

Cooperative Neighborhood Action in Onaville, Haiti

Designing a Process for Urban Development and Environmental Hazard Mitigation in a Rapidly Urbanizing Settlement

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Abstract

Key words: Canaan, Haiti, community-based planning, urban planning, sustainable process planning, multi-stakeholder, disaster risk reduction, poverty reduction, development cooperation

Unbowed migration into rapidly spreading, precarious settlements at the margins of economic centers has led to a state of emergency in urban planning, housing and environmental policy in Haiti and other developing nations. The Haitian earthquake of 2010, which caused the deaths of more than 300,000, injured just as many, and left more than 1.3 million people homeless, (Farmer 2012, USGS 2011) provides an example that natural disasters further fuel informal urbanization tendencies, thus increasing structural poverty and the country's vulnerability. Setting up a United Nations Internally Displaced Persons camp on the remote outskirts of Port-au-Prince, the "international community," in conjunction with the Haitian government, caused the rise of Canaan, a vast urbanization that was declared the "biggest land grab of Latin-America" (Valencia 2013). As every day new families arrive, pressure is increased on people, land and environment. Canaan now stands at the crossroads between potentially relieving Port-au-Prince's urbanization pressure in a more sustainable way on the one hand, and the threat of developing into a huge, under-serviced city on the other. Since instead of necessary multi-stakeholder cooperation, lack of coordination and collaboration still prevail on the ground and in development practice, many resources of expertise, labor and funding remain untapped.

This study explores the hypothesis that economicly, environmentally and socially integrative development and long-term improvement of living conditions in marginalized neighborhoods only becomes possible if the community is taken as the main actor in a multi-stakeholder framework. With the involvement of academia—promoting research, mutual learning, as well as citizen empowerment and community-based action—less cost intensive, better adapted and more durable solutions can be generated. This supposition is investigated on the basis of practice-oriented research and participatory action in the neighborhood of Onaville (Canaan, Haiti), conducted by the author and Master-students of an interdisciplinary research group at the Technische Universität München.

Following participatory planning and urban design theory, the involvement of residents, actors and stakeholders in such an open-ended process is even more important than the finished project. Therefor the methodology for an accompaniment and empowerment of neighborhood initiative are examined, focusing on the modes and methods of citizen involvement and cooperation. In order to develop normative statements, the author's experiences and deliberations are critically reflected in the light of theory of development, citizen involvement and urbanism. Outlining obstacles, recommendations and perspectives are provided for the continuation of academic action in Onaville, as well as for the improvement of practice in development cooperation and decision-making in Haiti.

This study reveals in a non-linear chapter structure that—with very limited financial means—academic initiative may contribute to community-building and enhancement of knowledge, democratic skills, hazard awareness, and neighborhood action. Researchers have shown to be in a promising position to promote contact and network building, and to bridge the knowledge gap between community, national and international actors. At the same time cooperation with local actors remains the biggest obstacle, as the coordination frequently remains unilateral and agreements are not followed by action.

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If not stated otherwise, illustrations and photos originate from the author or TUM-USO students named above and workshop participants in Onaville, Haiti.

List of Acronyms

ARC American Refugee Committee (NGO)

ASEC Assembly of the Communal Section (Assemblée de la Section Communale)

CAP Community Action Plan

CASEC Administrative Council of the Communal Section (Conseil Administratif de

la Section Communale)

CIAT Interministerial Committee on Land Management (Comité Interministériel

d'Aménagement du Territoire)

CNIGS National Geospatial Information Centre (Centre National de l'Information

Géo-Spatiale, Ministry of Planning)

C.OSM-HA Community OpenStreetMap Haiti (Communauté OpenStreetMap de Haïti)

CRC Community Resource Center

DGI General Directorate of Taxes (Direction Générale des Impôts)

DINEPA National Direction of Drinking Water and Sanitation (Direction Nationale de

l'Eau Potable et de l'Assainissement)

DLR German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt)

DPC Haitian Civil Protection Agency (Direction de la Protection Civile, Ministry of

Interior and Local Government)

DTM Displacement Tracking Matrix (IOM)
FAO Food and Agriculture Organization (UN)

gal Gallon

GoH Government of Haiti
HGW Haiti Grassroots Watch
HRF Haiti Reconstruction Fund

HTG Haitian Gourde

IDB Inter-American Development Bank (Banque Interaméricaine de Développe-

ment, BID)

IDP Internally Displaced Person
IEZ Integrated Economic Zone

IFC International Finance Corporation (UN)
IHRC Interim Haiti Recovery Commission

IHSI Haitian Institute of Statistics and Information Technology (Institute Institut

Haïtien de Statistique et d'Informatique)

IMF International Monetary Fund (UN)

IOM International Organization for Migration (UN)

MDE Ministry of Environment (Ministère de l'Environnement)

MEF Ministry of Economy and Finance (Ministère de l'Économie et des Finances)

MPCE Ministry of Planning and Extern Cooperation

(Ministère de la Planification et la Coopération Externe)

MTPTC Ministry of Public Works, Transportation and Communications

(Ministère de Travaux Public, Transport et Communications)

MINUSTAH UN Stabilization Mission in Haiti

NATHAT Analysis of Multiple Natural hazards in Haiti

NGO Non-Governmental Organization

PLNH National Housing and Habitat Policy (Politique Nationale du Logement et de

l'Habitat, UCLBP)

PNH Haitian National Police (Police National de Haïti)

ONA National Office of Old-Age Insurance (Office Nationale de l'Assurance-viellesse)

ONU-Habitat UN-Habitat Regional Office for Latin America and the Caribbean

OREPA Regional Offices of Drinking Water and Sanitation (Offices Régionaux de l'Eau

Potable et de l'Assainissement, DINEPA)

OSM OpenStreetMap

SILQ Housing and Neighborhood Information System (Système d'Information sur

le Logement et les Quartiers, CNIGS)

TUM Technical University Munich

TUM-IAS TUM Institute for Advanced Study

TUM-USO TUM Research Group Urban Strategies for Onaville

UAV Unmanned Aerial Vehicle ("civil drone")

UCLBP Unit for Housing Construction and Public Buildings (Unité de Construction

de Logements et de Bâtiments Publics, Office of the Prime Minister)

UCP Program Coordination Unit (Unité de Coordination de Programme, Ministry

of Economy and Finance)

UN United Nations

UNASUR Union of South American Nations
UNDP United Nations Development Program

UN-Habitat United Nations program for human settlements
UNOSSC United Nations Office for South-South Cooperation
U.R.D. Groupe Groupe Urgence Réhabilitation Développement (NGO)
USAID United States Agency for International Development

USIP United States Institute of Peace

USGS U.S. Geological Survey

Background of Work

This thesis brings together more than one-and-a-half years of research, as well as field- and communitybased work-both in search of a process bearing improvement strategies for the complexity of existing problems within the rapidly, in an unplanned way urbanizing, under-serviced settlement of Onaville, Canaan, Haiti. Combining a semester project, two extended research internships and this Master's thesis the author's research is embedded into the interdisciplinary Research Group "Urban Strategies for Onaville" at Technische Universität München (TUM-USO), that is working since October 2012 within the spatial context of Onaville. While works have been tutored in joint, monthly research group meetings, the group has been supported by Professor Christian Werthmann's specific experiences from previous academic works in Haiti and his networks in the field of informal urbanism.

A huge base of scientific material and practical intervention have been produced and reconditioned by the student researchers. In search of a process towards a more equal and inclusive, ecological future of Onaville within the larger Canaan urbanization, the students' works have been adapted as good as possible to the requirements of Onaville's population, of the site and Haitian reality.

Research visits and personal network-building in Haiti have been organized independently by the author and the participating Master and PhD students—with everyone contributing great volunteer efforts to make the idea of an open-ended, trans-disciplinary research platform happen. The author greatly contributed to

TUM-USO project management by establishing and improving collaboration inside and outside the research group, thereby initiating and formalizing trans-disciplinary cooperation, capacity- and network-building with local, national and international actors on non-governmental and governmental level in Haiti.

This work is based on remote work in Germany and on lessons-learned from two extended research stays with participatory field work in the neighborhood Onaville, Haiti, which took place from April to June 2013 and from March to April 2014. All research stays and setting of priorities are based on intense collaboration with the Port-au-Prince based Non-Profit-Organization TECHO Haïti and with community members of Onaville. To a great extent this influenced and changed the orientation and goals of the author's work.

Freising, 2014

Interim results of this ongoing research and design process—such as this Master's Thesis—have been presented in October 2016 to partners and different actors in Haiti. This process is planned to be continued in future with the new student project works that are being produced within the TUM-USO framework.

Freising, 2017

Memorandum

The thesis builds on the author's understanding of Urban Design and Planning being an *open process*. The author aims to initiate an open-ended process of neighborhood action transforming Onaville—backed by external actors—into a more livable and socially inclusive city quarter.

The focus on the process is necessary as social exclusion, poverty and resulting dependency on heteronomy is reproduced within society by the upkeep of discrimination or by the inactivity of the structures in power.1 "Informal" growth of slums and marginalized settlements all over the world, have reached in some countries a level, that informality is rather normal than exceptional. Urban planning, building codes and laws remain empty words, undermined by the big parts of society suffering from the lack of affordable housing, basic services, and social and economic security. Consecutive symptoms for individuals, same as for society are countless: productive capacity is used for the upkeep of a minimax, or concentrates on informal market sectors—instead of being contributed to public welfare. Social peace is constantly in danger, natural resources are profoundly disturbed and so on.

There follows the thesis that there is only one way to reduce unplanned urbanization, destruction of natural resources, as well as people's and nations' vulnerability towards disaster: To reduce structural handicaps

of underprivileged parts of the society by assisting those in overcoming the fatalist, determinate and thus unchangeable perception of life, environment and future in a process of real, local empowerment. This process of improvement of living conditions needs to incorporate collective learning, reflection (theory) and action (praxis) in order to contribute to the enhancement of people's individual and democratic skills, and to encourage mutual (self-)help and the negotiation of societal change among citizens. Here, the reinforcement of local initiatives and networks by advocacy planners and professionals can act as an important driver of the targeted cooperative improvement of living conditions—reducing or preventing the aftereffects of social inequity.

Transferring the calls for change to the subject of development and retrofitting of existing urban habitat this asks for a radical democratic process, with residents and the neighborhood being key actors of participative planning and development action. Decades of shipwrecked development aid projects prove that external "donation" or provision of specialized aid for "the poor", and the underlying humanitarianism, do not appreciably reduce grievances and poverty of marginalized parts of society in the long-term—if the latter are not accompanied all along the difficult way towards more self-determination: Only if the target group is involved from early on in decision-making, a real take-over of responsibility for infra- and aid-structures will take place.

¹ Architecture has always followed the values, interests and codes of the power structures, respectively the privileged. Architects therefore mostly plan *for* their clients and not *with* the users. (De Carlo quoted in ARCH+ 2013)

Addressing the discrepancy between postulation and execution of democratic, participatory processes in the practice of architecture, urban design, urban planning, and development cooperation, the work of the author focuses on the grassroots-level of neighborhood action and transformation. Despite its huge potential, this level always risks being overseen, abandoned or insufficiently pursued due to short project time frames and highly simplifying and specialized work routines in project planning and in project execution within the regular business background.

This thesis aims to provide insights into experiences achieved by TUM Research Group in neighborhood and technical research in Onaville, Haiti and Germany from 2012 to 2014. Involved students (urban planners, architects, landscape architects and environmental engineers) expect to provide starting points for relevant socio-spatial change in the area—by inviting professionals and researchers to join the transformation process as "advocates" of the neighborhood promoting social change. As Onaville (and Canaan) is not yet a consolidated city, this is the time where the change of spatial, social, ecological and economic conditions may be initiated in a joint and (cost-)effective manner to avoid increasing marginalization.

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I hereby want to thank all involved members of TUM Research Group "Urban Strategies for Onaville" (TUM-USO)—among them participating professors, tutors and research colleagues.

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Great thanks go as well to all my student colleagues inside the research group, who share the vision TUM academics can start making the difference in an underprivileged Haitian neighborhood—by establishing a trans-disciplinary network of research, knowledge-transfer and collaborative action. At this point, in particular, Raphaela Guin, Valentin Heimhuber, and Sean Kerwin need to be mentioned: without their technical and reflecting assistance (clarifying controversies across cultural and professional borders), without their great independent, personal contribution to community-based work in Onaville this project work

would have never been accomplished in this instructive and fruitful manner.

The same is true for our cooperation partner and host, the Port-au-Prince-based non-profit organization TECHO Haiti, and the community-organizing committees in Haut- and Bas-Onaville. TECHO's approach to start societal change from the grassroots level via small, communitarian projects-evolving from voluntarism and community-building-helped me to get in touch with the complex realities of Haitian society. This changed completely my way of looking at the neighborhood's and country's needs, problems and qualities. Thus, I want to express my gratitude to all TECHO directors who made our intense collaboration possible (including research trips to Haiti and community-based workshops in Onaville), and to all Haitian volunteers who essentially helped TUM students to develop, organize and run those activities. In this context, my special thanks go to Jean Baptiste Jean Baby, Jean Simon Riot and Gabriel Vilex, who made—along with countless site visits and leader meetings-the implementation of the awareness-raising campaign on environmental hazards possible after Heimhuber and I left Haiti in April 2014. By June 2014 they realized its first phase in cooperation with leaders and residents of Onaville.

That the chosen community-based working approach was not doomed to failure is the result of the favorable acceptance of our activities among Onaville's residents and of the invaluable assistance provided especially by members of both community-organizing committees

in Onaville. Exemplarily my special thanks go to the Tab Travay members Salma Siméus and Estimé Volmy, our contact persons in the neighborhood. Both have been contributing huge, uncompensated amounts of time to initiate exchange between different and often isolated parts of the neighborhood, to raise residents' awareness towards risks, to mobilize people for local initiatives, and to negotiate conflicts, collective needs and visions with a plurality of actors and leaders. I also need to mention Salma Siméus and his wife Marie Celestin for a second reason: the family welcomed us cordially to live with them in their small house every time we passed a weekend in Onaville and we became close friends.

But there are so many others who have been committing greatly to the success of our campaigns and workshops in Onaville. I want to thank every single one of them for their hard work in the present, unfavorable living-conditions, for their efforts accompanying us on day-filling field visits, for their infectious motivation and their warm reception. I wish all of them the best for their personal and families' future. May they have the power to resist striking problems and throwbacks, so that their continuous, hard work on building a community capable of initiating real change may bear fruits.

I would like to thank all our strategic partners and the practicing professionals we met in Haiti, for dedicating their scarce time by inviting us to site visits, offering us a sympathetic ear and providing us with crucial insight knowledge, specific feedback, indispensable data and technical infrastructure.

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Fig. 1: Localization of Canaan in the metropolitan area of Port-au-Prince (Aerial: Google/DigitalGlobe, 2014)

Chapter 1: Introduction

Caused by crisis in rural economy and by mono-central supply of basic services, unbowed migration to rapidly spreading, precarious settlements at the margins of economic centers has led to a state of emergency in urban planning, housing and environmental policy in Haiti and in other developing nations. Missing answers to affordable housing for the urban poor and the middle class—fostered by cronyism during dictatorship of Duvalier family and the following unstable political decades—have led to a de facto normality of informal, urban development in Haiti, thus increasing vulnerability and marginalization of underprivileged parts of society (Forsman 2010).²

When a devastating earthquake hit Haiti in the late afternoon on January 12th, 2010, the rising, fragile democracy was once again profoundly reminded of its own weakness. The magnitude 7.0 quake—its epicenter closely adjacent to the capital Port-au-Prince—hit the most densely populated region of the country, causing the death of more than 300,000 people, injuring 300,000 more, leaving more than 1.3 million people homeless, and destroying large parts of the country's habitat and infrastructure. Three days after the catastrophe, Port-au-Prince's public spaces had been covered with tarps and tents by displaced people (Farmer 2012; USGS 2011).

Four years after the disaster, still approximately 147,000 Internally Displaced Persons (IDPs) remain in marginalized, under-serviced and insecure conditions in camps (Sherwood et al. 2014).

Relief and reconstruction in the aftermath of the catastrophe revealed many lessons to learn for future post-disaster management in Haiti and around the globe. Many mistakes had been committed by hasty decisions, lack of communication and collaboration deficits among both international and national actors. One of the most striking planning mistake was opening an IDP camp to relocate families in the remote outskirts of Port-au-Prince. Three months after the earthquake, hardly influenced by the "International Community", an overstrained Haitian government hastily executed the declaration of Public Utility of a 5,000 hectare terrain to create space for the construction of two IDP-camps—causing the rise of Canaan,3 a vast urbanization that was declared the "biggest land grab of Latin-America" (Valencia 2013). By 2014 Canaan has grown in terms of population to one of the largest Haitian cities, providing the best example that natural disasters fuel informal urbanization, structural poverty and a country's vulnerability towards future environmental disasters.

² For the last twenty years on average 75,000 migrants have been moving annually to the metropolitan zone of Port-au-Prince, arriving mostly in not formally planned, peri-urban settlements (World Bank 2007).

³ In the Decree for Public Utility the area is designated Corail-Cesseless. As the term Canaan is used widely in population and by authorities, it is used by the author to denominate the entire zone, including the quarters Canaan, Village Moderne, Jérusalem, Mosaïque, the Camps Corail Sector III and IV and Onaville.

A manifestation of institutional weakness, the case of Canaan will show if Haitian and international decision-makers—in joint efforts with the Haitian civil society—will take the opportunity to develop livable and resilient neighborhoods—or if the country will be stuck proceeding down the path towards further uncontrolled sprawl. Since the lack of coordination and collaboration still prevail on the ground and in development practice instead of necessary multistakeholder cooperation, many resources of expertise, labor and funding remain untapped.

This Master's thesis examines based on the example of community-based work in Onaville (the easternmost sub-sector of Canaan) executed by students of the interdisciplinary research group "Urban Strategies for Onaville" at Technische Universität München (TUM-USO), which role students from the fields of urbanism, (landscape) architecture, and environmental engineering can play by direct contribution to participatory action, to cooperative self-aid, same as to network building and knowledge-exchange among key actors of development.⁴

1.1 Definition of Important Terms

Many terms of this thesis are used in the contexts of planning and development. Omnipresent over-use leads to blurring and misuse in order to please an audience of decision-makers or the public—no matter if an intervention or project is covered by the term's definition and underlying theory.⁵ In order to clarify their meaning and use, important terms are presented at this point, giving the specific definition in which they are used in his work.

The term *Collaboration* is used in this work to describe the "act of working with another or others on a joint project" (Collins English Dictionary cited on Dictionary. com 2014 a).

In comparison to collaboration, *cooperation* is used when collaboration further includes the purpose of joint action—becoming an "act or instance of working or acting together for a common purpose or benefit," and an "activity shared for mutual benefit" (Dictionary. com 2014 b). Cooperation is thus used to describe a more intensive mode of collaboration, where the partners adapt their own working methods to their partners' in order to achieve better results.

The term *community* is used ambiguously in literature. Here it is used in the meaning of a "social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage" (Dictionary.com 2014 c).

The term *neighborhood* designates a specific locality, an "area or region around or near some place or thing" (Dictionary.com 2014 d). In the context of urbanism and development, neighborhood and community are often used synonymously. Neighborhood in this context explicitly includes the people living in proximity of a particular area. While especially the common

⁴ C.f. Johann-Christian, Christian Werthmann, and Thomas Hauck. "Designing for Uncertainty: The Case of Canaan, Haiti," in: D. Czechowski, T. Hauck, G. Hausladen (eds.), Revising Green Infrastructure: Concepts Between Nature and Design, Boca Raton, November 2014.

⁵ This phenomenon of blurring and misuse can be observed best on the example of the vogue words *sustainable* and *resilient*.

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heritage is important to define a certain community, the spatial aspects determine a neighborhood.

Participation is used in this thesis in the meaning of taking part, or even becoming actively involved in (democratic) decision-making and governance. The author follows Sherry Arnstein, defining "citizen participation ... [as] a categorical term for citizen power. It is the redistribution of power that enables the havenot citizens, presently excluded from the political and economic processes, to be deliberately included in the future" (Arnstein 1969, 216). The terms participation and citizen involvement are used in an exchangeable manner.

Sustainability or sustainable development is used as described by the Brundtland Commission of the United Nations includes the three pillars economic growth, environmental protection, and social equality. Behind this stands the definition of "Sustainable development ... [as] development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" (World Commission on Environment and Development 1987, 41). In the context of urbanism this signifies that sustainable solutions development simultaneously propose benefits on a social, ecological, and economic level.

Resilience describes "the ability of an ecosystem to return to its original state after being disturbed" (Collins English Dictionary cited on Dictionary.com 2014 e). Here, resilience is used for urban systems designed and equipped to recover after a major crisis or disaster. Resilience includes that people are prepared potential disasters and, in the aftermath of a catastrophe, provided with the necessary means, tools and strategies.

1.2 Problem Definition

Expropriation of the 5,000 hectares in the widely uninhabited zone, now referred to as Canaan, by the Haitian government "opened a Pandora's box" (Jean-Christophe Adrian, UN-HABITAT, cited in: HGW 2013 a). During a site visit in June 2013 Prime Minister Laurent Lamothe estimated about 300,000 people live in this remote area,6 lacking affordable basic services in education, healthcare, water provision, sanitation and environmental disaster prevention and cut off from the capital's social networks and job market. Every day new families arrive in the zone, increasing the pressure on people, land and environment. Land and real estate speculation is increasingly high, as investors expect Canaan to become one of the country's new big centers, while hoping that national authorities and the "international community" will establish basic infrastructure in close future. Since 2010 this has led to unequal allocation of residents in Canaan and Onaville based on their socio-economic background—with the poorer settling in environmental risk zones, such as ravines and steep slopes. Until now, Onaville neighborhood has been one of the areas that have been the least investigated and have been ignored by the many NGOs operating exclusively in nearby Corail. This is related to the high conflict potential related to the area's unclear political status. In contrast to national authorities and international actors, the business sector has long since established all over the area.

