BUILDING RESILIENT CITIES AND REGIONS

KICK-OFF MEETING

OECD, 28 NOVEMBER 2014















Introduction of the Kick-off Meeting:

Building Resilient Cities and Regions

Objective:

The project "Building resilient cities and regions ---Framework for assessment and policy actions" was proposed to explore how cities and regions could strengthen their resilience for economic, social, institutional and environmental dimensions (see Attachment). Resilience has been successfully discussed in various contexts, including the recent discussion on natural disasters and climate change. The OECD's definition of resilience which assesses it from an economic, social, institutional and environment dimension is going to add a new value on it (Attachment Box 1). Responding to the interests from the OECD member countries, and with the growing importance of cities in sustainable development, this project is going to explore the drivers of resilience at the cities' level and assess policy practices to enhance them, and conclude with policy recommendations for city and regional governments, as well as for national governments.

This Kick-off meeting is a very valuable opportunity to share diversified views from international experts on how to enhance resilience at the city level. It is expected to provide suggestions and inputs to the project, including the study method, issues to be focused on, best practices of cities and indicators to measure local resilience.

Specifically, this meeting will focus on the role of universities to enhance resilience in local communities, which is regarded as the third mission of universities, in addition to education and research. Exploring the contribution of universities' to human resource development and local innovation will be an indispensable part of the project.

Organisers:

OECD, Kyoto Alliance (Kyoto Prefecture, Ryukoku University, Kyoto Sangyo University, Ryukoku University Research Centre for Local Human Resources and Policy Development (LORC), NPO Glocal Human Resources Development Center etc)

Place: OECD Headquarter, Room D

Date: 28 November, 2014 (Fri) 14:00-18:00

Participants: OECD member countries, academia, experts...

Language: Japanese-English simultaneous translation

AGENDA (28 November, 2014 (Fri)

14:00 – 14:15 Welcoming Remarks

- Setsuko Saya, Head of Division, Regional Policies for Sustainable Development,
 Public Governance and Territorial Development, OECD
- Katsutaka Shiraishi, Professor, Ryukoku University, Kyoto Alliance

14:15 – 16:00 Session 1: What is resilience for regions and cities?

OBJECTIVES & KEY QUESTIONS

The concept of resilience has been widely discussed, originally defined in physics and psychology, and extended to environmental science and social and ecological systems. It has been applied to natural disaster, climate change and sustainability issues at the city level in recent years. This session aims to discuss the implications of resilience for cities and regions, in particular, from economic, social, institutional and environmental aspects comprehensively, in the light of the OECD's understanding on "resilience".

- What does resilience mean for sustainable development in cities and regions?
- How drivers of resilience, such as climate change, demography change, financial crisis and human resources, will influence the resilience?
- How could cities and regions strengthen their resilience?

Chair

Setsuko Saya, Head of Division, Regional Policies for Sustainable Development,
 Public Governance and Territorial Development, OECD

Key Note Speech "The concept of resilient cities"

• Richard Ashley, Emeritus Professor, Department of Civil and Structural Engineering, The University of Sheffield, United Kingdom

Lead Speakers

- Laura Kavanaugh, Resilient Cities Project Manager, ICLEI, Germany
- Katsutaka Shiraishi, Professor, Ryukoku University, Kyoto Alliance with Naoya Ashida, Assistant Director, Fukuchiyama City, Kyoto Alliance

Interventions

- Hiroshi Yahagi, Professor, Ryukoku University, Kyoto Alliance
- Roman Szul, Professor, University of Warsaw, Poland
- Thorsten Wiechmann, Professor, TU Dortmund University, Germany

- Katharina Schaaff, Advisor Management Unit, Global Initiative on Disaster Risk Management, GIZ
- Cristina Martinez-Fernandez, Advisor KSA, OECD

16:00 – 16:15 Coffee break

16:15 – 17:45 Session 2: Resilience in human resources

OBJECTIVES & KEY QUESTIONS

Following up the discussion in Session 1, this session aims to discuss resilience in human resources. Particular attention is paid to the relevance with sustainable development in cities and regions.

- How to increase resilience in human resources?
- Who would be the main player, including university and civil societies?
- What kind of human resources are expected?
- How would it contribute to cities and regions?
- What is the role of universities and network of universities?

