2ND INTERNATIONAL CAPACITY DEVELOPMENT WORKSHOP DA NANG, VIETNAM

SEPTEMBER 04TH - 07TH, 2018

SPONSORED BY THE Federal Ministry of Education and Research

DEFEN Frankfurter Forschungsinstitut für Architektur • Bauingenieurwesen • Geomatik FRANKFURT UNIVERSITY OF APPLIED SCIENCES REPORT OF THE 2ND INTERNATIONAL CAPACITY DEVELOPMENT WORKSHOP CAPACITY DEVELOPMENT APPROACHES FOR THE RAPID PLANNING PROJECT DA NANG, VIETNAM SEPTEMBER 04TH - 07TH, 2018

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REPORT OF THE 2ND INTERNATIONAL CAPACITY DEVELOPMENT WORKSHOP

Capacity Development Approaches for the Rapid Planning Project DA NANG, VIETNAM SEPTEMBER 04TH - 07TH, 2018

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INTRODUCTION TO THE WORKSHOP

The program of the Second International Capacity Development Workshop from September 04th to September 07th, 2018 was developed by the Rapid Planning Team of the Frankfurt University of Applied Siences (FRA-UAS) with the support of Brandenburg University of Technology Cottbus – Senftenberg (BTU), Verband zur Förderung angepasster, sozial- und umweltverträglicher Technologien e.V. (AT-V), Institut für Umweltwirtschaftsanalysen Heidelberg e.V. (IUWA), Institut für ZukunftsEnergie- und Stoffstormsysteme (IZES), Institut für Energie- und Umweltforschung (IFEU) and UN-Habitat.

The activities of the workshop were hosted by the City Administration of Da Nang with a close cooperation with the Da Nang Institute for Socio-Economic Development (DISED), Da Nang Department of Construction (DoC), Da Nang Urban Planning Institute (UPI), Da Nang University of Architecture and Da Nang University of Technology.

The workshop was conducted with the participation of representatives of the municipal departments and city administrations of Frankfurt am Main (Germany), Kigali (Rwanda) and Da Nang (Vietnam).

The workshop aimed at achieving the following objectives:

- Identifying the capacity development necessities in the administrations for the improvement of planning processes and the implementation of the Rapid Planning Methodology in the case cities.
- Providing an overview of the preliminary capacity development concepts and approaches developed by the FRA-UAS/IUWA teams for Rapid Planning as well as presenting examples of selected materials.
- Collecting feedback from representatives of the different target groups in Da Nang as well as from representatives of the municipal officials from Da Nang, Kigali and Frankfurt about the capacity development approaches presented by the FRA-UAS/ IUWA teams.
- Fostering mutual exchange on practical experiences and approaches to transsectoral infrastructure and environmental planning among the representatives of the city administrations, relevant stakeholders from Da Nang, Kigali and Frankfurt, as well as members of the Rapid Planning teams and UN-Habitat.

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EXPECTATIONS FOR THE SECOND INTERNATIONAL CAPACITY DEVELOPMENT **WORKSHOP**

The international participants from the three cities of Da Nang, Kigali and Frankfurt expressed their thoughts and expectations regarding the program as well as the planned contents of the workshop. These expectations were summarized as in the following points:

• To have an update on the status quo of urban development of the three cities including an overview of the major trends and challenges of development.

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Ostfalia

Hochschule für angewandte Wissenschaften Wissenschaften

• To review and discuss the enacted formal policies, programs or plans that address future development.

- To review and discuss the progress, future steps and expected results of the Rapid Planning Research Project.
- To discuss the topic of Capacity Development in depth, between theory and practice. And, to review the current measures implemented in the three cities concerning the enhancement of their capacities.
- To discuss the importance of Capacity Development as a major component of the Rapid Planning Research Project.
- To review and discuss the approach to Capacity Development that is suggested by the team of the Rapid Planning Research Project.
- To discuss the cooperation and possible exchange of knowledge and experiences between the three cities in the context of the Rapid Planning Reaserch Project.





Guests from Frankfurt



WORKSHOP ACTIVITIES

THE RELEVANCE OF CAPACITY DEVELOPMENT IN URBAN PLANNING

Presentation by Yaman Hebbo and Dr. Susana Restrepo Rico (FRA-UAS Rapid Planning Team)

Understanding Capacity Development

The concept of Capacity Development is relatively new. It emerged in the 1980s and has become a central aspect of technical cooperation and development programs in the 1990s, due to its complementary role to the purpose of major approaches dominating the field. Throughout the evolution of the terms, from Institution Building to Capacity Development, the focus of development approaches was gradually moving towards strengthening institutions rather than establishing them from the scratch. In this sense, existing organizations are seen as a major asset for developing countries to run their public investments properly and to secure the capability of their public sectors. This has indicated an emphasis, therefore, to reconsider imported models/solutions from developed countries. Later development approaches promoted more inclusion as they aimed to engage a wider spectrum of actors with a stronger focus on delivery systems of desired capacities. This has led to acknowledge the importance of education and health as well as to put the people at the center of development processes. The engagement of other sectors such as private as well as NGOs in following development approaches has broadened the activities of technical cooperation to consider a wider presence of collaboration networks and the broader societal environment. The issues of development ownership, process and knowledge sharing were introduced later as important topics to be considered in development approaches (Lusthaus, Adrien and Perstinger, 1999).

To conclude, the evolution of development approaches has shaped the concept of Capacity Development. It is an aggregate concept integrating valuable lessons of many previous development experiences. Capacity Development, therefore, has become a key component of international technical cooperation to ensure the ability of development partners to achieve their targets and sustain their results. It builds on existing capacities and national assets including social structures, institutions, local skills and know-how. And, it considers the local cultural values as well. In this context, the UNDP understands Capacity Development as: "the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time" (UNDP 2009, p.5). There is, however, a diversity of other definitions for



From Capacity Building to Capacity Development

Capacity Development. In the context of the Rapid Planning Project, Capacity Development is considered to be a major component of project. The main objectives of the Rapid Planning Capacity Development are:

- Facilitate knowledge sharing and exchange of experiences between the case cities of the project
- Make sure that the project's partners have the required skills to utilize the project's tools and methods
- Provide a full access to the project's toolkit

Capacity Development as a Component of the Rapid Planning Project

Capacity Development is a vital element of the Rapid Planning Project as it:

- Incorporates new trans-sectoral thinking that takes into account synergies between the different sectors of urban development into the planning processes of the case cities.
- Supports a smoother change management towards resource-efficient planning.
- Provides the necessary knowledge and also the know-how as well as the tools to facilitate a possible implementation of the Rapid Planning Methodology.

The Target Groups of Capacity Development

The objective is to develop Capacity Development materials for administrations, academia, schools and the public in order to support learning processes with respect to the Rapid Planning methodologies and tools. Experiences show that training materials alone cannot provide a comprehensive know-how transfer. Therefore, training units/ working sessions will provide the possibility to communicate the training materials directly to the respective target groups. Situation related examples will contribute to transfer the information from the training materials and use the feedback to improve the materials when required. Indicators of a Successful Capacity Development

Some important factors must be taken into account in order to achieve a successful Capacity Development process. These factors may be grouped in three different categories – levels of intervention, preparation and

implementation, and fields of action.

For Capacity Development, three levels of intervention could be recognized:

- Individuals, by developing their experience, knowledge, and technical skills.
- Organizations, in order to develop internal policies, arrangements, procedures and frameworks.
- Enabling environment, which refers to the fact that a broader system of policies, legislation, power relations and social norms must facilitate the processes of Capacity Development.

Within the preparation and implementation of a Capacity Development process, the following points must be acknowledged:

- Knowledge materials should be simple, focused and stimulating.
- The tools should be accessible, userfriendly and preferably based on previous experiences.
- Involvement and Participation should be granted to integrating all stakeholders.

• The process has to be conforming to current local planning, structures and resources.

Regarding the Capacity Development's fields of action:

- Knowledge Sharing: Through creating a research demand and supply. Here, education and retention strategies play a key role.
- Qualified leadership: Inspired, pro-active and with developed skills individuals who can take informed decisions.
- Regulatory frameworks: Promotion of the necessary institutional arrangements.
- Accountability: Transparency, participatory planning, feedback and practice standards.



EXCURSION TO CHAM ISLANDS - HOI AN RESERVE HERITAGE

Excursion to Cham Island-Hoi An © Hebbo, 2018

Guided by Dr. Chu Manh Trinh (Marine Protected Area of Cham Island)

Opportunities for Research and Development

As one of Vietnam's national scenic sites, the Cham Islands are becoming one of the major touristic attractions in the central region of Vietnam. They are located 18 km east of Hoi An City in the East Sea. Administratively, the islands belong to Hoi An City of the Quang Nam province. Approximately, 84,000 people live in the area. The Cham Islands contain mountainous areas and rainforest ecosystems that are strongly enfluenced by seasonal monsoons. And, they are especially renowned for their great environmental and marine diversity including corals, mollusks, crustaceans and seaweed (UNESCO, 2015). Fishery is the main economic activity that is associated with the daily life of the local people. Nowadays, one could also regard tourism as another effective sector that has an enormous economic potential. However, due to the substantial increase of the number of tourists on the island, possible risks regarding the biodiversity of the place as well as the wellbeing of its people should be addressed properly.

In 2009, the UNESCO has designated the Cham Islands as one of two core areas to the Biosphere Reserve of Cu Lao Cham-Hoi with a total sufface area of 33,146 ha. The other core area of the reserve is the World Cultural Heritage Site of Hoi An (UNESCO, 2015).

In a complementing effort, national authorities have also declared the Cham Islands to be a Marine Protected Area (MPA) for Community Research and Development. Through a sufficient focus on ecotourism, waste management, local

craft production, renewable energy as well as sustainable fishing practices, the MPA aims at improving and protecting healthy conditions for the ecosystem. In this sense, the MPA has been piloting a number of community-based environmental management programs and projects to demonstrate activities that can benefit the long-term livelihood of the local residentsres while also promoting an appropriate policy for environmental protection (Babcock, 2012). There are two zones constituting the MPA. The first zone is strictly protected as it is designated to be off-limits to all uses except for vital operations such as samples collection and monitoring the condition of plants, wildlife and habitat.

n to Cham Island-Hoi

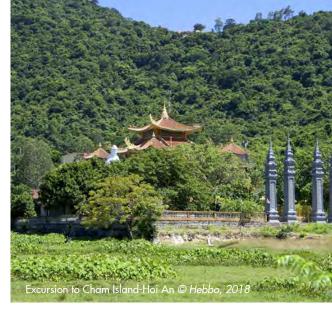


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Excursion to Cham Island-Hoi An © Vollmann, 2018

The rehabilitation zone, the second, is less restrictive as it allows, to some extent, activities related to ecotourism. However, it stays prohibited for uses that can harm the habitat such as housing and anchoring offshore. Both zones are seen essential to protect and improve the sensitive environmental balance and biodiversity (Babcock, 2012).