Arising threats of unplanned consolidation of Canaan can be analyzed in Port-au-Prince's endless underserviced, marginalized neighborhoods that cause uncontrollable issues related to traffic, natural hazards, public health, security and education. Bidonvilles (French term for underprivileged neighborhood, slum) at the southern mountain ranges of Port-au-Prince every day prove, that super-imposed strategies for urban management, poverty reduction or disaster risk reduction are doomed to fail as they cannot attack the origins of vulnerability and extralegal activity at their roots.8 Well-meant, protective infrastructures such as protective barriers for prevention of illegal land occupation, codes, and regulations remain ignored, creatively bypassed, or even used as a resource for building. Provision of basic infrastructure in many cases leads to rising land prices and unhampered speculation, thus resulting in extreme densification of the urban fabric, in economicly-forced migration of the urban poor to other marginalized neighborhoods, or in urbanization of other high-risk zones thereby degrading important ecosystems. Those observances lead to the presumption, that the main beneficiaries of infrastructural upgrading and development action in Canaan and Onaville would not be targeted, underprivileged parts of society, who lack affordable housing, but real estate speculators from middle and upper class. In the meantime, protection measures against environmental hazards, occupation of risk zones and unbowed densification are urgently needed to reduce the poor's vulnerability and risk exposure.

The press conference from June 17, 2013 can be accessed: https://soundcloud.com/laurentlamothe/point-de-presse-du-premier-7 (accessed October 27, 2013). The Displacement Tracking Matrix (DTM) of International Office for Migration (IOM) reported by September 2013—with slightly different delimitations—a number of 14,101 house-holds with 64,378 individuals (IOM 2013 b).

⁷ The two camps hold the legal status of IDP-sites, while Canaan and its sub-sections are considered as "new neighborhoods needing urban planning with a long-term view," (UCLBP cited in IOM 2013 b) and thus follow other legal conditions.

⁸ Extremely dense *bidonvilles* have been developing on the steep slopes of Morne l'Hôpital since the 1980s as a result of a political and judicial vacuum, contradictory legal dispositions and lack of operational capacity. Today the settlement stretches across three municipalities hosting about 500,000 habitants (Richener 2013).

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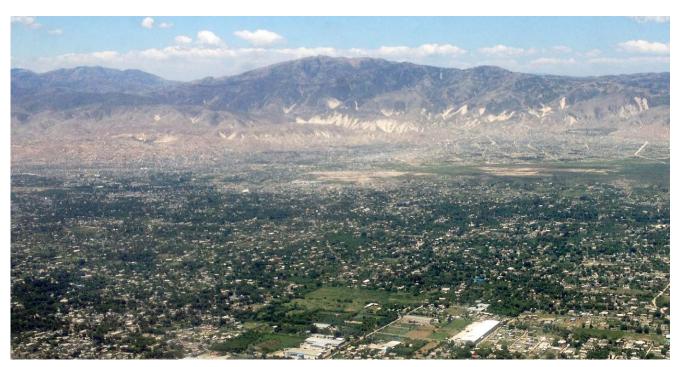


Fig. 2: The urbanized Cul-de-Sac plain with Canaan (left) and Onaville (right) at the foothills of Chaîne des Matheux/Montagne des Pensez-y-Bien



Fig. 3: Hundred-thousands of people occupied the barren hills of Canaan after the earthquake



Fig. 4: TECHO's community-organizing committee in Haut-Onaville, 2012 (Courtesy of Gökce lyicil/Fidan)

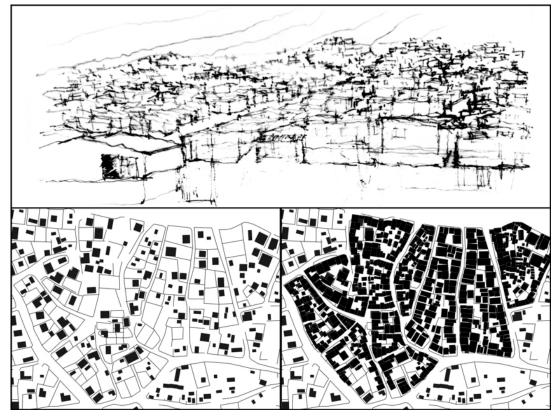


Fig. 5: Density scenarios: existent foundations and houses (left) and consolidation projection (top, right)

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1.3 Hypothesis

Sustainable urban development and improvement of living conditions in contexts of informally growing, under-serviced neighborhoods only become possible if community is taken as the main actor in a cooperative, open process within a multi-stakeholder approach heading for greater social cohesion. Within this participatory process academia may take a crucial role as having an independent position in society and thus being able to widely act beyond economic, temporal and political constraints. As universities in democratic countries hold the ethic mandate to serve the entire society with production and transfer knowledge, academia has an educative role to play in the everyday life of people, especially in contexts of development: students may perform in cooperative work basic research and community-based vision building-often lacking in development practice—and actively share findings with different stakeholders and actors in order to improve practice. If academia undertakes planning in favor of underprivileged communities or neighborhoods-thereby advocating empowerment of active citizen and community in local decision-makingsolutions for the improvement of urban environments can be elaborated and implemented that are-since using locally available resources—less cost intensive, better adapted to the socio-economic and environmental reality of place and people, and more durable, as involvement of "beneficiaries" respectively local community in decision-making leads to higher acceptance, better care of measures and greater respect of common rules.

1.4 Research Question

In order to verify the hypothesis this thesis is structured around the following principal question of research: Will it be possible to initiate or influence community-based, urban change in Onaville by academic research and planning action performed by an interdisciplinary research group from Technical University of Munich, Germany, and which conclusions can be drawn from this case study for the role of academia in citizen involvement and urban development in general?

In order to critically reflect undertaken action and provide answers as well as recommendations for future improvements, several other questions have become important for the structure of analysis, presentation and evaluation in this thesis: What are historical, political, economic, environmental, and social preconditions of predominant grievances in on the ground in a specific location, in actual political and development practice? Which approach, which methods and tools have been applied? What have been the concrete obstacles, achievements and benefits of the applied, practice-oriented research approach in Onaville? What are the reactions of the Onaville community and of practitioners in Haiti? Which preliminary conclusions can be drawn on this basis? Become local neighborhoods through cooperation with academia better enabled to take over a leading role and ownership of local decision-making, project management and maintenance? Could this mutual learning relationship between students and community, combined with network building among decision-makers and practitioners in the long-term lead to recovery over a minimum of control in unregulated urbanization processes?

1.5 Importance of the Topic

1.5.1 Importance on a Local Level

Learning from missing coordination and mismanagement in the aftermath of the earthquake, which have led to vast accusations on national and international levels, no large NGO wants to begin intervention in Canaan without being backed by Haitian Government. This has to do with the assumption of many NGOs and governmental entities that informal growth would increase even more once basic services are established in Canaan-resulting in the fact, that it would become increasingly unlikely that national authorities and international actors regain a minimum of control over Canaan's urbanization process. Inactive, policy stands now in a dilemma between prevention of bidonvillisation (French term for slumification)-thus accepting in parts illegal occupation of land-and neglect9-with the consequence that also in future hundred-thousand potential electors remain living in under-serviced conditions where speculation and growth continues unhampered.

The living reality of many inhabitants of Canaan display that urgently something needs to be done: Predominately belonging to the lower middle class, (TECHO Haïti 2010) the majority of people living in Onaville, respectively Canaan are exposed to various challenges and grievances in everyday life. Many live without basic health services, affordable, clean drinking water, sanitation, education, environmental hazard protection. Due to lack of economic and social safety many suffer from malnutrition, and illnesses. Especially households of single mothers with children—representing 44% of Onaville households10

(TECHO Haïti 2012)—and other marginalized parts of society face existential threats of urban poverty, social exclusion and related disaster risk exposure. From the perspective of people's and city's vulnerability towards environmental disasters the situation becomes increasingly critical: With progressing urban consolidation, the banks of the major seasonal river Ravin Madan-Èl (also called Ravine Lan Couline), same as smaller ravines and steeper, landslide prone slopes of Morne-à-Cabris, which at times reach an inclination of more than 40%, are settled. Many actors therefore see the need for an integrated, strategic intervention plan for entire Canaan covering the fields of environmental protection and hazard reduction, management of urbanization borders, as well as provision of basic services and infrastructure. As Canaan and Onaville are not yet consolidated, there is still time left to avert the worst-case scenario bidonville, that would affect the entire nation's disaster vulnerability and security.

1.5.2 Importance on a National and Global Level

From the perspective of development practice in Haiti and on the global level, many projects of the reconstruction after the earthquake, same as other development projects remain extremely inefficient, are unable to give rise to real change, lack evaluation, and often fail due to a lack of take-over and maintenance of provided structures by the "beneficiaries." Heavily criticized in the global public in the aftermath of 2010 earthquake in Haiti, world-wide disaster relief sector has been hit at its foundation. In most cases this can be referred to system-inherent issues such as high turnover and discontinuity in staff and funds, lack of coordination and cooperation among actors working in one field, and the need to meet expectations of investors and donors who want to see visible success in short time. In Haiti, the so called "graveyard of nice projects," foreign aid, same as long-term loans

⁹ With more than 100,000 people anything other than consolidation of the urbanization seems to be unrealistic.

^{10 &}quot;The latter famil[ies] belong... to the poorest social class and suffer... the most from the pressures and problems of life in Onaville. This includes food scarcity (and resulting undernourishment) the lack of availability of affordable drinking water and the very few employment opportunities of adults. These conditions result in a

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by international financial institutions—both focusing preferentially on the development of hard infrastructure instead of investment in and building of human capacities-have led to the common opinion, that in the inability of the Haitian government there will come NGOs to fix the problems, just as in the last decades. This leads to a widespread feeling, that communities and society is not able or has no reason to take own initiative or to take over ownership and maintenance of structures provided by international organizations. Billions of dollars invested in the last decades have not markedly changed the situation of the poor majority as money never reaches them in the form of an improvement of their living conditions. This fact has led to a huge frustration in society towards foreign intervention and Haiti's government. Furthermore, many expensive aid structures especially in disaster relief are of poor quality and short durability. Labor creation, if existent, happens mostly for the short-term in the construction sector.

Altogether this creates the feeling, that Haitians could do it better and achieve much more with less money through societal cooperation and solidarity, if they just would be "allowed" and provided with the money to start to change the grievances on their own—free from exerted paternalism.

This Haitian view on development aid reflects major obstacles and deficits in development practice that urgently need to be addressed if this sector—that at least in widest parts really works constructively to reduce poverty and initiate sustainable change—wants to break with the accusations of paternalism and unilateral profit-making in favor of the developed world.¹¹ Trans-sectorial cooperation for knowledge and expertise transfer, capacity building and long-term accompaniment of Haitian government and people

is seen widely as the only solution to overcome both rejection and the striking structural deficits in Haiti. Long-term partnerships are required for disaster risk reduction, urban management and planning, public education, health care, creation of long-term employment and social safety. As proven by recently initiated partnerships between renowned U.S. and Haitian universities, academia can be an important actor of long-term support and capacity building (MIT 2013; UCHI 2014).

1.5.3 Transferability to Western World Decision-Making in Urban Design and Urban Planning

The necessity of active involvement of residents, community, and thus academia in urban retrofitting and development is not only strongly demanded in developing world countries, but also in western hemisphere, and thus Germany. Even if the initial situation may be different, planners of urban development or infrastructure development, decision makers and practitioners face widespread denial and opposition in population. Democratically legitimized decisions are contested, construction stop obtained, protest escalates, costand time-intensive judicial proceedings hold, as citizens fundamentally question the necessity and costs of new infrastructure and development, often at the same time criticizing the lack of investment in affordable housing and social programs. Citizen involvement may help to constructively encounter people's loss of trust in decision-makers and the disenchantment towards politics, as the collective working process may not just cause higher acceptance of, but can open the way for an identification with an intervention among the population, as people's involvement in decisionmaking facilitates a takeover of responsibility for the decision.¹² Thus, participation may significantly save resources in time and money during implementation and maintenance. As in Germany a clear discrepancy

¹¹ Fatal Assistance (Raoul Peck, 2012)—an observant documentary of the international relief and recovery campaign—documents this feeling and aggravates accusations against the "international community" by revealing countless major issues in communication, management and in the coordination of remits.

This has been the quintessence of a lecture by Jan Wörner, mediator within the project Stuttgart 21 and head of Regional Dialogue Forum for Frankfurt Airport, at TUM on January 17, 2014.

becomes visible between the common call for more citizen involvement in all kinds of decision-making and the appropriate selection, design, and execution of participatory procedures, the analysis and lessons learned from citizen involvement in Onaville may allow conclusions for the participatory procedures for planning and decision-making at the local neighborhood scale in Germany and other "developed" countries.

1.6 Research Methodology

In the vacuum of political and development action in Canaan this research work has been placed, where appropriate, incorporating the working methodology of the partner organization TECHO that fosters a deliberative process of collective formation of opinion with the goal to initiate self-determined, collaborative neighborhood action in Onaville.

The used research methodology corresponds with the nature of the work and its different phases along the open process of research and action. Methodology builds on a mix of theoretical research in Munich, practical research based on field work in Haiti, as well as community-based initiative in Onaville, Haiti-each greatly influencing the other. Presented methods have not been followed in a strict sequential but in an overlapping, emerging manner, reacting on changing state of knowledge, objectives, and circumstances. This "learning by doing" methodology-collaboratively transferring and testing findings with the community has been established in order to provide residents and community-based initiatives with academic expertise, so they get enabled to start improving their living environment - where possible by self-help and -construction, where needed supported by extern cooperating actors.

Research methodology consists of two major components: the first, theoretical literature review and analysis of available data, the second, a practice-oriented approach consisting of primary and secondary data

collection, interpretation and personal action. The acquisition of theoretical knowledge has been based on an interdisciplinary, general and site specific literature review, as well as on attendance of lectures, seminars and international conferences in the wide range of urbanism, participation and sustainable urban development. The chosen primary data collection approach ranges in the field of the anthropologist or sociologist research methods participant-observation¹³ and immersion.¹⁴ Both cover the author's direct field observation as well as personal involvement in community-based action. Methods of direct field observation have been mapping, open-ended in-depth interviews—discovering aspects of land tenure and management, socio-economic backgrounds, leadership in the community, community-organizing committees, and other topics-the collection of personal narratives, as well as documentation of work on the ground by writing field notes about the lived reality and

¹³ Participant Observation as a qualitative research method of data acquisition "emerged as the principal approach to ethnographic research by anthropologists and relied on the cultivation of personal relationships with local informants as a way of learning about a culture, involving both observing and participating in the social life of a group. ... Although the method is generally characterized as qualitative research, it can (and often does) include quantitative dimensions. ... A strength of observation and interaction over extended periods of time is that researchers can discover discrepancies between what participants say-and often believe-should happen (the formal system) and what actually does happen, or between different aspects of the formal system; in contrast, a one-time survey of people's answers to a set of questions might be quite consistent, but is less likely to show conflicts between different aspects of the social system or between conscious representations and behavior" (Wikipedia 2014).

Immersion is used in qualitative research to get a precise understanding about local problems, motivations, ways of living and thinking, subcultures of social groups, and so on existent in a specific area, social group or topic of research. "In immersion, the researcher immerses themselves into the setting, living among the participants for months or years. The researcher "goes native" to get an in-depth and longitudinal understanding of the subject. ... Immersion means that the researchers immerse themselves in the culture they are studying. ... It also means listening to the people of the culture and really attempting to see the world from their point of view. ... The payoff of immersion is usually immense as the researcher can gain more information about a subject or culture than through any other method. However, the drawback is the time and dedication that is required" (Crossman 2014).

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Fig. 6: Transect walks and talks with residents brought deep insights into Onaville's growth processes



Fig. 7: Awareness-raising as key aspect of field work



Fig. 8: The author spent many nights in the single-room home of friends in Bas-Onaville

observations. Due to the high level of immersion with life in Onaville, the author has been actively involved as participant in community-based action in Onaville. He has furthermore active influence on work in the community as initiator of community involvement sessions and driver for collective action. Besides four months of field work in Onaville, Haiti, the author has been attending directors' and volunteers' meetings of TECHO, arranged meetings and expert-interviews with practitioners and program managers of potential partner organizations, local enterprises and governmental employees. Any further used secondary data of this thesis has been collected by reviewing government reports, articles from active organizations or local newspapers, as well as by personal communication with practitioners in Haiti.

1.7 Problems Confronted

Among confronted problems, the biggest obstacles are maintenance of communication and coordination of activities with the community organizing committees in Onaville, same as with the cooperation partner TECHO in Port-au-Prince. Despite different technological improvement attempts (regular email and telephone updates, establishment of an intern, web-based communication platform), remote communication decreases every time the author returns to Germany as necessary efforts spent in time and money on communication and coordination increase significantly. While contact and network building between residents, different initiatives and actors has been possible during personal presence in Haiti, success rates have decreased to a minimum. This is related in wide parts to the lack of available technology, and to lower technological skills of the residents and volunteers the author worked with. The author and other TUM-USO students learning Haitian Creole Introduction [19]

during field visits, personal contact and the high level of immersion greatly helped to overcome language barriers. ¹⁵ In remote communication, this issue yet has been a strong hampering factor of coordination and information exchange. As communication partners in NGOs and administrative entities, are overloaded with work, agreed feedback rounds and coordination of action is widely delayed or is even not followed by action at all. Thus, communication has remained mostly unidirectional from side of academia.

1.8 Scope and Limitations of the Work

This Master's thesis embeds the author's theoretical and practical work within the last year and a half and in community-based action in Onaville, Haiti into a theoretical background in order to document and critically reflect the chosen open-ended process of participatory planning and acting in Onaville. In order to do so, historical and political contexts of vulnerability and poverty in Haiti are uncovered. In a theoretical discussion of the development discourse generally and of the critique of development in urban planning in particular, different fundamental positions and backgrounds are briefly, but by no means exhaustively summarized and, where necessary, underpinned by insights into development practice in Haiti. Academia's de-facto and potential role in development is analyzed and reflected on examples from Haiti, and relevant obstacles and opportunities for enhanced involvement in participatory processes are highlighted. In the following chapters, TUM-USO's participatory, cooperative action in Onaville and Haiti—carried out by the author and fellow students-is outlined and specified. Overall working methodology, modes and methods of citizen involvement as well as of cooperation are examined, same as the different actors and stakeholders on the ground. Academic accompaniment of neighborhood initiatives is presented and detailed focusing on examples of several still open-ended neighborhood initiatives. The rough, sketchy manner in which the case studies are presented reflects the openness of processual work and its final outcomes just as well as the unpredictability of community-based action planning. Within the final evaluation of work, and via actor-specific recommendations, the author carves out important adjusting factors for future sustainable development action and outlines potential options for a continuation of the open-ended working process in Onaville, respectively an up-scaling of the integrative neighborhood approach for a cooperative development of Canaan within a multi-stakeholder framework. Ruptures in the structure of the thesis are pre-programmed by the

Haiti has two official languages: Haitian Creole, the native language of Haitian people, which is used in all situations of life, and French, which is used in the education, administrative and business sector and which is spoken by those who attended school. As TECHO aims a high level of immersion with the life of underprivileged families in the neighborhoods, communication in the organization and in community meetings is hold in Creole.

complex and open-ended nature of work, as well as by the author's intention to provide the reader with a complex, but comprehensive "orientation guide" for a further, process-oriented design of intelligent and sustainable development cooperation that is grounded on integrative neighborhood action.

From the perspective of practical work in Onaville and Canaan, the complexity of political and societal issues and the various arising conflicts of interest have until now, greatly prevented constructive intervention of both academic and international organizations. Therefore, the focus of this work is explicitly not on providing ready-made solutions-neither for the design or development of specific spatial situations, nor for urban management, or citizen involvement - but rater to outline different options of action within an open process. Issues and phenomena related to land tenure insecurity and land management deficits are sketched out only roughly on the example of some obstacles that have arisen during work. The same is true for analyses of environmental hazards, where the author widely collaborated with Sean Kerwin and Valentin Heimhuber, as well as for analyses of urban structure, unplanned growth, local living conditions and societal aspects in Onaville, Canaan, and Haiti. There the author collaborated intensively with Raphaela Guin.¹⁶

By taking up this wide spectrum of topics ranging from theoretical fundamentals to concrete examples from community-based practice in Onaville, this thesis carves out causal connections between specific local preconditions, the problematic nature of informal settlements, system-inherent issues of development and cooperation, and the complex nature of transdisciplinary work in open-ended processes. By doing so, the author elaborates an orientation guide which, by revealing the lessons-learned from academic work in Onaville, proposes options for future support of neighborhood initiatives and cooperative, community-based action in development of Onaville and Canaan.

¹⁶ Many research findings and background informations can be looked up in Sean Kerwin's Master's thesis Drainage, Water and Sanitation Infrastructure Improvement in Impoverished Areas - A Case Study of Onaville, Haiti (2013), Valentin Heimhuber's Master's thesis GIS Based Flood Modeling as Part of an Integrated Development Strategy for Informal Settlements - A Case study in Applying GIS (ArcMap) in Combination with Hydrologic (HEC-HMS) and Hydraulic (HEC-RAS) Modeling Software to Estimate the Flood Risk of Onaville—Canaan—Haiti (2013), Raphaela Guin's Master's thesis *Urban catalyzers—Places* for the Community (2014), as well as in the author's project documentation Analyses Onaville-Environmental Risks and Urban Structure (2013). With TUM-USO students having acquired baseline data in all of these areas, these topics have a huge potential for further, specialized research.

