the organization of AURI events, covering the costs of all Cities Alliance partners to attend the first AURI meeting. AURI partners have been mobilized in writing discussion papers that fed into the Cities Alliance Africa Strategy, around which Cities Alliance will coordinate the actions and investments of its partners in sub-Saharan Africa.

Influence on policy

In 2013, AURI partners conducted a review of Cities Alliance's City Enabling Environment initiative, which ranked African countries in terms of their capacity to provide an enabling environment for effective local governance of urban areas. This key policy document aims to help cities and local authorities determine what actions should be taken at the national level to increase effectiveness in urban management, and is the first of its kind produced for the African context. It further seeks to catalyse public debate on how urban policy can help create environments that are conducive to the productive, sustainable and inclusive development of African cities. Through the reach of the Cities Alliance country programmes and various initiatives in Africa, this document has the potential to shift national policy instruments towards a focus on sustainable urbanisation, through official policy channels.

Individual learning

The participation of Cities Alliance partners in AURI meetings provided opportunities for the sharing of perspectives and priorities between diverse actors involved in research and practice. Government officials broadened and sharpened their knowledge of the challenges facing urban research in Africa. Likewise African urban researchers have learned about the challenges and imperatives facing those in government and the development industry.

Institutional learning

The establishment of AURI as an international network of applied urban research centres is itself an example of the formation of a new trans-disciplinary working group and network. AURI has emerged as a key partner in the process to develop the Cities Alliance Africa Strategy. Through these linkages AURI is in a key position to influence future policy at both national and local levels through the institutional reach of Cities Alliance.

CityLab Programme

Many of CityLab's engagements with a wide range of stakeholders have had a direct impact on policy. For example, during 2011, the CityLab Programme helped the City of

Cape Town co-produce an urbanisation strategy by bringing together different departments of the City and various stakeholders. This strategy resulted in the establishment of an urbanisation department in the City of Cape Town to help better respond to population growth through proactive planning. Similarly, in 2012, the CityLab Programme assisted the Western Cape Provincial Government with co-producing a long-term development strategy (the One Cape strategy) and is currently assisting with its Human Settlements Framework to ensure the creation of more integrated and sustainable urban environments in the Western Cape Province.

Many non-governmental organisations and community groups have been involved in the CityLab seminars and events, and in collaborative research project. For example, Slum Dwellers International (a large grouping of informal settlement residents, linked to a global movement) played a prominent role in the Philippi CityLab and Human Settlements CityLab, and the residents are currently involved in a collaborative research project on the impacts of informal settlement upgrading on violence (linked to the Urban Violence CityLab).

The CityLab Programme has also been successful in engaging students in seminars, events and collaborative research projects, helping ensure that many students have been exposed to real world problems and to new ways of doing research (in collaboration with other stakeholders).

Urban Debates and Urban Africa Portal (UrbanAfrica.net)

New tools are being tested to help CTLIP map its impacts better. The very roughest measure is a register to record numbers, names and affiliations of people attending CTLIP events. A total of 16 'Brown Bag' talks and Seminars in 2014 were attended by approximately 250 people. Anecdotal feedback about ACC's research (including book reviews) and citations or adoption of co-production methods is a second example. Third, increasing subscriber numbers to CTLIP websites and publications are an indication of user profiling and influence. Current (October 2014) social media statistics are as follows: UrbanAfrica.net website: Google analytics (21 Sept. – 21 Oct.): 3,643 visitors (21% up on previous month) (Source: Google analytics); Facebook: more than 1,000 'likes' (the number of Facebook users ACC logs in a month fluctuates between 4,500 and 7,200); Twitter: urbanafrika.net has 1,485 followers, averaging 50 new Twitter followers per month for 6 months. There are currently 200 users signed up (directly via the site) to receive updates about urbanafrika.net.

Invitations to speak and advise in academic and official arenas are also measures of reputation and anticipated impact rather than actual impact, for example, in advising on National Urban Policy, and on Cape Town's Indigent and Food Security policies, and via CTLIP's embedded researchers. Also, CTLIP participants serve on boards of other urban non-governmental organisations, teaching institutions and think tanks.

Organisation, administration and follow-up

With a large number of people involved from different organisations, 70 projects in four countries and funding from many sources, operating Mistra Urban Futures requires skilled and effective administration with clear roles, routines, structure and established systems for financial follow-up, budgeting and quality control. This chapter presents an overview of the Centre's organisation and governance, processes for planning and evaluation and administration routines and facilities.

The size and complexity of the task of setting up and operating a Centre between research and practice across four different countries exceeded expectations during the application and start-up phases. This involved a steep learning curve about appropriate administration and quality control processes during the first years. Today, operations are well-managed and efficient processes and tools are in place.

CENTRE ORGANISATION AND GOVERNANCE

The organisation is described in Fig 1, page 14. The Gothenburg Consortium is the main funder, together with Mistra. Chalmers is one of the partners in the consortium and plays a dual role as the host institution, with legal accountability and responsibility for the Centre. Within Chalmers, the Centre is positioned directly under the President within the Rectorate, as a reflection of the university-wide role it plays. The Centre also has a strong link to the Built Environment Area of Advance. The Areas of Advance at Chalmers are strategic, cross cutting arenas that bring together education, research and innovation within the university and with the industry and society.

The Centre's Board is appointed by Chalmers in consultation with Mistra and Sida; the Board defines the vision and mission of Mistra Urban Futures and has the overall management responsibility for its performance. The Board has ex-officio members from Chalmers, the Consortium and Mistra.

The Director is responsible for the management of the Centre operations and for creating and maintaining good forms and levels of collaboration in the Centre. The Director is also responsible for ensuring that the Centre, including projects, is monitored and followed up, that the results achieved are compiled and that information pertaining to such monitoring, follow-ups and results is provided to Mistra, Sida and other financiers and relevant target groups.

The Centre operations are executed at the LIPs, with managerial, communication and administrative support from the Secretariat.