Guided by Dr. Chu Manh Trinh from the MPA, the Rapid Planning team and its guests from Da Nang, Kigali and Frankfurt were introduced to the Cham Islands. The goals of the excursion were to gain a perspective on the current status of development of the protected area, to have an overview of the policies, programs and implemented measures as well as to have a first impression of their impacts. Also, the excursion aimed at identifying potential points of interest for cooperation as well as for further research and development. It has been concluded that there is a need to address the economic potential as well as the challenges and risks of growing tourism in a sufficient manner. Ideally, this could start from a close examination of social, economic and environmental indicators at the local level to validate our understanding of the current state of development. It is also important to consider the matter at the regional level, where it is possible to develop an integrated model. On the basis of clear strategies towards sustainability and resilience, such a model should consider the development of major touristic attractions of the region, but with a proper collaboration with other vital sectors (e.g., industry) as well as a sufficient consideration of environmental balance and resource efficiency.









Excursion to Cham Island-Hoi An © Hebbo, 2018

DA NANG: LIMITATIONS IN URBAN PLANNING AND URBAN PLANNING MANAGEMENT

Presentation by Mr. Thanh Le Tu Gia (Director of Da Nang Urban Planning Institute - UPI)

In recent years, Da Nang has been considered one of the most dynamic cities in Vietnam regarding urban development. In 20 years of development, Da Nang has had many achievements and also many mistakes, coming from a variety of reasons that have to do with capacity of the stakeholders involved.

Urban Planning

Since 1997, when Da Nang became a city under the direct control of the central government, its area has expanded nearly 4 times to about 15,000 hectares. A number of new urban areas, tourist resorts, and industrial areas have been built. Urban space has expanded towards the sea and stretching along the river. In this process, the city has implemented thousands of large and small projects. Each one is a set of planning documents and many of them have been adjusted at least 2 times. This has entailed enormous workload due to the volume of planning projects. In days of higher workload, 2 to 3 projects are approved per day. It can be said that the speed and skill of project implementation are highly professional. To have a set of planning dossier, it is necessary to carry out processes of survey, draft, revision and perfection of general premises and technical infrastructure. The dossier needs to be finalized with the signatures of the stakeholders and seals of approval, later submitted for evaluation and approval.

The Da Nang Urban Planning Institute (UPI), with more than 100 people, is the body in charge of these tasks. This institution is under control of the Construction Department, responsible of implementing most projects in the city. The difference between UPI and other consultancy firms lies in its personnel, facilities, direct instruction, and pressure from the city



Da Nang City at Present



Da Nang Urban Planning Department

and departments leaders, investors and land clearance agencies. In spite of its position, the UPI has lacked competitiveness, resulting in low quality of research projects. Detailed blueprints generally meet technical requirements but lack creativity and aesthetic.

Other limitations in planning in Da Nang include:

- Pressure of resettlement, which often leads to prioritization of residential land plots, which now account for 50% to 60% of the total urban area. This resulted in land fund for social welfare – such as education, health, and especially parks – lower than expected in urban areas.
- There is no room for architects to develop their creativity. This is because they have become too familiar with simple plotting projects. Over time, this means they will become more skilled but less creative.
- Lack of personnel to perform strategic tasks such as general planning, zoning planning, and specialized network planning.
- As a result, although UPI has been a leading local consultant, it has not yet become a strategic consultant.

Planning Management

Because of the speed and volume of projects, the planning work requires hard-work under a lot of pressure. In spite of this and compared to many other cities in Vietnam, planning management in Da Nang has achieved considerable success. Da Nang is the first city in Vietnam that has merged the overall planning of the city in a unified system. This has helped Da Nang with preventing the risk of overlapping or misleading the projects in practice. However, it has entailed several constraints:

- To evaluate a great volume of projects, administrators can only focus on the project's technical aspects without paying enough attention to aesthetical aspects and other aspects relates to the impact of the blueprint. The Central Bus Station is a good example of this.
- The Department of Construction is facing massive workload, ranging from strategic issues to very small affairs such as confirmation of planning information, location of public toilets, among others.
- Lack of professional ethics. Like other areas, planning tasks often receive a lot of pressure from high-level officials. Although most decisions are correct as they have been deliberately discussed, incorrect

decisions are made when managers do not react or react half-heartedly by the fear of worsening relations with their superiors. The fact that Da Nang has too much residential land and lack of green parkland can be explained partly because of this reason. This leads to consequences that the city is trying to solve and is included in the Government Inspectorate of 2014.

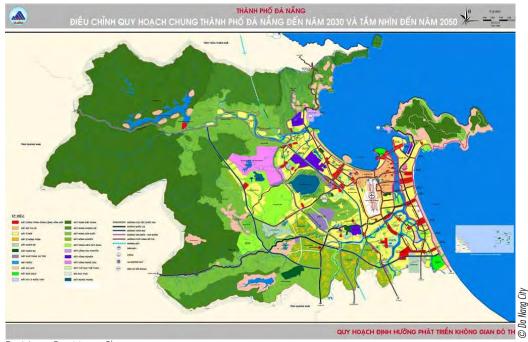
Solutions for Improvement

For solving the mentioned constraints, it is necessary to change the mindset of the planning team: they need to stop the habit of doing their jobs without passion. Also, competition is necessary to create motivation. The "monopoly" status of the UPI as the only planning consultancy leads to a loss of creativity and vision. Da Nang has over 500 architects and many of them are very talented. Taking advantage of these human resources could bring good results, rather than automatically addressing all the work to the 40 architects working at UPI. Planning needs to be countered by organizations and professionals. Large and sensitive projects need to go through

public consultation to widely and objectively gather people's opinion, as well as including the City Council of Architectural Planning in the approval of such projects.

In addition, planning should be decentralized to the districts. This could free the Department of Construction and guide it towards a strategic management, while promoting a greater role of localities in management. This could also give managers more time for "high-minded" thinking instead of simple affairs.

Professional ethics is a complicated and systematic issue to address. However, as a pioneer in many areas, Da Nang has enough ability to improve this situation. Although training professionals in ethics is not simple, it does not mean it is impossible. Professional associations - such as the Association of Architects, the Planning Association, the Literature and Arts Association, the Union of Science - lack professional activities while architects need a variety of activities to meet, exchange knowledge, and motivate each other. Only passion can make people braver.



Da Nang City Master Plan



Participants from Da Nang



Participants from Da Nang



Participants from Da Nang and Frankfurt

GOALS, CHALLENGES AND APPROACHES TO CAPACITY DEVELOPMENT IN KIGALI

Presentation by Abias Mumuhire (Kigali City Administration)

Kigali in Numbers

Currently, the city of Kigali has an extension of 731 km2. The city is divided into three main districts: Nyarugenge, Gasabo, and Kicukiro. The gross density of the city is 1,778 persons per square kilometer. By 2011, there were 1.3 million households located within the city limits, with an average of 4.8 members per household. Also by that time, there was an offer of half a million jobs in the city.

Projections for Kigali have been done for the year 2040. By that time and due to population growth, the density will increase up to 5,198 persons per square kilometer. The number of households would increase as well up to 3.8 million. However, the average size will decrease from 4.8 to 3.85 members per household. 1.8 million jobs will need to be created in order to accommodate the growing economically active population.

The spatial accommodation of the city can be seen in figure x. 50% of the municipal territory

is occupied by natural areas, unsuitable for urban development. 19% of them are wetlands and 31% are slopes of up to 20%. This means the actual developable land for urbanization is only 30% to 35% of the current area within the municipality.

Goals of the Kigali City Master Plan

The Kigali City Master Plan aims to make Kigali "the center of urban Excellence in Africa". The three districts of Kigali would receive a distinct role. The district of Nyarugenge will be the "Financial Hub", the district of Gasabo will be the "Administrative Center", and the district of Kicukiro the "Knowledge Hub".

The key aspects of this Master Plan are:

- To keep urbanization out of wetlands and slopes, in the 35% of land currently available for urbanization.
- To strengthen the existing city center.
- To organize city fringe areas.
- To define new growth areas.



Overview of Kigali City

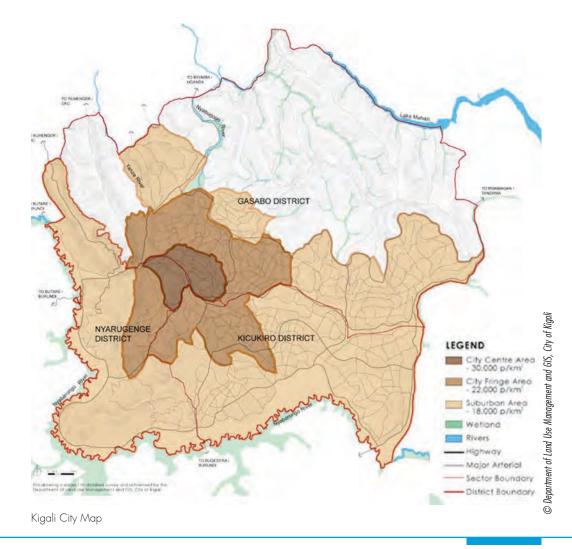
• And to set strategies for un-buildable and rural areas.

Six visions for the city head this Master Plan:

- City of character, vibrant economy and diversity. A city with a vibrant business environment, unique regional destinations, and a sport and cultural hub.
- City of green transport. The pursued goal is to increase the modal share of public transportation to 70%, as well as to achieve that 10% of the trips be "green" (non-motorized).
- City of affordable homes. A slum free city

with 90% rate of home ownership.

- City of enchanting nature and biodiversity. It is envisioned the full restoration of land with slopes up to 40% and of the existing wetlands, and the creation of innovative urban agriculture for slopes under 20%.
- City of sustainable resource management. The vision is to reduce by 20% of the world average the energy and water consumption, 20% of alternative energy sources, and 50% of waste recycling rate.
- City of endearing character and unique local identity.



The Kigali City Master Plan also encompasses the creation of 1.6 million jobs in the service sector and 0.6 million jobs in the industrial sector. A hierarchy of commercial centers with 11.5 mill km2 of commercial space will be constructed, as well as strategically located industrial zones. Regarding the housing sector, the idea is that home ownership rises up to 90%, with a variety of residential choices.

The Master Plan also integrates a "green and blue" plan for the year 2040. It includes a wetland network, the management of watersheds and slopes, agriculture wetlands, the restriction of building in slopes up to 40% and their afforestation, and a variety of public parks and open spaces.

Regarding the sector of transportation, the plan includes a reconfiguration of the road hierarchies, the creation of five Bus Rapid Transit lines, and the implementation of a Mass Rapid Transit system with the construction of two primary lines and a secondary circuit.

Township model as an organizing element for Kigali City

The basic residential unit of this model is called a "basic community", which is composed of a central public space surrounded by affordable housing. At a neighborhood scale, the "residential community" cell is composed

by a commercial core surrounded by public facilities, green spaces, and the previously mentioned residential basic units. These cells are then replicated, following an integrated site planning in order to adapt to the existing context.