Chapter 2: Historical and Political Context of Vulnerability and Poverty in Haiti

When the devastating earthquake hit Haiti by the late afternoon of January 12, 2010, the fragile democracy-slowly raising since the election of President René Preval in 2006 - was once again reminded profoundly its own weakness. But already before, in 2004 and 2008, Haiti was hit by disastrous flooding and hurricanes, killing more than 4,000 people and leaving 20,000 homeless (Forsman 2010). The magnitude 7.0 quake with its epicenter in direct adjacency of the capital hit the most densely populated region of the country. Big parts of the country's habitat and infrastructure was destroyed or at least heavily damaged: according to official estimates about 100,000 homes were destroyed in the Port-au-Prince area and southern Haiti, nearly 200,000 were damaged (USGS 2011). Haiti's one of the only and biggest public hospital, the General Hospital (Hôpital de l'Université d'Etat d'Haïti, situated next to the epicenter of the earthquake in the governmental district of Port-au-Prince, which had been in critical condition in terms of budget and equipment), had been severely hit, killing parts of the staff; open spaces of the campus became clinic in tents due to the aftershocks during the following two weeks which sometimes reached up to magnitude 4.5 or higher, Ministry of Health destroyed, other important medical institutions heavily damaged. Near Jacmel, Les Cayes, Petit Goâve, Luly and Anse-à-Galets the earthquake caused a local tsunami killing at least four people (Farmer 2012; USGS 2011). Comparing the incredibly high loss of lives and level of destruction with similar natural disasters in other geographical regions-causing often much less damage-the importance of local political and historical context becomes evident. Both will help to understand better the high vulnerability and low disaster preparedness of both—population and Haitian government.

2.1 Historic Preconditions

After several bloody revolts in the former French colony, Haiti became in 1804 the first free slave republic in the world. During upcoming twentieth century, the young republic passed a foreign occupation, followed by a sequence of unstable, non-democratic regimes and a twenty-nine-year-long dictatorship by the Duvalier family. "Papa Doc" François Duvalier and his son "Baby Doc" Jean-Claude Duvalier, who—with only nineteen years—took over the power after his father's death in 1971, for twenty-nine years had been oppressing any political dissidence by terror of their militia.¹⁷ In the power vacuum following their overthrow in 1986 Haiti passed an unstable political decade. The growing democratic movement caused violent riots, military coups and military-civilian juntas. The origins of these conflicts had been basically class conflicts between old elites and a rising popular movement—claiming—influenced by liberation theology-equal political, civil, social and economic rights for Haiti's poor majority. Several times the upcoming democratic movement had been crushed by military coups, leading to the application of brute force on all sides (Farmer 2012).

Persistent unrest, profound political de-stabilization and the left-oriented, populist agenda by Aristide's government led to an international "aid-embargo" on the Haitian government. 18 Big waves of migration hit

Haiti's professional sector a second time: Especially in public sectors public health, education and jurisdiction skilled personal left for NGOs or searched their fortune abroad; due to political persecution of dissidents during the Duvalier dictatorship big parts of professional and intellectual elites had already left the country. By the year 2004 the UN Peacekeeping Mission MINUSTAH was set up to restore "a secure and stable environment" (UN Peacekeeping 2013) after the forced departure into exile of president Aristide - in a context of regular food- and basic good-shortages, tremendous lack of public health and education, and an unpopular interim government which had been supported by the International Community. Heavily armed groups were taking over power of entire city quarters, local police were weak or corrupt, and jurisdiction often doubtful (Farmer 2012; Pierre-Louis 2011). The government—lacking budget and skilled staff to provide most necessary services to the public on the eve of January 12, 2010-hardly could have been able to anticipate better this environmental and humanitarian disaster: Lack of public health care, food and safe drinking water has been causing daily loss of lives, spatial planning regulations and building codes had not been adopted for decades. The presence of UN MINUSTAH mission and international agencies did not change much this persisting human crisis (Farmer 2012; Forsman 2010; Ramachandran et al. 2012).19

2.2 The Canaan Case—Example of Weak Governance and Issues of Disaster Relief

By April 2010 the decision was made to relocate 6,000 people from a camp in the capital—facing flooding and mudslide risk during the starting rainy season. People were moved far of basic services, social ties or employment facilities to the Internally Displaced Persons (IDP) Camps "Corail-Cesseless", a place

¹⁷ The *Tonton Macoutes* transgressed constantly "sex, gender and kinship norms" (Farmer 2012: 388) to manifest Duvalier's power and control over the state through a culture of "rape, torture and shame" (Ibid.). towards dissidents. Thus, big parts of professional and other Haitian elites left the country as political emigrants during the regime, participatory, all democratic tendencies were violently broken down (Id.).

¹⁸ President Jean-Bertrand Aristide's left-oriented, populist agenda of improved access to basic social services, justice and equal rights for the poor caused wide opposition in the Cold War-influenced U.S.A. A controversial documentary related to this topic is *Aristide and the Endless Revolution* (2005) by Director Nicolas Rossier. For further information on the "aid embargo" — blocking multilateral donors from dispersing aid to GoH—, resulting lack of operational budget and its consequences on public services read Farmer 2012 and Ramachandran et al. 2012

¹⁹ For more brief, but detailed historic background information of Haiti see "A History of the Present Illness" in Paul Farmer's book *Haiti after the earthquake* (New York: PublicAffairs, 2012).

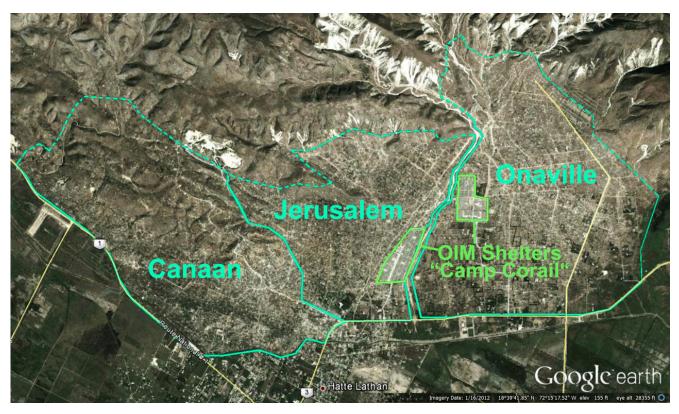


Fig. 9: Neighborhoods of "Canaan" as delimited by TUM-USO (Aerial: Google Earth, 2013)

potentially endangered by flooding, set up by the "International Community" in a desert environment fifteen kilometers north of Port-au-Prince (IOM 2010; Richener 2012). After opening the camps and therefore announcing expropriation for public utility of 5,000 hectares of land,20 the "International Community" in conjunction with the Haitian Government, "opened a Pandora's box" (Jean-Christophe Adrian, UN-HABI-TAT, cited in: Haiti Grassroots Watch (HGW) 2013 a). Informal development started immediately following diverse motivations from the side of new arrivals: A first wave of earthquake-affected, displaced families spontaneously occupied land in the desert zone of Canaan²¹ to escape deficits in camps and *bidonvilles* of the capital. Others took advantage of the situation

to obtain land informally, to participate in unhampered

speculation on real estate in the arising city or to

escape rural regions, heading for the city (HGW 2013

a, b; IOM 2010; Richener 2012).22 During a site visit in

June 2013 Prime Minister Laurent Lamothe estimated

there to be 300,000 residents in the area,23 thereof

only 10,000 living in the formal sectors of Camp Corail

(fig. 9) (IOM 2013 b). Every day new families arrive in

Canaan, Village Moderne, Jérusalem, Mosaïque, the

The declaration of the Decree for Public Utility was published in the Official Journal of the Republic of Haiti Le Moniteur. Different interviews with plot holders in Onaville and Delmas in 2013 gave us the impression that the declaration had been widely seen as free land offer to the people.

In the Decree for Public Utility the area is designated Corail-Cesseless. As the term Canaan is used widely in population and by authorities, it is used by the author to denominate the entire zone, including the guarters

Camps Corail Sector III and IV and Onaville

Personal interviews in Onaville revealed that many residents but especially young men recently migrated from rural parts of the country to Canaan in search of Port-au-Prince's higher educational and economic opportunities.

The press conference from June 17, 2013 can be accessed: https://soundcloud.com/laurentlamothe/pointde-presse-du-premier-7 (accessed October 27, 2013). The Displacement Tracking Matrix (DTM) of International Office for Migration (IOM) reports—with slightly different delimitations—a number of 14,101 households with 64,378 individuals (IOM 2013 b).

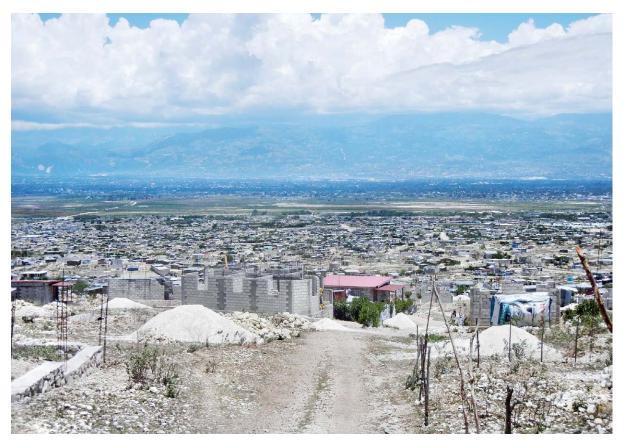


Fig. 10: On a ville is built by "auto-construction" — everyday new buildings arise



Fig. 11: Temporary shelters and Moringa trees in UN Camp Corail, Sector 3.

the zone, increasing the pressure on people, land and environment.²⁴

Housing is nothing new to this area: Before the 1940s the plantation Corail-Cesseless cultivated sugar and sisal. In the late 1990s the Haitian firm NABATEC S.A. started projection of an Integrated Economic Zone of over 1,000 hectares. The main landholder at that time prepared a master plan for so called "Habitat Haïti 2020" - containing industrial, commercial, administrative and residential clusters (International Finance Corporation 2011).²⁵ The invasion of the vast terrain by April 2010 set an abrupt end to NABATEC's plans leaving the government and humanitarian agencies in the worst imaginable situation: Confronted with the tremendous task to stop "slumification" in Canaan the latter also need to face compensation for expropriation over an estimated \$64 million (HGW 2013 a, b). Different governmental institutions and primarily the Unit for Housing Construction and Public Buildings (UCLBP)²⁶ have been confessing the indispensable necessity to provide basic infrastructure to the zone, as far-reaching relocation will be infeasible. Nevertheless, different grave issues such as the legal status²⁷

and the lack of budget for initial intervention have prevented interventions so far.

Today the emergent "city" of Canaan stands at the crossroads between the chance to relieve Port-au-Prince's urbanization pressure on one hand, and the threat to become a large under-serviced city on the other-destabilizing Port-au-Prince's urban and environmental development. Although the earthquake has enhanced the process, Canaan is just one more manifestation of the capacity in Haitian society to build its own habitat by "auto-construction".28 This rather enforced self-aid is not only apparent in the housing sector or in the emergence of micro-economic activity, but also in the greening of the environment. Even in the harsh climatic and environmental conditions of Canaan residents have begun notable efforts to improve their livelihood by planting home gardens with fruit and timber trees. Can these self-aid capacities be better supported in the future to develop a healthy living environment in Canaan?

More detailed information on driving factors and occupation history of Canaan can be looked-up in Richener, Noël, Reconstruction et environnement dans la région métropolitaine de Port-au-Prince: Cas de Canaan ou la naissance d'un quartier ex-nihilo (Port-au-Prince: Groupe U.R.D., 2012)

²⁵ Ranked best out of twenty-one sites in Haiti by the International Finance Corporation, the implementation was planned by public private partnership between NABATEC, extern investors and the government of Haiti—which was sighted to provide basic social and technical infrastructure (International Finance Corporation 2011). During that same time, ONA (the National Office of Old-Age Insurance) implemented the gated housing project "ONA-Ville" for governmental employees in the most eastern part of the territory.

UCLBP was formed after the earthquake; first, to reconstruct destroyed public buildings, second, to coordinate housing interventions and set up the new National Housing Policy and third, to help displaced people to return to their neighborhoods and to reconstruct them (UNDP 2013).

²⁷ Declaration of Public Utility on expropriated land prohibits permanent construction or plot selling by Haitian law to undermine potential nepotism (personal communication with Odnell David, UCLBP, May 31, 2013).

²⁸ By buying lots thru informal land markets, purchasing construction material and paying labor, Haitians have already invested more than 90 million US Dollar in the urbanization process in Canaan (personal communication with Maggie Stephenson, UNO-HABITAT, May 30, 2013).

2.3 Site Characteristics and Environmental Hazard Exposition of Canaan and Haiti

Located at the interface between the fertile lowlands of Plaine du Cul-de-Sac and the foothills of the deforested mountain range Montagne des Pensez-y-Bien, Canaan ranges over approximately twenty squarekilometers of the municipalities Croix-des-Bouquets and Thomazeau. To the west, the urbanization is bordered by the bay of Port-au-Prince and to the north moderate to steep slopes of Morne-à-Cabris shape a physical barrier. Due to land speculation, this border is already being eroded—leading to occupation of the steeper, landslide prone slopes, which at times reach an inclination of more than 40%. Topsoil degradation and the subsequent lack of higher vegetation in the watersheds have been decreasing infiltration and retention potential for decades. This has increased the natural hazards of flooding and landslides while depleting aquifers, and contributing significantly to periodical major water deficit in Canaan.29

Onaville, the focus area of the research group and most eastern part of the Canaan settlement, covers a 7 square kilometer wide alluvial fan and its adjacent foothills. The neighborhood is home to—according to estimations by IOM-more than 11,000 people (IOM 2013 b) and is divided from the other Canaan sections by the ephemeral river, Ravine Madaniel (also named Ravine Lan Couline) (fig. 14), which captures run-off water of vast watersheds in the northern mountains. As the immediate consequence of local, tropical storms, hurricanes or cyclones - causing precipitation events of several hundred millimeters in few hoursthe ravine shows major flooding and erosion risk for Canaan and Camp Corail, along with minor endangering of the same nature to Onaville. The artificial flow channel that was constructed along with Camp Corail only provides protection against flood events in

29 Damien, the closest rain station to Canaan, lists an average annual precipitation of less than 1,000 millimeters, which is much less than the national average. For comparison: Proximate Port-au-Prince receives precipitation rates above 1300 mm (NATHAT 2010).

the frequent hazard range, corresponding to a return period of 5 years. Flood runoffs with return periods of 25 and 100 years were found to exceed the capacity of the channel significantly so that devastating flood events are to be expected.³⁰ The upper part of Onaville was found to be highly vulnerable to small-scale torrential debris flows generated in four relatively small and steep watersheds north of Onaville.

On a national level, the environmental hazard exposition is as follows: Located in the Hurricane belt, Haiti is regularly hit by devastating tropical storms, hurricanes and cyclones. Since the country is almost entirely deforested and natural retention systems are heavily degraded, any major rainfall has the potential to cause devastating mudflows, landslides, torrential debris flows, spring floods in the mountainous zones, and severe floods in the lowlands. These few. productive lowlands are further menaced by climate change-caused sea level rise and tsunamis. Two major tectonic fault lines cross Haiti, exposing the country to unpredictable tectonic risk. Despite the annual occurrence of natural catastrophes, authorities and population are very poorly prepared for disasters. This can be attributed to deficits in countrywide appropriate early warning systems, to a general lack of protective infrastructures and to the unregulated growth of precarious settlements in environmental high risk zones—all that coming along with weak governance and budget deficits of local and national authorities (Forsman 2010; Mora et al. 2010; Ramachandran et al. 2012; UNDP 2010).

³⁰ Valentin Heimhuber's hydrologic modeling of Ravine Madaniel (Ravine Lan Couline) revealed peak flow discharges in the river channel of 110 cubic meters per second for a five year design storm event, 300 cubic meters per second (25 year storm) and 475 cubic meters per second (100 year storm) (Heimhuber 2014).

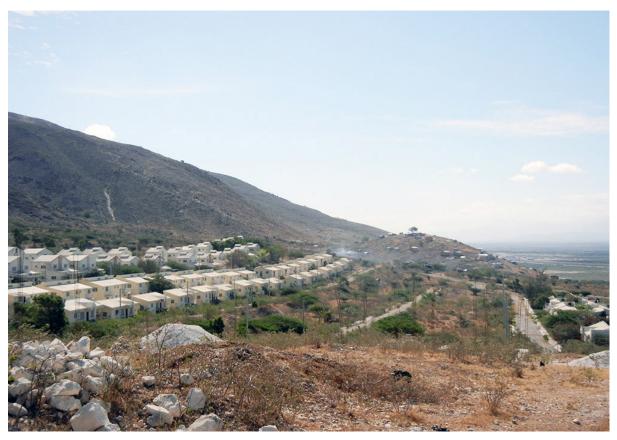


Fig. 12: ONA housing project at the foot of the steep slopes of Morne-à-Cabris (Haut-Onaville, April 2013)



Fig. 13: Same site as of April 2014—the steep slopes are getting invaded gradually



Fig. 14: Ravine Madaniel's flow channel cuts deeply into the alluvial cone



Fig. 15: Analyzing the artificial flow channel and its fragile levees at the flood hazard outbreak zone



Fig. 16: Camp Corail, Sector 4 (left); new settlers construct in regular flood zone on the river banks of Ravine Madaniel

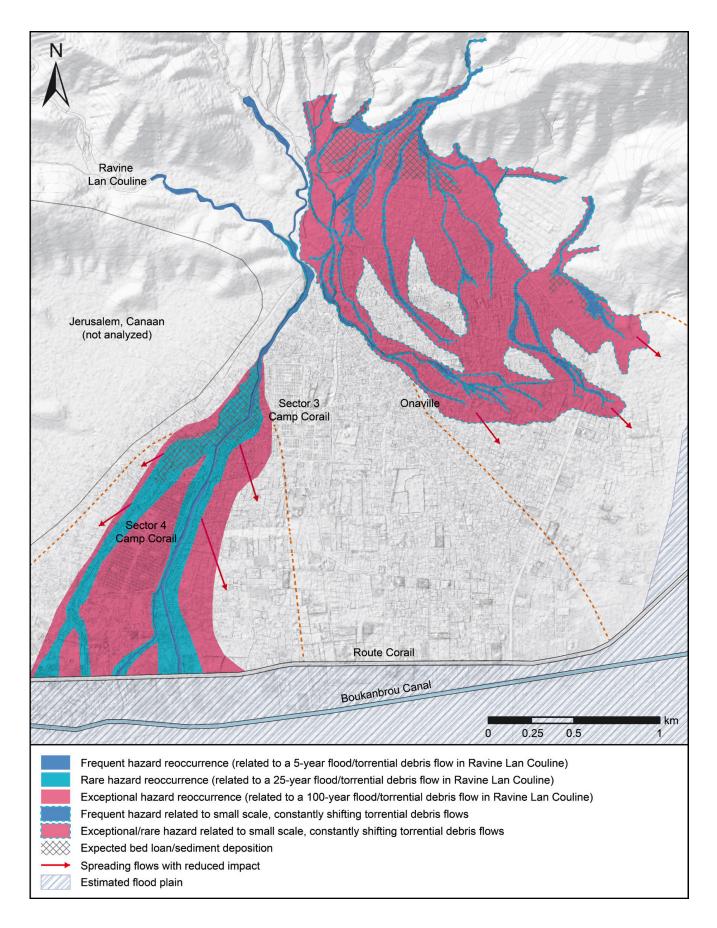


Fig. 17: Flood hazard zoning of Onaville (Courtesy of Valentin Heimhuber; hill-shading: TanDEM-X, DLR, 2013; aerial: Drone Adventures, Open Street Map, IOM, 2013)

2.4 Urban Crisis

The emergence of Canaan is surely one of the most striking reflections of Haiti's housing reality: it stands exemplarily for the state of emergency in urban planning, housing and environmental policy. Increasing discrepancy between rural and urban areas led to unbowed migration towards the capital-fostered by economic crisis and mono-central supply of basic services (Forsman 2010).31 Missing answers on affordable housing for the urban poor and the middle class have been paving the way towards a de facto normality of informal housing in Haiti's urban development—leaving a majority of urban residents for years with a lack of basic infrastructure and public services. Needless to say, informal peri-urban sprawl had been fostered by unstable political decades (Id.) and even more so after the earthquake, which left more than one tenth of the Haitian population homeless for months and years (IHRC 2011).

Long before Canaan, vast occupations in the steep slopes of Morne l'Hôpital at the southern edge of Port-au-Prince had been showing similar tendencies: extremely dense bidonvilles have been developing since the 1980s as a result of a political and judicial vacuum, contradictory legal dispositions and lack of operational capacity. Today the settlement stretches across three municipalities hosting about 500,000 habitants (Richener 2013) (fig. 18, 19, 20). The "informal" occupation is also omnipresent in the lowlands of Cul-de-Sac, which had once been a main area of agricultural cultivation. Dramatic urban expansion of the capital along major streets had marked the beginning of the occupation of quarters like Croix-des-Bouquets, Tabarre and Bon Repos in the north of the metropolitan zone (Saffache 2002). Today these neighborhoods cause uncontrollable problems regarding traffic, public health, public security and natural hazards by

31 For the last twenty years on average 75,000 migrants has been moving annually to the metropolitan zone, arriving mostly in not formally planned, peri-urban settlements (World Bank 2007).

substituting forever one of the country's only lowlands with the potential for large-scale agriculture.

In the concept paper The Global Campaign on Urban Governance UN-Habitat defines the "Inclusive City" as "a place where everyone, regardless of wealth, gender, age, race or religion, is enabled to participate productively and positively in the opportunities cities have to offer" (UN-HABITAT 2002, 5). Referring to this statement reality in Haitian cities can be described as rather exclusive: the majority of society are discriminated and driven towards marginality. Whether discriminated against for their social background, precarious economic situation, gender- and age-based arguments, skin color or handicap, people often are also spatially pushed towards marginal sites such as ravines, steep slopes and swamplands-segregated from the "regular city" by the lack of adequate accessibility, social, economic, educational and sanitary infrastructure. Connected with the "formal city" often only through steep and narrow paths, entire neighborhoods remain "invisible" in the urban fabric (fig. 21), leaving especially their weakest inhabitants deprived of basic citizen rights and social services, as well as extremely exposed to environmental hazards. Taking this into account Canaan can probably be seen as one of Haiti's most pressing examples of marginalized urbanization coupled with anthropogenic environmental risks. Logical result of the failure of the state and the "International Community" to provide sufficient housing long before and after a major crisis the existence of Canaan and Onaville shows that in the current situation of unclear land ownership and stalled housing projects, "auto-construction" seems to be, despite the efforts undertaken by the Haitian government and international actors, the only way for Haiti to overcome its housing shortage in the short-term.