The Board

The first Board was appointed in 2010 and 2011, composed of members with policy, practice or research experience. As the Board's terms expired, new Board members were appointed in January 2014. Ines Uusmann served as the first Chair of the Mistra Urban Futures Board; Professor Thomas Rosswall was appointed as the new Chair of the Board when her assignment was completed.

Usually the Board meets four times a year, with one in-person meeting and three teleconferences. However, in 2014, the new Board met three times in person, in order to prepare sufficiently for the mid-term evaluation and to do the strategic planning for the coming period, 2016–2019. In general, the role of the Board is to make the strategic decisions for the development of Mistra Urban Futures; adopt strategies, budgets, annual plans and reports; and follow up on the Centre's plans and activities.

The Gothenburg Consortium

Each partner in the Gothenburg Consortium has appointed a representative to constitute a Council that meets four times a year. The topics include the partners' interactions, match funding and participation in Mistra Urban Futures activities over the short and long term.

In addition, for operational planning, development and follow-up of the projects in Sweden, appointed Consortium coordinators meet monthly together with coordinators from the associate partners and members of the Secretariat. The Consortium coordinators act as the bridge between the Secretariat and the seven Consortium partners.

Local Interaction Platforms

Directors for the LIPs were appointed in 2012. After the integration of the Urban Futures Arena into the overall Centre structure in 2013 (see page 22), monthly telephone or Skype meetings were initiated to bring together the LIP Directors, to foster more collaboration in the management of the Centre than previously achieved. The LIP Directors discuss international collaboration, methods for co-production and the strategic development of the Centre. These meetings are timetabled to ensure maximum effectiveness with the process of Board and Consortium meetings, to enable feedback and communication loops to be built between strategic and operational concerns. The LIP Directors, the Centre Director and members of the Secretariat also meet physically once or twice a year in order to deepen the collaboration.

Staff

During the start-up of the Centre, Henrik Nolmark was appointed Acting Director by Chalmers. In 2011, a formal Director was recruited to lead the Centre: Lars Reuterswärd, former Director of the Global Division at UN-Habitat. When Reuterswärd retired in early 2014, Jessica Algehed became Acting Director, serving during the search for a new Director. In September 2014, David Simon, Professor of Development Geography at Royal Holloway University of London, was appointed new Director.

In 2011, the Centre needed to strengthen administrative routines and processes. Administrative staff members were recruited through mid-2012, becoming part of an administrative function. During 2012, administrative services were set in place in parallel with the initialisation of many projects at all the LIPs. A year and a half later, core routines and processes had become well established, and administrative resources could be reduced.

Currently the Secretariat consists of seven full- or part-time staff, including the Director of the Centre. The Board, the Gothenburg Consortium Council, the Secretariat and LIP Staff are presented in Annex 7. The Secretariat has weekly meetings for discussing and deciding on operational matters, as well as for preparing documents for discussions with LIP Directors and decisions taken by the Board. The total number of people involved in the Centre activities 2010–2014, is around 600, of which approximately 400 are in Sweden. In Sweden, a majority of the researchers are employed with one of the Consortium partners and work in-kind or on commission from the Centre.

PLANNING AND EVALUATION

Planning

The agreement with Mistra stipulates a yearly revision of the Centre Operational Plan (COP). The COP is made through a bottom-up planning approach that includes Project Plans, Local Activity Plans from each LIP and associated budgets; joint planning of international collaboration by the LIP Directors; and planning of overall administrative and communication activities by the Secretariat. The COP is approved by the Centre Board before submission to Mistra. The process of producing the COP for 2012 and 2013 was quite cumbersome, as Centre operations were still being developed. In 2013 and 2014, the process for COP 2014 and 2015 could be done with considerably less effort, as the planning was more integrated in the daily operations and already established meeting forums.

Evaluation and quality control

The Centre relies on principles for quality control that were initially presented in the application to Mistra. Evaluation and quality control focus on project development and general Centre performance. Indicators for expected outputs and outcomes were presented in the Strategic Plan 2012–2015 (Table 1). These indicators were reflected in the LIPs' assessments of outcomes for 2014 (Table 2).

The initial principles for quality control have been implemented. For new initiatives, a number of criteria that are consistent with the goals of the Centre have to be fulfilled. Evaluation and quality control also includes a general examination of the membership composition of proposed project teams.

Criteria for new projects:

- Support the strategic/operational goals at the Centre.
- Be backed by one/two or more of local partners.
- Capture needs and knowledge around a specific urban problem seen from practice, industry and research.
- Be based on in-depth collaboration between involved stakeholders.
- Have clearly identified recipients within practice and research.
- Produce usable and implementable results.
- Be transferable to different urban development contexts.
- Show a potential for up-scaling.

Quality control is incorporated into the project implementation stage as part of regular progress reports. Progress and achievements in relation to goals and plans are reported by project managers and LIP Directors and reviewed and commented on by the Secretariat as part of the dialogue with the LIPs. In addition, the general performance of the LIPs is assessed with respect to partnerships and fundraising, working methods, communication and dissemination, risk management and lessons learnt.

In conjunction with progress reports, the budget is reviewed in a financial report from each LIP, as well as for the Centre overall. The payments to project staff and to the international LIPs are linked to the approval of the progress reports and financial reports. Standard peer review principles apply for scientifically produced publications. Assessments of achieved outcomes for completed as well as ongoing activities have been carried out at the individual LIPs. The results are presented in Annex 4.