With this model, projected land use is breakdown into:

- Residential use. With 13,000 ha for low density and family houses, 3,565 ha for medium density housing, and 170 ha for high density housing.
- Public facilities use. 690 ha will be given to community space, 436 ha to schools and educational institutions, and 141 ha to hospital and care centers.
- Commercial and industrial use. 1,330 ha will be used for offices and commercial developments, 1,110 ha for light industries, and 1,790 ha for heavy industries.
- Green land use. Breaking it down into public parks and open spaces with 3,575 ha, plantations and agricultural farmland with 19,100 ha, and protected forests and wetlands with 20,160 ha.

Policy

The legal framework that supports this Master Plan involves the National Urbanization Policy



estation of Slopes over 40%

"It is essential to have faith in the city's ability"

(2015), Kigali City Master Plan (2013), Rwanda Building and Urban Planning Code (2015), National Sanitation and Implementation Strategy (2016), the National Housing Policy (2015), the National Informal Settlement Upgrading Strategy (2017), and the City Wide Upgrading Strategy (under preparation).

Key Challenges and Capacity Gaps

Six main challenges have been identified for the implementation of the Kigali City Master Plan:

- Limited Planning Capacity
- limited financial means
- Huge compensation cost for affected properties in implementation of bigger projects
- Relocation of Utilities
- Handling issues of tenants who are predominately living in the unplanned areas
- The predominance of unplanned settlements

In addition, several capacity gaps also hinder the development of the Master Plan:



Proposed Green and Blue Plan 2040

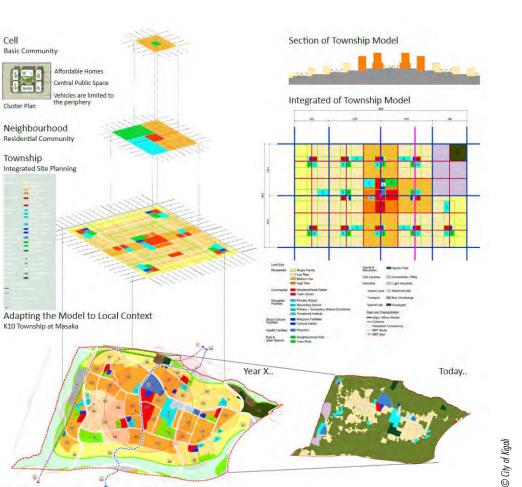
- Scientific data basis to make informed decisions for sustainable infrastructure planning for upgrading
- Methods to quickly generate the required data
- Capacity building for data analysis
- Capacity building toolbox on various techniques (central, decentralized infrastructures including the advantage/ potentials and costs per each)
- Neighborhood based planning approach

Partners

To address the previously mentioned challenges, the city has engaged with different partners, namely the Central Government, communities, consultants, the World Bank, UN Habitat, the Rapid Planning project, Laterite, and Skat Consulting.

In addition, the challenges will be addressed through five main programs:

- Infrastructure. In order to improve accessibility especially of the energy and water sectors.
- Housing. Improving the existing stock and building new households.
- Waste management.
- Centralized and decentralized sewerage treatment plants.
- Sustainable resource management. This program includes the urban agriculture and the environment protection sectors.



Township Model as the Organizing Unit for Kigali Planning

Kigali, in terms of population and geography. They highlighted the integration of innovative terms into the Kigali Master Plan and how it has a clear dimension of spatial planning regarding the regulatory framework to organize construction. Inquiries about its vision showed up, as the plan seems too ambitious regarding the targeted population and economic growth. In response, the presenter said the master plan is indeed ambitious, but it must incorporate some level of ambition to help shape better future

development policies and that it is essential to

have faith in the city's ability.



Presenter Abias Mumuhire

Discussion

After the presentation, a vivid discussion took

place. Some of the questions raised revolved

around how to arrange capacity development

measures, as the municipal staff of the partner

cities have very busy schedules. In response,

the presenter said alternatives must be found

and one of them could be the option of taking

people away from their working routines to

improve the chances for a better and more

focused reception of knowledge. Participants

from Vietnam expressed the similarities

between the two case cities, Da Nang and

GOALS, CHALLENGES AND APPROACHES TO CAPACITY DEVELOPMENT IN FRANKFURT

Presentation by Prof. Peter Kreisl (Frankfurt City Planning Department) and Dr. Thomas Hartmanshenn (Frankfurt Environmental Department)

City Planning Department

Organizational Level

The City Planning Department of Frankfurt am Main is the body in charge of:

- Participating in regional planning and regional preparatory urban land use planning
- Dictating binding urban land use plans and urban design
- Compiling policy plans for larger areas or specific projects
- Providing construction advisory services and assessing building applications
- Improving public plazas and streets using funding from the "More Beautiful Frankfurt" investment program
- Fostering urban renewal in distinct districts

Urban Planning in Frankfurt follows the subsidiarity principle, which means it is done by the municipality as an expression of the capacity of the community to govern its own affairs. Skilled workforce. 130 Planners,

At the organizational level, it is characterized

- Architects, Geographers, Landscape-Architects and Planners, Engineers, GISand CAD-Experts,...
- Established Procedures and Standards for Urban Land-Use Planning
- Legal Instruments, e.g. for Binding Land-Use Planning, Urban Renewal, Urban Development Contracts, Urban Development Measures, Public Housing Grants
- Established Planning Support System (GIS, CAD, Website)
- Sufficient Budget for the procurement of external expertise and consulting (e.g. urban design competitions, professional reports for transportation issues, effects of development on endangered species, report on expected demand of markets for office space)



Frankfurt Skyline View



Frankfurt 2030 Participatory Procedure

Deliberative Planning Procedures

The methods used at the City Planning Department tend towards more participatory and more deliberative planning procedures, as it is understood that urban planning is not only a technical process. Therefore, the Department aims to build a city for people and by people: a city which addresses the daily "life worlds" of people affected by plans, result of a collaborative place-making process. Examples of these collaborative methods can be found on different urban renewal projects, planning workshops with community boards, the redesign of public squares, or in extension projects of existing neighborhoods. These practices take the form of meetings, workshops, urban design charrettes with the communities, exhibitions and gallery walks with public discussions, interactive social media use, and conferences with lobby groups, among others.

Challenges

The challenges that the City Planning Department faces have to do with four different aspects:

• The limitations for sustainable development



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due to the "dominant attitude" of the private sector. The private real estate developers drive the change of the local land-use pattern and the municipality is the one in charge of "managing" this change, so there is little chance for the communities to make their claim.

- New deliberative practices and collaborative place making processes are needed.
- There is a need for practical knowledge on how to strengthen strategic capabilities for urban development and evidencebased, structured decision-making.
- The city of Frankfurt is part of a growing urban agglomeration, which entails the reflection on which is the best form of governance for a city-regional scale.

Environment Department

The Environment Department is the body in charge of:

- Landscape planning and management
- Management of the Green Belt of Frankfurt (incl. public relations)
- Environmental education
- Nature and landscape protection (through the Nature Conservation Authority)
- Urban climate and adaptation
- Geographical Information System -

Instrument for space management

• Consultation for political decision makers

From the Practice of Capacity Development

The Environment Department offers human resource development to all members of the municipal administration through further vocational training. This involves training activities which can later influence planning processes and also offer feedback to the Department's team. Apart from this, continuous education opportunities are provided to different target groups and can be divided into:

- Academy for Nature Protection. The target group for this academy is the members of the nature conservation authorities in the different districts and communities. The program offers further education experiences coming from the current practices. It is addressed towards a state level and the financial resources come from the State of Hessen.
- Open Market. This involves participation at conferences and meetings, provided together with universities, think-tanks and privates. The target group is teams or agencies.
- Promotion for young professionals. This includes traineeships and internships, supervision of bachelor or master



North Park in Bonames, Frankfurt am Main

dissertations, and lectures at universities.

 Environment Department as an institution for education. The Department has two projects directed towards students, pupils, and the general public: the "Discover, Research, Learn" project and the "Cities dare wilderness – Experience the Diversity" project.

Staff Recruitment at the Free Market

Recruiting of staff is done in moments of opportunities, when growth of personnel is needed or current staff retires. Professional job advertisements are published, detailing the technical, method-linked or soft skills that the job requires.

Discussion

Inquiries about cross-cutting topics were raised, asking about the way the two institutions define their goals and how coordination and communication is done. The presenters answered that they understand communication is essential for collaboration between institutions, although there is always room for improvement of current practices. One example of collaboration is the green-belt policy, for which regular meetings and discussion take place as it involves several departments. Also, the Federal Planning Code sets a legal procedure for collaboration. The legal zoning plan preparation is indeed lawmaking and is approved by the citizens through the representatives they elect for council. Every private individual or company affected by the plans can make a claim on any proposed plans. The planning authority must consider these claims and compensate where and when possible between the catalog of claims and the proposal of the city. If a resolution is found, it should be approved by the lord-mayor and get published in a later step. If there are no further claims, it is enacted as a binding law. Regarding the time that these processes take, it depends on the situation and scale. In a large city like Frankfurt a process could be achieved in one year if there are no major conflicts and consensus is made in early stages. But in

average, a 4-year process is needed. On a regional level, administrations are freer to define their strategies as they are authorized to make their own plans. Other factors affecting timing in collaboration processes are the number of projects that are running at the same time, as well as that local planning can be interrupted when facing federal issues.

Comments regarding involvement of private actors were also made. These situations again depend on the case. The city is in charge of the provision of all public facilities, however, sometimes the city can delegate this activity to private investors based on previous negotiations. Another participant asked about how to engage municipal departments with decision-making. The presenters answered that the process of decision-making is a political one. When there is an initiative, the city council authorizes it if there are reasons to justify the proposal, which should also deal with certain problems or bring certain values in need. It is customary to have many discussions between the relevant stakeholders before starting a planning process.



WALKING TOUR THROUGH DA NANG CITY CENTRE

Guided by Mr. Thanh Le Tu Gia (Director of Da Nang Urban Planning Institute - UPI)

Guided by the director of Da Nang Urban Planning Institute (UPI), the Rapid Planning team and its guests from Da Nang, Kigali and Frankfurt were introduced to the central districts of Thanh Khe and Hai Chau, in Da Nang. The goal was to get an impression of the current state of the old urban quarters that forms the traditional historic center of the city as well as to discern the impacts of the remarkable urbanization growth that took place in the last 20 years.

Walking through the central areas of Da Nang reveals that they do not only host many of the administrative and authority offices and agencies, but also provide a vibrant environment for economics, culture, politics and education. They also comprise mixed, concentrated and improved residential living areas. However, in order to understand the relatively recent changes that occured in the urban structures of the central districts of Tanh Khe and Hai Chau, one should keep in mind the changing role and status of Da Nang itself.

Tour through Da Nang City Center © Hebbo, 2

Due to the central lcation of Da Nang in the country in addition to the wide range of touristic attractions in its region as well as the support and political will of the central government, the city has become a major hub for urban development and tourism. This has triggered a trend of growing businesses, mostly related to tourism, and contributed further to the already increasing number of the city's population.