Directed by UCLBP, recent programs in Haiti's reconstruction and the new *National Housing and Habitat Policy* show the first adjustments towards a new paradigm in urban development by integrating the construction of social housing, as well as assisted (auto-)



Fig. 18: Pétion-Ville and the vast slums (bidonvilles) at the mountain range of Morne l'Hôpital

construction and retrofitting of existing, under-serviced neighborhoods (UCLBP 2013a; UCLBP 2013b).³² Facing the extent of crisis in Haiti's housing market and budget limitations of the Haitian government, community-based upgrading processes for existing, under-serviced quarters will remain—in addition to newly built social housing, and sites and services programs—as the only possibility to improve the relation between planning authorities and residents—regaining control over Haiti's urbanization process without provoking social unrest.

³² The application of the new policy will show if national and local authorities, backed by international partners, regain a leading role in urban planning, manage to upscale the promising pilot projects and thus reduce the gap between formal and informal neighborhoods in Haiti. The document can be accessed online: http://uclbp.gouv.ht/pages/16-document-de-politique.php

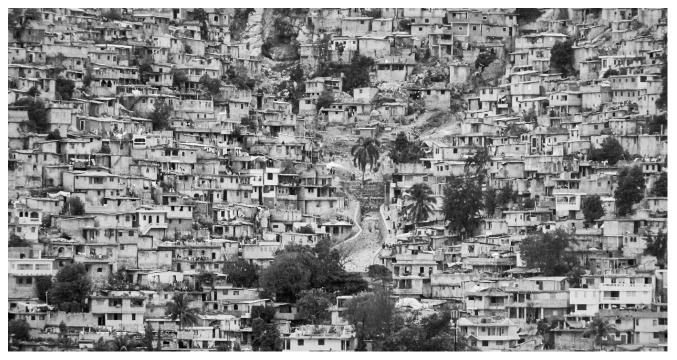


Fig. 19: Dense slums of Morne l'Hôpital, Port-au-Prince. In 2013, in some of the steep torrents, gabion walls, check dams, and retention basins were installed.



Fig. 20: Bidonvilles of Morne l'Hôpital stretch from Pétionville to Carrefour



Fig. 21: Neighborhoods are constructed in steep, hazard prone ravines of Delmas 75, Port-au-Prince—accessible often only via unfixed paths and staircases



Fig. 22: Port.au-Prince, and Delmas neighborhoods are dominated by "auto-construction"

Chapter 3: Theoretical Background of the Discourse and Critique of Development

As a deeper take up of the development discourse and its critique would exceed the scope of work by far, the author focuses at this point—after a brief overview over the most important, theoretical literature used—on a short historic overview—in order to put economic and political constraints in "development cooperation," humanitarian aid, and urban development practice in perspective. On the example of Camp Corail, Canaan, this rather theoretical critique of development practice and humanitarian aid is proofed on the basis of manifestations of deficits and grievances on the ground.

3.1 Overview of Important Literature Used

ARCH + Volume 211/212 Think Global, Build Social (2013) provides a good starting point to enter theoretical discourse of development as spatial planners. The author has further deepened his theoretical background in the development discourse and critique, as well as in the discourse of participatory planning processes in urbanism with specialist literature. In the development discourse and critique the anthropologist James Ferguson (The Anti-Politics Machine: "Development," Depoliticization and Bureaucratic Power in Lesotho, 1994), the sociologist and former United Nations Special Reporter on the Right to Food Jean Ziegler (Wir lassen sie verhungern: Die Massenvernichtung in der Dritten Welt [Betting on Famine: Why the World Still Goes Hungry], 2011), and the political scientist researching in the context of development Aram Ziai (Towards a Critique of the Discourse of Development, 2013) are to mention. As for critique of development aid in Haiti, same as humanitarian relief work and reconstruction in the aftermath of the 2010 earthquake, Paul Farmer provides a extensive insight facts (Haiti after the earthquake, 2012). In the fields of architecture, urbanism and urban planning theory the critique concentrates basically around authoritarian top-down approaches in decision-making, architecture, and urban development practice. In this context, the writings of the architects John F. C. Turner (Freedom to Build, dweller control of the housing process, 1972) and Giancarlo De Carlo (Architecture's Public. 1970) have provided important theoretical fundaments³³—promoting open-ended, participatory processes where planners and architects undertake advocacy planning for and with the future users—with "no prescribed itinerary and no final solutions ... introduc[ing] a plurality of objectives and actions whose outcomes cannot be foreseen" (De Carlo quoted in ARCH+ 2013: 92).³⁴ From an anthropological and sociological perspective, the founder and president of the Mega-Cities Project Janice Perlman (FAVELA: Four Decades of Living on the Edge in Rio de Janeiro, 2011) reveals important insights into mechanisms in and realities of underprivileged and informal neighborhoods. It thereby has widely influenced the author's view on urban retrofitting programs and urban planning.

Seeing in education a catalyst for social change and active citizenship—and thus for the improvement of urban environment and spaces, two more authors had influence on this work—especially on the specific design of participatory field work in Onaville, which is

33 Turner defines housing as a basic activity, as a process or verb (Turner 1972, 151), with the result, that "decision-making power must, of necessity, remain in the hands of users themselves" (Id., 154). In the eyes of Turner this means rather "that households should be free to choose their own housing, to build or direct its construction if they wish, and to use and manage it in their own ways" than that everyone should build its own house. The benefit than comes along with the open-ended process of user-sensitive planning and building: "When dwellers control the major decisions and are free to make their own contribution to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well-being" (Turner 1972).

De Carlo's analysis of architectural practice and participatory, processual alternatives pursues a similar theory: "In the case of planning 'for', the act of planning remains forever authoritarian and repressive, however liberal the initial intentions. In the case of planning 'with', the act becomes liberating and democratic, stimulating a multiple and continuous participation. This not only gives the planned event political legitimation: it also makes it resistant to the wear and tear of adverse circumstances and changing times" (De Carlo quoted in ARCH+ 2013, 92).

The Laufen Manifesto for a Humane Design Culture, published in 2013 by a group of urbanists, (land-scape) architects, urban planners, and designers, take up this discourse by advocating for a new culture in design—a culture that is based on open-ended, cooperative elaboration of solutions for today's urban environments (Heringer et al. 2013).

described beginning with chapter five of this thesis: the biologist, sociologist and pioneering town planner Patrick Geddes,³⁵ as well as the educator and philosopher Paulo Freire.³⁶ All authors recognize that in most cases the origins of grievances and resident's needs in informal or under-serviced urban settlements are related to marginalization of entire parts of the society and thus have a social, political or economic origin that cannot be solved by professional compartmentalization within the "urban disciplines."

Explicitly not included in this work have been participatory planning theory in the context of urbanism. Therefore, the commonly used approaches Community Action Planning (described for example in Otto Koenigsberger's writing Action Planning from 1964 and in Nabeel Hamdi and Reinhard Goethert's Action Planning for Cities; A Guide to Community Practice from 1997) and Participatory Rapid Appraisal (described for example in Robert Chambers's Rural appraisal: Rapid, Relaxed and Participatory from 1992) are not taken into account in this Master's thesis' discussions, analyses and reflections.

³⁵ Considering urban planning as the practical application of sociology, Geddes believed that "in order to understand and improve a community, one had to be a part of it" and thus tried "to involve himself as closely as he could with all the people concerned, especially with those who were suffering most from the consequences of urban dysfunction and blight" (Turner 1972, 124).

³⁶ Freire's concept of Popular Education and Critical Pedagogy addresses lower socio-economic classes by aiming at social transformation—based on a dialectic learning relationship between educator and educated. By actively dismantling and defeating the origins and oppressive structures, Popular Education enables its beneficiaries to escape structural poverty (Freire 2007).

3.1.1 Key Points of a Systemic Critique of Development

The criticizers of the development paradigm mainly reject the theory of development, that external investment and development of technical infrastructure and high-technology solutions in under-serviced regions and nations may improve living conditions and reduce poverty in "third-world" countries. Described with other words that means, that "an analysis which suggests that the causes of poverty ... are political and structural (not technical and geopolitical) ...and that meaningful change can only come through revolutionary social transformation...has no place in "development" discourse simply because "development" agencies are not in the business of promoting political realignments or supporting revolutionary struggle... By uncompromisingly reducing poverty to a technical problem, and by promising technical solutions to the sufferings of the powerless and oppressed people, the hegemonic discourse of "development" is the principal means through which the question of poverty is de-politicized in the world today" (James Ferguson, quoted in Ziai 2013, 24). Aram Ziai focuses on the aspects that the development discourse is inherently Eurocentric-dividing societies and nations in the categories "developed," ("developing,") and "underdeveloped", considering the industrialized Western world model as superior and thus preferable-and authoritarian, as expert knowledge and national elites enforce generally in decision-making. This presumes a division of society in a small, legitimized group of decision-makers and experts, and in a majority of beneficiaries for whom social-technological measures are undertaken in the name of "development"—often against the will of the latter (Ibid.). Ziai acknowledges numerous conceptual innovations in development practice and a transformation of development discourse especially since the 1980s, introducing the concepts of sustainable development, structural adjustments, introduction into international markets, empowerment of civil society, participation, an emphasis of "ownership", as well as "good governance" and

"global governance". Many of them profoundly criticize top-down decision-making and the principle of "trusteeship" and thus collide with the system-inherent rules and motivations of development-challenging existing power relations respectively addressing more participation and self-determination. With the concept of sustainable development fundamentally questioning global applicability and viability of standards in "developed" nations' societies the normative discourse on development becomes more mutual: also "underdeveloped" countries can serve as a model for the Western world to develop in a more sustainable way (Ibid.) Jean Ziegler first and foremost centers his fundamental critique around the neoliberal paradigm and its often deadly effects on people in the "third world". He attacks structural adjustment programs, multinational agriculture and food corporations, and global players in food and land speculation, that among other historical reasons have essentially fueled the societal decline in many "poor nations."

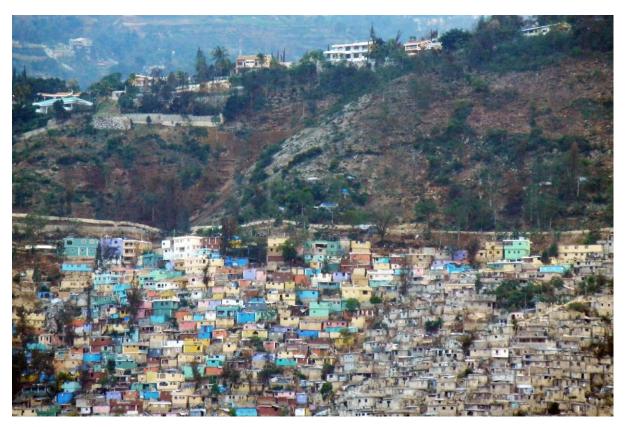


Fig. 23: Jalousie en Couleur (Jalousie in Colors; left) and the vast bidonvilles of Morne l'Hôpital (right)—the wall that had been built in 2013 to prevent further invasion. On the top of the mountain range, upper-class homes and hotels

3.1.2 Critique of Development from the Perspective of Urban Planning and Architecture

Often, highly cost intensive urban retrofitting and slum upgrading programs do not change the reality of the urban poor to the desired extent. In other cases, physical upgrading does not reach the most vulnerable residents or, even worse, contributes to their displacement as they cannot afford to pay raising rents or leases caused by increased land value after neighborhood retrofitting. As most projects focus primarily on construction, the biggest part of the money is spent on "hard" infrastructure development and centralized service systems (Perlman 2011, De Carlo 2013).³⁷ In consequence, the involved project man-

agers, architects, planners, engineers, and certified construction companies are the main beneficiaries of *the* development.³⁸ Community engagement in priority setting and decision-making is often reduced to a minimum, the lack of community pride and ownership over the improvements tend to become abandoned and fall into disrepair once project offices are closed and construction crews leave the ground. Perlman refers this to the fact, that "the best intentioned and most experienced professionals, nonprofit directors, or community leaders cannot speak for the residents,

always been the greatest challenge long before their living environment. Perlman refers to many of the neighborhoods' struggles after a finalization of favela retrofitting programs to the fact that the major part of investment had always been made in technical infrastructure but not in people—for example via education, capacity building and long-term job creation.

This is at the moment visible everywhere in Haiti: mostly certified companies from the Dominican Republic are executor of large scale (re-)construction activities of the Haitian government, such as the reconstruction of governmental buildings, construction of Caracol Industrial Park, or of major road infrastructure projects.

³⁷ Even if the geographical and societal context of Perlman's study is the Brazilian and the historic context of slavery and rural-urban migration might allow the transfer of certain tendencies and findings. Janice Perlman's book Favela—Four Decades of Living on the Edge in Rio de Janeiro (New York: Oxford University Press, 2011) provides numerous research findings. One is that in the perception of favela residents' access to jobs and job security have

and unless the residents have an influential voice in the process and outcomes, they will remain "clients" rather than "players"" (Perlman 2011, 282). "Soft development"—investing directly in the future of local people by incorporating social, educational, cultural, and local economic components into development action such as funding of qualified teachers, social and day-care workers or skills mentors-would be much more labor-intensive, require more place specific knowledge, their economic efficiency would be harder to evaluate and publicly visible success would be far more difficult to achieve (Id., De Carlo 2013). The slumupgrading project "Jalousie en Couleurs" (Jalousie in Colors) in Port-au-Prince can be taken in this context of abstract accusations as a concrete example for the existing discrepancy between residents' needs and decision-makers' intervention on the ground: The \$6 million project has brought up a huge controversy as a huge part of budget was spent on facade painting while basic services and job creation had not been included in the project, remained under-funded or have been retarded in execution. Many Haitians and residents thus accuse the project of being a "makeup for misery" (HGW 2014 c).

3.2 Historical Fundamentals of the Discourse and Critique of Development

After World War II and the geopolitical reorganization of the world into two opposite blocks during Cold War a rapid process of decolonization takes place. In 1945 UNO is created, announcing the UN Charter with its universal principles, valid under international law. During the 50s colonial power structures are replaced by the new paradigm of development aid. Both blocks try to exert political and economic influence on former colonies to direct these countries' future development. United States of America "primarily uses development as a policy tool in the fight against the spread of communism. The Soviet Union also seeks to develop political allegiances with the newly independent countries" (ARCH+ 2013, 12). In direct vicinity of communist Cuba. Haiti is located in U.S.A.'s zone of influence. Foreign intervention follows the principle of "development through growth": credit-financed modernization and industrialization and integration in the global market are seen as key to growth and property, but the failure of this modernization theory is already visible in the end of the sixties. The Pearson Report published by World Bank in 1969 redefines theory: growth is no longer seen as the goal of intervention but "the byproduct of satisfying all basic material and immaterial needs" (Ibid., 14). Worldwide programs are created to meet these needs: programs for sustenance (FAO), food assistance (WFP), housing (UN-Habitat), health (WHO), labor (ILO), education (UNESCO), as well as programs for freedom and political self-determination. Towards the end of the 1970s intellectuals start critical reflection on the effects of (de)colonization—under the term Postcolonial Studies. By the year 1974 UN General Assembly endorses an Office for South-South Cooperation in United Nations Development Programme (UNDP) "to promote technical cooperation among developing countries," (UNOSSC 2014 a) nevertheless it takes until the late 1990s that south-south cooperation gains importance in the development discourse (Owen et al. 2005). In the 1980s World Bank and International Monetary Fund (IMF)³⁹—both part of UN apparatus—, as well as World Trade Organization (WTO) impose neoliberal economic agenda on highly indebted countries connecting allocation of credits with structural adjustment programs. The aim is to open the countries of the south for the private, global markets in goods movement, services, patents and capital movements. This widely causes privatization of public services including education and health care leading to the exclusion of large parts of society (Ziegler 2011, Farmer 2012). Consequences of these reforms and the loss of sovereignty of many Third World countries leads to the "Postdevelopment Theory" questioning fundamentally the "legitimacy of the development discourse," (ARCH+ 2013, 14) demanding abandonment "... instead of seeking to improve the theory or practice of development" (Ziai 2013, 23). The end of Cold War and collapse of Soviet Union changes development dynamics: global economic enmeshment and networks gain in importance, amplifying contrasts among developing countries. Development Aid becomes more and more directly linked to economic interests of the donor nations and private economy. 1987 the UN-linked World Commission on Environment and Development-commonly known as Brundtland Commission—publishes Our Common Future, identifying that human resource development in terms of poverty reduction, gender equity, and wealth redistribution is a crucial precondition for environmental conservation, recognizing environmental limits to economic growth in industrialized and industrializing societies, and thereby defining normative principles of sustainable development (World Commission on Environment and Development 1987). The report prepares the ground for 1992 Earth Summit in Rio de Janeiro (also known as Conference on Environment and Development), where UN member states agree unanimously to Agenda 21 and its ambitious global goals for sustainable development. By the year 2000, on UN Millennium Summit, the largest gathering

of world leaders, the Millennium Development Goals are ratified to reduce global poverty. Subsequent global conferences state growing disparities between industrial and developing nations and the need to push forward the goals of Agenda 21. More and more NGOs and multinational corporations gain importance within these conferences. National development aid organizations like German GTZ are transformed into federally owned enterprises (GIZ) and redefine their profile from exclusively "development aid" provider towards "world's leading provider of international cooperation services for sustainable development" (GIZ 2014) following social and economic interests of Germany. Rio+20 "Future We Want" Outcome Document of Earth Summit 2012 in Rio launches a process to develop concise, action-oriented, easy communicable and in their number limited Sustainable Development Goals (SDGs) who "build upon the Millennium Development Goals and converge with the post 2015 development agenda" (UN Division for Sustainable Development 2014).

As specialized UN agency with independent charter, governing structure and finances (IMF: Overview), the IMF manages the foreign depth of the so called 122 Third World countries (Ziegler 2011).

3.3 The Role of Development and the International Community in Haiti

In the 1980s Haiti runs through two structural adjustment programs in the 1980s under the control of IMF: one result is import duties for rice are reduced from 30 to 3%. Before, Haiti was self-sufficient with rice produced mostly by local small-scale farmers. Eliminating restrictions on agricultural products, import of rice produced in the highly subsidized, U.S. agriculture system increased from 15,000 to 350,000 tons per year, while local rice production decreased from 124,000 to 43,000 tons, causing large scale rural exodus (Ziegler, 2011). The same has happened with sugar production: Haiti, "once the world's leading exporter of sugar, was also now a net importer of subsidized sugar from the Unite States and elsewhere" (Farmer 2012, 35). Years later, Bill Clinton "publicly apologized for pushing [as president of the United States of America] legislation that undermined Haitian rice production" (Ibid.). Effect of different foreign aid embargoes on Haitian governments during the 1990s and 2000s illustrate influence of "international community" in Haiti. Profound political de-stabilization after a coup divesting president Aristide by September 1991 leads to the blockade of aid including all outlays the United States of America granted to the Haitian government by the Bush Administration. Food items are the only products not affected by sanctions, this was not the case for seeds and fertilizers which were essential for the nation's food security (Weiss quoted in Ramachandran et al. 2012). Due to unstable political situation and embargoes on Haitian exports until 1995, the Haitian gross domestic product falls drastically, resulting in unemployment of about three-quarters of population (Ibid.) As reelection of Aristide in 2000 is widely disputed, World Bank, European Union, Inter-American Development Bank, the United States, Canada, France, and the Netherlands block all aid to the Haitian government. Suspension of aid is continued until the questionable removal of president Aristide in 2004 (Ramachandran et al. 2012).

The coeval turn in the international development assistance to support NGOs instead of potentially corrupt, illegitimate respectively unwanted Haitian governments⁴⁰ led to the fact, that by 2002 the operational budget of the Haitian public sector "governing a population of almost ten million, ... wasn't much bigger than that of the city of Cambridge, Massachusetts [with its 100,000 inhabitants]" (Farmer 2012, 135). Until the eve of the devastating earthquake in 2010 the Haitian government has lacked sufficient operational budget and skilled staff to assure and provide the most necessary services such as food and water provision, public health care, basic education to the public; as consequence, heavy shortages have caused daily loss of life (Farmer 2012). Oxfam's Martin Hartberg et al. stated the same in 2011: "Since the 1980s, the donor community has tended to provide assistance directly through the UN and Haitian and international NGOs so as to circumvent corrupt and inefficient state institutions. However, this in turn has served to undermine the state's ability to fulfill its function" (Hartberg et al. 2011, 11).

During the weeks following the earthquake, Haiti—the "Republic of NGOs"—attained a huge amount of international support and aid. The international public sector pledged, during an international conference in New York, donations of \$10 billion for humanitarian relief and reconstruction until the end of the year 2012 (UN Office of the Special Envoy for Haiti 2011). One year after the earthquake Hartberg et al. witnesses that the International Community (UN agencies, the Interim Haiti Recovery Commission (IHRC) and countless NGOs) "has too often ... undermined good governance and effective leadership" (Hartberg

By the year 2008 the net foreign aid for Haiti is approximately \$90 per capita (UN Office of the Special Envoy for Haiti 2011).

The numbers of NGOs "operating in Haiti prior to the earthquake range from 3,000 to as many as 10,000" (Kristoff et al. 2010, 1).