	SHORT-TERM OUTPUTS Examples of indicators	LONG-TERM OUTCOMES Examples of indicators
INTERNAL	Financial and human resources Qualitative growth (personnel, projects, etc.) Implementation milestones Deliverables Publications and citations Consortia partnerships	Academic network Gender development in trans-disciplinary discourses Sustainable business partnerships Policy partnerships Skills inventories and expertise development Consortia partnerships
EXTERNAL	Stakeholder collaboration Knowledge transfer Decision influence Perceived policy capacity Networking, arena, forums creation	Policy trajectory shifts Knowledge implementation Toolbox and methods utilisation Cross-sector knowledge utilisation Best-practice utilisation

Table 1. Indicators for Quality Management and Evaluation (QME) from the Strategic Plan 2012-2015

PARAMETERS	EXAMPLES OF OUTCOMES
ENGAGEMENT	The value of the Centre and its activities is described in official documents Additional financial contributions by partners to Centre activities Participation in long and resource-demanding processes by organisations or residents Political consensus regarding engagement with the Centre
INFLUENCE ON POLICY	Direct impact of project on public policy documents Direct impact on work carried out by national authorities Invitation to public (including national/regional) policy arenas
INDIVIDUAL LEARNING	Individual capacity development Possibilities created for officials to act in an 'independent' role Officials getting experience of research
INSTITUTIONAL LEARNING	Centre projects linked to the regular activities of authorities Knowledge inputs from the Centre to public planning activities New trans-disciplinary working groups and networks established Politicians and officials meeting at an arena outside their own organisations
CIVIC USE	Increased public dialogue

Table 2. Assessment of outcomes



GOLIP and the secretariat 2013. Photo: Chalmers Film- & Fotocommitté

ADMINISTRATION AND CENTRE FACILITIES

Administrational routines

Some administrative routines specific to the Centre had to be developed during the start-up period. However, as much as possible, the administration is integrated with Chalmers' regular routines and processes. Staff at Chalmers Administration and Services unit handles matters for the Centre within human resources, procurement, legal advice, IT infrastructure and support, archiving, and so forth. The financial systems and financial administration are handled by the Chalmers financial department.

The administrative routines for projects in Sweden are described in a Project Administration and Communications Guide. The KLIP follows an internal administrative manual that describes how administration, remuneration and financial activities are handled within that platform.

In order to have an effective and professional structure for handling contacts, the Customer Relation Management (CRM) system Lime is used since 2012. The Lime system consists of approximately 3900 contacts today, of which 1050 are researchers, 1300 practitioners, 350 politicians, 100 are from interest organisations and more than 1100 are business representatives. A computer based system, Apsis, is used for handling invitations, registrations and newsletters. The system was implemented in 2013.

In addition to the Chalmers-Mistra agreement, Mistra-Sida agreement and the Gothenburg Consortium agreement, several other different types of agreements stipulate roles, responsibilities, the copyright to results and the financial agreements between Chalmers and the parties involved in the Centre.

- For GMLIP and CTLIP, perennial International Cooperation Agreements (ICA) are signed between Chalmers and their host organisations: University of Salford,

Manchester for GMLIP and the University of Cape Town for CTLIP. For KLIP, an ICA is signed between the Centre and the KLIP Trust on the basis of signed Memorandum of Understanding between Chalmers and the KLIP Trust. These agreements refer to the Chalmers-Mistra agreement as well as to the Mistra-Sida agreement, mainly applicable for KLIP and CTLIP.

- For the associated partners in Sweden, perennial agreements regulate their contributions to the Centre .
- Organisations that have staff involved in Centre projects enter into one agreement per organisation per project. Currently, most of these agreements are annual and are based on the annual project plans of the COP.
- The KLIP Trust enters into sub-agreements with partner organisations in accordance with the directions of the ICA with the Centre.

Centre facilities

During the start-up of Mistra Urban Futures, the Secretariat was located within the premises of the Gothenburg Environmental Institute on Chalmers' campus. In 2013, Chalmers decided to invest in a new facility for Mistra Urban Futures in order to improve accessibility, meeting facilities and the work environment. The new facility is located at the northern edge of the university campus, facing the City of Gothenburg.

The office space was designed to be an attractive meeting place for all involved with Mistra Urban Futures and to attract potential partners. All furniture was bought second-hand, in order to have the minimal environmental impact at a low cost and to create a 'homey' atmosphere. The Secretariat moved into the new facilities in January 2014. Since then, the office space is frequently used by Centre partners and projects for scheduled and spontaneous meetings, workshops and other events.

Finance

Mistra Urban Futures relies on funding from various sources. The utilisation of funds is based on yearly Central Operational Plans, approved by the funders, as described in Chapter 5. Presented here are overarching figures of financing and distribution of costs from different funding sources and for various parts of the organisation. Detailed information is found in the annual reports for the Centre.

The funding to the Centre comprises of both cash and in-kind from different sources, as described in Table 3.

Source	Cash	In-kind	Comment
Mistra			Core funding to the whole Centre
Gothenburg Consortium			Core funding to the whole Centre
Sida			Used in KLIP, CTLIP, and certain related activities at GOLIP and the Secretariat
Local co-funding GMLIP			From local and external partners to GMLIP
Local co-funding KLIP			From local partners to KLIP
Local co-funding CTLIP			From local and external partners to CTLIP
External funding GOLIP			Associate partners and funders like Formas, Vinnova, the European Union

Table 3. Cash and in-kind funding

The funding by Mistra and the Gothenburg Consortium has together constituted the core funding of the Centre. This backing has financed the institutional establishment and a large part of the research completed by Mistra Urban Futures. The third single largest funder is Sida, whose support has been used for the build-up of the LIPs in Kisumu and Cape Town and for research activities focused on poverty alleviation in the African region.

The total cost for the period 2010–2014 amounts to SEK 235 million, of which Mistra and the Gothenburg Consortium have funded approximately 30% respectively. The total funding by Mistra for 2010–2014 amounts to SEK 75 million. The cash funding by the Gothenburg Consortium has been SEK 35 million, and the in-kind contribution from the consortium SEK 38 million. The in-kind contribution has mainly been in the form of staff time in GOLIP projects. Sida has contributed SEK 26.5 million during the same period.