In fact, in 2017, the city welcomed 6.6 million tourists, 2.1 times higher than the figure in 2013. The tourism industry generated 186,770 jobs

in 2017 and grossed over US\$854.1 million in revenues, 2.5-fold increase from 2013, which has further stimulated the resort hotel and restaurant industry. In 2018, Da Nang was home to 712 accommodation establishments with more than 29,730 rooms, rising by 7,355 rooms compared to 2017. Of the lodges, there are 156 three- to five-star hotels with more than 18,000 rooms. By the end of 2018, the city expects to raise the number of lodges to 774 with 36,031 rooms. Da Nang targets to have over 920 establishments with about 45,600 rooms by 2020 (VNA, 2018). The large hotels are mainly concentrated in five districts: Ngu Hanh Son, Thanh Khe, Son Tra, Lien Chieu and especially Hai Chau.













Consequently, the central districts of Da Nang have been put under severe pressure to accomodate more and more functions as well as residents. The existing residential areas in these districts, therefore, were considered to be a subject of redevelopment and densification.

In addition to the political intention to beautify the center, especially with regard to the central areas along the River Han, the municipal authority of the city was also motivated by the economic potential to increase the capacity of the districts in order to accommodate more people, administrative services as well as businesses. the construction and renovation projects of the central urban structures were also associated with promoting the role, position and function of Da Nang as an exchange centre in terms of commerce, culture and tourism, science and technology, education and training, etc. These projects, including resettlement housing development, were addressed as part of the city's commitment towards the pogram of the "Three Availabilities", which aims at providing jobs, housing, and an urbane lifestyle to every Da Nang resident.

Due to these projects, the construction sector of the city gained many experiences, with regard to the legal work and municipal procedures as well as the planning and implementation of urban redevelopment. Further research, therefore, could shed the light on these experiences.





Tour through Da Nang City Center © Hebbo, 2018





CAPACITY DEVELOPMENT APPROACH FOR ADMINISTRATIONS

Presentation by Prof. Dr. Michael Peterek and Dr. Susana Restrepo Rico (FRA-UAS Rapid Planning Team)

The target groups of this approach are public administrations, local planning institutions and sectoral stakeholders and operators. Capacity Development material and activities for administration aim to generate a general understanding of the Rapid Planning Methodology, to give background information for the knowledge blocks, and to develop municipal capacities.

The instruments used by the Rapid Planning Project to enhance capacity in administrations will follow the educational methods of Customized Training, Experiential Training, and Leadership Development.

Customized Training Instrument – Rapid Planning Seminar

Customized training is meant to improve technical skills for implementation and is tailored to the needs of the participants. The specific method of customized training that will be used is the Rapid Planning Seminar. By a seminar it is meant a process in which attendees construct and share knowledge for further learning. Teaching and learning by dialogue encourages the development of individual ideas, as well as the consideration of different opinions. Seminars stimulate participants to learn from one another, starting processes of reflection that will lead them towards the production of social knowledge. Seminars also strengthen the ability to reach consensus.

For the implementation of seminars, a preparatory work is needed, which can be a presentation, video or text as background information. Later, time for discussion is opened, ending with a summary of the main developed ideas and conclusions. In this process, the work and initiatives of participants are key components. The discussion is driven by open questions and its main aim is to generate shared knowledge.

The Rapid Planning Seminar will be divided into four modules, with presentations prepared by the Rapid Planning team. Each slide should have a respective narrative in the form of text that explains the slide and the different concepts presented in it. The idea is that these presentations are available for download on the RP webpage and anyone regardless of their association with the RP project could present the content to their colleagues, co-workers, subordinates, etc. The four modules and the topics addressed in them are the following:

- Module 1: Strategic approach. The titles of the topics will be a) assessment of the urban condition, b) establishing an urban vision, and c) urban management and institutional learning.
- Module 2: Data generation. a) Data typology and collection methods, b) Data processing and storage, and c) Examples of data generation.
- Module 3: Trans-sectoral scenarios. a) the synergies among Rapid Planning sectors,
 b) development scenarios and goals, and
 c) examples of trans-sectoral planning.
- Module 4: Urban management. a) Sectoral implementation strategies, b) intersectoral coordination, b) management structure and institutional learning, and d) implementation models.

Experiential Training Instrument – Trans-Sectoral and Sectoral Workshop

Experiential training involves structured and

semi-structured processes to learn from the experiences in the workplace. The educational method of experiential training that will be used is trans-sectoral and sectoral workshops. By definition, a workshop is a work meeting with several actors intended to produce a joint work result. The purposes for implementing a workshop are to foster a creative process of problem-solving in a very short time, to enhance effective communication, and to establish consensus building to add legitimacy to decision-making. Workshops use a strategy of participation and discussion for reaching agreements on decision. Thereby, they require a high level of openness and comprehension. The moderator is an essential component of a workshop. She or he is responsible for encouraging an environment of mutual understanding while ensuring that the set goals are achieved. Also, time is a key of success and it is recommended to have a minimum length of one day and a maximum of one week.

A trans-sectoral stakeholder workshop is the one involving several actors from different working areas. Its advantage is, most of all, the convergence of different disciplines that can create a more productive solution atmosphere, since the knowledge and experience of the whole is more varied than the ones of a homogeneous group. The trans-sectoral and sectoral workshops will be divided into 4 stages:

- Stage 1: Urban development and goals definition. Addressed towards well informed high level officials, this stage aims to create consensus on an urban development goal.
- Stage 2: Trans-sectoral development scenario. In a plenum, high level officials and operation actors work together in the definition of possible trans-sectoral scenario outlines on the basis sectoral synergies.
- Stage 3: Strategic definition. Sector experts, officials and operators take part on parallel sectoral working groups, established to define sectoral strategies.
- Stage 4: Collaboration and prioritization. In a plenum, actors work in a collaborative management strategy and road map for the implementation.

Instruments – Written Documents

Finally, Leadership Development focuses on the challenges of implementation of the Rapid Planning project, by supporting learning and performance improvement. For that, several deliverables and brochures will be delivered.



Written Documents of the Capacity Development Approach for Administrators

CHALLENGES IN URBAN PLANNING AND MANAGEMENT IN DA NANG CITY

Presentation by Dr. Phùng Phú Phong (Department of Construction Da Nang)

Overview of Da Nang Urban Planning

After becoming a centrally-controlled city, Da Nang has had important achievements in the urban planning and embellishment of the city. The city has effectively exploited land and public resources in order to develop infrastructure and to upgrade and expand urban spaces. These efforts have resulted in a modern appearance of the city and have helped Da Nang to become a pivotal economic centre, as well as a popular destination for national and international tourists.

Besides focusing on urban development, Da Nang also focuses on state management, public administration reforms, human resources development, and in creating an attractive environment for domestic and international investors. The abovementioned actions aim to positively influence socio-economic processes and to contribute to the improvement of the material, cultural and spiritual life of local people. It can be said that achievements in urban planning and construction have enhanced the urban quality of the city, with important progress in urban infrastructure. The city currently has good foundations to develop sustainably towards the future.

Opportunities and Challenges in Planning and Planning Management

In spite of the progress and positive changes in terms of economy, culture, social security, and national defence, rapid urbanization has posed several challenges to the existing planning and management of the city. These challenges can be divided into the following categories: Sustainable development goals. The city is facing now several urban problems such as traffic congestion, environmental pollution, and risk of flood. These problems go parallel with issues in the planning system, which include heavy administrative procedures, corruption, and influence of specific groups. For that, it is necessary to review and develop local criteria following the Sustainable Development Goals.

- Orientation for urban development. Within the city, some urban areas have been developed out of control result of low-quality, asynchronous and unfeasible projects, and also because of lack of effectiveness in land use planning. It is necessary to apply a compressed urban model in order to address these issues and to plan the central urban area and satellite districts.
- Urban planning. The main challenges of urban planning lie in asynchronous coordination among departments in policy implementation, as well as in shortcomings in the processes of approval and monitoring after planning procedures. For addressing these issues, a new approach of urban planning must be integrated with sectoral planning, in addition to the development of a toolkit for evaluating the current situation and forecasting in a comprehensive way.
- Construction standards and laws. Planning is governed by multiple laws and ordinances. However, when new laws are issued, the process could be very slow and overlap with each other. Also, there is a lack of local building standards.
- Human resources. Improvement of skills



Dragon Bridge Da Nang

through training, cooperation and transfer of technologies is essential.

Strategic Solutions

Strategic solutions for improving the efficiency of urban planning and management were categorized into 4 groups:

- Solutions on policy and legality. This group aims at creating mechanisms and policies for improving the implementation and monitoring of planning.
- Specify the objectives and urban development programs, as well as plans and phases of investment.
- Institutionalize a democratic mechanism, which would allow people, investors, and professional associations to take part in the planning process.
- Develop policies to mobilize resources for planning and investment development.
- Solutions on planning methods. Innovative and multi-sectoral planning methods are needed in order to ensure a better socioeconomic development.
- Integration of strategic, participatory planning.
- Integration of measures of a more

sustainable development, in order to tackle climate change.

- Solutions on urban management. Urban management plays a very important role in sustainable urban development. The current speed of urbanization puts a lot of pressure in the management of the city, especially in building permit delivery procedures. Therefore, improving management regulations and strengthening urban design of planning projects as a basis for building regulations becomes necessary.
- Solutions for improving the capacity of target groups participating in decisionmaking processes, as well as the staff involved in planning, approval and management of construction projects.
- Carry out an administrative reform of decentralization in order to make planning more efficient, reducing bureaucratic procedures.
- Develop a plan for raising awareness and improving skills of senior officials at all levels.
- Strengthen programs of human resources training, with focus on international cooperation.
- Strengthen the coordination with planning ministries and agencies.

RAPID PLANNING SEMINAR. SESSION 1: ASSESMENT OF THE URBAN CONDITION

Presentation by Dr. Susana Restrepo Rico and Yaman Hebbo (FRA-UAS Rapid Planning Team)

The background of this seminar is framed in the Strategic Planning model, which purpose is to create consensus and produce decision-making procedures that reflect the collective vision of the stakeholders to produce effective, coordinated actions on various urban sectors.

The aim of this first session –Assessment of Urban Condition - is to analyze the urban context and the constant changes in the built environment, understanding the challenges and opportunities posed by urbanization.

The assessment focuses on current urban development trends – in the fields of redevelopment, mobility, open spaces, urban gardening, participation, and culture -, statistical trends – regarding jobs and housing and urban development challenges, in order to have a picture of the status quo of the city.

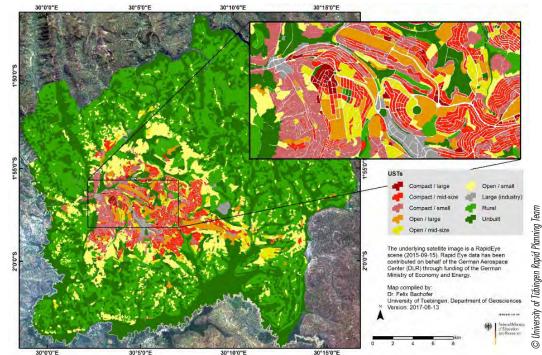
To do so, data gathering is a key step. For

it, the Rapid Planning project proposed three kinds of data gathering methods:

- Remote sensing. It is a method for observing the Earth through images acquired by satellite sensors or aerial photography. It gives a quick and neutral overview of a large area of interest. It is a very good alternative in contrast to more time-consuming or expensive methods of information collection done in the field (such as surveys, measurements, etc.) or even for gathering data that cannot be measure by field work alone. It also allows keeping track of changes at defined intervals (e.g. monitoring of urban development). For using this method, some reauirements are needed:
 - Cloud-free conditions. Cloud cover can be a major problem for planned image acquisitions. Waiting for suitable months (dry season) is crucial



Remote Sensing Results - Urban Structure Types Kigali



Remote Sensing Results - Urban Structure Types Kigali

for getting a cloud-free image.