Chair

Masanori Nakatani, Professor, Kyoto Sangyo University, Kyoto Alliance

Lead Speakers

- Masanori Nakatani, Professor, Kyoto Sangyo University, Kyoto Alliance
- Kitty Triest, Senior Advisor, RegioRegisseur, Netherlands
- Laura Fioni, Assistant Professor, Biology Department, École Polytechnique, France

Interventions

- Roman Szul, Professor, University of Warsaw, Poland
- Municipality of The Hague (tbc)
- Kozo Aoyama, Professor, Kyoto Prefectural University, Kyoto Alliance
- Shigemitsu Izaki, Branch Manager, Kyoto Shinkin Bank, Kyoto Alliance

17:45 – 18:00 Closing session

OBJECTIVES

This session aims to wrap up the discussion of the day and propose future work for the inputs to the project proposal.

Chair

Setsuko Saya, Head of Division, GOV, OECD

BUILDING RESILIENT CITIES AND REGIONS

---- Framework for Assessment and Policy Actions --(NEW PROJECT PROPOSAL (2015/16))

Background

- Cities play large roles for the sustainable development at regional and national levels. Currently, 70% of the population in OECD countries live in metropolitan areas and generate large parts of the GDP. They account for an estimated 67% of global energy use and emit 71% of global energy-related CO₂ emissions (OECD, 2013a). On the other hand, concentrated population and capital assets in cities are facing the vulnerability to climate change and natural disasters. For example, the proportion of the population living in flood-prone river basins increased by 114% and more than half of the world's largest cities are located in areas of high risk of seismic activity (UNISDR, 2013). The Great East Japan Earthquake in 2011, floods in Europe, as well as Hurricane Sandy in New York City in 2012 have shown the vulnerability to disruption, impacting the economy and well-being in large urban areas. An OECD study found that a major flood of the Seine River and its tributaries could affect up to 5 million residents and cause up to 30 billion euros in direct damage (OECD 2014a). Furthermore, cities are also struggling during economic shocks, such as the 2008 financial crisis and structural economic change, shifting from heavy manufacturing industries to service industries. The global value chain has the potential to amplify the propagating impacts of shock events, given that approximately 50% of economic activities are linked into global value chains in 2009 (OECD 2014b).
- Many approaches and initiatives have been observed in various organisations to identify the role of cities in overcoming those challenges and to be "resilient", as well as to define "resilient cities". Such approaches were taken understanding the importance of cities in the face of shocks that have environmental, economic and social consequences at the local and regional level. Major parts of the discussion are focused on the environmental aspect of resilience, including climate change and natural disasters. For example, the UNISDR Making Cities Resilient Campaign (2010-) intends to support sustainable urban development by promoting resilient activities and increasing local level understanding of disaster risk (UNISDR, 2013). The City Resilience Profiling Program (2012-) of UN-HABITAT has been focusing on providing national and local governments with tools for measuring and increasing resilience to multihazard impacts, including those associated with climate change (UN-HABITAT, 2012). The World Bank also provides principles, tools and practices to encourage cities to invest in riskbased approaches and make better use of the technologies and tools available to manage disaster risks (World Bank, 2013). ICLEI – Local Governments for Sustainability, is an example of understanding resilience in the context of European cities (ICLEI, 2012). In its Resilient Cities Conference in 2011, ICLEI defined a resilient city to support the development of greater resilience in its institutions, infrastructure, social and economic life, underlining the contribution of resilient cities' to sustainable development in the long-run. The City Resilience Index of the Rockefeller Foundation (2014) takes a similar approach by highlighting the importance of taking a comprehensive and holistic framework to enhance the function of cities in a system.