The local co-funding at the LIPs is described in Chapter 2, in the section on ‘Local partnerships and funding’. At GMLIP and CTLIP the local co-funding has increased year by year, landing at approximately 50% of the funds for the whole period, generated locally at the hosting universities, with local partners and also from external funders such as the UK Research Councils and the National Research Foundation in South Africa. At KLIP, co-funding in the form of in-kind contributions from local partners was initiated in 2013.

For GOLIP, the local funding is included in the Gothenburg Consortium funding. Main external funders in GOLIP are the Swedish Research Council, Formas and the Swedish Innovation Agency Vinnova. Other main external funders of GOLIP are the associated

partners in Sweden. These include the Swedish Transport Administration, the Swedish National Board of Housing, Building and Planning, SP Technical Research Institute of Sweden and White Architects.

Total costs per main funding source for the whole period are shown in Figure 13 and annual distribution per funding source in Figure 14. Total funding per Consortium partner is shown in Figure 15.

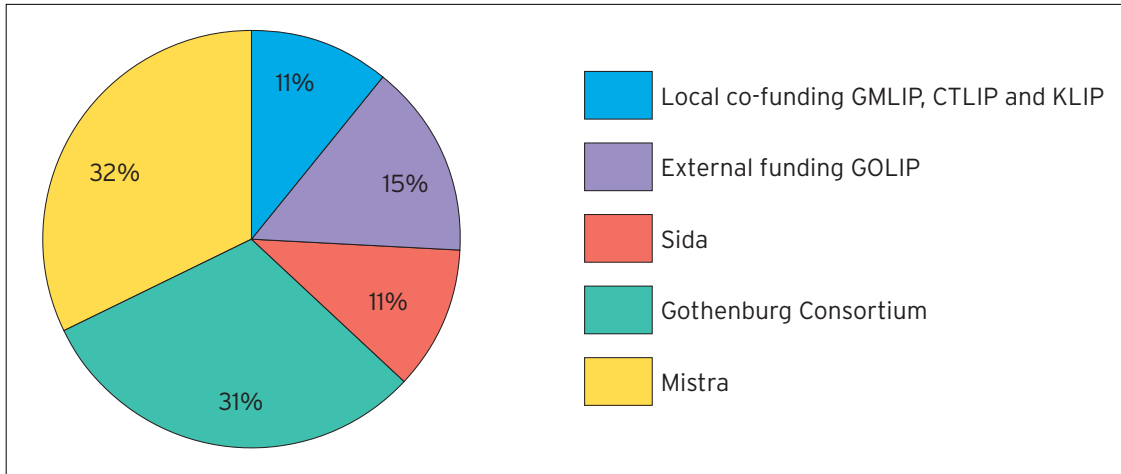


Figure 13. Total costs and main funding sources 2010-2014

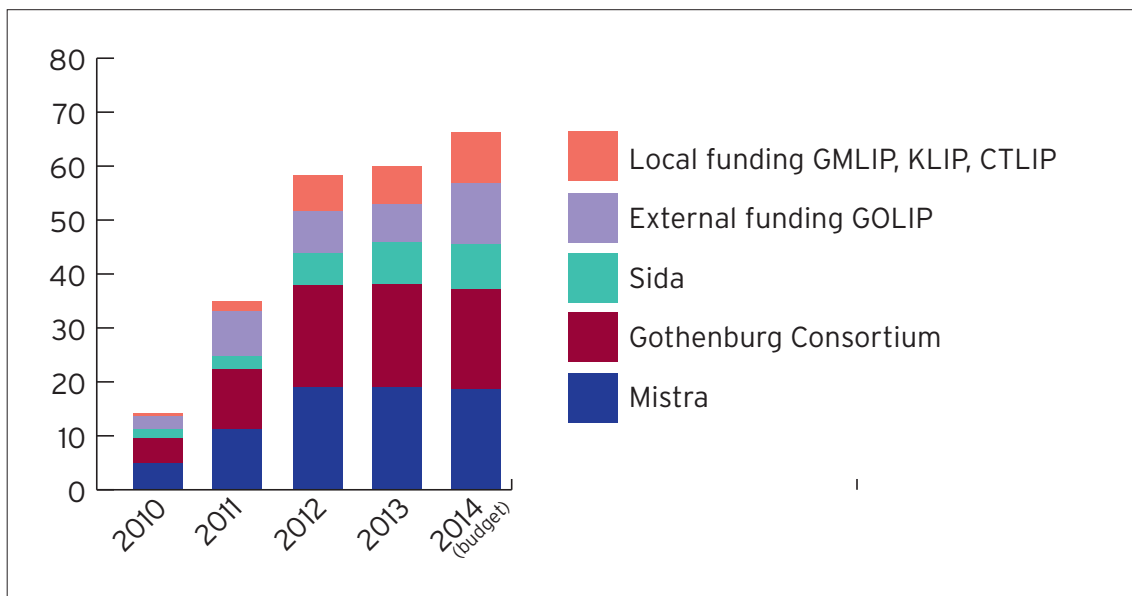


Figure 14. Annual distribution of costs, mSEK

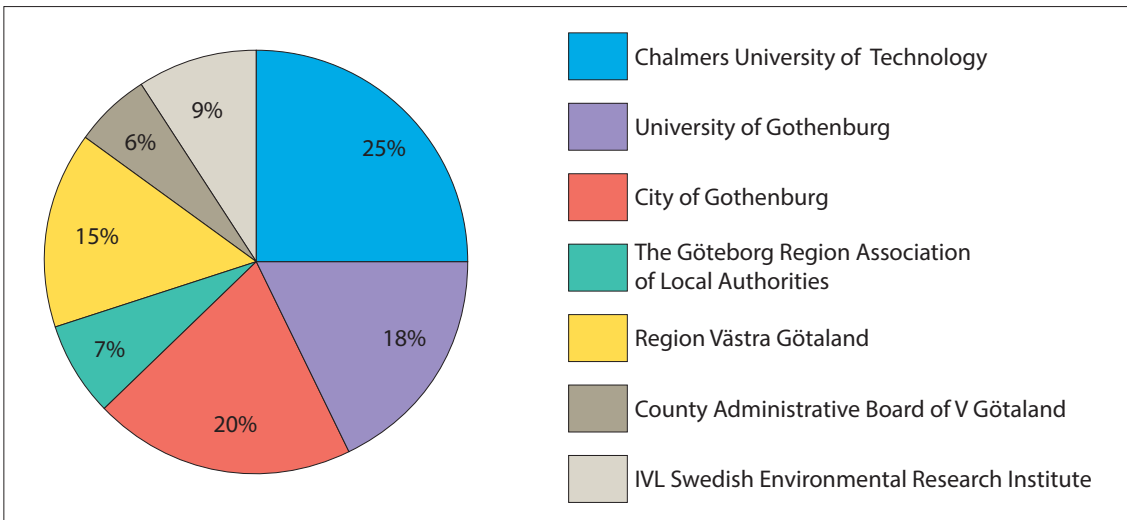


Figure 15. Distribution of funding from Gothenburg Consortium

The in-kind contribution in GOLIP, from the Gothenburg Consortium partners and others, is managed through time sheets. Every hour contributed is valued based on seniority level, according to the agreement between Chalmers and Mistra. However IVL has a specific agreement directly with Mistra with a higher hourly value than what is agreed with Chalmers.

With the strong commitment and large in-kind contribution from the partners in Gothenburg, GOLIP represents 43% of the total cost for the Centre. This is more than what was budgeted in the Strategic Plan 2012–2015. One reason is the integration of the Mistra Urban Futures Arena with the overall Centre structure, as described in Chapter 2, during which a large part of the Arena budget was transferred to GOLIP.

As proportions of the total costs of Mistra Urban Futures, the LIPs outside Sweden represent 27% and the Director and Secretariat, 16%, including Centre common activities such as the web site and newsletters (see Figure 16).

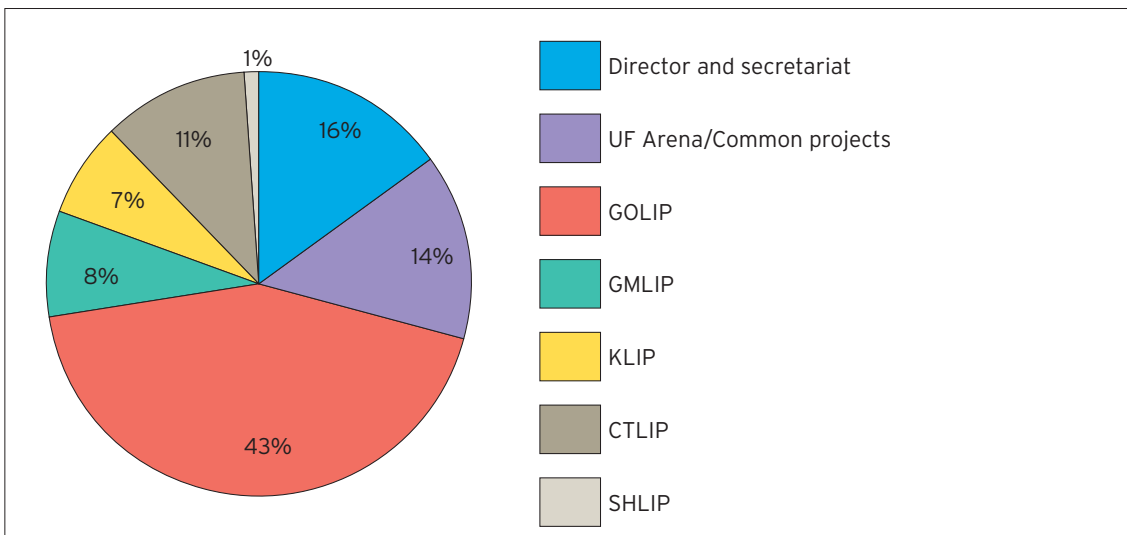