- A-priori ground survey. To define the information to be extracted from the satellite image, e.g. building typologies.
- Suitable spatial resolution. Is about the size of an image (pixels). Currently, the highest achievable is 0.3 m. However, the higher the spatial resolution the higher the price of the image and the smaller area to be covered.
- Precise ortho-correction of the image. Very high-resolution images can be distorted by local topography. A digital elevation model (DEM) is needed to reduce these distortions.
- Suitable method for processing information. There are two options for selecting a method for the extraction of the desired information: a) automated, which is a digital image process (object-based image analysis, machine learning, statistics...) that requires technical expertise and computing capacities. It is time effective but

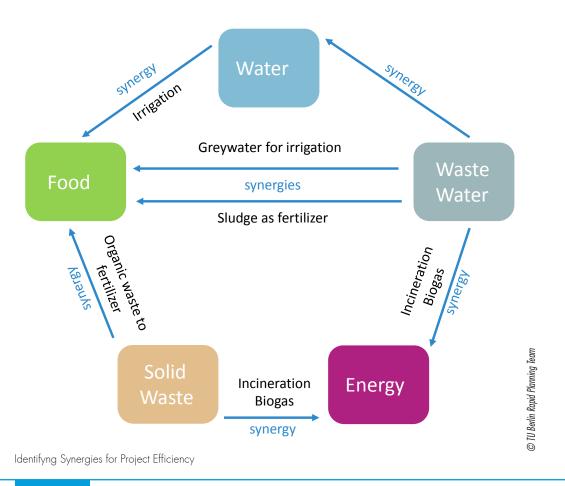
often requires manual refinement; and b) manual, which relies in visual interpretation. It is time consuming but more reliable.

- Surveys. Surveys are an information elicitation process performed on-ground by municipal personnel. They obtain both, qualitative and quantitative data:
- Qualitative data, such as land uses, spatial organization of neighborhoods, photographs, building typologies and uses, roof materials, building patterns, neighborhood morphologies, etc.
- Quantitative data, such as housing densities, building heights, number of floors, infrastructure demand and coverage, etc. quantitative data can produce qualitative analysis for the assessment of the urban condition. The collected data should support each other and should also agree with observational data.

RAPID PLANNING SEMINAR. SESSION 2: ESTABLISHING AN URBAN VISION

Presentation by Dr. Susana Restrepo Rico and Yaman Hebbo (FRA-UAS Rapid Planning Team)

An urban development vision is an integrated set of visions and objectives to make the urban development process adjustable. A holistic understanding of the condition of the territory, combined with the purpose of the planning process established in the first stage, should produce a holistic vision for the future of the city. Strategic planning proposes a different set of visions and objectives to make the project feasible and the development process adjustable. The long-term commitment of actors is the most difficult to achieve. Thus the process must establish a long-term vision for the development i.e. 8-12 years, which acts as an umbrella, covering the general objectives and purposes of implementing the development projects. The long-term vision will foster project continuity and could avoid politicisation (Miranda 2004). A medium-term vision could give governments the possibilities to achieve development goals within the electoral cycle while continuing the project on the longterm plan. A short-term vision is necessary for the development of coordinated, effective,



electricity local water cycle helps to prevent urban flooding vaccum toilet 1L per flush evaporation (cooling effect) CHP- combined © TU Berlin Rapid Planning Team heat and power fermentation grey water plant plant light biogas treatment

Hamburg Water Cycle

localised projects.

Identifying Synergies for Project Efficiency

In order to do so, the Rapid Planning project proposes identifying synergies between sectors of services provision for improving project efficiency. For instance, the water sector relates to the food sector by the activity of irrigation. For its part, the food sector highly relates to the solid waste sector as organic waste can be turn into fertilizer. The solid waste and the waste water sectors can produce as well biogas used in the energy sector. By exploring different synergies, new alternatives for urban development pop up. The goal is to reveal the effects of trans-sectoral applications through a better management of resources.

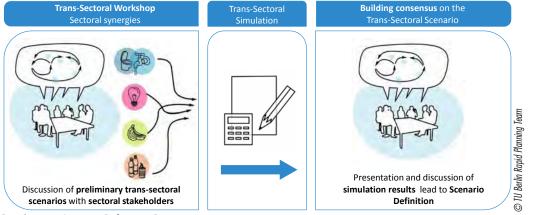
A Development Alternative Based on Sectoral Synergies: The example of Hamburg

Hamburg is the second largest city of Germany with 1,8 million inhabitants, expected to grow up to 2 million by 2030. On 35 hectares of former military grounds, a project is being developed and to be finalized by 2020. This project entails a local implementation of a city-wide concept: the Hamburg water cycle. This concept combines waste disposal, energy production and separation of grey and black water.



Jenfelder Au: A Climate Resilience Project in Hamburg, Germany

42 Workshop Activities



Development Scenario Definition - Process

The RP Trans-Sectoral Scenario Development

Based on different possible sectoral synergies, alternative development scenarios are proposed. In order to define the best scenario, three stages are to be followed:

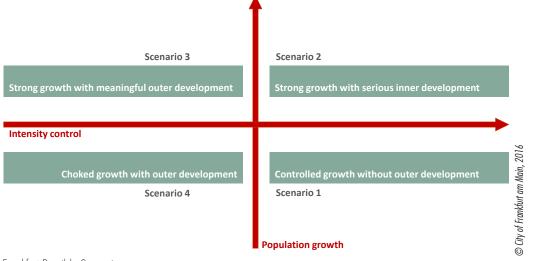
- Trans-sectoral workshops. A discussion of preliminary trans-sectoral scenarios with sectoral stakeholders.
- Trans-sectoral simulation. This tool has the objectives of integrating analysis of infrastructures, accounting of resource fluxes, analyzing of scenarios, and supporting pre-planning processes. The target groups of this simulator are planning

authorities, the research community, nongovernmental organizations, water and energy supply companies, and waste-water and solid waste collection companies.

 Building consensus on the trans-sectoral scenario. Presentation and discussion of simulation results to lead to a scenario definition.

Development Scenario Alternatives: The Example of Frankfurt

Frankfurt is the 5th largest city in Germany and is expected to grow to 810,000 inhabitants by 2030. This poses a challenge for housing



Frankfurt Possible Scenarios

provision, as 99% of the open space within the municipal border is already occupied by agriculture and natural protected areas. Thereby, the city has identified four possible scenarios:

- Scenario 1. Controlled growth without outer development.
- Scenario 2: strong growth with serious inner development.
- Scenario 3. Strong growth with meaningful outer development.
- Scenario 4. Choked growth with outer development.

Each scenario entails different options of new household's construction, regarding its number and its location inside, outside, or in the readyto-build areas inside or outside the city. The decision on which scenario is to be chosen is vet to be made.

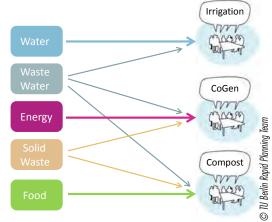


Frankfurt Possible Scenarios Analysis

RAPID PLANNING SEMINAR. SESSION 3: URBAN MANAGEMENT

Presentation by Dr. Susana Restrepo Rico and Yaman Hebbo (FRA-UAS Rapid Planning Team)

The development of a trans-sectoral scenario would include integrated urban development goals, which may be formulated by several stakeholders, namely heads of municipal departments, urban planners, sector experts, public services operators, and external consultancies. For their part, the different sectors involved would have as well sectoral development goals, defined by municipal infrastructure departments, sector experts, urban and infrastructure planners, public services operators and external consultants.



Trans-Sectoral Strategies

Trans-Sectoral Projects – Sectoral Coordination

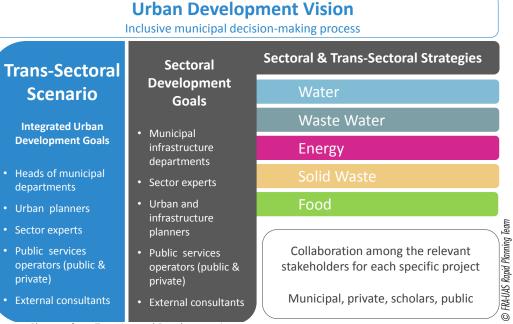
Trans-sectoral projects represent a challenge for policy integration and new relationships among institutional initiatives, disciplines and municipal departments. It entails collaboration and coordination among the relevant stakeholders for each specific project. Coordination is understood as "a structure or process of concerted decision making or action wherein the decisions or action of two or more organisations are made simultaneously in part or in whole with some deliberate degree of adjustment to each other" (Warren et al. 1974: in Mulford and Rogers 1982: 16).

Trans-sectoral Strategies – the Need for Collaborative Planning

Collaborative planning works within interactively constructed contexts to promote strategic consensus-building through 'quality' inclusionary argumentation, which ensures governance

> "Through communicative processes various actors develop common visions for action along with creating the capacity to achieve these visions" (Shannon & Schmidt, 2002)

processes (and outcomes) that are not only fair and just, but also empowering. Collaborative planning gives feasible action plan for implementation, which facilitates the translation of objectives into sectoral projects. Strategic planning allows actors to pose inquiries about project design and implementation processes, grounding project planning and definition, in accordance with the realities of the population and available resources.



Strategic Planning for a Trans-Sectoral Development Scenario

Emergent Governance for Inter-Sectoral Policy Integration

Participatory processes refer to the multiple opportunities for interaction among actors and organizations as well as through institutional arrangements. Through communicative processes various actors develop common visions for action along with creating the capacity to achieve these visions. To call this framework "emergent governance" is to say that the processes of boundary definition and expansion create a system of rules, institutions, and mechanisms over time. Inter-sectoral policy integration presumes that the way to achieve increased efficacy in actual policy-guided outcomes is through improved integration of policy making and implementation across multiple policy sectors.

The scheme for collaborative planning for transsectoral project entails:

• Participation strategy. Stakeholders and participation mechanisms.

- Consensus building. Managing the interests of all actors, expressing their positions along with their interests, priorities and agenda.
- Communication system. Communication channels between actors enhance the possibilities for collaboration and joint action.
- Project management. Define clear roles and responsibilities for each stakeholder.