The Interim Haiti Recovery Commission (IHRC)—co-chaired by former U.S. President Bill Clinton—was established by April 2010 to bundle and manage worldwide relief efforts.

et al. 2011, 7) by bypassing the Haitian people, local government and ministries during post-earthquake reconstruction (more accurately since the 1980s) (Id.) By the end of 2012, only slightly more than 50% of the pledged donations had been disbursed. While NGOs and private contractors appear to be primary intermediate recipients of funding, the Government of Haiti received less than 10%. Less than 1% went directly to Haitian NGOs and companies (Ramachandran et al. 2012; UN Office of the Special Envoy for Haiti 2012). The highly recommendable book Haiti after the earthquake by Paul Farmer, who has worked for about thirty years as physician in Haiti, describes undertaken international efforts before and in the aftermath of the earthquake, thereby elaborating-from his perspective of the United Nations Special Envoy for Haiti-a highly diverse image, packed with in-depth views of "the dysfunctional system of humanitarian aid—a system that, good intentions aside, has become another obstacle to Haiti's recovery and sovereignty" (Farmer 2012, blurb).

One of his key points concerns the fact that only the Haitian government can be the sole entity who holds the mandate to serve the entire Haitian society with public services and fight extreme poverty. Limited in legitimacy for public action, as well as in capacity, NGOs follow a working methodology that addresses and advocates target groups and is founded widely on donors' interests. This, together with the lack of coordination and cooperation, causes the problem that action remains locally scattered and socially limited. Long-term effect and effective reduction of grievances and vulnerability in society stand out as NGOs fail with to upscale interventions and strategies on a regional or national level. With a still very limited budget in the fiscal year 2014,43 and with the lack of expertise in its agencies, the Haitian government has been unable to fulfill its mandate (Id.). Assistance Mortelle (Fatal Assis-

tance) (2012)—a long-term observant documentary by director and former Haitian Minister of Culture, Raoul Peck, further aggravates accusations against the International Community by showing a controversial view on the efforts and achievements of the two-anda-half-year long relief and the "Building Back Better" campaign carried out by the International Community. This critique revealed major issues in the relief work, including the fact that by November 2010, still more than ten million cubic meters of debris from damaged buildings remained in Port-au-Prince, hampering relief work and reconstruction efforts, partially due to a lack of a common debris removal strategy and similar policy guidelines. Few organizations focused on this prestige-lacking debris clearing, while it occurred that other works many concentrated on were carried out twice (Jean-Louis et al. 2011; Raoul Peck: Assistance Mortelle 2012).

For the fiscal year 2014, the government's operational budget is still only twice as high (\$1 billion) as the one of Cambridge (Geffrard et al. 2013; City of Cambridge, MA. Cambridge Budget Department 2013).

3.4 Proof of Humanitarian and Development Aid-Related Issues on the Ground: Camp Corail, Canaan

The setting up of both sectors of Camp Corail by the international community, "humanitarian agencies like the International Organization for Migration (IOM), World Vision and American Refugee Committee (ARC) together spent over US\$10 million" (HGW 2013 b). Contributing \$7 million (Id.) as "emergency aid" (World Vision 2014) the NGO World Vision has been one of the major actors of the transformation from a tent camp towards the actual camp structure, financing temporary shelters, different playgrounds, a public school, and training and employment of teachers, carrying out small social programs, as well as establishing six community-organizing committees (Id.). Oxfam International contributed a public water provision system, community latrines, and additionally a funding program for micro-businesses to the action of the "international community," others build drainage infrastructure and solar-powered street lights, a mobile health clinic was established. ARC and IOM both had leading roles in the provision of basic services and camp management.

Listening to critical Haitian voices—for example in the documentary Assistance Mortelle (Fatal Assistance) (2012) or in the investigations of Ayitikaleje (Haiti Grassroots Watch, HGW)—these image" rapidly lose their brilliance. Many of the accusations are confirmed when one investigates details in personal interviews with residents in the camps and with involved development practitioners in Haiti. Many of the services had not been completed, other social and economic programs had already come to their end, and infrastructure was already deteriorating when the author visited the camps the first time in April 2013.

All international actors had left the camps, leaving its 10,000 residents and their committees alone with the lack of basic services—or as HGW reports in June 2013: "Trumpeting their success and claiming to have

prepared a "transition" to the local authorities, IOM, ARC and World Vision all pulled out" (HGW 2013 b).

People were living almost three years in lack of appropriate drinking water provisions: Three years after the inauguration of the camps—by summer 2013—the promised infrastructure, consisting of cisterns and a network of interconnected public water kiosks, finally goes into operation by the state water agency DINEPA, providing affordable drinking water to the residents.⁴⁴ The project was designed for a temporal and financial framework of two years, with contracts of project managers limited to this timeframe. When problems occurred during the implementation and the two years passed, the project came to a standstill until its finalization in 2013 (Personal communication with Agathe Nougaret, Antonio Andres, and John Heelham, Oxfam International, 2013).

From the perspective of environmental risk exposition, flood protection measures constructed are extremely insufficient to resist a major flood event, as dams consist of loose material, dug out from the riverbed of Ravine Madaniel during the camps construction.⁴⁵

Drainage infrastructure inside the camps varies between high quality concrete ditches in sector three and unfinished earth ditches in sector four.

Public and semi-public latrines that had been constructed by World Vision and Oxfam in Corail camp

that a new system of cisterns and kiosks would soon provide residents with water from the state water agency. Two years later, the faucets remain dry... Residents buy water ... from private vendors or from the committees that manage the few still-functioning water "bladders" left over from the camp's early days when water and food were free and when agencies provided "cash for work" jobs and start-up funds for would-be entrepreneurs (HGW 2013 b). The difference in price of drinking water between public and private providers in the area is factor 12.5—DINEPA-kiosks charge 2 Haitian Gourdes per 5 Gallons, most private providers charge 25HTG.)

⁴⁵ For more information please refer to Chapter 2.3 Site Characteristics and Environmental Hazard Exposition of Canaan and Haiti.

and Onaville today heavily lack maintenance: many are unusable—heavily damaged by vandalism, or are filled up with feces due to the lack of regular emptying. 46 Most residents therefore use the ravines and riverbeds for open defecation, exposing girls and women especially at night potentially to sexual violence.

In late 2013, the handover of the public school from World Vision to the Haitian government and a resulting retraction from teachers' wage payment immediately resulted in an introduction of tuition fees, thereby excluding many of the benefiting children of Jerusalem, Canaan and Onaville neighborhoods from education (Guin 2014).⁴⁷

Unemployment is one of the biggest issues encountered in interviews with residents of Corail. Aside from day-jobs in the informal construction works of Canaan, or work in barber shops, private water kiosks, and private kiosks, there are no real job opportunities in the area. For qualified or specialized work, people need to spend a large amount of time and money on transport to Port-au-Prince. Micro-business programs by the involved NGOs did not really help to solve the problem, as the scale was far too small, and strategies were unable to tackle the fundamental lack of a local job market in the remote zone of Canaan. Even if providing some residents with the necessary means to open a small business, some programs are the reason of new frustrations: "An Oxfam program that handed out up to US\$1,000 to some—but not all—small businesspeople led to disagreements, rumors, protests and eventually arrests" (HGW 2013 b).

Another reason for social tensions and frustration in Onaville and Canaan is caused by the NGOs only having the ability to support **target groups** respectively and a very insufficient part of a target group in the

Many of the exemplarily highlighted deficits, conflicts, and frustrations on the ground can be attributed to the specific context of hasty planning and insufficient coordination of relief work in Port-au-Prince and the opening of IDP-camp Corail. Others, such as the striking delay in the provision of affordable drinking water, can be better attributed to the general, system-inherent issues of humanitarian disaster relief and development aid, such as the short-term nature of the sector. However international decision-makers, development practitioners and Haitian government have learned many lessons in the direct aftermath of the earthquake in Haiti. As of in 2012, a turn in development assistance has been looming in Haiti: Since governmental entities have been reinforced with qualified, often on a project-based hired, international and Haitian staff, and since the establishment of different multi-stakeholder platforms such as sectoral groups, focus groups and work groups, international actors have begun to channel money through selected governmental entities.48 Two examples are the newly created Unit for Housing Construction and Public Buildings (UCLBP),49 and the National Geospatial Information Centre (CNIGS).

context of big disasters: As a logical result of bundled foreign aid in the camps, IDPs in Camp Corail now live in their wooden shelters in relatively secure conditions with access to some basic services, while many other earthquake victims, settling in the un-planned part of Canaan, have never had access to this aid.

None of the organizations had prepared a takeover by local entrepreneurs or management committees before leaving the ground.

Before the public school of Corail Sector 3 had been the only school providing free education for children not only from the camps but also from surrounding neighborhoods.

In the meantime, the government increasingly reinforces south-south cooperation with the Union of South American Nations (UNASUR), Venezuela, Cuba, Mexico, Ecuador (UNOSSC 2014 b).

⁴⁹ UCLBP was formed after the earthquake; first, to reconstruct destroyed public buildings, second, to coordinate housing interventions and set up the new National Housing Policy and third, to help displaced people to return to their neighborhoods and to reconstruct them (UNDP 2013).



Fig. 24: Street life in UN Camp Corail, Sector 4



Fig. 25: Water cisterns of Camp Corail



Fig. 26: Community toilets and a DINEPA water kiosk (Sector 3)



Fig. 27: Public open space, Sector 3



Fig. 28: Manmade channel of Ravine Madaniel (Sector 4)



Fig. 29: Filled with feces, many community latrines are unusable, 2012 (Courtesy of Gökce lyicil/Fidan)

3.5 Citizen Involvement as Solution? Examples from the Field of Participatory Retrofitting and Multi-Stakeholder Cooperation in Haiti

The German Federal Ministry for Economic Cooperation and Development (BMZ) highlights the important role of participation for successful project execution in the context of development cooperation: "Participation contributes to an articulation and enforcement of the interests of target groups and partner organizations of development cooperation (empowerment). Participation further means that people introduce their experiences and moral concepts in cooperative work. Thereby they take ownership of undertakings and assume responsibility for their success" (BMZ 2014).

This shows that the multiplicity of unsuccessful projects and the critique of development have led to a great rethinking of development policy and practice. Nanz and Fritsche explain: "Dialogue-oriented - procedures bring together citizens, actors from civil society, and decision-makers in a political process, designed to exchange opinions, negotiation of a collective will, and—in the best case—consensual decision-making. ... [This] does not mean to replace existing models of representative democracy but rather targets to provide a constructive addition—a political space for collective negotiation of solutions in a complex, multi-cultural, and globalized social system" (Nanz et al. 2012, 11f). As "participation creates an understanding of political processes and raises democratic awareness of all participants," (Nanz et al. 2012 2012, 9) citizen involvement—by promoting the takeover of common responsibility in society—provides fruitful strategies for a multitude of issues and tasks: assessment of local needs, early identification of possible problems, embedment of local knowledge and resources, minimization of investment risks, and efficiency-deficits in implementation of programs and development.

Well-designed procedures can therefore highly contribute to possible rapprochement of conflict parties, elaboration of commonly supported decisions,

improvement in communication between authorities, decision-makers and citizen, and thus to a recovery of public confidence in politics and administration (ld.).

Decades of experience in reforestation, watershed protection and small-scale agroforestry projects in rural Haiti give a proof of the increasing private initiative of plot-holders where confronted with higher responsibility throughout all projects' planning and implementation phases. In the urban context, recent showcases from the Haitian reconstruction indicate the same tendency and show that multi-stakeholder approaches provide promising answers to deficits such as mismanagement of projects or the lack of coordination.

The 16/6 Projects, where sixteen underprivileged neighborhoods have been rehabilitated to facilitate the return of earthquake affected families from six camps in Port-au-Prince,⁵¹ and their successors, the program for integrated development of informal neighborhoods of Port-au-Prince: Martissant et Baillergeau (AIQIP),⁵² and the integrative neighborhood approach used in Simon Pélé neighborhood of Cité Soleil⁵³ can be

⁵⁰ Personal communication with Nicolas Morand, Volmy Merise and Benoît Jeune (HELVETAS Swiss Intercoperation Haiti, May 28, 2013).

The 16/6 program was initiated by the Presidential Office of Haiti (IHRC 2011) and pursuits a bottom-up approach on very high level: based on initiative in neighborhood committees, habitants and community leaders get the possibility to become active stakeholders in a community-led reconstruction and development of their neighborhood—in time taking over responsibility inside a Community Action Plan (personal communication with the architects Gerardo Gazmuri, Care/America Solidaria, April 27, 2013, and Nazanin Mehregan, Architecture for Humanity, May 19, 2013). An overview and further information can be accessed on the projects' website on http://www. projet16-6.org/, a detailed analysis of the cooperative framework in Villa Rosa neighborhood retrofitting can be found in Nazanin Mehregan's Master's thesis "The Architecture of the Process-Process-ology of an Integrated Upgrading Plan for the Informal Settlement of Villa Rosa, Port au Prince, Haiti" (Universitat Internacional de Catalunya, 2012).

A description of the program can be accessed online: http://uclbp.gouv.ht/pages/60-aiqip-fiche-du-projet.php and http://uclbp.gouv.ht/pages/170.php

⁵³ A description of the program can be accessed online: http://www.habitat.org/disaster/active_programs/



Fig. 30: Subsistence farmers establish contour bonds with hedgerow cultures in a watershed of Petit Goâve

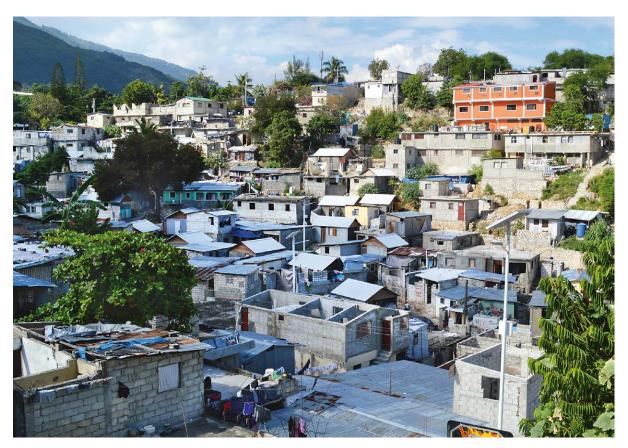


Fig. 31: The 16/6 Program implemented street lights, improved pathways and sport fields in Villa Rosa, Portau-Prince (Courtesy of Raphaela Guin, 2013)

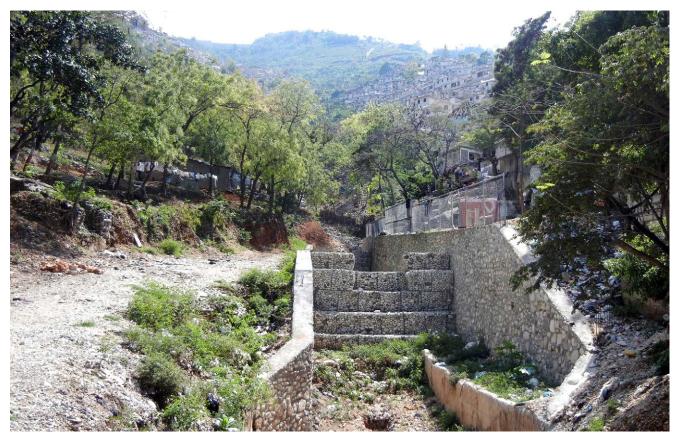


Fig. 32: Ravine with basins for debris load retention in a Morne l'Hôpital neighborhood, Port-au-Prince

seen as the first, very important steps towards better coordination of action, multi-stakeholder cooperation, community-based decision-making and governmental project leadership. In the context of administration an example of multi-stakeholder coordination needs to be mentioned: the setup of six focus groups⁵⁴ consisting of representatives of national institutions and mainstakeholders has enabled the UCLBP to exchange experiences and elaborate policy guidelines. Starting work in 2013 the focus groups so far influenced the new *Politique Nationale du Logement et de l'Habitat* (National Housing and Habitat Policy) which was presented to public audience by October 2013 (UCLBP 2013a; UCLBP 2013b).⁵⁵

transforming_communities.aspx

Work group exist for Sites and Services, Assisted (Auto-)Construction, Canaan, Land Tenure, Standards and Guidelines and Housing Financing (UCLBP 2013a).

55 Its application will show if national and local authorities, backed by international partners, regain a leading role in urban planning, manage to upscale the promising pilot projects and thus reduce the gap between formal and informal neighborhoods in Haiti.

Chapter 4: Academia in the Context of Development and Citizen Involvement

The Research Enterprise

Everyone is talking; no one is listening. Everyone wants to design. Doesn't anyone want to think? [...] Cities are traditionally studied in the context of a single discipline: economics, politics, media studies, ecology, architecture, or sociology. But in urban design education, an interdisciplinary approach to the creation of urban environments is essential in confronting the task of understanding what now exists and when inventing new paradigms for the exploding cities of South America. The current problems of massive urbanization cannot be solved in a unitary, isolated fashion, but require multiple and simultaneous approaches. Nevertheless, while teaching in local universities, we have found that design schools fail to respond to the urgent problems of 'real life' in the barrios [slums, bidonvilles], even though the southern hemisphere is in desperate need of such responsive and thoughtful projects.

Quoted from Brillembourg and Klumpner 2005, 102f.

Due to the focus of the work, a quick overview over academic intervention in development becomes necessary. The chapter only very roughly touches the design-build movement (also called projects built at 1:1 scale, or self-construction) in the global context, for a more extensive background and theoretical discourse reference is made to chapter 'Design-Build' in ARCH + Volume 211/212 Think Global, Build Social (2013). On the other hand, some backgrounds of academic intervention by Harvard Graduate School of Design (GSD), Massachusetts Institute of Technology (MIT), and TUM are provided, that had preceded TUM-USO's work, partially with involvement of Christian Werthmann in his former roles as professor at GSD and as Hans Fischer Senior Fellow of TUM Institute for Advanced Study (TUM-IAS). The chapter concludes with reflections on academia's possible role in participatory procedures.

To start the critical wrap up of academic intervention in development, Alfredo Brillembourg and Hubert Klumpner are quoted, who questioned in 2005 that education at design schools widely fail in the task of equipping students with skills, strategies and tools for planning and designing with and in the circumstances of informal settlements. Future planners all over the world thus lack preparation and expertise for a phenomenon that, in a global view, dominates great parts of their planning reality.

4.1 The Design-Build-Movement and Experimental Construction Activity

Referring to a very similar critique, the Design-Build movement, no matter if executed in Western world or developing nations, are implemented to tackle the problem, that "academic instruction of architects has moved further and further away from working with the realities of construction" (Steiner 2013, 154). As an important reference of the movement in academia can be seen the Rural Studio, which was founded in the early 1990s by architect Samuel Mockbee at Auburn University, Alabama, in order to demonstrate social necessity and possibilities of creative, practical architectural education in places marked by socially precarious circumstances. Rural Studio's working methodology in Hale County projects was grounded on an intensive collaboration with local social aid organizations, and on the principles of participants' self-organization, self-planning and self-construction. Especially since the 2000s a multitude of architecture classes have worked on design-built projects—with a focus on African and developing nations—with the intention of confronting architectural students with real life, and locally available resources, by emphasizing sensitive communicative learning oriented on local cultural circumstances, construction methods, needs and the empowerment of local population.⁵⁶ Embedded in the context of international markets with their globally applicable solutions in spatial design, development and humanitarian aid, these academic projects may serve as a method of critical, reflecting education heading for cultural diversity, heterogeneity, anti-authoritarian architecture, thus questioning global business dominated by Western hemisphere's interests (ld.). If design-build projects are seen in an education perspective, the common accusations—neo-colonialism, waste of money, provision of placebo-solutions for social or structural problems, "aid tourism," exploitation of cheap, volunteer manpower-defuse

56 Prof. Hermann Kauffmann's design-build projects building in Africa are examples for this academic initiative at TUM.

at least partially. But it has to be named clearly that this academic working methodology remains often very self-centered, with students' technical education and practical learning clearly in the foreground of intervention. Instead of being used as starting point, the involvement of local community as part of an open-ended, cooperative learning, planning and design process remains often only one cornerstone among many. The consequence is that, once again, technical dominate over social and economic aspects of a project in urban design, (landscape) architecture, engineering, or environmental planning education.⁵⁷ Real respectively long-term change of living conditions thus often misses out as local community's capacities have not been sufficiently built, and economic and social networks not sufficiently integrated or expanded within a project's development process.

After finalization, many academic design-built structures—same as many others provided in development business—in the lack of local empowerment and ownership, run the risk of relying on operation and maintenance by often weak or corrupt public authorities. This approach may seem sufficient where authorities act in a socially-inclusive and democratic way, yet these principles especially in developing countries are often not followed. On the other hand, time has proven that academic projects in developing nations can act as a kick-starter for further local initiative: students contribute their knowledge and findings as volunteers or young professionals to the pursuit or development of the same project, or in different local contexts of development.58 Specialized research formats such as MIT's D-Lab, specialized research institutions such as the Aprovecho Research Center which focuses on

This can be probably related to the very un-flexible schedule within academic education.

From such community involvement of students, initiatives such as Kounkuey Design Initiative (KDI) have arisen, that started 2006 in Kibera, Nairobi, Kenya and now acts in 13 projects in Africa, Latin America and the U.S.A for transformation of "impoverished communities by collaborating with residents to create low-cost, high-impact built environments (Productive Public Spaces) that improve their daily lives" (KDI 2014).

improved low-cost cooking stoves, or others, address dominant issues of development business with applied science by cooperatively researching innovative, low-cost, easy-to-use, and DIY-technologies, combining technological research, which is in cases backed by technology promotion in the local circumstances, capacity-building, technical assistance, a business plan for upscaling, and network building (MIT 2014 a; Aprovecho Research Center 2014).

Concluding one can say, that the success of academic design-build projects and their real impact on living conditions in terms of empowerment of local people, "ownership", participation and provision of basic services depends, same as within the development business, entirely on how theory is put in a distinct local context into practice.