Figure 16. Total cost per unit

Lessons learnt and the way forward

Creating a well-functioning centre from scratch in only a few years has been both demanding and challenging. With the strong focus on co-production of knowledge, understanding and trans-disciplinary methods, the Centre is at the vanguard of an increasing interest in such collaboration and participatory methodologies and how they can contribute to the promotion of sustainable urban development. Lessons learnt at both strategic and local levels have strengthened the Centre and lead the way towards the Mistra Urban Futures Strategic Plan for 2016–2019.

Building a Centre

The intention from the start was to establish Mistra Urban Futures as an international network of partnerships. Therefore, the Centre has simultaneously built partnerships for both local and international collaboration. Setting up organisations and activities in different parts of the world has been time consuming and challenging in terms of how to deal with diverse local contexts as well as come up against a number of temporal, disciplinary, institutional and communication barriers.

Building a network of partnerships in different parts of the world also requires taking into account some substantial cultural and institutional differences. Not only are there differences in how academics and city officials think and act, but language barriers as well as cultural differences can also affect the understanding and timing of activities. Despite such challenges, and in many ways because of the diversity that the Centre embodies, a creative and thriving organisation has now been established with four active international partners with a great number of engaged researchers as a solid base for further cooperation and development. Furthermore, a significant positive lesson learnt for the Centre is the relevance of the trans-disciplinary co-production methods, regardless of geographical or cultural conditions.

When the original application was developed, the ambitions were very high. However, the initial ambitions exceeded the capacity to deliver, which has led to the central challenge of maintaining and managing high expectations throughout the Centre and its projects. Therefore, to a certain extent, the first years were characterised by an attempt to ‘do it all’ instead of focusing on a few themes, projects or partnerships. However, despite that initial overreach and the limited timeframe and resources available, the Centre has already achieved considerable results.