DA NANG HIGH RISE DEVELOPMENTS AND PUBLIC SPACES ALONG THE WATERFRONT HAN RIVER

The Han Riverbanks © Peterek, 2018

Guided by Mr. Hao Tran (Da Nang Urban Planning Insitute - UPI)

In order to have an impression of the construction sector, city scape and skyline of Da Nang, the Rapid Planning Team and its guest from Da Nang, Kigali and Frankfurt were invited to a boat tour along the River Han. The tour was guided by a representative from Da Nang Institute for Socio-economic Development (DISED).

As already mentioned, the city has a lot of construction projects to come along with the rapid pace of urbanization and economic growth. This did not only comprise of renovation, redevelopment and resettlements development, but also include new development areas towards the fringes of the city. In general, together with the redevelopment of the central districts, oonstruction sector became a leading

economic force as it contributed significantly to the national economy. Total investment in capital construction in 2013 was 1.8 times compared to 2010. Also in 2013, the total GDP of the construction sector scored an increase as it was 1.3 times compared with 2010, accounting for 36.2% of GDP of the industry-construction sector and 12.56% of GDP of the whole city. On the other hand, construction sector has also contributed to the appearance of Da Nang, making it a more spacious and more modern municipality. On the national level, therefore, Da Nang gained the reputation of becoming one of the cities with the highest construction speed and the most beautiful planning, fitting to be the vibrant centre of the region that is attractive for living as well as for businesses

With a clear concentration of development as well as population densities in the central areas of the city, it could be also observed that the boundaries of rural areas has been narrowed and changed to urbanization, due to the process of urbanization and development. It was reported that this process has caused a loss of almost one-third of the agricultural land and tens of kilometers of shores, which in return has also challenged the welfare of the affected farmers and fishers. Since these peripheral areas are relativey cheaper than the central districts, and thus more affordable, they became more appealing as places for resettlement projocts and social housing. It has been reported that these areas also offer shelter for many migrants from the region as well as from other provinces in the country since they are more affordable and easily connected to the city center (about a 45-minute motorbike-trip from the farthest area













of Hoa Bac to the city center). The municipal authorities, therefore, consider these areas to be an essetial factor to ease the pressure on the more central districts of Da Nang. And they are committed to provide and maintain the required infrastructure as well as the sufficient living conditions (e.g., electricity, water, school, health facilities, traffic, market, etc.). In this context, it could also be added that the city authorities do not only see the outer districts to host only resettlement projects and social housing, but also provide an appropriate place for all income-groups. It is perceived, therefore, to have projects with more spacious, beautiful, convenient houses and constructions that are equipped with a better approach towards easy transport .

Some other functions such as industrial zones, an amusement park as well as a sport compund

have been recognized to take place near the rural areas, which have been reported to attract a large proportion of labor from the field and neaby villages.

With the inclusion of the city peripheries to the urbanization process of the city, it was concluded that Da Nang became highly urbanized. In fact, the city has one of the lowest proportion of rural population in the country. It was estimated that while the proportion of urban population in Vietnam in 2009 was 30%, the proportion of Da Nang was 86,9%. However, these numbers are strongly connected with the nature of the administrative borders of the cities and regions in consdiration.





Han River @ Vollmann, 2018



Developments along Han River © Hebbo, 2018

CAPACITY DEVELOPMENT APPROACH FOR THE GENERAL PUBLIC

Presentation by Prof.Dr. Michael Peterek, Yaman Hebbo (FRA-UAS Rapid Planning Team) & Felix Vollmann (UN-Habitat)

The focus group of this approach is the urban residents of the case cities. This approach aims to inform the general public about the Rapid Planning project, as well as raising awareness about the current urban challenges and how the project could improve the urban condition.

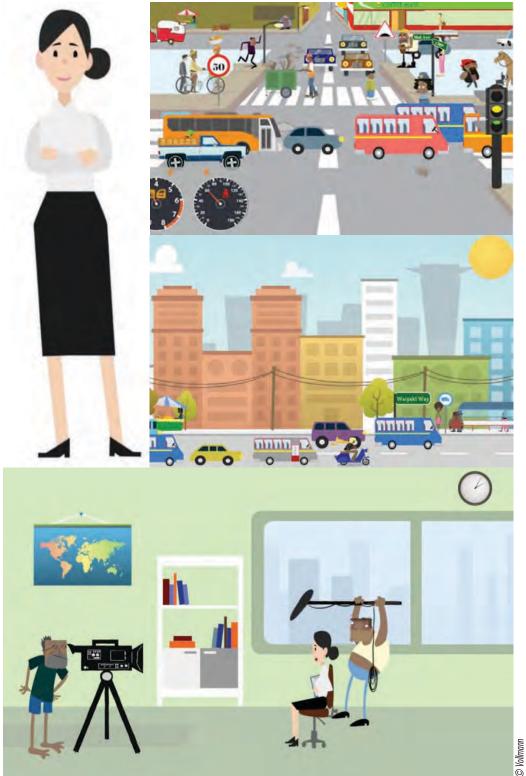
The learning approach used with this focus group is intended to develop collective knowledge and to support learning and change. To do so, instruments such as media with visual emphasis are proposed, more specifically slideshows or animated clips, brochures and flyers. The film or animated clip (or both) will simplify the current complex urban issues, following the style of "edutaining" that is, educating and entertaining, always linked to the Sustainable Development Goals and the New Urban Agenda. In these animated clips, general information about Rapid Planning related topics may be communicated in an easy and attractive manner. The general structure is to be divided into four episodes with different topics:

- Episode 1: Intro: current challenges of urban regions and the role of Rapid Planning
- Episode 2: International sustainability guidelines as motivation for Rapid Planning
- Sustainable Development Goals (SDGs)
- New Urban Agenda (NUA)
- Episode 3: Introduction to the Rapid Planning Project
 - Fields of Research
 - Good-Case Practices
- Episode 4: Citizens' responsibility and trans-sectoral thinking

The animated series can involve an animated moderator explaining the methodology of Rapid Planning and guiding the viewer through the story. The suggested character is Mrs. Urban.



Proposed Illustration for Animated Clips



Mrs. Urban, the Suggested Animated Moderator

CAPACITY DEVELOPMENT APPROACH FOR ACADEMIA AND SCHOOLS

Presentation by Yaman Hebbo (FRA-UAS Rapid Planning Team), Dr. Werner Krause & Laura Pfisterer (IUWA)

Capacity Development for Academia

The focus groups of this approach are university students, research institutes, and university professors. The aim is to generate a general understanding of the Rapid Planning methodology, to give background information for the knowledge blocks, and to generate a dialectic process and interest in the project. To do so, two learning approaches are proposed: blended learning and e-learning. These learning approaches include the use of web-based learning systems and interactive training.

Following these approaches, the selected instruments are webinar lectures, which will be a series of videos explaining the RP methodology. They will contain a presentation of maximum 10 minutes with 5 to 7 graphs or images and a corresponding text of maximum 6 A4 pages (font size 14). The videos will follow a structure of a) welcoming, b) introduction, c) main part, and d) outro. The proposed topics for the videos are:

- Introducing Rapid Planning
- Challenges of Urbanization
- Sustainable Development and Urbanization
- Lessons learned from Frankfurt
- Remote Sensing for Urban Planning
- Data Generation on Household Level
- Socio-economic Survey for RP
- Implementation of MFA for Urban Plannina
- Defining Scenarios and Relevant Involvements
- Trans-sectoral Scenario Simulation
- Change Management

54 Workshop Activities

- Trans-sectoral Methodology Development
- Integrating the RP Methodology into

Spatial Planning • Less or more?

Also, other materials used for these focus groups will be Rapid Planning scientific publications and associated theses and dissertations, as well as Rapid Planning software manuals.

Capacity Development for Schools

This approach is focused towards elementary and middle schools pupils, teachers and parents. Its objectives are the formation of basic thinking structures on children, to deliver theoretical and practical knowledge about public infrastructure, and to promote collaboration and sustainability knowledge. The focus groups will learn by exposure, with projects and visits to the implementation of small local trans-sectoral projects.

In order to do so, this approach will include a simple document which sets the guidelines for the preparation of activities of data collection at home by pupils, and for trans-sectoral inschool projects. This booklet/manual contains the following teaching modules:

- Introduction to Rapid Planning. A simplified introduction of the RP project for teachers and pupils.
- Didactic guidelines. Teaching structure suggestions for teamwork and interactive learning.
- Questionnaires. Simple data collection at home to raise awareness
- Practical projects. Mini projects based on theoretical inputs with actionoriented learning.
- Group Games. To foster teamwork and negotiation skills.

The abovementioned projects keep a focus on trans-sectorality. Some examples of the practical projects are:

- Walter filter in a bottle. An old water bottle is reused as a water filter using different materials in successive layers. In this experiment, the pupils can see an outcome of cleaner water directly which has a learning effect
- Grey water and plant growth. Pupils can plant beans and water each pot with either arey or clean water. Afterwards they compare the growth process of both beans. In this project, They feel responsible for their own plants
- Compost in a bottle. Pupils can create compost in a bottle using only food scraps, soil and leaves. Over several months the de-composting process is observed and documented. The bottle base can afterwards be used to plant seeds inside.
- Solar energy. In this experiment pupils create their own solar oven. They are provided with simple solar oven recipes to experience the operating principles of solar energy and the power of the sun. They cook together which fosters teamwork.







Waste Project Example





Manual for Schools

Water Project Example

EXPERIENCES IN COMMUNICATION AND RAISING AWARENESS ON SUSTAINABLE DEVELOPMENT AMONG WOMEN IN DA NANG

Presentation by Vietnam Fatherland Front

The Women's Union of Da Nang, part of the People's Committee, has provided several funds and developed numerous projects within the city in order to enhance capacity among women. With the motto: "focusing on the grassroots level: supporting women to build prosperous, equal, and happy families", the Union has helped more than 2,000 women to overcome poverty, having reached 85% of the established target. Some of the implemented projects have been:

- The campaign "Building Families with 5 NOs and 3 CLEANs". The 5 NOs refer to: no starvation, no illiteracy, no beggars, no drug addicts, and no murders/robberies. The 3 CLEANs refer to: clean house, clean neighbourhood and clean food. This campaign aims to promote confidence, self-esteem, honesty and resourcefulness among women in Da Nang.
- Development Assistance Fund. Disbursement of 139,025 million VND

with low interest rates for 9,711 lowincome households for repairing and building houses and WCs.

- Strengthening fundraising activities in officials and female members in 1,239 associations with 110,495 participants over 120 billion VND.
- Project "Supporting women's start-up 2017-2025". For this project, several surveys were conducted and 7 training courses were organized in different districts. The results were the collection of 253 ideas for starting business, finally selecting 4 ideas to participate in the Female Start-ups Day organized by the Vietnam Women's Union. A follow-up process included providing guidance to develop business plans and then submitting these plans to the city council for evaluation and calling for cooperative investments.
- The Union supports 175 service and cooperative groups, contributing to the



mplementation of "Green Living" Models



Maintenance of Roads and Urban Gardens

regular employment of 2,604 female workers, with an income of 2-4.5 million VND per month. Some of these groups are cooperative groups for production, cooperative groups for "Lihn Chi mushroom", groups of domestic help or cooking services, and groups that have created models for growing clean vegetables and producing safe food.

