Urban Nexus – Structured Dialogue, Problem-Solving, and Strategic Partnerships

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1 ABSTRACT

Urban Nexus is a 3 year €1m, multi-partner Coordination Action (2011-2014), funded by the European Commission (FP7), that aims to enable and further strategic urban research which can address the challenges facing European cities today. These challenges include the current economic crisis, sprawling urban development and pressures on the natural environment, as well as the longer-term implications related to climate change and resource scarcity e.g., peak oil and water.

Urban Nexus supports the development of a structured dialogue with all relevant stakeholders, including civic leaders, policy-makers, businesspeople, researchers and educators to enable rich communication, knowledge transfer and partnership-building around these challenges.

This form of direct engagement will help to build upon and strengthen the relationship between various stakeholders and policy-makers through engagement, collaborative prioritisation, and knowledge transfer, to secure long term strategic partnership. Framed by these principles, the Coordination Action pursues the following objectives:

- Increase awareness, knowledge exchange, cooperation and collaboration through structured dialogue;

- Promote innovative problem-solving approaches to the complex and interrelated policy issues concerning sustainable urban development and;

- Further the long-term strategic framework for scientific cooperation through the enabling and building of strategic partnerships.

This in turn should lead to integrated perspectives for sustainable and resilient urban communities.

2 URBAN NEXUS – STRUCTURED DIALOGUE

Urban Nexus is developing structured dialogue with stakeholders in relation to the key dimensions of sustainable urban management including energy, water scarcity, transport, tourism, technology and innovation, governance, social equity and cohesion, and sustainable consumption. These are prioritised according to stakeholder consultations, conducted via the project Stakeholder Advisory Board.

The scope of the Coordination Action does not permit all issues to be addressed equally, nor indeed is this desirable. The political priorities for the territorial management of cities and city region's provide the basis for understanding and structuring of the interconnected complexity of urban life and thereby the effective management of the city towards sustainable development. Cities in Europe today respond to a variety of sometimes conflicting (political) demands. In responding to the political imperative of climate change mitigation and adaptation cities must also ensure that cities fulfil their role as motors of economic development whilst securing appropriate conditions for a socially cohesive and healthy population, and quality of life. The Urban Nexus conceptual framework provides the basis for ordering and prioritisation of the various challenges faced, highlighting the strategically critical elements, and also providing principles to define the interconnectedness of all elements. This framework is derived directly from the legacy of the URBAN-NET project (ERA-NET).

The URBAN-NET framework promoted the vision of the sustainable city by focusing on future research needs and activities that stimulate the planning, financing, performance, dissemination and utilisation of research amongst all stakeholders at all levels including local, regional, national, transnational and European. This framework includes:

- adapting to climate change;

- health and quality of life;

- sustainable land-use;

- integrated urban management;
- integrated information and monitoring.

2.1 Adapting to Climate Change

Anthropogenic climate change and its consequences are major challenges for European cities. European cities are traditionally built in strategic geographical locations along major rivers or next to the sea, consequently a substantial number of European cities are likely to experience the direct impacts of climate change including flooding as well as extreme temperatures. Climate change has severe implications for urban populations including heat stress, cardiorespiratory complications, parasitic and infectious disease, flooding, and drought. There is therefore a strong need for the establishment of resilient cities, urban areas able to absorb changes, reorganize and integrate economic, socio-cultural and ecological developments. Strategies are needed to improve the collective responsiveness and preparedness of individuals, institutions and services to the inevitable consequences of climate change. Education, health care, public health initiatives, infrastructure and economic development will become increasingly important in maintaining acceptable levels of quality of life.

There has been a lot of research attention focused on the mitigation of climate change. Mitigation aims to reduce emissions of greenhouse gases and curb further anthropogenic climate change by reducing energy consumption, improving energy efficiency, the substitution of fossil fuel use and changes in land-use practice. However, adaptation is a necessary imperative for responding to climate change. Urban areas and cities are particularly vulnerable due to the complexity and interdependency of activities and relationships between actors. Urban-specific characteristics serve to amplify climate change impacts, e.g. the urban heat island effect, increased flood risk due to greater impermeable surface area and, in the majority of cases, the proximity of urban areas to coasts, rivers or watersheds. Adaptation is often overlooked in favour of mitigation, witness the international efforts of the Kyoto Protocol to address emission reductions at a global scale. However, the scale and sophistication of day-to-day relationships and interactions in urban areas across Europe and other continents belies the fragility and susceptibility of urban society, economy and infrastructure to seemingly remote or even minor perturbations arising from climate change. Changing climate trends and an increasing frequency of extreme events, such as forest fires, drought, heat waves, excessive precipitation and storms, are pushing urban societies ever closer to unpredictable and potentially chaotic futures.