During these first five years, the Centre has had a strong focus on learning from experience and thus it has been critical to adopt a continuous adjustment of the working methods and adaptability in organisational needs and routines. A self-evaluation and the main lessons learnt so far are summarised in the following pages.

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MISTRA - THE SWEDISH FOUNDATION FOR STRATEGIC ENVIRONMENTAL RESEARCH | SIDA - THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
CONSORTIUM: CHALMERS UNIVERSITY OF TECHNOLOGY | CITY OF GOTHENBURG | IVL SWEDISH ENVIRONMENTAL RESEARCH INSTITUTE | REGION VÄSTRA GÖTALAND
THE COUNTY ADMINISTRATION BOARD OF VÄSTRA GÖTALAND | THE GÖTEBORG REGION ASSOCIATION OF LOCAL AUTHORITIES (GR) | UNIVERSITY OF GOTHENBURG

	Operational Goals	Result	Notes
1	Expertise and knowledge within Fair, Green and Dense with focus on both policy and research context.		Position papers have been prepared on the three focus areas Fair, Dense and Green. Different aspects have been included in all projects.
2	An arena for comparative projects, synthesis and knowledge exchange in collaboration with existing and new partners		Four solid and active LIPs established. Collaborative research has started and will be extended. A new form of partnership is being explored and piloted. Criteria for additional partnerships developed to be implemented as part of the new Strategic Plan.
3	Research and expertise with-in transdisciplinary knowledge production where research and practice collaborate on equal terms		Guidelines have been prepared and courses carried out on co-production methods. A manual of joint knowledge co-production has been published.
4	Develop new tools and skills for knowledge application, dissemination and learning		A Modes Anthology has been prepared. Projects on innovative tools have been developed, including one on Urban Games.
5	Establish a Research School in Sustainable Urban Futures active at all LIPs		A Research School pilot in Kisumu is ongoing and will guide the development at global level. A large number of PhD students are linked to current projects.
6	Develop the consortia partnerships as well as become a key actor, supporter and participant for European and international outreach		Supportive consortia are established at GOLIP, GM-LIP and KLIP. See comments above on new partnerships regarding extended international outreach.
7	Broad communication of Centre outputs through a well-functioning and effective communication strategy and plan		A communication strategy has been developed. A well functioning infrastructure, including CRM systems Lime and Apsis, for communicating news and results is in place, with a modern, interactive website, newsletters and social media (including Twitter and YouTube streams) as well as seminar series.
8	Establish an effective organisation regarding leadership, decision-making, staffing and administrative and economic systems at both the Centre and LIPs		Operations are in good control and processes and tools are in place . Administrative manuals have been prepared for GOLIP and KLIP.
9	Develop and implement fundraising strategies for the Centre		Fundraising strategies are implemented, securing match funding in GOLIP, GMLIP and CTLIP in most projects. Evolved strategies are being planned for safeguarding financial sustainability of the Centre.
10	Develop and implement a transdisciplinary system for quality management		Quality control is well established at a project's initiation stage, and systems are being introduced for the implementation stage. Methods for assessment of completed projects are under development as well as introduction of KPIs. Overall quality management and evaluation is part of the regular progress reporting.



Fulfilled objectives



Partially or mainly fulfilled objectives

Table 4. Fulfilment of goals

An overall qualitative self-evaluation of the Centre's performance in respect to the operational goals, set in the Strategic Plan, is summarised in Table 4. Green represents fulfilled goals while yellow stands for partly or mainly fulfilled goals.

The strategic goals, backed up by ten operational goals, as described in Chapter 2 and Table 4, guide the *Centre performance*. They reflect the vision and mission statements, adapted on basis of experience during the inception phase. Further adaptation and refinement of the approach and portfolio has gradually been made in order to address the specific context and key urban challenges in the cities and regions of operation as described in Chapter 3.

In particular goals number 1 to 4 form the basis for achieving *Excellence in science, knowledge generation and utilisation*. The research results from over 70 projects (Annex 2) are presented in about 400 publications including both scientific publications and more popular ones (Annex 3). A qualitative assessment in the form of a bibliometric study is presented in Annex 3, Appendix 3A.

Integration of science, policy and practice represents the core task of Mistra Urban Futures and is applied through trans-disciplinary knowledge co-production. This is in particular reflected in goals number 3 to 7. About 600 people from both academy and practice have been engaged in the Centre's research activities (Annex 6 and 7). The communication strategy and identified impact on policy and governance are described in Chapter 4. Interviews with a number of stakeholders are presented in Annex 1 and independent evaluations of outcomes at all four platforms are found in Annex 4.

Goals number 8 to 10 form the basis for the Centre's development and performance in respect of *Organisation, management and leadership*. This is described in Chapters 5 and 6.

Lessons learnt from co-producing knowledge for urban change

The overall goal of Mistra Urban Futures is to help researchers, urban planners, policy-makers and different interests groups work together to integrate different types and sources of knowledge in urban areas, thereby making themselves better equipped to solve urban problems. Co-production is thus a way to combine different types of knowledge and understanding about urban planning, living, and research to increase the social relevance of the knowledge produced. This has been achieved by creating a trans-disciplinary research centre, characterized by novel forms of leadership, funding, organisation and boundary-breaking partnerships, as well as through innovative and novel ways of working together across practice and research. The approach to co-production that exists at the Centre is broad, inclusive and reflective, recognising the diversity of such practises in different partnerships and institutional settings. However, leading, financing, organising, practicing, and evaluating the results of such a centre on both local and international levels has also proved to be extremely challenging and time consuming and resulted in a wealth of experiences that can be applied to the next phase.

Everyone working within Mistra Urban Futures is committed to co-production as a way to produce knowledge and understanding. Consequently the ethos and experience of joint knowledge production is strong within the Centre. Numerous studies have shown the value of co-production, but also the difficulties that researchers and officials in the public sector face when co-producing knowledge.