4.2 Academic Action in Haiti

After the earthquake, many prestigious, especially U.S. universities have discovered their potential to contribute to post-disaster aid, and better reconstruction and development in Haiti. There have been countless academic initiatives and research conducted in Haiti or from far away, fueling an academic discourse on the topic in University of California (UC), MIT, GSD Harvard, University College London (UCL), and many other research institutions. MIT and UC efforts have to be emphasized as both, besides having carried out a multitude of different academic initiatives in Haiti, are building up long-term partnerships on education with universities, schools and the government in Haiti in order to support better public, tuition-free education long-term capacity building and training, and science.⁵⁹ Apart from these institutional partnerships,

many student labs have been focusing on the development of applicable low-cost solutions and strategies for Haiti: MIT Media Lab for example developed *Konbit* (Creole for a distinct mode of rural cooperation, mutual aid), an automated phone-based employment service to connect unemployed Haitians with NGOs, researched on-site the potential of pedal powered electricity generation and other topics (MIT 2014 d; MIT 2014 e; MIT 2014 f).

At the end of this chapter academic intervention is introduced that preceded TUM-USO's work in Haitiwith involvement of Christian Werthmann in his (former) roles as professor of landscape architecture at GSD and as Hans Fischer Senior Fellow of TUM-IAS: In 2011 MIT Department of Urban Studies and Planning and Graduate School of Design, Harvard are approached by the Deutsche Bank and Clinton Foundation to become part of a research project for the new development of Zoranje, a housing site with 400 building units funded by IDB, and another 125 by Deutsche Bank Foundation, ten kilometers north of Port-au-Prince in Cul-de-Sac plain. Looking for "sustainable" and "replicative" designs of housing units, Deutsche Bank hired the academic team, which conducted community meetings, and surveys, and found that sustainable development of a community in Zoranje could only be initiated if starting with a "job training program while also constructing critical infrastructures" not by focusing on the design of 125 housing units (studioWEISSMAN 2014 a). Trained construction workers in the new community should then build homes for new residents (Id.).

leadership training to Haitian officials. ... [By June 2014] The MIT-Haiti Initiative has already trained more than 100 teachers in STEM subjects and has presented Haitian government officials with world-class leadership education" (MIT 2014 c).

[&]quot;The MIT-Haiti Initiative was designed to address issues of poverty alleviation, economic regeneration, the democratization and modernization of education, as well as continued recovery efforts ...The multiphase program provides [Kreyòl-language] faculty training and curriculum development for teachers in science, technology, engineering, and mathematics (STEM). More recently, MIT Sloan Executive Education has offered management and

[&]quot;UC Haiti Initiative (UCHI) [which started in February 2010] is a global partnership for higher education that connects students, faculty, administrators and alumni from the University of California and the State University of Haiti to create educational, research and public service partnerships towards the development of Haiti" (UCHI 2014). UCHI partners with Haiti's largest public institution of higher learning, the Universite d'Etat d'Haiti (UEH).

The elaborated sustainable community development scenario that is followed by clear recommendations for precautions and further studies was not followed by the decision-makers, the project team completely lost control over the project. Instead IDB funded the development of 400 housing units, chosen as political flagship project by the new government of president Michel Martelly. Lacking basic infrastructure such as schools, job opportunities, public water provision, adequate drainage structure and well-designed open spaces, the implemented project has nothing to do with MIT and GSD initiative, informal occupation, lack of basic infrastructure and lack of community proofed academic prognoses and doubts (personal communication with Christian Werthmann, July 4, 2014; own observations based on a site visit by June 2013).

In 2012 MIT school of Architecture and Planning, Harvard Graduate School of Design partners with the NGOs Oxfam America and Haven for the Gressier Community Development Project, a small, permanent housing project for about 80 families on a greenfield development site in Gressier. The academic group designs "an urban plan that inherently connects basic infrastructures to community development opportunities" (studioWEISSMAN 2014 b), integrating water provision, sanitation, natural water retention, "community spaces to facilitate this integration, ... [and] models for collaboration with local organizations to support livelihoods opportunities through the development of small-scale composting and agricultural production within the community" (Ibid.). Design has been discussed with the community and elaborated with local authorities, but shipwrecks in the last minute before construction start due to land tenure and ownershiprelated issues-apparent land owners claimed their right (personal communication with Christian Werthmann, July 4, 2014).

With this personal experience in mind, Haiti initiative as part of Werthmann's TUM-IAS Fellowship at

TUM tries to follow another path: 60 not the built object and students' learning from construction has been the main objective, but multifunctional, landscapebased resilience strategies and infrastructure tactics for at-risk communities in Haiti-contributed to a professional discourse by landscape architects in close cooperation with environmental planners, and urbanists. With the case study of retrofitting in the city of Medellín, Colombia in mind, the emerging Haitian city of Canaan had been selected for applied research by PhD students. Due to a lack of interested PhD candidates of landscape architecture, a loose group around a PhD student in integrated water management, backed by several Master's students, has been formed. The research group and its work is described in detail in chapter five. Circumventing constraints in time and orientation, first initiative comes this time from academia, not from NGOs or funding entities. Like this, conflicts and distortion of research results would be less probable-reducing thereby the risk of failure—interlinkage with local community more likely (personal communication with Christian Werthmann, July 4, 2014).

Hans Fischer Senior Fellowship enabled the organization of two international conferences— "Metropolis Nonformal" (2011) and "Metropolis Nonformal—Anticipation" (2013)—same as international network building, and promotion of PhD students at TUM.



Fig. 33: Zoranje housing, 2013



Fig. 34: Degraded building exposition, Zoranje 2013

4.3 Reflections on Academia's Role in the Context of Citizen Involvement

The inherent institutional neutrality enables academia to take an almost unique, partially critical dual role in public discourse and decision-making: becoming provider of expert knowledge and mediator in public discourse and participatory decision-making of a democratic society in the same time. The question if it is possible to take both roles in participatory procedures, and how exactly neutral mediation can be guaranteed while providing topic-relevant input would need further critical reflection. Yet this cannot be covered in this work. Instead in the following some key facts are be wrapped up in order to line out the key aspect why academia in the author's view is destined for getting involved into citizen involvement.⁶¹

Grounded on its fundamental right to self-administration and on the freedom of research, secured by the tenure-track system, academia has an almost unique degree of "autonomy" from temporal, economic, same as party- or geopolitical interests and constraints. In addition, academia enjoys respect and trust across all parts of society, same as among political and economic decision-makers. Due to public financing, university has the possibility and the obligation towards society to carry out and promote both interdisciplinary education and research in order to identify problems and elaborate specific solutions. Academics are enabled by its scientific and societal mission to gather different opinions where necessary and at any point of time. If taking an active role, this

described openness and objectivity of academic work can provide important inputs to enable, accompany, or even lead participatory processes.

Academia may contribute further to different categories of public discourse—pursuing each time different objectives, and using different procedures of participation: researchers and students may contribute to a knowledge discourse among experts, to a reflective discourse among concerned citizen and key actors, and to a discourse of design of concrete options for action. While in the first, an accurate depiction of a phenomenon is targeted by experts, the second's objective is to interpret different facts and structure different interests. This is carried out in order to clarify preferences, trends, and values, same as to carry out a normative assessment of problems and proposals both for preparing decision-making and preemptive conflict prevention. The third has as goal to elaborate concrete options for action and to operationalize solutions for concrete problems, thereby including mediation (Renn 1999).

Especially in the last two categories of discourse, the public communication of technology and specific knowledge stands in the focus of academic action. If academia reinforces its efforts in providing knowledge in an easily comprehensible manner, each field of research can contribute its specific and crosssectoral knowledge to render the public discourse more constructive. Accurate, educational work can be performed among the participants of the respective participatory procedures by disclosing hypotheses, scientific explanations, and possible options for the solution of a distinct problem. But this requires that scientists, educators and students in all disciplines from early on learn how to transmit their specific knowledge in the dialogue with decision makers and civil society, as well as how to design "good" participatory procedures.

Reflections refer in great parts to debates in two intensive seminars on Citizen Involvement led by Dr. phil. Jörg-Wilhelm Wernecke and Dr. Thomas Hamacher at TUM in 2013/14. The seminar involved to a huge extent practical input by experts working in public administration, administrative jurisdiction, infrastructure planning, technical and social science, and mediation.

⁶² Interweaving with politics and the business sector—for example through third-party project- and tenure-track funds—in cases may raise questions on this independence, but it can be stated, that in general autonomy of academia from external constraints is far greater than of other institutions and business sectors.

Chapter 5: Neighborhood as Main Stakeholder in a Cooperative Process of Urban Development

Urban Strategies for Onaville (TUM-USO) is the interdisciplinary project platform of a research group consisting of several master students at the Technical University of Munich (TUM) working on integrative strategies for a more disaster-proof urban development of Canaan's subsection Onaville. Onaville neighborhood had been selected as priority area of research in Canaan as it shows the condition of having numerous environmental risks-flooding, erosion and landslides—along with potentially favorable zones for urbanization, releasing population pressure from Haiti's overcrowded capital Port-au-Prince. 63 In a retrospective evaluation of executed, practical work in Onaville this chapter provides detailed insights into the project's general framework, as well as into collaboration and cooperation of TUM-USO students with actors in Haiti. Profiles of important actors in Onaville and Canaan follow in order to facilitate future design and execution of participatory procedures in future community-based development action of Onaville. The description of citizen involvement methodology is followed by a detailed analysis of procedures that have been carried out—in order to allow final evaluation and recommendations at the end of this thesis.

63 If not marked explicitly facts presented in chapter five are based on author's first-hand observations, community-based action, as well as expert and stakeholder meetings in Haiti.

5.1 Objectives of TUM Research Platform Urban Strategies for Onaville

Due to weak economic and educational resources in most Haitian households, the absence of basic public services and an almost total lack of regulation and planning by the authorities, TUM-USO project platform aims to propose economically feasible, applicable and sustainable solutions for the urban development of Onaville settlement, Canaan. Considering demographical structure and social habits the research group aspires to elaborate and propose concepts for integrated management of water, land, urban structure and productive open spaces, as well as of related resources in order to increase the economic and social welfare in the underprivileged urbanization. Concepts include the protection of functional ecosystems for future generations, respectively the restoration of severely disturbed, and search for strategies for prevention and mitigation of environmental hazards in the zone heavily marked by deforestation, landslides and flooding. The research group aims to achieve these objectives on the one side via interdisciplinary collaboration and cooperation among planners, (landscape) architects, environmental engineers and other "urban disciplines" at TU Munich, on the other side via trans-disciplinary field work in Haiti.⁶⁴ For the latter,

Fast growing slums and bidonvilles in cities all over the world show that multiple issues of fast-growing, underprivileged urbanizations can neither be solved by professional compartmentalization nor singularly by development of hard infrastructure as both approaches are greatly unable to provide answers to the lived reality and social hardships which cause informal growth and related lack of basic services.

objectives and working approach changed during the evolution of the project. Especially reacting on the conditions on site, the intervention concept of TUM-USO researchers and students developed towards a more pro-active, intermediary role of academia mediating between technical assistance for the local community incorporating educative and implementing elements and conceptual thinking.⁶⁵

5.2 Organization of TUM-USO

Since 2012, doctoral candidates and Master's students of the Technische Universität München, under the direction of Professor Christian Werthmann (Hans Fischer Senior Fellow, TUM Institute for Advanced Study), Regine Keller and Thomas Hauck (Lehrstuhl für Landschaftsarchitektur und öffentlichen Raum), Harald Horn and Brigitte Helmreich (Lehrstuhl für Siedlungswasserwirtschaft), have been addressing the aftereffects of the earthquake in Haiti on a landscape and urban planning level.

With doctoral candidate Gökce Fidan (environmental engineering), ⁶⁶ the »Focus Group Onaville« starts its transdisciplinary work on small scale, landscape-based water management strategies and urban planning for improving living conditions in the east-ernmost neighborhood of Canaan—which suffers the most from natural hazards. The interdisciplinary project arises from collaboration between the chairs of Landscape Architecture and Public Space (Prof. Regine Keller and Dr. Thomas Hauck), ⁶⁷ Sustainable Urbanism (Prof. Mark Michaeli), as well as Urban Water

Systems Engineering (PD. Dr. Brigitte Helmreich). With proceeding of academic research and community-based work in Onaville, the chairs of Hydrology and River basin management (Prof. Markus Disse and Dr. Wolfgang Rieger) and of Hydraulic Engineering and Water Resources (Dr. Franz Zunic) joined the group.

TECHO and small grants from German Academic Exchange Service DAAD and TUM task force for Development Cooperation enable the integration of internships and fieldwork in Haiti. As the researchers work entirely on their own initiative, they stand to a certain degree outside of economic and political constraints and remain flexible to react on changing conditions due to community-led activities. Out of their personal interest in the Canaan Case, students contribute as volunteers by providing their personal resources to project organization and fieldwork in Onaville.

By July 2014 research group consists of seven Master and one PhD students. In the initial phase in late 2012 Johann-Christian Hannemann, Master student in Urbanism, and Sean Kerwin, Master student in Environmental Engineering joined the working group around Gökce lyicil/Fidan. The author working on analyses concerning environmental hazards and urban growth⁶⁸, Kerwin elaborated first principles and strategies for water provision, sanitation and drainage infrastructure in his thesis *Drainage*, *Water and Sanitation Infrastructure Improvement in Impoverished Areas—A Case Study of Onaville*, *Haiti*, completed by March 2013.

During the author's extended site visit from April to June 2013 in Haiti, three Master students joined the group for the final thesis: María Alejandra Casanova, Master student in Sustainable Resource Management who completed her theoretical thesis *Sanitation Strategy for Onaville* by December 2013, Raphaela Guin,

This mediation role of academia is not only limited to the content of action, but extended to active mediation between the community, NGOs or other actors and authorities. Within this process educational aspects and visionary, integrative concepts need to be submitted to the other stakeholders.

Work group for Advanced Water Treatment and Water Recycling, Chair of Urban Water Systems Engineering

Thomas Hauck, since 2014, is research assistant at University Kassel and left his position as supervisor.

⁶⁸ For more information refer to the report of the Master's Project Analyses Onaville—Environmental Risks and Urban Structure (Hannemann 2013)

student in Architectural Urbanism, and Valentin Heimhuber, another student in Environmental Engineering. By July 2013 lyicil/Fidan resigned for personal reasons work inside the research group.

Guin—together with Kerwin following up the author's field work and community-based action in Onaville (October and November 2013)—developed a proposal for an architectural, community-led design framework for the creation of community centers. She finished her Master's thesis Urban catalyzers—Places for the community by April 2014.

Heimhuber worked on his Master's thesis *GIS Based Flood Modeling as Part of an Integrated Development Strategy for Informal Settlements—A Case study in Applying GIS (ArcMap) in Combination with Hydrologic (HEC-HMS) and Hydraulic (HEC-RAS) Modeling Software to Estimate the Flood Risk of Onaville—Canaan—Haiti and completed work by December 2013. Together with the author, Heimhuber, by March 2014, contributed one month to evaluation of his research results, as well as to community-based work in Onaville. Thereby he presented his research findings to various actors and stakeholders from governmental agencies to NGOs, as well as to the community in Onaville.*

Heimhuber and the author have elaborated a contingency plan together with residents, leaders and TECHO. Its first phase—an extended an awareness-raising campaign in risk zones of Onaville—was carried out in June 2014 by TECHO volunteers, residents and leaders of the zone.⁶⁹

During this field visit the necessity of a continuation of the flood hazard research in Onaville with another, two-dimensional hydraulic model integrating debris accumulation became visible. As did the elaboration of a site-specific design and testing of specific

flood protection measures, which would be necessary to provide governmental and non-governmental key actors with constructive recommendations. This research and design work was carried out in 2014/15 by Wolfgang Krötzinger and Bjarne Bächle, two Environmental Engineers in their Master's theses.

5.2.1 Interdisciplinary Work: Cooperation of Chairs and Students at Technical University Munich

Regular research group meetings have brought together participating researchers, tutors and academic supervisors from the different cooperating chairs. Group meetings take place every or every second month in TU Munich, opening space for students' presentations of intermediate results and feedback, as well as for general coordination of the research group, of planned activities in Haiti, or of the need for further research. Meetings are in general hold in a mode of equal communication between all participants; exceptions are final presentations. The presented participating students have personally collaborated to a great extent on different topics. The most important are explained as follows: Students acquire and share data and information in individual meetings and feedback sessions, as well as by establishing and organizing an intern data platform.

Facing the task to contribute generally to improved information exchange among stakeholders in Haiti, the research group on one the side launched an online project site on OpenArchitectureNetwork providing research data and fact-sheets, 70 on the other provided basic data to commonly used databases. 71 Analyses, assessments and recommendations are partially elaborated in joint action, each one contributing her/

The network website was no longer maintained

when Architecture for Humanity closed down. As a replacement, the Wikipedia article on Canaan was fed with information.

⁷¹ For more information on used data platforms see Chapter 7.2 Recommendations.

⁶⁹ Onaville's Contingency Plan is presented in Chapter 6.1.

his specific knowledge and discussing critical points in order to create better, more integrative outcomes. Thereby constant input and feedback loops are established between practical research or neighborhood action in Onaville and the theoretical work in Munich, feeding the other side with specialist knowledge—such as the identification of measures and issues, calculation and design based on specialist, global and local literature-or important insights retrieved from thematic community workshops—for example potential users' habits, cultural preferences and doubts, locally available means, techniques and materials, as well as potential catalyst or hampering effects of a measure or strategy on the urban structure and development. This interdisciplinary collaboration with trans-disciplinary⁷² working phases enables problem-oriented and culturally adapted work on both specialist and generalist scale, which has shown crucial relevance in analyses of environmental hazards in and hazard prevention, sanitation and (rain-)water treatment concepts for Onaville.

5.2.2 Trans-disciplinary Work: Cooperation with TECHO Haïti and Community-Organizing Committees in Onaville

The research project Urban Strategies for Onaville was launched with different site visits and stakeholder interviews conducted within a two weeks' research trip by Gökce lyicil/Fidan in collaboration with Haitian volunteers of the non-profit organization TECHO Haïti-Yon Do kay pou Peyi'm.73 A three-month-long research internship from March to June 2013, completed by the author of this thesis, brought deeper insights into the cultural, social and economic reality of the neighborhood. The author, as well as other students of TUM-USO74 conducting participatory field work in Onaville, have been able to build on established social relations and confidence in the neighborhood: there, Haitian volunteers of the non-profit organization TECHO Haïti have contributed to community-building in two community-organizing committees (Tab Travay⁷⁵) already since the year 2011. The youth-led nonprofit organization TECHO follows a working method demanding a high level of immersion of their young Haitian volunteers in the living circumstances of the organization's target groups: people living in situations of poverty in under-serviced, often stigmatized neighborhoods. Principles are followed by hosted TUM students in order to immerse in the county's culture, issues and realities.76 The following profile is based on personal communications with Roxana Carballo (Director of formation and voluntary service, TECHO),

⁷³ Creole: A Roof For My Country; Spanish: Un Techo para mi País

⁷⁴ In particular, students spending extended research visits in Haiti are Raphaela Guin, Sean Kerwin and Valentin Heimhuber.

⁷⁵ Tab Travay (Creole term for working table) and Working Table are used interchangeably throughout the thesis. The capitalized version of "Working Table" distinguishes community-organizing committees established by the NGO TECHO Haïti from the general term "working table".

This social immersion in Haitian reality of the "normal people" includes using TapTaps ("public" transport pick-ups) to go to the community, sleeping and eating with families in Onaville, and so on. For more details refer to Chapter 1.6 Research Methodology.

⁷² In differentiation to interdisciplinary work (collaboration and cooperation between different specialists and experts), transdisciplinary work further includes non-experts.



Fig. 35: TECHO's Mothers' Day party, Bas-Onaville 2013



Fig. 36: Meeting of the community-organizing committee at Haut-Onaville

web publications (TECHO 2014 and IDB 2010), and observations during the author's research internships with the organization.

TECHO opened its local office in Haiti after the devastating earthquake in January 2010 to provide transitory shelters and overcome poverty and social exclusion by joint work between residents and young volunteers. Until 2013 they were able to mobilize more than 6,500 volunteers⁷⁷ and to construct more than 2,200 transitory shelters in the country. So far seven community-organizing committees (*Tab Travay*) have been established in six communities of Haiti: Onaville (two *Tab Travay*), Gariche Prince, Abraham (renounced), La Hatte, La Digue and Royal.

Three driving factors characterize the organization's intervention model: The promotion of community development in underprivileged neighborhoods (1), the encouragement of the countries' youth in favor of critical, social awareness and action (2), political advocacy and networking for structural changes and social policies (3).

TECHO also provided aid to vulnerable families in "informal parts" of Canaan and constructed—following an internally compiled socio-economic survey—more than 1,480 homes. Since February 2011 the organization fosters community-building and local governance within a community-organizing committee (Tab Travay) in Onaville-en-haut, followed in October 2012 by another in Onaville-en-bas. The empowerment process is coordinated by young Haitian volunteers, who organize weekly meetings and lead different social-inclusion programs. Community-organizing committees have been planning and implementing the denomination of streets in Onaville—in consensus

with both municipal authorities, Thomazeau and Croix-des-Bouquets. Extensive respectively spatially-operant projects have barely occurred to this point as it bears a high conflict potential with local and national authorities. Under the reigning conditions this would have widely surpassed the capacities and means of TUM-USO students, same as of TECHO.

Among all accompanied communities in Haiti, Onaville can be seen as the most critical: with more than 11,000 residents (IOM 2013 b) on about seven square kilometers Onaville resembles rather a city than a community. As the area remains under high urbanization pressure and suffers under property speculation, land-related conflicts, lack of basic services and job opportunities the volunteers' organization works at its limits.78 Inclusion of all social groups within the Tab Travay can no longer be achieved with the same means as in smaller communities. Consensual decision-making becomes increasingly complicated, especially as many land holders are not living in the area but speculating on real estates. Working Tables are confronted with accusation of frustrated residents not to represent the community but to follow particular interests. Anonymity lowers residents' motivation to follow general rules within the neighborhood or to contribute with personal effort to concerns of the neighborhood. Dominant unsteadiness of Canaan's political, legal and administrative status further aggravates the difficult situation as TECHO needs to act very carefully negotiating between different actors' interests—as this is outlined in the following section "Actors and Stakeholders in Onaville and Canaan".