• Also, the Union supports 432 women's groups which maintain 1,754 roads within the city. They maintain the roads' green areas and keep them clean and beautiful. Over the years, the Women's Union of Da Nang has learned important lessons. One of them is that all levels of the Union must constantly innovate their content and operation methods. The Union continues to work keep playing a pivotal role in women-related activities and keeps encouraging more gender equality at both, the grassroots level and the legal frameworks.



Cooperative Groups



WALKING GUIDED TOUR THROUGH CAM LE DISTRICT

Guided by Dr. Harry Storch (Brandenburg University of Technology, Cottbus-Senftenberg)

Guided by the representative of Da Nang Institute for Socio-economic Development (DISED), an excursion to Cam Le District was organized to introduce the RP team and its international guests to the south-western area of the city, where many ambitiuos development projects are planned to take place in the future. Also, it was the goal to review the progress and recent actitivites of the Entry Project implemented in the area by the Rapid Planning Project.

Cam Le District is the only district in Da Nang that has no direct access to the coat. It covers an area of 33,000 ha, hosts major administrative and commercial functions such as a main market as well as the city's international exhibition center. Industry is also present in the district. Although Cam Le could be considered

as one of the core districts constituting the city center of Da Nang, it only hosts 2,6% of the city's total population. It is, therefore, acknowledged by the city authorities to be a strategic location for significant future urban development. More specifically, industrial development, infrastructure improvement, and tourism development are seen to be the three further development emphases of the district. Planned for this area, therefore, are developments of trade, services and tourism, including convenience stores, hotels, restaurants and luxury residential properties. Larger scale industrial development and intensification of existing manufacturing industries as well as handicrafts are planned for the district too. In addition to a new town development, with modern facilities including a new bus station, it

Cam Le District © Vollmann, 201

is planned to expand the tourism sector in Cam Le, with two major tourism projects recently approved, a floating island and an Ecotourism center. The district also currently plays an important role in agriculture production for the city and it is a strategic area for floodwater retention for the whole city. The city planning, therefore, has developed a vision to improve and upgrade the food system in Cam Le, which prioritizes food safety. Various rivers flow and unite in Cam Le. Cam Le River is a tributary of Vu Gia River and flows into the the Han River.

The focus area of the Entry Project is a 4 km stretch of Cam Le riverbank and waterfront from Tien Son Bridge to Do Bridge. In addition to the visible pollution of the river, Past landscaping and tree planting systems undertaken along the riverbank, are seen to lack maintenance and overall planning and governance. The river













and the riverbank itself has become a dumping ground for household waste. In allignment with the city's policy to maximize the usage of waterbodies (lake, river, and riverbank areas) for green open space, the designated section of the Cam Le riverbank was chosen as the spatial focus area of the Rapid Planning's Entry Project in Da Nang. The motivation was to stress the strong potential for open space utilisation and highlight the opportunity to integrate the cultural preservation and agriculture development of the area. The Entry Project, therefroe, was seen to involve measures for riverbank stabilization, coastline protection and (peri-) urban water management as well as to identify potentials for storm- and waste water reuse for irrigational needs for urban green spaces, urban agriculture and riverbank riparian greening. In allignment with the Rapid Planning Project, the Entry Project was also meant to promte trans-

sectoral planning and thus address linkages to other sectors. Here, waste management could produce compost to be used in increasing water retention capacity of the riparian areas. Urban agriculture and roof top greening could contribute to reduce rainwater runoffs. Also, residues from flood resistant crops or flood resistant energy plants could be used for energy production (e.g. biogass plant). It was reported that the activities of the Entry Project were planned in close cooperation with existing and relevant local activities. Local needs and possible partners were identified and approached. The experiences made throughout the implementation are seen to be a contribution to the city's efforts towards sustainable development. They display a concept for green and blue infrastructure concept with a focus on riverbank and waterfront management within Cam le District.









COMMUNITY EMPOWERMENT PROJECTS IN DA NANG UNIVERSITY OF ARCHITECTURE

Presentation by Phan Tran Kieu Trang (Head of Community Engaged Learning Center of Da Nang University of Architecture)

The Faculty of Architecture of Da Nang University is an active participant of an alliance of 10 universities and non-governmental organizations, which have committed to support communities and to develop activities for that matter. The Kicodo Club is composed of lecturers and students of the Da Nang University of Architecture. This club aims at creating an environment to practice and experience new ideas. Through interaction, students have the opportunity to widen their knowledge about cultural, societal and academic issues, as well as to directly participate and support community projects. Some of the activities this club does are:

 Within 3 years, the club has designed and constructed more than 20 playgrounds for children in Da Nang and Hoi An. Before their installation, students are able to experiment and create at the Kicodo Lab, which was established in 2016. Through this activity, the club has learnt a lot about how children play in the countryside and the suburbs of the city, which results in many changes in the design. Also, collaboration with the community is crucial, as the lifespan of the playground depends directly on how the community maintains it.

- Another activity entailed conducting surveys in order to design the Canh Dong Chua Park. The surveys were intended to collect data to better know the current situation and the real demands of the local people. During this exercise, students learnt a lot from the community and received support from the local authorities and the inhabitants.
- In Phong Nam village, students helped to build organic vegetable gardens. A project of a photo book also came up to help preserving the memory of the village. The photographs were exhibited and the book was presented to the inhabitants. Students had the opportunity to improve their social skills and learnt it takes time to gain the trust of the community.



Community Empowerment Projects Presentation



Painting Walls to Improve the Space Along Cam Le River

 During the Summer School, students engaged in workshops and several activities which aimed at thinking about how to improve the space along the Le Cam River. With this, students gained hands-on experience, improving their knowledge and skills. They participated enthusiastically, developing a sense of supporting community.



Playground Finalized

IFARNING THROUGH PRACTICE: FNTRY PROJECTS IN KIGALI

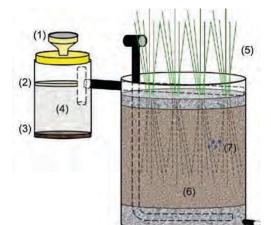
Presentation by Sylvie Kayitesi (UN-Habitat Kigali)

Five projects were designed in Nyarugenge to spatially link resource flows and stakeholders, in order to exemplify trans-sectoral synergies:

- Decentral grey-water treatment. This technology aims at scientifically test the potential of a decentralized lowcost technique to treat and recycle HH greywater as an interim or hybrid technology. The technical setup of the tested decentral greywater treatment pilot systems comprises 7 cleaning steps. The purification performance of the greywater treatment system is based on concentration and transformation. The low-tech system is gravity feed (no electricity) and has a modular design to enable upscaling to different household sizes.
- Sponge school concept. The objective of this project is to demonstrate the potential to tackle erosion and increase resilience to extreme weather with affordable vegetative bio-engineering techniques and upcycling. The Vetiver plant (vetiveria

zizanioides) helps to stop and prevent soil from further erosion. However, a local value chain may be drawn from its cultivation. In this case, the Biryogo primary school and a local women cooperative called Nyarambo Women Centre (NMC) were involved in this project. Vetiver is grown in the school and its maintenance is in charge of the women's group. The plant is then harvested, dried, and used as raw material for handicrafts. The generated income from the handicrafts goes to the women's group and helps paying school fees or food for their kids. This project has a great potential to upscale to all schools located at hillsides

 Linking the agriculture cooperative, the multi-level waste flow and green buildings. This project aims to show the potential of the use of sustainable irrigation and permaculture techniques to enable the production and local marketing of fresh food. For it, different sectors and productive activities may be linked. First



Decentral Greywater Treatment



ponge School Project - Vetiver Cultivation

of all, cow dung and sawdust can be turned into compost. Compost serves as an organic fertilizer, which increases the organic matter of soil and thereby higher nutrient moisture capacity. It also helps in reducing the volume of waste and decreases the costs of buying mineral fertilizer. On the other hand, irrigation may also be improved with the implementation of mobile solar pumps and the Olla Technique. The mobile solar pumps use a solar panel to generate energy. This helps reducing manual irrigation work by using renewable energy. The Olla Technique is a method of sub soil irrigation which uses 50% less water than surface irrigation. This method is especially helpful during the dry season and helps in decreasing

plant stress, evaporation and weeds. Another permaculture technique is the riverbank stabilization with food forests. This method consists in the cultivation of different species of trees in the riverbanks and it produces biomass for cow folder and mulch, the shades of the trees help to reduce evaporation, and increases surface (vertical gardening). It also helps as a wind break and as a water filter (phytoremediation). Finally, the agricultural products may be sold at a market point located within the area. This market is intended to be a green building, which would reduce cooling techniques and is fully demountable to enable its relocation.



Sponge School Project - Vetiver Harvest and Use

INSTITUTIONAL LEARNING AND CAPACITY DEVELOPMENT AS A COMPONENT OF CHANGE MANAGEMENT IN THE RAPID PLANNING PROJECT

Presentation by Dr. Ulrike Schinkel (IZES)

The Rapid Planning project aims at influencing the socio-technical system as a whole by suggesting technical innovations and the utilisation of potential trans-sectoral synergies, and by supporting the network of stakeholders with regard to trans-sectoral thinking, planning and management. Within this framework, change management also aims at a change of values. In order to do so, capacity development and institutional learning are major components.

Institutional Learning

By its part, institutional learning requires changes in three main aspects or levels: in the environment, at the administration level, and at the individual level. These aspects are explained below:

- An enabling environment.
 - Enablement of trans-sectoral cooperation, communication and coordination (data exchange, sharing of information, transparent decision-making). In short, political will.

- Enablement and enforcement of transsectoral infrastructure planning and management: modification of planning law
- Allocation of budgets for change towards trans-sectoral infrastructure and management
- Development of incentives for private sector and individuals to develop or use new technologies
- Organization Administration and (Governance) System
- Establishment of exchange formats or fora
- Integration of learning and capacity development into routines
- Integration of knowledge (research and experience) into the organization
- Improvement of horizontal and vertical coordination
- Integrated instead of silo thinking
- Enhancement of stakeholder participation
- Utilization of innovative technologies and procedures: data gathering &

RP Change I	Management	Institutional Learning
Awareness	Technologies & procedures	Enabling Environment
Communication & coordination	Legislative & policy framework	Organisation - Administration/ (Governance) System
Capacity development	Admin. structures & stakeholder system	
Planning & management	Finances	Individual

Change Management in the Rapid Planning Project: Components

- computation, modelling, scenario development, GIS-based mapping, Regional Impact Assessment etc.
- Development and enforcement of internal regulations fostering transsectoral planning, thinking and acting
- Establishment of a strong leadership structure
- Optimization of administrative processes
- Development of mechanisms for the involvement of the private sector in infrastructure provision
- Sustainable organizational development
- Assessment of costs related to material flows
- Reform of fee system
- Identification of alternative funding sources
- Individual
- Strengthening the motivation to work with others
- Utilization of opportunities for exchange and active participation in fora
- Utilization of opportunities to learn
- Sharing of knowledge with others, in order to feed knowledge into the system
- Gaining of broad knowledge about existing planning system
- Gaining of broad knowledge about



trans-sectoral synergies

- Gaining of broad knowledge about the governance system

Impulses

In order to impulse change management, several activities have been developed and put into practice:

- Participatory system and stakeholder assessment. The objective is to develop an understanding about the governance and stakeholder system as a whole and to create understanding among all relevant stakeholders. In order to do so, the specific approaches are semi-structured interviews, formal and informal meetings, snowball sampling, and multi-stakeholder dialogues. After the implementation, stakeholders have contributed to the generation of knowledge (which has been of benefit for the RP project). Also, the results were presented to the local stakeholders, who got a general overview about the entire stakeholder system which they are part of; the tasks, responsibilities and perspectives of other stakeholders; and the local planning system as a whole.
- Empowering workshops. The objectives of these workshops are to activate a transsectoral thinking, the application of the approach of obstacle-based planning



(OBP), and to foster the participation of representatives of a wide range of stakEholders (multi-level). In Da Nang, several empowering workshops have taken place during 2015 and 2016. The topics of these workshops included supply and disposal management, solid waste management, water and wastewater, energy, and agriculture and food systems. These workshops derived into an improved relationship and more direct communication between departments and service providers. Also, the joint discussion process targeted towards trans-sectoral infrastructure planning and management derived into a cooperative learning process. Later on, the participants acted as multipliers of knowledge. Furthermore, the workshop-based approach has already been applied to single planning processes in the city's administration.