Co-production partnerships have developed differently in the LIPs. In GOLIP and GMLIP there are local authority, private sector and NGO partners, whereas in CTLIP the collaboration is mainly with the City authorities. The collaboration at KLIP is based on an all-inclusive group of different stakeholders.

Despite their diverse contexts and partnerships, all of the LIPs have experienced similar challenges. Their reflections include the fact that co-production takes a great deal of time, and that different institutional cultures in both practice and research affect the success of activities and processes, as well as the implementation of results. Co-production is not about collapsing roles and functions; it is about building on difference, where institutional integrity must remain intact. The co-production of knowledge is also only successful if the fit is right—individuals are as important as contexts and institutions. Importantly, because of the high ambitions placed on co-production, it requires careful management of expectations from all parties.

The spectrum of different approaches exemplified across the LIPs is a good basis for further analysis of the role of co-production and the nature and diversity of knowledge required in urban transitions. The Modes anthology is the first step in this analysis. It contains detailed descriptions of some of the prior experiences and difficulties encountered thus far. These can be summarised as follows: co-production is a time-consuming process; institutional mismatches and diverse policy and disciplinary cultures create substantive barriers; personal skills among participants such as openness, curiosity, flexibility and critical self-distance are crucial; and different organisational structures and ways of communicating require in-depth analysis to ensure the accessibility and impact of the results.

Building from these experiences, three main areas will be in focus as we move forward with refining our approach to co-producing knowledge. First, the development of efficient co-production processes is a research task in itself. The aspiration to improve research-practice relationships is manifest in research funding streams across Europe and the world, through concepts such as living labs, innovation ecosystems or the triple helix. Yet the Mistra Urban Futures Centre is unique in having the range of internationally comparative first-hand experiences of different types of co-production processes. This positions the Centre to move into another level of theoretical and methodological research and practice on co-production. The work that has already been carried out will also contribute to theoretical insights grounded in diverse empirical case studies.

Second, different types of co-production approaches are highly valued by their individual participants from both practice and research across the LIPs. What is needed now is a more institutional approach to co-production where learning processes are less individually based and more ingrained in the fabric of the organisations themselves, including more refined forms of project initiation, and dissemination and evaluation of project results. More work is needed to anchor co-production more tightly in practice and policy settings. At the same time the implications of this anchoring, specifically the risk of loss of critical distance or scientific rigour, needs to be continually assessed.

Third, a central issue regarding the nature and diversity of urban knowledge needs is how the Centre should manage and evaluate the impacts and intangible legacies of the complex activities connected to co-production processes. The Centre is built on dual goals: creating both scientifically excellent as well as socially robust results. This results in two main parallel challenges regarding scientific and societal impact; how co-production can contribute to bridging empirical and theoretical gaps, both within urban studies in general and specifically in diverse contexts of the LIPs in both the global South and North and second, the importance of new and innovative channels for knowledge dissemination to reach wider target groups. Time and support for academic dissemination and publication need to be prioritized and secured. New approaches are needed such as computer games, learning-focused seminars and workshops, blogs, apps, visualization tools, videos, etc. All of this takes time and resources.

The specific ethos and approach of the Centre has developed throughout its first five years, and will continue to be developed. The Modes anthology identified some of the most important benefits associated with this ethos. These include: the development of intrinsically new relationships between practice and research; novel sharing of responsibility for knowledge production across diverse groups of practitioners and researchers in urban areas; increased local research capacity; and increased understandings and insight regarding the complexity and ‘wickedness’ of urban sustainability challenges.

Mistra Urban Futures has pioneered urban knowledge co-production and subsequently gained considerable experience. Such experiences are a competitive advantage today when securing societal impact is becoming more and more of a prerequisite for various research funding organisations. Consequently, Mistra Urban Futures will keep its strong focus on co-production and will further develop the various methods for refining and evaluating co-production processes.

Strong and extended local partnerships are important

The Centre is also distinctive due to its unique blend of international comparative work and strong and well-functioning local partnerships. We believe this is the most appropriate way to make a notable contribution to the changes in global policies that are necessary to create the Fair, Green and Dense cities we are striving for.

During these first five years of Mistra Urban Futures, strong partnerships have been developed by working through local platforms for co-production of knowledge in Gothenburg, Greater Manchester, Kisumu and Cape Town, while linking these platforms together for a comparative view.

A lesson from Mistra Urban Future’s experience relates to the time needed to build partnerships locally and globally in parallel. To elaborate, the LIPs experiences have shown that building partnerships is a complex, constantly ongoing process and one that is essential for finding solutions to the challenges faced, such as urban poverty and sustainability. For example, projects have been successful in establishing important collaborations at high levels, both in the city and the county, that have resulted in solid support for the activities from both the community and diverse stakeholders.

The Centre has its origin and central Secretariat in Gothenburg, and a strong local presence. Additionally, GOLIP and the overall Centre have collaborated with both researchers and city officials in multiple cities in Sweden as well as with national authorities. These collaborations have proven very fruitful and because Sweden is a relatively small country, the Centre could benefit from having a strong Swedish base with partners in cities like Stockholm, Lund and Malmö in terms of bringing complementary expertise and attracting additional Swedish funders as well as international collaboration partners. That said, it would have significant implications for the focus and orientation of Mistra Urban Futures, not least in relation to possible new partnerships abroad (see below). Decisions in this regard will be taken in the light of the results of the current feasibility study in Stockholm and in relation to possible expansion

So far, the Centre has established an active presence only in Europe and Africa. Given the challenges — the time consumed, cultural differences, and so forth—that we have faced while simultaneously building local platforms in current cities, including any additional city during these first years would have been difficult to manage, although it had been intended that the Shanghai LIP would have become operational.

However, with all the experience gained and with a team of LIPs working from the bottom-up and closely together towards common goals, the time has come to expand the

network. We believe it would be valuable to include partners from elsewhere, for instance, from Asia as well as North and South America. Criteria for selecting such potential new partner cities in time for Phase 2 are set out in the Strategic Plan for 2016-2019.