[&]quot;TECHO volunteers are all people who feel the urge to change the reality of their country through joint work with the families living in slums. TECHO focuses on summoning young people that are currently enrolled in higher education, and who are in the midst of their studies in technical careers and/or college degrees" (TECHO 2014).

Several times TECHO's directors have thought about quitting engagement in Onaville—as this was done in Canaan neighborhood after violent conflicts. So far intervention is continued in order to support extraordinary contribution of several very motivated, charismatic leaders. Update 2017: By October 2016, TECHO had withdrawn from Onaville, same as from many other communities—as the NGO was running into financial issues. Several volunteers created a CBO called "World Dynamic Action Haiti" to continue work in Onaville.

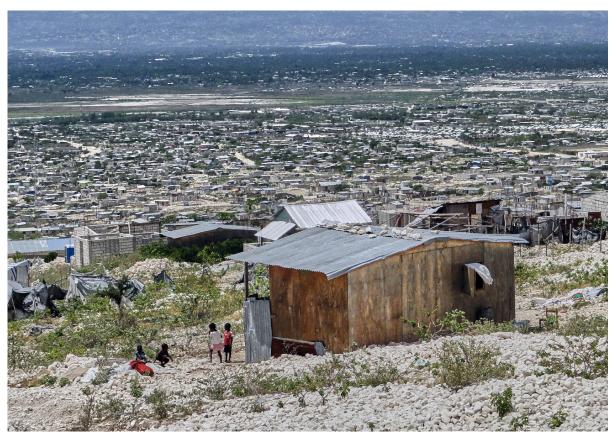


Fig. 37: Temporary shelter constructed by TECHO for an underprivileged family

TECHO's Community Approach

The first phase of TECHO's community intervention approach consists of the insertion into slums and the development of a diagnostic of families in need (1).

Working in the field, youth volunteers approach the families' reality in underprivileged settlements. In the second phase, a response to families' needs are formulated, implementing and managing solutions in the area of livability, education and labor (2).

Transitional housing is constructed in collaboration with families in need as achievable short-term solution. Other solutions are developed enhancing individual and collective capacities for community's self-management. In this joint work, volunteers get involved in an awareness-building process initiating critical reflection about poverty and its causes—building a starting point for community-based action. In order to deepen this empowerment process, a community-organizing committee is implemented by TECHO. Using the tool "Round Table" (Haitian Creole: *Tab Travay*) community leaders and volunteers meet once per week, dialogue about local problems, elaborate and plan implementation of local solutions. Additionally, TECHO supports individuals and families via education plans, basic skills training and micro-credits for example to start small businesses. Networking of different communities leads to the third phase of the intervention (3): the promotion and implementation of sustainable long-term solutions, such as regularization of property, basic services, housing, infrastructure and local development.

TECHO helps communities to articulate their needs and ideas promoting organization, participation, and community co-responsibility. Leaders are linked with government institutions and/or other actors, so they can demand communities' basic rights.

Despite the mentioned issues both *Tab Travay* in Onaville have achieved significant success in community-building, formation and first small-scale project implementation, presented in the following box. Three of these neighborhood initiatives are presented in chapter six with the goal to show how these could act as catalysts for further initiative: The Neighborhood Contingency Plan which had been initiated by Valentin

Heimhuber and the author, street denomination, and a tree planting initiative.

As cooperation in community-based work in Onaville between students from Munich and TECHO increased and got stronger during extended visits, the organization agreed in hosting TUM students for future research internships and fieldwork.

TECHO-Accompanied Community Gariche-Prince

In Gariche-Prince, a rural community with already tightened social ties, TECHO projects can be achieved far more easy and faster: after five months of cooperative work Happiness Plaza, a public square, had been planned, designed and implemented by the community committee, residents, volunteers, two architects and an artist. In joint volunteer action residents and TECHO volunteers procured local available stones from the nearby riverbed to use them for the construction of fundaments, stages, and walls of the public plaza. Together with TECHO the community run a crowd funding campaign, raising \$1,900; remaining costs were contributed by Union of South American Nations (UNASUR) and Inter-American Development Bank (IDB/BID) (Indiegogo 2013).

TECHO Activities in Onaville

In Onaville so far TECHO has run, or was involved in the following programs and projects:

- Socio-economic surveys (2010, 2012, 2014)
- · Water provision through well digging with UNASUR (discontinued due to salinity of ground water)
- Neighborhood parties
- Furnishing of community center (finished)
- Extra tuition for children (education plan; discontinued)
- Community health plan (discontinued)
- Technical training for adults (discontinued)
- Economic development course (micro-business) for market women (finished)
- Street sign construction "Welcome to Onaville" (finished)
- Street naming initiative (in collaboration with TUM-USO)
- Tree planting initiative (in collaboration with Viva Rio; details outlined in chapter six)
- Neighborhood contingency plan (in collaboration with TUM-USO)
- Prioritization of future community-based projects (Participatory diagnosis planned for September to December 2014)

(Compilation based on personal communications with TECHO directors Julio Martinez, Mariana Vazquez del Mercado, Roxana Carballo, Mariana Aramayo Donoso, Silvia Rojas, Belen Michel Torino).



Fig. 38: Site visit with Erdem Ergin (CIAT) and Azzurra Lentini (Oxfam Italy)

5.2.3 Data Exchange with Other Actors

During research stays in Haiti the author and TUM-USO students have initiated data sharing and networking among a plurality of researchers and practitioners in order to obtain, share and discuss insights, data, and key findings. Via email correspondence, various stakeholder interviews and meetings on the one side, "strategic partners" have been updated about research and working progress, on the other side, ways and means for future cooperation or collaboration possibilities have been explored.

Among the exchange partners have been governmental entities such as the UCLBP, CNIGS, CIAT⁷⁹, and UCP/DPC⁸⁰, as well as actors from the so called "International Community" (Oxfam International⁸¹, ONU-Habitat, the World Bank, USAID, CordAid, and others). Local authorities have not yet been integrated into the process due to existing territorial disputes.⁸²

⁷⁹ Interministerial Committee on Land Management (Comité Interministériel d'Aménagement du Territoire)

⁸⁰ Program Coordination Unit (Unité de Coordination de Programme, Ministry of Economy and Finance) and Haitian Civil Protection Agency (Direction de la Protection Civile, Ministry of Interior and Local Government)

⁸¹ Information has been exchanged with member organizations from Great Britain, Americas and Italy.

⁸² For further information refer to Chapter 5.3.6 Local authorities and actors.

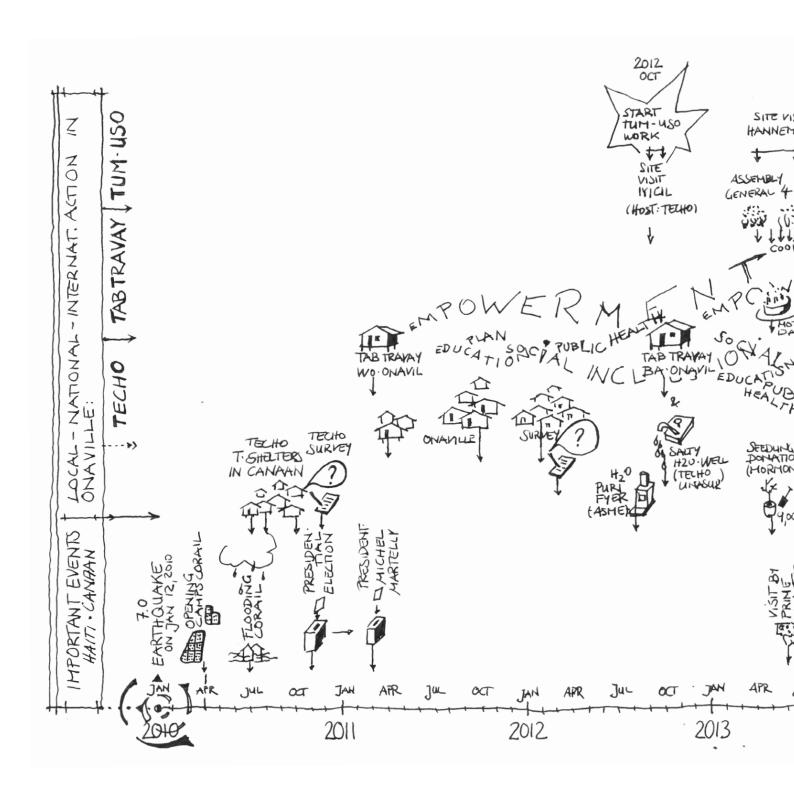
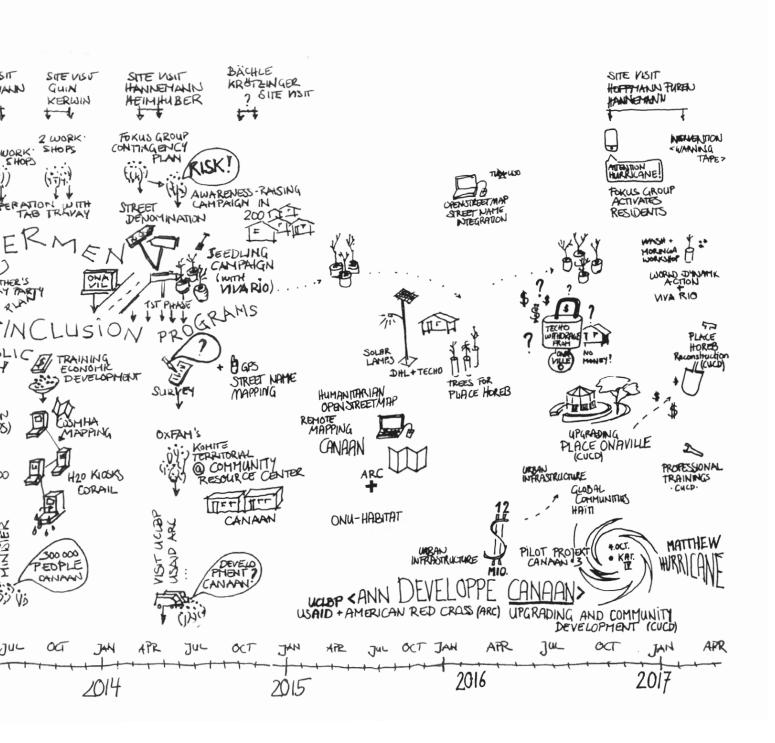


Fig. 39: TUM-USO students', TECHO's, and other activities in Onaville and Canaan; updated, 2017



5.3 Actors and Stakeholders in Onaville and Canaan

The most important actors and actor groups in Onaville and Canaan are wrapped up and highlighted in the following paragraphs. The goal is to provide more detailed data on existing actor groups, their motivation of action in Canaan, recent activities and arising problems in order to provide the reader with important basics for future planning activity.

This stakeholder inspection becomes important especially for the selection and design of specific citizen involvement procedures when a coordinated multi-stakeholder approach for integrative neighborhood development is targeted.

The structuring of the following chapter is taken up in the structure of recommendations, outlining actorspecific options for action.

Demographic Insights in the Living Conditions in Onaville

Predominately belonging to the lower middle class, (TECHO Haïti 2010) the majority of people in Onaville lives in the lack of basic health services, affordable, clean drinking water, sanitation, education, environmental hazard protection. Especially households of single mothers with children—representing 44% of Onaville households¹ (TECHO Haïti 2012)—and other marginalized parts of society face existential threats of urban poverty, social exclusion and related disaster risk exposition.

Settlers income mostly comes from unstable and temporary activity in street trading of goods of daily necessity, in day work in construction and quarries, or increasingly in the service sector (above all boutiques, copy shops, and beauty salons). For this reason, households' average monthly income in Onaville is about 3,000 HTG (about \$65), or 115 HTG (\$2,50) per day (households in Onaville consist in average of four to five persons) (Guin 2014). The adult unemployment rate in 2012 in Onaville was 88% (TECHO 2012). Basic services cover the biggest part of income as they are run by expensive private business holders or need to be met in Port-au-Prince. Water is one of the main expenses in the relatively arid zone, as there are no natural water sources. The minimum water need per person is about 4 gallons (15 liters). Public water provision is spatially limited to the IDP camps (water price: 0.40 HTG per gallon), in the rest of the area water provision is managed by private firms charging much higher prices (5 HTG per gallon). In the lack of public hospitals or dental facilities, most residents need to go to Port-au-Prince using public transport by informally organized taxis, called TapTap. This is cost intensive, consuming there and back about 70 HTG, or \$1.50. Field work of the author showed, that many residents, and especially children are ravaged by malnourishment, watertransmitted diseases, or even Hepatitis. The only public school in the zone, designed for 650 pupils and established by the NGO World Vision in Camp Corail since 2013 charges tuition fees, private schools charge around 250 HTG per half year and child. This consumes about 14% of a family's semi-annual income (Id.).

[&]quot;The latter famil[ies] belong... to the poorest social class and suffer... the most from the pressures and problems of life in Onaville. This includes food scarcity (and resulting undernourishment) the lack of availability of affordable drinking water and the very few employment opportunities of adults. These conditions result in a poverty circle which is passed on from one generation to the next" (Guin 2014).

5.3.1 Residents of Onaville

The demographic profile in Onaville is very heterogeneous—as everywhere in Port-au-Prince metropolitan area after the earthquake. 83 Traditional spatial segregation based on socio-economic groups broke up as people of all social backgrounds were facing displacement and had to live in tent camps in the capital's open spaces. 84

Even though many lower and lower middle class people from informal parts of Port-au-Prince were among the first who had occupied land in Canaan, speculators and investors only arrived a bit later. 85 Nevertheless, spatial distribution tends to be inhomogeneous: the socio-economicly underprivileged households concentrate in a relatively dense manner in Haut-Onaville or in sites exposed to environmental risks—in small ravines, at the flood prone banks of the major seasonal river Ravin Madan-Èl, and on steep landslide prone slopes of Morne-à-Cabris, same as smaller ravines and steeper. The lower and upper middle class concentrate in the more favorable, safer, lower parts of the alluvial cone in Bas-Onaville, partially holding extent parcels. 86

Motivations therefore are diverse, ranging from escaping appalling situation in the capital after the earthquake to opportunism⁸⁷—some profit-

ing from illegal land occupation to get a piece of land to live, others taking the chance to invest on unhampered real estate speculation.88 Raphaela Guin writes about the objectives of the residents in Onaville: "The main interest of the settlers in the legalisation of the settlement and the provision of fundamental infrastructure. The settlers hope to become owners of their settled plots and thereby become compensated for the move from their old [, destroyed] residences" (Guin 2014, 33). Residents have begun notable efforts to build a city via "autoconstruction", and the establishment of (micro-)economic activity, improving their livelihood by planting home gardens with fruit and timber trees. On the other side stand the land speculators: within several weeks construction teams of twenty to thirty workers are hired to construct huge houses especially in Bas-Onaville.89

⁸³ More detailed informations can be found in Raphaela Guin's Master's thesis.

With proceeding reconstruction, the economically more powerful have left, only poorer parts remaining in the precarious situation of the camps—with especially weaker parts of society (women, girls, children or disabled) and discriminated social groups highly vulnerable to rape and exertion of violence.

⁸⁵ For more detailed information on driving factors and occupation history of Canaan read Richener, Noël Reconstruction et environnement dans la région métropolitaine de Port-au-Prince: Cas de Canaan ou la naissance d'un quartier ex-nihilo (Port-au-Prince: Groupe U.R.D., 2012)

⁸⁶ The author presumes that this fact is related to clear ownership and/or active owners preventing occupation of their parcels in Bas-Onaville.

⁸⁷ Based on own estimations this are especially families of the lower and lower middle classes. A TECHO

survey in Onaville revealed that by 2012 68% (of 973 interviewed heads of households) had displaced because their former home had been destroyed, while 21% displaced for economic reasons (TECHO 2012).

⁸⁸ Personal interviews in Onaville revealed that many residents but especially young men recently migrated from rural parts of the country to Canaan in search of access to Port-au-Prince's higher educational and healthcare services, as well as economic opportunities.

⁸⁹ In an interview on May 30, 2013 Maggie Stephenson, a former employee of ONU-Habitat Haiti explains that about 40% of built houses in Jerusalem neighborhood (Canaan) are empty at night—thus probably are built for real estate speculation.



Fig. 40: Settlers terrace the steep, landslide prone hills of Morne-à-Cabris

The fact, that the owners are almost never present on the ground result in conflicts with community interests such as the negotiation of common rules: heavy constructions inside of drainage zones shift flooding problem towards the neighbors, but as the contractors—often living in Port-au-Prince or Croix-des-Bouquets—are almost never present on the ground, negotiation becomes impossible.

The huge percentage of construction for real estate speculation raises the fundamental question who would profit the most from development of public infrastructure: the vulnerable, land-less parts of Haitian society or wealthy speculators and entrepreneurs (personal communication with Erdem Ergin, CIAT, April 2014).

5.3.2 Entrepreneurs

In contrast to national authorities and international actors, the business sector has long since established all over the area: especially construction material traders, the regionally operating water providers and private schools profit from unregulated development and lack of basic public services. Especially the providers of drinking water make profit of the lack of basic infrastructure, selling their water 12.5 times higher (25 HTG per 5 Gallon) than the public water kiosks in Camp Corail.⁹⁰

⁹⁰ For more information on the DINEPA water kiosks, refer to chapter 3.4 Proof of Humanitarian and Development Aid-Related Issues on the Ground: Camp Corail, Canaan.



Fig. 41: Construction of a magnificent building, Bas-Onaville



Fig. 42: Construction material traders and private water kiosk operators profit from the lack of regulation



Fig. 43: Upper middle-class house, built in Onaville prior to the earthquake



Fig. 44: Land for sale at Route Corail, Bas-Onaville

5.3.3 Land Owners

Land ownership is highly uncertain in the Canaan area as different expropriations have been executed by Haitian governments in the last decades. Already in 1971—under the power of Duvalier family—Corail-Cesselesse had been expropriated for public utility without compensation payments for land owners in order to establish a touristic zone in the area of Sources Puantes—hot Sulphur springs next to the seaside (Richener 2012). The project was never realized. It remains unclear if original landowners regained the land or who got access to ownership in the political context of autocracy, favoritism and of the later unstable political period of the 1990s.

A powerful stakeholder in the actual disputes for compensation is the Haitian firm NABATEC S.A.—main landholder in the area preceding the announcement of expropriation for public utility in March 2010. In the late 1990s NABATEC S.A. started in coordination with the Government of Haiti and the World Bank projection of an Integrated Economic Zone (IEZ) of over 1,000 hectares (IFC 2011).⁹¹ The invasion of the vast terrain by April 2010 leaves the government and humanitarian agencies in the worst imaginable situation: for the expropriation of NABATEC S.A.'s land the government needs to face compensation over an estimated \$64 million (HGW 2013 a, HGW 2013 b, Richener 2012).

Since the 1990s several solitary upper middle-class houses had been constructed in the so far widely uninhabited territory—often shielded with big green fences or rock walls. They are located mostly in Jerusalem neighborhood and Bas-Onaville. This supports the hypotheses that in Bas-Onaville land tenure is far clearer respectively that de-facto owners heavily control their parcels even if it is open fields: big parcels are demarcated often announcing for sale or for affermage

5.3.4 Community-Based Organizations (CBOs)

There are a lot of different Community-Based Organizations (CBOs) or associations in Canaan and Onaville. By the time of writing it was only possible to identify a few associations in a rather un-systematic manner. While for Jerusalem an extensive mapping had been carried out by ONU-Habitat and its associates, for Onaville and the rest of Canaan associations mapping remains fragmentary or advances falteringly.

A Community Resource Center (CRC) had been established in Corail-Cesselesse in 2013 as a common platform for "coordination of extern aid, technical assistance and information for community leaders, community-based organizations, and the residents in the neighborhoods" (ONU-Habitat Haiti 2011).93 However, at this point in time, the platform has worked very sporadically, recruitment of community representatives and CBOs has remained fragmented, information exchange, data collection, as well as promotion of the CRC's activity widely lacks. Neither the Community Resource Center (CRC) Corail-Cesselesse-which recently started to identify leaders and CBOs in Canaan-nor TECHO has compiled extensive data. Under collaboration of the author, TECHO integrated questions to identify community leaders and CBOs in the field survey, carried out in Onaville in June 2014. As analysis and evaluation of the study are not yet terminated it has yet not been possible to include extensive details in this thesis. The so far identified

⁽leasehold). 92 In contrast, un-organized densification of urban structure concentrates on the higher regions of Haut-Onaville.

⁹¹ The author presumes that the question of legal ownership in Canaan is far more complicated than claimed by NABATEC S.A. (HGW 2013 a, HGW 2013 b).

⁹² Affermage (leasehold) is one of the most common forms of ownership in urban Haiti.

⁹³ The Community Resource Center Corail-Cesselesse is located at Route Corail at the entrance of camp Corail Sector 4 (18°38'56.41"N; 72°15'11.80"W).

CBOs in Onaville are: Baptiste de Pétion-Ville (religious group), COFARH, MEAC (Mouvement d'Éducation et Action Communautaire), MOFEDO/MONFREDO (political group), MOJEPAHAPROS (Mouvement des jeunes patriotes Haitiennes pour l'avancement et le progress social d'Onaville) MOVINOH (Mouvement des visionaire pour une nouvelle Haiti; social group), OCDO (political group), ONASOM (Organisation Nationale de Mutuelle Solidarite), ORACSOD/OACSOD (political group, youth group, involved with the land market), MOPO (Mouvement pour le Projet d'Onaville; social group), TADO (Tèt Ansamn pou Developman pou Onavil; Heads Together for the Development of Onaville), UNICODIS (Union des Citoyens D'Onaville pour le Developpement et l'Integration Sociale), Vallée de Bénédiction (sports group), and an electricity committee (name unknown).

increasingly engage in their neighborhood. As TECHO explicitly supports women in the committees, their number increases. Nevertheless, there is still a long way to pass before women are respected equally in decision-making.