- Recent OECD studies defined resilience in a different way, based on the approaches followed in member countries that aim to increase resilience at the regional level. For example, the Abruzzo post disaster regions study defined resilience for the assessment of the Abruzzo region as the ability to withstand and to recover from external, adverse shocks through adjustment processes that re-establish or enhance the previous state of the system (OECD 2013b), mentioning that it helps a community to become less vulnerable to external shocks, so as to achieve a better long-term standard of living. This study was particularly important to discuss building resilience through an integrated regional development strategy, and to build the first framework to assess resilience in the face of shocks including economic shocks. It also highlighted that the quality of public and private sectors determine the resilience at the regional level. The theme to increase economic and social resilience was followed in the assessment from the perspective of risk governance at the OECD High Level Risk Forum (OECD 2014a), underlining the importance of forward-looking risk governance, the role of trust and an optimal and complementary mix of resilience measures. Here, resilience was defined to look more broadly at the ability of social and economic systems to maintain function when shocked and in the time of recovering.
- 4. The OECD Ministerial Council Meeting 2014 highlighted the importance of resilience, mainly at the national level. It discussed how to achieve "resilient economies and inclusive societies" to generate jobs and growth, empower people and promote the well-being of citizens. Strengthening resilience is essential today for many reasons, including demographic trends, the use of technology, and greater inter-dependence among countries. Resilience can be defined as the ability not only to resist and recover from adverse shocks, but also to rebound stronger than before, and to learn from the experience, (Box 1, OECD, 2014c, d). The concept of resilience is defined further in the Overview Paper of the Ministerial Council Meeting. It took a very unique approach on the concept of resilience by covering four different considerations that are interlinked, and lack of one of the four dimensions will affect the strength of the other dimensions: "economy", "society", "institutions" and "environment". A regional approach to understand the concept of resilience was made in the OECD's study on "How's Your Life in Region (OECD, 2014e)" to assess the sustainability of region's well-being, as regional well-being is influenced by a number of place-based factors (Box 1).

Box 1. Defining "Resilience"

- 1. The 2014 Ministerial Council Meeting concluded its discussion of the importance of "resilient Economies and Inclusive Societies" with the following statement(OECD 2014c):
 - 1. On the occasion of the 2014 OECD Ministerial Council Meeting, we have assembled under the Chairmanship of Japan, on the 50th anniversary of its accession to the OECD, and the Vice-Chairmanship of Slovenia and the United Kingdom.

3. <u>Resilient Economies and Inclusive Societies</u>: Against this backdrop, we discussed how we can achieve "resilient economies and inclusive societies" to generate jobs and growth, empower people and promote the well-being of our citizens. We share a common goal of increasing resilience of our economies by incorporating multidimensionality into policy design to help identify trade-offs, complementarities and unintended consequences of policy choices. Sound and appropriate macro-economic management including responsible fiscal policies, further structural reforms and further global rebalancing are all essential for achieving robust, resilient and inclusive growth, taking into account rising inequality.

. . .

5. Rising inequality endangers social cohesion and weakens social resilience, thereby hampering economic resilience. A key challenge is to achieve inclusive growth by providing social protection and empowerment to

people, which can strengthen human security. Appropriate flexibility and security in labour markets and relevant education and skill programmes can facilitate greater inclusion and participation of under-represented groups. We welcome OECD initiatives targeting these groups, including on gender equality, youth employment, ageing society and the integration of migrants. We also recognise that regional and urban policies can play a key role in empowering people and building resilience at all levels of our economies and societies

Source: OECD 2014 Ministerial Council Statement (OECD, 2014c)

- 2. Overview Paper on Resilient Economies and Societies (OECD, 2014d), which was presented at the Meeting of the OECD Council at Ministerial Level (Paris, 6-7, May 2014), summarised the definition and the scope of the concept "resilience" as follow:
 - 1. The 2008 economic and financial crisis highlighted the importance of strengthening the resilience of our economies, societies and institutions. Resilience is a broad concept, centred on the ability not only to resist and recover from adverse shocks, but also to "bounce back" stronger than before, and to learn from the experience. Resilience is also multidimensional, encompassing a range of interconnected factors and conditions. Strengthening resilience is all the more essential today in the face of increasing policy complexity and interconnectedness, deep-seated demographic and technological trends, and growing environmental pressures, all of which increase the likelihood of some critical event having negative impacts on economic growth and well-being.
 - 2. Being resilient involves understanding the sources of risks and opportunities and learning to cope with uncertainty. There is no single methodological approach for measuring resilience and concrete analysis and recommendations are best developed within specific policy areas. This paper addresses resilience across four broad dimensions covering economic, social, institutional and environmental issues. Each of these dimensions is relevant in its own way and they are all strongly interconnected, reflecting the capacity of individuals, organisations and systems to withstand and recover from shocks.

Source: Overview Paper on Resilient Economies and Societies (OECD, 2014d)

3. Territorial resilience was discussed in "How's Life in Your Region? -- Measuring regional and local well-being for policy making" (OECD, 2014e). In the process of assessing the sustainability of region's well-being, this study defined territorial resilience as the capacity of territories or communities to absorb the effects of shocks and learn from them in order to move forward.