With additional cooperation in new regions, we will have improved opportunity to become a credible voice in the global policy world, due to an outstanding combination of in-depth local co-production and the ability to make global comparisons. Given our experiences so far, we would look for partners who already focus on co-production and have established relationship with their hosting cities. We would also start new collaborations at a limited scale in order to limit the risks for mistakes and so as not to jeopardise the investments made by Mistra Urban Futures to date.

The need for a coherent research agenda

During the first years of the Mistra Urban Futures, local research projects were demand-driven rather than challenge-driven. This has resulted in a variety of local research questions related to sustainable urban development being addressed, with the exceptions of the joint work done within the GAPS project and the Modes Anthology. It can be argued that it was a natural first step to let each LIP develop its own set of in-depth research questions, since urban development is context-specific. All projects touch the Fair, Green and Dense themes, but these have proven to be too broad to give guidance on what research questions should be investigated, especially since the themes are meant to be incorporated in all research projects.

It would be valuable to involve diverse stakeholders and the community, at an early stage and in all levels in discussions around new themes and project activities. Early engagement would encourage dedicated cooperation and enhance the acceptance and foster ownership of the final product. A key research question is what impact partnerships have for addressing urban transitions.

However, as the purpose of the Centre is to compare local experiences at a global level, the next phase will require a more coherent research agenda composed of a set of overarching themes and research foci as a frame for local research questions and comparative studies across the LIPs where priorities from all parties are reflected. This structure will enable a clearer research process, communication of results, form the basis for a broad collaboration within and between LIPs and other partners, and involve more people from academia as well as from the public and private sectors. This approach is set out in the Strategic Plan for 2016–2019.

Strategies for different categories of funding to be strengthened

During the first years of Mistra Urban Futures' operations, the funds from Mistra, Sida and the Consortium were substantial enough to cover the start-up costs and discussions around contributions from other funders were not initiated. After some years, it became clear that the funds provided were not sufficient to meet the Centre's ambitions and the internal and external expectations of the Centre. This called for a shift in funding principles, which was introduced in 2013. The new principles state that Centre partners should be prompted to provide matching funding for specific projects and that the funding should be clarified before starting a project.

Processes of funding reporting need to be transparent, as flexibility and certainty about funding is essential in order to match projects at the local level. It is important to carefully consider partnerships, regarding both co-funding and the implications for co-produced outputs and impacts. It is critical to have a clear understanding of cooperation conditions.

One main lesson is that further clarity is needed regarding the principles according to which funds are distributed to the research projects, researchers and administration. It is essential to create a central fundraising strategy, including a strategy on how new partners could be attracted to share the costs for the Centre infrastructure, such as management, administration and local infrastructure costs.

Of course, this approach must be balanced against a coherent research agenda and the need to cover similar local issues in multiple locations to be able to perform comparative studies. A balance also has to be struck between expenditure to support research activities in Phase 2 and investment to assure the longer term future of the centre and the maximum added value from the resources that are put into the Centre.

An efficient and effective administration

A complex centre like Mistra Urban Futures requires a skilled and effective administrative support team with clear roles, routines, structures and established systems for financial follow-up, budgeting, quality control and communication. The main administrative and managerial challenges include the multitude of stakeholders involved and the different sets of funders, located in different parts of the world. Routines, systems and structures have been developed throughout these first years of Mistra Urban Futures by a well-functioning administration. However, as always, there is room for improvements.

Key Performance Indicators

Further to the evaluation and quality control routines described in Chapter 5, a set of Key Performance Indicators, KPIs, would be beneficial to make it easier to steer projects and keep track on progress, both for project leaders and the Centre management. These should be relevant, measurable and easy to follow-up.

Contracts and planning process

Currently the Sida funding is channelled through Mistra to Chalmers, which leads to inefficient communication and unnecessary administration. For the next phase it should be investigated if the agreement could be made directly between Sida and Chalmers. In general, the main contracts, between the LIPs and Chalmers and onwards to the funders, can be simplified in order to make planning and reporting to the funders and to and from the LIPs more efficient and effective.

In Sweden all contracts are currently renewed annually. In order to reduce administration and to increase long-sightedness, the contract periods should be longer than the current model and cover the whole project lifetime. A large number of contracts are issued, as one contract per organization and project is generated. Instead one overall contract per project should be issued in all cases possible. This would also simplify the yearly planning process.

Today the Centre has a transparent planning and budget processes in place. However, greater speed and flexibility within the tranches approved by Mistra should be achieved in phase 2. The current level of detail in the annual Centre Operating Plan and timetables for approval by the Board and Mistra Foundation have proved cumbersome and create unhelpful delays and uncertainties, especially in relation to renewal of research staff contracts.

Organisation in and support from Chalmers

The current organisation of the Centre, directly under the President of Chalmers with a strong link to the Built Environment Area of Advance of, is a strategically beneficial set-

up as the Centre is not tightly connected to one specific department. However, many of the core routines and support processes are most easily accessed within the departments; hence the administrative support to the Centre is not optimised. A review of the Centre's access to and use of Chalmers central services following a review of the Centre's position within the Chalmers institutional structure needs to be done when planning for the next phase. One possibility might be to have service level agreements for key services.

Conclusion

Thanks to the hard work of the dedicated people involved in the development of the Centre, we can conclude that Mistra Urban Futures has come a long way since 2010. Today, this well-functioning Centre has established partnerships in several parts of the world. We see evidence of Mistra Urban Futures being a highly recognized player in sustainable urban development as well as tangible results from our distinctive approach to knowledge co-production.

The experiences gained by the Centre since the start have formed the Mistra Urban Futures of today. In particular, the operations of the Centre have been evaluated and thoroughly discussed with various stakeholders throughout 2014. The lessons learnt, summarised above, are important points of departure for the Strategic Plan for 2016–2019 and for strategic decisions on the future of Mistra Urban Futures.

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