2.2 Health and Quality of Life

There has been increasing recognition that the planning, design and management of urban areas has significant implications on the health and quality of life of urban populations. Reliance on cars, high levels of pollution and poorly designed and planned neighbourhoods has exacerbated problems with health and health related behaviours. Research has focused on a number of areas including for example, sustainable transport, the design of cities and suburbs, and the promotion of physical activity and the exposure of urban populations to contaminants in water, air and soil. Despite a raft of evidence and guidance, the recommendations for how to achieve healthy lifestyles remain disconnected and ineffective. What is needed is the development of an integrated understanding and problem-solving orientation for issues concerning quality of life and sustainability in the urban realm through bringing challenges and risks to health into the foreground. In addition, this could include a synthesis of evidence of risks and challenges to people's health arising from spatial planning as manifest in urban form and urban design in an accessible form. However, health and quality of life remains a complex issue which cannot be solved by one agency alone. Therefore, consultation is required with a range of stakeholder communities including planners, those in the health care sector, education institutions and so on, to develop a common understanding of the integration and synergy between the wider determinants of health, economic resilience and urban ecosystem services.

2.3 Sustainable Land-Use

Land-use and land management practices have a major impact on natural resources including water, soil, nutrients, air, plants and animals, landscape and landform. One of the most important tasks of a sustainable land-use policy should be to minimise environmental impacts and in particular the consumption of natural resources. It is still unclear how this goal could be reached and what measures would be appropriate. The

polycentric city region model has been suggested as a basic orientation model and vision of urban sustainability in which autonomous cities create a continuum of densely developed and mixed-use areas and landscapes; integrating energy, food production, open space and spatial concentration of buildings. The model of a polycentric city region appears to combine the advantages of a compact city such as density, mix of functions, public transport with the individual qualities of suburban areas e.g. green spaces, child-friendly environments and home ownership. This model seems more valid for some parts of Europe than for others, for example not immediately for the lower density parts of Europe. However, research is needed to understand the driving forces, interactions and dependencies and to find innovative solutions as part of a participatory decision-making process between citizens, local government and other actors. The achievement of sustainable land-use and settlement structures seem to be mainly a question of decision-making and implementation. Thus, research should also contribute to implementation through scientific analyses, advice and evaluation. Research for and about implementation has a role other than implementation alone. It is about observing or preparing and analysing decisions and their implementation which in turn will also be about lessons learned and best practices.

2.4 Integrated Urban Management

The interconnectedness of the social, economic and environmental dimensions of urban life and the associated drivers of change at the urban level, also create complex conditions for urban management, and fundamental barriers to the effective implementation of sustainable urban development. In response to this interconnectedness and complexity, the principles for integrated urban management have become the pre-eminent framework for the development of appropriate policy responses to these urban challenges.

One basis for policy failure in relation to the land-use – transport – environment nexus can be attributed to difficulties of securing an integrated policy response between the responsible agencies. Two fundamental poles of this integrated policy response concern first, the horizontal policy integration necessary between the sectoral agencies responsibilities for land-use management, and transport and environmental planning, at the local and regional levels of governance. Failure to secure an integrated policy response is attributed to variety of factors including notably organizational and procedural barriers to achieve central coordination, as well as problems of communication between organisations.

The second dimension of policy integration concerns vertical coordination between agencies responsible for policy delivery at local, regional, national and EU levels. The factors identified above operate in the horizontal perspective and are equally applicable, but in land-use management in the European context in particular, a special focus is required on how to reconcile subsidiarity with necessary coordination of actions.

2.5 Integrated Information and Monitoring

Effective monitoring of the pressures, state and impacts at the urban level, as well as the effectiveness of policy responses in controlling urban development, is clearly essential. One of the prime barriers to integrated urban management is identified in the opportunity to address and overcome these deficiencies in policy responses necessary to secure sustainable urban development.