The example above shows that the resilience of a region refers to the adaptability of a territory, which includes the capacity of its individuals and firms to deal with upsets and the capacity of institutions to adapt and reform. At the same time, the resilience of a region is diminished by its vulnerability, that is to say, the potential impact of the shock on the community. Vulnerability results from the exposure to shock and sensitivity to it. Additional work needs to be done to identify and monitor indicators of territorial resilience, such as, for example, trade openness, to measure the exposure of a region or education and health indicators for sensitivity. Because institutions and governance arrangements influence the capacity to adapt after a shock, measures of the quality of regional governments, open government and community engagement should be considered, as well as measures of territorial adaptability.

Source: How's Life in Your Region --- Measuring regional and local well-being for policy making (OECD, 2014e)

5. The drivers of resilience at the city level could be better understood by applying the four dimensions of resilience of the OECD's concept as follow:

(1) Resilient economies

Economic resilience encompasses the ability to minimize potential vulnerabilities, to promote more robust and inclusive growth, to enhance the capacity of the macro-economy to withstand shocks and reallocate resources to harness new growth opportunities. Economic shocks are influenced by the overall exposure to global economic value chains and the level of diversification in its industrial structure (OECD, 2014d). The level of diversification of economic activities determines the resilience of cities, while considering the effectiveness of specialization to build their

competitiveness. Enhancement of new sources of growth through investment would be important for developing knowledge-based capital and innovation, which have strong spill-over benefits.

(2) Resilient societies

A resilient society is one that is able to cope with shocks by adopting a coordinated and coherent set of economic and social policies and practices (OECD, 2014d). Social resilience is linked to having institutions which are capable of delivering services and empowering individuals through jobs, education and focus on human capital. Ageing trends influence social resilience at the city level, because of a declining population in the economically active age.

(3) Resilient institutions

Resilient institutions ensure open, transparent and inclusive policy making and enable effective implementation. Institutions play a key role in strengthening resilience since the impact of any shock depends on an institutional capacity to respond and rebound from shocks (OECD, 2014d). In particular, city authorities are on the front line to deliver public services effectively, and to build trust in government. Capacity building in local governments and development in human resources are indispensable for resilient institutions, because the capacity to reform the institution determines regional resilience (OECD 2014e).

(4) Environmental Resilience

Economic, social and institutional resilience is complemented by an environmental dimension. Strengthening environmental resilience is particularly relevant in the face of environmental degradation, the overuse of resources, the potential costs of climate change and natural disasters (OECD, 2014d). Environmental resilience is critical for cities, because of the large number of people living in relatively concentrated areas and the complexity of the systems that interact with them, including infrastructure networks, communication systems, water and energy distribution, housing and urban green spaces (ICLEI, 2013). Complex urban systems are particularly vulnerable to extreme weather events (OECD, 2014f), because, for example, built-up environments can raise the risk of localized flooding after a heavy storm, which might lead to water-supply contamination. Building environmental resilience also needs preparedness at the local level to understand how climate change will impact their communities and to take action to safeguard human well-being and community assets (ICLEI 2014).

Objectives of the new project

6. This project will explore how cities are able to strengthen their resilience by assessing the experiences of cities and regions, including Kyoto. It will also provide opportunities to learn from each other by sharing best practices.

Methods

(1) Concept note

• Based on the framework set by the OECD 2014 Ministerial Council Statement (paragraph 5), this project will discuss the drivers of resilience at the city and regional level. A Kyoto Case Study (see (2)) will provide inputs to the discussion by sharing the views on the applicability of the Ministerial Council's framework at the city level.

• The concept note could be structured to respond to the possible policy questions at the city level as follow:

(Examples of possible questions)

Economies

- To what extent is a city's industry diversified enough to be flexible to any shocks which may influence one specific industry, while maintaining the specialization for improving core competencies?
- How could the existing amount and quality of infrastructure and public services be maintained or managed during austerity and long term demographic structure change (e.g. depopulation)?

Societies

 How could social cohesion be maintained in the long term if shocks such as the demographic change toward ageing societies that weakens networks of people in local communities, in particular, in the case of natural disasters?

Institutions

- How could cities' capacities for better public investment under financial constraints be strengthen?
- How to mobilize private sector's finance to provide public services and infrastructure, which may require innovative investment schemes to recover from shocks under financial constraints?
- What kind of human resources would be most necessary to strengthen the capacity of the public sector in the aftermath of shocks?