• Multi-stakeholder dialogues. This approach aims at developing an understanding of other stakeholders' points of view through a joint development of research results and solutions. This approach is understood as a forum for sharing knowledge outside formal processes and formats, creating an informal atmosphere in which sensitive themes can be discussed. Two multistakeholder dialogues have taken place in Da Nang (November 2016 and April 2018). In these dialogues, the intermediate results of the Rapid Planning project were communicated and discussed. They resulted in valuable feedback from the participants and the relationships between different departments and stakeholders improved. Also, they serve as an excuse to present this approach in a practical way, as an innovative methodology for strategic pre-planning.

Summary

Several lessons and results may be drawn from the implementation of the abovementioned approaches. First of all, Capacity Development is a crucial component of Change Management, and it has derived into a twoway learning process: the project has benefited from the knowledge of local stakeholders and the methodologies have been transferred into the institutions. Second, knowledge has been created by bringing together the perspectives of different stakeholders. Third, the planning methodologies were presented at an early stage to give the local stakeholders (end-users), which gives them the opportunity to support the shaping of the methodologies (co-design). Finally, the representatives of the case cities were able to share knowledge and experience at an eve-to-eve-level.



From the Presentation



Empowering Workshops



Capacity Development Workshop in Kigali

A WALKING TOUR THROUGH THE TOURISTIC DEVELOPMENT OF COCOBAY AND PRE-DEVELOPMENT AREA OF NGU HANH SON

Guided by Dr. Harry Storch (Brandenburg University of Technology, Cottbus-Senftenberg)

Since Da Nang is seen as a hub for urban growth, economic development and tourism, it became an attractive center for big developers to construct large-scale compounds that aim at offering high-end services as well as luxurious accommodations. Many of these sites are located on the costal line streching along the road from Da Nang to Hoi An, turning the area into a location for expensive real estates. In order to have an impression of the scale and nature of development in this area, an excursion to Cocobay touristic complex was organized.

The project contains 16 hotels, 9 entertainment facilities and many restaurants. It defines its ambition to become one of the leading entertainment and tourism destinations in Southeast Asia, offering a variety of recreational activities and tourism and hospitality services. Buildings were largely completed and put to use, except for some constructions that were still

in progress or yet to start.

ic Development © Hebbo, 2018

During the visit, it could be observed that the people using the facilities and open spaces of the complex are rather few. This is due to the time of the visit as it took place after the "touristic season" has passed. Otherwise, the team was told that the place would have been much more busy. This point, together with scale and nature of such big projects, raised interesting questions regarding the integration of projects such as these into the overall planning of the city. Here, there is room for trans-sectoral applications that can improve the efficiency of service provision and infrastructure and sustainability of resources.



Cocobay Touristic Development © Hebbo









Visiting the Pre-development Site of Ngu Hanh Son District

Another development site was also visited to shed the light on a different approach towards urban development. This site is located in the Ngu Hanh Son District, south to the city center of Da Nang. It is close from the costal road connecting Da Nang and Hoi An and located in the backyard of the Marble Mountains separated from them by water. This approach towards the generation of buildable lands is seen to be more flexible. This is where the municipal authority takes charge of the parcilization of land, basic service provision as well as the construction of roads. The generated parcels of land are then distributed among a vareity of investors and construction contractors, who in return take charge of the actual constructions. It is then sold to

the future residents. Since this approach is more dependent on the mechanisms of the local market of real estates, it could be hard to anticipate the future densities and landuses that will take place, keeping in mind the strategic location of the development. There is chance, therefore, to revisit the proposed development plans and explore the possibilities for a more integrated planning and sustainable infrastructure development.





A Constructed Street for the Pre-development Site of Ngu Hanh Son © Peterek, 2018

WORKSHOP CONCLUSIONS

SUMMARIZING THE RESULTS ON URBAN CHALLENGES, CAPACITY DEVELOPMENT AND SOME LESSONS LEARNT FROM THE WORKSHOP

Capacity Development in the Rapid Planning Project

Capacity Development has become a fundamental component of international technical cooperation. It focuses on building on existing capacities and assets including social structures, institutions, local skills and know-how, considering the local cultural values. Therefore, Capacity Development is a major component of the Rapid Planning Project as it helps to facilitate knowledge sharing and exchange of experiences between the case cities, and it makes sure the project's partners have the required skills and capacities to utilize the tools and methods of the project. In case they do not have them, the provision of full access to the project's toolkit would ensure the fulfilment of the necessary capacities.

Capacity Development Target Groups

Within the Rapid Planning Project, the objective of Capacity Development is to reach different sectors of the case cities by developing tailored materials for each one of them. Therefore, the selected groups of the project were administrations, academia, schools and the general public.

During the workshop, the different approaches were explained in order to observe how they will support the learning processes with respect to the Rapid Planning methodologies and tools:

 Administrations. The materials and activities developed for public administrations, local planning institutions and sectoral stakeholders aimed at generating a general understanding of the Rapid Planning Methodology, to give background information for the knowledge blocks, and to develop municipal capacities. For this matter, three different educational methods were selected, namely Customized Training, Experiential Training, and Leadership Development. The instruments utilized are the Rapid Planning Seminar, the Trans-sectoral and Sectoral Workshop. During the workshop, the first module of the Rapid Planning Seminar was more extensively presented, divided into its three topics: Assessment of the Urban Condition, Establishing an Urban Vision, and Urban Management and Institutional Learning.

- General Public. This approach aims to inform the general public about the Rapid Planning project, as well as raising awareness about the current urban challenges and how the project could improve the urban condition. The instruments used for this approach are media with visual emphasis, such as slideshows or animated clips, brochures and flyers.
- Academia. The aim is to generate a general understanding among university students,



Da Nana

research institutes and university professors of the Rapid Planning methodology, to give background information for the knowledge blocks, and to generate a dialectic process and interest in the project. Two learning approaches are proposed: blended learning and e-learning.

• Schools. This approach is focused towards elementary and middle schools pupils, teachers and parents. Its objectives are the formation of basic thinking structures on children, to deliver theoretical and practical knowledge about public infrastructure, and

to promote collaboration and sustainability knowledge. The focus groups will learn by exposure, with projects and visits to the implementation of small local trans-sectoral projects.

Goals, Challenges and Approaches to Capacity Development in the Case Cities

Each of the cities involved in the Rapid Planning Project has specific goals they want to achieve, they face several challenges when doing so, and each of them address those challenges with different approaches.



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Kigali

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Representatives of each city presented these three elements, which serve as guidance for the Capacity Development scope in each city and for developing further changes.

Frankfurt am Main

The City Planning Department of Frankfurt is characterized by its skilled workforce, established procedures and standards, legal instruments, a planning support system and sufficient budget. In addition, the methods this Department uses include participation and deliberative planning procedures, which can be observed in several planning practices. Also, collaboration between institutions is well-understood in the city, which is reflected in the agreements made between several institutions regarding different urban projects and supported by extensive legal procedures. In spite of these advantages, the City Planning Department still faces some challenges, mainly regarding the dominance of the private sector in the management of the local-use pattern, the need for new deliberative and collaboration practices, the lack of practical knowledge to strengthen its capacities, and issues related to urban growth.

The vision for the city is captured in the Kigali City Master Plan. The main goals of this Master Plan are to develop Kigali as a city with a vibrant economy, a good and "green" transportation system, affordable housing, bio-diversity, and sustainable resource management, without losing its character and identity. The city has set this ambitious vision to better shape development policies, having faith in the ability of the city to accomplish this plan.

Nevertheless, some challenges have been identified for its implementation, which can be summed up in limited planning capacity, limited budget, compensation cost for affected properties in implementation of bigger projects, relocation of utilities, handling issues of tenants who are predominately living in the unplanned areas, and the predominance of unplanned settlements. Also, the city also has several capacity gaps that hinder the development of the Master Plan, including lack of scientific data, efficient methods to generate data, technical expertise on data analysis, and capacities to approach neighbourhood planning. However,



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the city has developed five main programs and has engaged with several partners in order to address these challenges.

Da Nang

The city of Da Nang has had important achievements in its urban planning which are reflected in its urban infrastructure and modern appearance. With these improvements, the city has become an important economic centre and a popular tourism destination, and has good foundations to develop sustainably in

towards the future.

The Da Nang Urban Planning Institute (UPI) has achieved considerable success. By instance, Da Nang is the first city in Vietnam that has merged the overall planning of the city in a unified system, which has helped the city in preventing the risk of overlapping or misleading the projects in practice. Its workforce is highly skilled and professional. Nevertheless, the institute faces some challenges such as lack of staff to perform strategic tasks such as general planning, zoning planning, and specialized



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network planning, enormous workload due to the volume of planning projects, heavy administrative procedures, and lack of skills regarding cooperation and transfer of technologies. Lack of coordination in policy implementation among departments also hinders the department's performance, as well as shortcomings in the processes of approval and monitoring after planning procedures.

In addition, rapid urbanization has posed several challenges to the city planning and management, such as traffic congestion, environmental pollution, and risk of flood.

To counteract these challenges the city has identified some capacity gaps. Competition is necessary to create motivation and to higher the quality of the projects. For that, decentralization

is needed so a more strategic management approach could be achieved. The inclusion of external organizations, professionals and the general public is also needed, as large and sensitive projects could more widely and objectively gather people's opinions.

The city has posed strategic solutions for improving the efficiency of urban planning and management which can be categorized into 4 groups: policy and legality, planning methods, urban management, and improvement of the capacity of the target groups participating in decision-making processes. Also, as presented in this brochure, several civil society organizations and institutions such as the Women's Union and the University of Da Nang are making important contributions to counteract the challenges the city faces.



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