2.6 Structuring Principles and Structured Dialogue

The concepts reviewed above provide a prime basis for analysing the various interconnected issues that define the complexity of the city and the challenges of city management. These concepts deliver structuring principles, and a basis for prioritisation of the thematic focus for knowledge transfer and the delivery of structured dialogue to the urban stakeholder communities. The thematic focus for knowledge transfer and structured dialogue in Urban Nexus is also developed according to stakeholder assessment of the priorities for the delivery of sustainable urban development, difficulties of measurement via indicators, and in the creation of assessments of urban impacts that effectively relate to policy needs. The complexity of urban interactions is clearly a major challenge in this regard, but the generation of integrated information and effective monitoring of policy implementation is also undermined by information management systems that are primarily designed to meet the needs of a particular agency and which do not communicate with other agency information systems. The fragmentation of the information and intelligence essential to support integrated policy solutions and policy implementation seriously impedes the effective response of cities and regions of Europe to these challenges.

3 STRUCTURED DIALOGUE AND SUSTAINABLE URBAN COMMUNITIES

On the basis of the structured dialogue developed in the urban Nexus Dialogue Cafes focused on the themes of Urban Climate Resilience (Glasgow, May 2012) and Health and Quality of life (Barcelona, October 2012), the following challenges related to resilient communities have been identified by the stakeholder communities:

3.1 Integrated Approach beyond Individual Policies

An integrated approach is needed to support policies. Of course this is not new, but we need to go beyond the level of individual prolicies. Structured partnerships between policy-makers, the private sector, researchers and civil society are necessary to address cost issues and to mobilise wide societal support for sustainable urban development, especially as these are under pressure in these times of economic crisis. An integrated set of indicators is also needed in order to ensure better measuring of potential hazards for cities (climate, land use, air pollution etc.). Harmonization of different data bases between different city sectors, between city and governmental administration and between cities on trans-border and transnational level is also a target. Upgrading city management with an objective permanent monitoring of urban change, territorial management and efficient use of different financial mechanisms, including European funds, should also be considered. Integrated sets of indicators, correlated to local and regional priorities, traditions and territorial and environmental capacity, will allow for better cross-boundary cooperation and territorial development within Europe.

3.2 Green Infrastructure

Promoting green infrastructure is an effective way to increase health and quality of life in cities. It also has capabilities to address climate issues: it helps to decrease urban heat island effects and could act as a buffer for water retention. Green infrastructure has the power to mobilise support for sustainable development because of its appeal at the local level. Green infrastructure could be the leverage for securing more attention to resilience and adaptation, rather than the current focus on mitigation.

3.3 Built Environment

Health and quality of life in cities is not only about implementing technological improvements in order to ensure less noise and better air quality. Good urban design will lead to better traffic flows and should lead to more lively urban areas at the same time. This, together with green infrastructure, improves the quality of life in cities. Upcoming activities on the theme of urban land use will surely add more knowledge to this. Advanced investigation into tendencies for urban sprawl or shrinking cities together with risk assessment on natural and anthropogenic disasters or catastrophes provide further potential for better strategy and action planning on sustainable urban management.

3.4 Bottom-up Initiatives

Often bottom-up initiatives in neighbourhoods result in the development of more sustainable characteristics of the area while fostering social cohesion among citizens. Interestingly, many promising initiatives happen in areas confronted with demographic decline. It is a cost-effective way to improve the general quality of life in cities. Moreover, large-scale political action on sustainability can only be enforced if there is wide support for it among the population. Bottom-up initiatives can create such support, in tandem with the wider partnerships between business, research, civil society and policy-makers mentioned above, and regional networks are a potential solution.

4 CONCLUSION

The urban Nexus long-term strategic partnership aims to respond to a dynamic of self-organising governance in forging a new conceptual basis for long-term strategic partnership, and in facilitating partnership formation in the framework of Dialogue Cafe interactions. The conceptual framework for the long-term strategic partnership is identified with the public, private and 'third' sectors. Partnership between these sectoral interests combine the innovation of the private sector, the collective values of the public sector, and the human desires of the third sector. These partnerships and linkages can be classified into three basic combinations – public-private, private-community and public-community – where each sector has certain strengths, weaknesses, opportunities and threats:

- Public-private linkages include various partnerships and consortiums, ethical procurement, supply chain initiatives, and much of mainstream economic development activity.

- Private-community sector linkages include local business or regeneration partnerships, social investment funds, 'mutual' or cooperative finance firms, corporate trusts and companies, consumer clubs and networks, cooperatives, community development trusts and other forms of social enterprise.

- Community-public sector linkages include voluntary sector compacts, neighbourhood partnerships, customer charters, intermediate labour markets, social trading, and other forms of community enterprise.

5 REFERENCES

Urban Nexus Consortium, Urban Climate Resilience: Synthesis Report and Follow-up Report, Glasgow, 2012.
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