Environment

- How can urban form and governance contribute to resilience regarding natural disasters and climate change?
- What kind of energy management must be cultivated to create redundancy and self-sufficiency of energy supply?
- The concept note will include the assessment on the role of policies at the national government level to enhance resilience at the city level.

(2) Case studies

- The case study is based on the following steps;
 - Identify the drivers of the four dimensions of the case study city's urban resilience in terms of economy, society, environment and institutions.
 - Assess the current policy practices and results of the case study city to enhance the above mentioned drivers, and compare them with the desired policy achievement.
 - Propose policy recommendations to close potential gaps for the case study city.
- The first case study will be **Kyoto** (2015 Q1-2). The preliminary assessment of Kyoto based on literature research and initial discussion with Kyoto tentatively concludes to focus on the below mentioned questions. The details will be determined through further assessment;

Economies

- How could Kyoto's asset of research institutions contribute to economic growth through innovation and diversification of its industrial mix?
- How could Kyoto's regional economic disparities between southern and northern areas be mitigated?

Societies

 How could Kyoto's secondary and tertiary education institutions, which make Kyoto known as "the city of universities", support local efforts by fostering talents to empower local people and supplement the public sector's activities?

Institutions

 How could citizens be integrated to tackle the challenges in ageing societies, which lack in human resources at the local level?

Environment

- What kind of energy management must be cultivated to create redundancy and self-sufficiency of energy supply?
- Several other cities will be invited for case studies to respond to the possible questions in paragraph 5.
- Explore the measurement of resilience in an internationally comparable way.
- Those assessments will be summarised in one report, including case studies in (1) as an OECD publication.

(3) Theme specific assessment

- Theme specific assessment to focus on one dimension of resilience will be conducted as independent studies, using the same framework of the OECD 2014 Ministerial Council Statement (OECD, 2014b). The details will be decided depending on the interests from OECD member countries and funding availability.
- A study on "Energy and Cities" discusses the energy sustainability for environmental resilience at the city. Energy demand in cities is projected to increase in the future (IEA, 2008), as economy and population will be further agglomerated in urban areas. This study will develop a policy framework on how cities can pursue energy sustainability by increasing energy production and energy storage within cities, as well as improving the energy management system and energy efficiency. Measurement methodologies will be proposed to develop indicators for energy self-sufficiency. This project includes an assessment of policy practices and energy sustainability of several cities.

(4) Assessment of policies for strengthening urban resilience / disaster risk management (in collaboration with Urban Green Growth in Dynamic Asia project)

• A study will be conducted to assess policies for strengthening urban resilience / disaster risk management in Asian cities. It will take place within the framework of the ongoing OECD analytical study on Urban Green Growth in Dynamic Asia, by adding the urban resilience / disaster risk management policy analysis to the existing study components. The following five cities are considered: Bandung (Indonesia), Bangkok (Thailand), Cebu (Philippines), Hai Phong (Viet Nam), and Iskandar Malaysia (Malaysia). The study is in collaboration with the Global Initiative on Disaster Risk Management, undertaken by the German Federal Ministry for Economic Cooperation and Development (BMZ) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

OECD (Organisation for Economic Co-operation and Development)

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to coordinate domestic and international policies.

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OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

OECD Public Governance and Territorial Development Directorate

OECD work on regional and urban development is concentrated in two divisions of the Public Governance and Territorial Development Directorate (GOV): the Regional Development Policy (RDP) Division and the Regional Policy for Sustainable Development (RSD) Division.

The Public Governance and Territorial Development Directorate is a leading international source of policy solutions, data, expertise and good practices for governments and other stakeholders seeking to strengthen public policy-making in the face of unprecedented economic, social and fiscal pressures. This involves:

- *Highlighting the role of public sector economics and governance for economic and social well-being
- Promoting the strategic capacity of government
- Reviewing the role of the state and its choice of policy instruments
- •Improving the efficiency and transparency of public service design and delivery, focusing on innovation, trust and citizen engagement
- •Fostering balanced, inclusive growth that maximises the potential of cities and regions as drivers of national performance www.oecd.org/gov

TDPC (Territorial Development Policy Committee)

With representatives from 34 OECD member countries, non-member countries and other organisations and networks, the Territorial Development Policy Committee is a leading international forum for discussion and exchange of experience in the field of regional policy. The committee directs OECD work on territorial development policies to promote competitiveness and effective and innovative governance. Its Working Party on Urban Areas promotes urban policy exchange.

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www.oecd.org/gov/regional-policy/resilient-cities.htm