Further it needs to be taken into account, that influential leaders may be eventually involved in the informal land market or gang activities, thereby securing their leadership by exertion of pressure on the residents. This has not been observed during TECHO's and TUM-USO's activities in Onaville, but was reported from other parts of Canaan. A spontaneous meeting of a youth gang member in Haut-Onaville by April 2014 at least gives a proof about the existence of gangs in the area.

5.3.5 Community Leaders

The same is true for community leaders: ⁹⁴ There does not exist an extensive overview or specific research on community leaders in Onaville, aside of leaders working in TECHO's two Tab Travay. Only general statements can be given: As religious institutions in Onaville, Canaan and in Haiti often are the service providers of education, pastors—simultaneously having the role of the school teachers—hold huge influence within neighborhoods. Generally, leaders are (young) men. This can be traced back to the patriarchic orientation of Haitian society, it's strictly hierarchical order counting back until colonial times—with men in the most powerful positions—reaching as far as into family structure.

In Onaville the establishment of the two Tab Travay by TECHO brought up new, motivated leaders who

Rapid Rotation of Local Representatives

During the author's first research visit in April 2013 a spontaneous interview meeting with the director of the local annex of the commune Thomazeau in Bas-Onaville was held. By the second visit in April 2014, the representative had already changed—at least one times.

Politicization of Workshops

There had been problems twice with politicization of workshop sessions by representatives of the commune Croix-des-Bouquets, who—in absence of representatives of the commune Thomazeau—argued their exclusive responsibility for concerns of "Canaan" area. Workshop moderators both times had to cut the heated, one-sided debates in order to continue constructive work.

Ommunity leaders designates in this context persons with an extended sphere of influence among the residents—no matter if they are publicly elected or self-chosen.

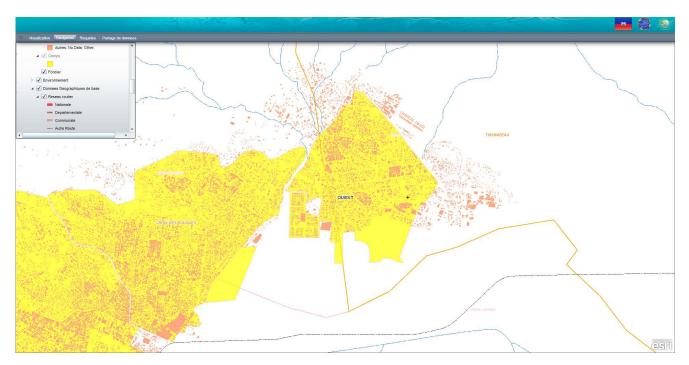


Fig. 45: Communal sections of Croix-des-Bouquets (left) and Thomazeau (right). (Credit: CNIGS, SILQ Project)

5.3.6 Local Authorities and Actors

The territory of Onaville and Canaan is administrated by two communes—respectively their communal sections:95 the commune of Croix-des-Bouquets (2ème Section Communale Crochus) in the west and the commune of Thomazeau 1ère Section Communale Crochus) in the east. However, both Croix-des-Bouquets and Thomazeau reclaim their solely auspice and responsibility for Onaville, thereby creating a latent conflict. Different community meetings that had unplanned attendance of representatives of the commune led to heated debates as the following example from field work shows:

Local authorities' mission is to take the leading role in communal decision-making, management and development, creating an environment conducive to investment. As members of CASEC and ASEC are directly elected candidates from the communities for four years, CASEC and ASEC hold relatively strong social ties and responsibilities within the communities in their section, relying on the favor in the neighborhoods. But as local authorities fundamentally lack budget to execute their mandate for self-administration and planning, mayors and representatives often are vulnerable towards favoritism and suggestibility by particular or party-political interests. Local officeholder are exchanged continuously, steady decision-making and collaboration is very difficult.

On the ground, the commune Thomazeau follows an ambiguous policy: via a local annex of the city hall in Bas-Onaville the commune exerts increasingly supervision and "management" of the urban growth process: In the case of new construction activities, the buyer of a parcel needs to proof pragmatically that his parcel is not involved in tenure-related conflicts. Then the representatives of the annex hand out extra-legal building permissions—against a "small handling fee."

⁹⁵ The communal section (Section Communale) is the smallest administrative entity with financial and administrative independency in Haiti. It is governed by a CASEC (executive body) and an ASEC (deliberative, controlling body), holding the local mandate for planning and development (Alexandre et al. 1990). Bigger administrative entities are the commune (Commune), the district (Arrondissement), the department (Département), and the Haitian state.

In case of "wild construction"—that means when not paying the handling fee—the construction site is closed by the authority, denominating it "chantier fermé." Thereby the annex of the commune Thomazeau de facto executes control of the land management—bypassing all existing legal land management processes and taxation. The logical result is that residents fear to pay handling fees, that can't provide them with legal security against forced eviction.

5.3.7 National Authorities and Actors

The area has been for the most part left on its own to develop: Local stations of Haitian National Police (PNH) are the only constant representation of the state in the area.

Activities of national authorities and governmental representatives on the ground in Onaville and in Canaan have been limited to site visits: One official visit in June 2013 by Prime Minister Laurent Lamothe, another with representatives of UCLBP and key actors of the "International Community" in May 2014—underlining UCLBP's development vision for the area.

In order to regain control of the state over the rapid urbanization process, UCLBP is elaborating a concerted intervention with key actors of the "International Community" for an urban development and upgrading of the Canaan zone. UCLBP was designated by



Fig. 46: Construction site closed by the local authority Thomazeau

international actors for this leading role. The governmental entity started work on a coordinated intervention strategy for Canaan in an expert Work Group, consisting of key actors in 2013.

In the development strategy, the provision of basic infrastructure stands clearly in the foreground. Land management respectively a legal clarification of ownership and tenure would be a necessary key aspect in the long-term to solve many problems, but not focus of primary intervention (personal communication with Jean-Baptiste Volcy, Coordinator for Canaan of UCLBP, March 26, 2014).

5.3.8 The "International Community"

Due to the unclear legal status, most NGOs have stayed away from projects outside of the planned Corail camps. 96 According to statements of TECHO director Olson Regis, Agathe Nougaret (Urban Program Manager, Haiti; Oxfam GB), Maggie Stephenson (former Senior Technical Advisor, Haiti; ONU-Habitat), Chris Ward (USAID Haiti), and others in personal interviews conducted in the years 2013/14, NGOs do not want to bypass the planning authority of the Haitian government. They widely see the necessity for a concerted, integrated urban and environmental planning framework in order to avoid that punctual establishment of public basic services and infrastructure further accelerates the uncontrolled growth in the area.

At the beginning of work of UCLPB's Canaan Work Group in 2013 the following actors had been involved in the work: French Development Agency (AFD), AVSI (Association of Volunteers in International Service), ONU-Habitat, UNDP, World Vision, and IOM. TECHO had been attending several meetings (personal communication with Agathe Nougaret, Urban Program

At the moment of writing Oxfam Italy is working on a regional watershed and environmental hazard study that stretches over all communes around Hispaniola's two major lakes—the Haitian Étang Saumâtre (also named Lac Azuéi) and the Dominican Lago Enriquillo. Onaville's watersheds—especially the ones of Ravine Madaniel (Lan Couline)—are covered by the research. A territorial committee on environmental hazard was created in CRC Corail Cesselesse in May 2014, involving community leaders and representatives of CBOs in the project. Two leaders of TECHOs *Tab Travay* have been included in the work.

Manager, Haiti; Oxfam GB, April 15, 2014). According to inside-information from May 2014 the United States Agency for International Development (USAID), one of the major funders of Villa Rosa neighborhood upgrading, and the American Red Cross are involved in fundraising for the project.⁹⁷

⁹⁶ The action of international agencies inside the camps are explained in Chapter 3.4. This section focuses on interventions in the unplanned parts of Canaan.

⁹⁷ One may assume, that the World Bank, same as the Inter-American Development Bank are also involved in the negotiations as both are among the biggest investors and funding entities of Haiti's reconstruction.

5.4 Methodology and Analysis of Academic Citizen Involvement in Onaville

5.4.1 Methodology of Citizen Involvement

TUM-USO project has accompanied different steps within an open process of community building and praxis-oriented, collective learning in Onaville—heading in the long-term for a multi-stakeholder process for community-led improvement of living conditions, urban development and maintenance of basic services. Facing the exorbitant speed of transformation, the researchers came to the conclusion, that most conventional planning approaches are doomed to fail in Canaan from the beginning as most are based extremely on labor, time and extremely cost-intensive bureaucratic processes.

Community building and help for self-aid was set as one focal point of the academic project in this early development phase in Onaville. Within the frame of very limited financial and temporal resources an actororiented planning dialogue has been adopted by the students who initiated community-based field work in Haiti. The chosen approach tries to follow the overall objective to create a participatory culture of self-help and local governance in Onaville. Then—within an extern coordinated multi-stakeholder approach in Canaan or without it—Onaville's community-based organizations, leaders, and residents would be sufficiently empowered to take an active, cooperative role in the future development of the settlement.

The used participation methodology of TUM-USO students can be seen as bricolage99 of different methods and tools for citizen involvement, consolidating from "learning-by-doing" within an open working process. While tasks may be associated with different phases in participation theory in order to facilitate a structuring of action and modes, in practice, clear structures mix as community-based work has been organized as open process. Methods and steps of the students' citizen involvement have been adapted "learning-bydoing in the running system"-always elaborating the next step with the cooperation partner TECHO and the two Tab Travay in Onaville. The author has thereby referred to basic rules of communication and critical pedagogy, using among other tools the methods of Round Table, Brainstorming, joint Recapitulation, and Reflection sessions for collective learning. Basic principles of citizen involvement such as the openness of procedures for a wide societal transect, adapted recruitment methods for participators, equal and open knowledge exchange and discourse among all participants were taken into account with the evolution of the organization of participatory field work. Some methodological steps have needed reviewing, others had to be repeated, or certain steps had to be skipped due to changing circumstances.

⁹⁸ By July 2014, this are Raphaela Guin, Valentin Heimhuber, Sean Kerwin, and the author. TUM-USO students had been present three times in Haiti, covering in total about 5.5 of the last 16 months with cooperative field work. Since March 2013 an ongoing (remote-) cooperation and coordination of community-based action is established with TECHO and the Tab Travay of Onaville.

⁹⁹ A *bricolage* is "something constructed or created from a diverse range of things" (Oxford Dictionaries 2014).

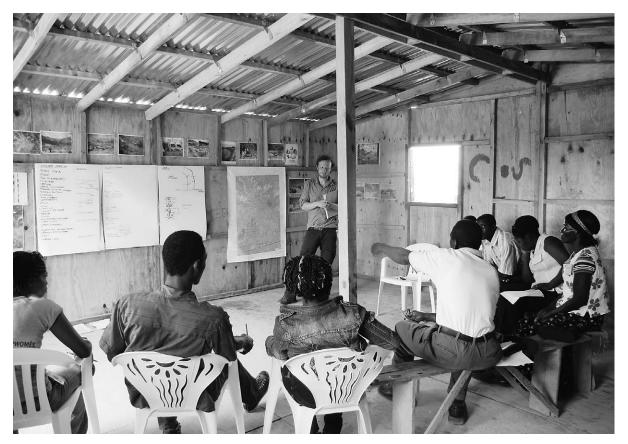


Fig. 47: Discourse on the neighborhood's needs during workshop session

NGO-Tourism in Canaan

The rapidly urbanizing Canaan attracts so many representatives of NGOs for site visits of a few hours, that some representatives of Haitian authorities speak about a real "NGO-Tourism." Aside of their interest in the "Canaan Case" these brief visits—most by car—so far have not led to any action—thereby contributing to the latent frustration of the residents in the zone.

Urbanization Process in Onaville

The unplanned settlement Onaville is under constant change. Every single day one could witness modifications in the urban fabric: houses, kiosks, restaurants, barber shops, material stores, parochial meeting houses—often with attached schools or kindergartens—and private health care facilities are announced to be built, are built or closed down again.

5.4.2 Analysis of Selected Participatory Methods

Only to a late point of the work being involved with the scientific debate of participatory approaches such as the Community Action Plan, these are left aside in this work. It is for this reason, that the author has chosen another approach: to document, structure and analyze in a retrospective the so far used methods of citizen involvement in his practical academic work from a methodological point of view. The descriptive analysis of academic citizen involvement in Onaville is based on first hand field research and the authors involvement of the participatory procedures in Onaville in the years 2013 and 2014.

Methods have been analyzed based on critical reflection of the author's personal involvement in the procedures, on two intensive seminars on Citizen Involvement led by Dr. phil. Jörg-Wilhelm Wernecke and Dr. Thomas Hamacher at TUM in 2013/14, as well as on theoretical and methodological literature. In this context, the author refers especially to two publications: the Handbuch Bürgerbeteiligung-Verfahren und Akteure, Chancen und Grenzen (Handbook Citizen Involvement-Procedures and Actors, opportunities and limitations) by Patrizia Nanz and Miriam Fritsche (Bundeszentrale für politische Bildung, Bonn 2012) which provides a comparative assessment of the most common procedures and methods of citizen involvement in order to facilitate application-specific selection and evaluation. The other resource is the Master's thesis The Architecture of the Process—Process-ology of an Integrated Upgrading Plan for the Informal Settlement of Villa Rosa, Port au Prince, Haiti by Nazanin Mehregan (2012) which has provided the author indispensable help to analyze and structure methods and tools of community-based work in the Haitian context.

Participatory procedures are in the following differentiated into methods for field research and data acquisition, methods for consultation, knowledge transfer, public debate and vision building, as well as methods

for decision-making and implementation of microscale projects. Each used method for citizen involvement is presented a comprehensive catalogue-like arrangement of short profiles, so that methodological key facts, differences, opportunities, and obstacles become visible and possible adjustments can be carved out. In conclusion, the learned lessons from practical work with participatory procedures and theoretical analysis are outlined in the evaluation Chapters 7.1.3 and 7.1.4. The explained factors and criteria then can serve to start with a better pre-design into citizen involvement activity, thereby increasing the chance of achieving valuable results.

The respective tools and methods will be characterized by a selection of criteria proposed by Nanz and Fritsche (2012) which has been adapted by the author: the general and specific goal of procedure, area of influence, duration, number of participants, selection and recruitment, mode of communication and participation, functions of participation, obstacles and particularities. The modes of selection¹⁰⁰ and recruitment¹⁰¹ determine essentially the composition of participants regarding demographic characteristics such as age, gender, socio-economic status, ethnical, religious and educative background. Choice of the "right" methods decides if a participatory procedure addresses general public, respectively everybody who is interested, exclusively "average citizen", "average citizen" and experts, directly concerned people, target groups, or a group of stakeholders. Further it decides if some target groups or stakeholders are specially emphasized during a procedure, for example in advocacy planning (Nanz et al. 2012). The criteria modes of communication and modes of participation show, how the different involved actors act among the other-by real communication, dialogue, or even collective formation of opinion-as well as if the general achievement of the procedure is either an articulation of interests, or

¹⁰⁰ Self-selection, random selection, distinct selection, combination of self- and distinct selection

Time frame, medium and mode of communication and promotion

an exchange of arguments, or the negotiation of reliable decisions and compromises. In the case of an articulation of interests the mode of participation is education; in an exchange of arguments the mode is to create conditions for deliberation; in the negotiation of reliable decisions the participatory mode is cogovernance (ld.). Functions of participatory procedures are as follows:

- Individual benefit and qualification of personal skills: enhancement of knowledge and democratic skills and contact building
- Exertion of influence on public and society: public debates which lead to a formation of an opinion, elaboration of common positions, community-building, or indirect exertion of influence by creating pressure to act
- Consultation and position statement: consulting function, recommendations without commitment for decision-makers, feedback desired
- Co-governance: direct exertion of influence on decisions (ld.).

5.4.2.1 Methods of Citizen Involvement for Field Research and Data Acquisition

In field research and analysis, the tools Community Survey and Transect Walks have been applied in order to involve members of the community, to achieve critical data and insight-facts from the realities of life in Onaville.

Community Surveys

Quantitative and qualitative community survey has been carried out by TECHO volunteers in Onaville three times: by the year 2010, 2012, as well as by June and July 2014. The 2014 survey questionary was developed by TECHO including on recommendation of TUM-USO students' additional questions on community, leadership and associations, environmental hazard, as well as on names and location of basic services. This analysis focuses on the survey carried out in June and July 2014.

Goal of procedure: Obtain demographic information in order to evaluate households' social, economic, educational and living conditions in Onaville, as well as to assess social ties or conflict potential within the neighborhood.

Area of influence: Haut-Onaville, Bas-Onaville

Duration: Three days in May and several days in July 2014 (not yet finished.)

Number of participants: Unknown

Selection and recruitment: Households within the selected blocks in Onaville are surveyed to generate representative findings.

Mode of communication and participation:

Consultation of heads of households (in-depth interviews) is the chosen approach.

Functions of participation: Data acquisition by TECHO for future intervention, awareness-raising of public and society, as well as for consulting of decision-makers.

Obstacles: Onaville community is not really involved into the survey activities, as the survey is carried out by TECHO volunteers because TECHO assumes the risk to cause false statements (by social pressure or shame) if surveyor and surveyed are part of the same local group or community. The survey can only be seen as tool having a very low level of community involvement.

Particularities: Survey includes GPS-mapping of the household location, general household information, education level, healthcare, economic activities, dwelling condition, names and location of basic services and specific information on the "community"—for example activities, contacts of leaders and associations.

Transect Walks Including Qualitative Resident Interviews

Basically, Transect Walks and Qualitative Interviews have been used in field research and on-site analysis. This generally included walking through the vast neighborhood, mapping, talking with residents in order to obtain critical information on environmental risks, urban growth process and the land market, local building and planting techniques and so on. In the meanwhile, awareness of residents in environmental hazard areas has been risen informing about research on dangers and possible mitigation strategies. Further, Transect Walks have been repeated on selected sites during workshop sessions (refer to the next chapter). Transect Walks including talks and interviews have proven to be crucial to develop a high level of personal immersion into the community—as crucial resource for trust in the troubled relationship between extern actors and Haitians.



Fig. 48: Transect walk with members of Tab Travay Bas-Onaville

Goal of procedure: Collect local information and prioritizing by leaders and inhabitants of areas in immediate need of intervention or areas with potential for joint initiatives. (1) Vividly illustrate and transfer knowledge and findings from academic research and field work on-site. (2) Personal training of skills (for example map reading and GPS-mapping). (3)

Area of influence: Transect walks and field research trips cover the entire area of Onaville and small parts of surrounding watersheds.

Duration: Walks take between one and two hours (workshop sessions) or even one day (field studies). Residents interviews in general took several minutes up to one hour.

Number of participants: In general, a small group of one to five members of Tab Travay, and one

to three Haitian TECHO volunteers accompanied the students. 102

Selection and recruitment: Participants are recruited based on their own choice to cooperate with TECHO and to contribute their time to the project (self-selection). Subsequently some leaders are contacted by the students to join the next activity (distinct selection), but also to invite others (self-selection).

Mode of communication and participation:

Consultation of local residents, same as the exchange of arguments, of findings and hypotheses in a deliberative discourse.

Functions of participation: Besides data acquisition by TUM-USO students, Transect Walks

¹⁰² Sometimes shorter Transect Walks have been conducted together with representatives of governmental institutions (CIAT) and NGOs (UNO-Habitat, Oxfam Italia, CordAid, USAID). There too, members of the community-organizing committees have been involved, to connect them with possible future implementation partners.

contributed to individual benefit, respectively qualification of personal competences of participating residents and leaders, as well as to a smaller degree to exertion of influence on public and society (in interviews and talks with other residents in the zone).¹⁰³

Obstacles: Language barrier was especially in the beginning a big obstacle in personal interviews with local residents.

Particularities: Findings and key points of discussion of the walks have been analyzed by the students and integrated into up-following participatory sessions. Transect Walks proofed to be very important to communicate and transmit research knowledge to the community. The joint walks with residents and leaders have contributed a lot to allay mistrust of residents and workers towards foreign researchers and their motivations.

5.4.2.2 Methods of Citizen Involvement for Consultation, Awareness Raising, Community Building and Vision Building

Tools used for awareness-raising of the local inhabitants towards existing or potential risks, as well as for participation in community action have been General Community Assembly, Thematic Workshops (Charrettes), Focus Groups and Transect Walks. All four are analyzed in the following section.

General Community Assembly

Goal of procedure: A General Assembly was designed for residents of Onaville by April 2013 in order to introduce TUM-USO and TECHO and their future participatory action transparently to promote participation of interested attendants in four thematic workshops (*Charrettes*) in the following weeks. Further, action and objectives of Tab Travay in Bas- und Haut-Onaville were presented, participation in the community-organizing committees promoted to increase committees' representation of community's interests.¹⁰⁴ The third goal was to create an inventory of health issues in Onaville by TECHO's community health work group.

Area of influence: Bas- and Haut-Onaville, Camp Corail Sector 3

Duration: The assembly stretched over one Sunday afternoon.

Number of participants: A peak number of 120 to 150 participants from different parts of Onaville and with different social backgrounds attended the meeting.

¹⁰³ Where extern attendants from GoH or NGOs participate in the walks, consulting of decision-makers gets a function of the procedure.

In field research, it turned out that most residents don't know about the action of both *Tab Travay*. People associate TECHO's activity mostly or entirely with the provision of T-Shelters. One major goal became to promote familiarity with the committees' work for the entire neighborhood.



Fig. 49: General Assembly, Onaville, April 2013

Selection and recruitment: People had been invited by the author together with members of the Working Tables and TECHO volunteers by using different strategies: personal invitation via talks and distribution of flyers on Transect Walks in the zone during three following days, via personal invitation by members of the Tab Travay, as well as via motorized megaphone-promotion on the day of event. All interested persons can engage and attend (self-selection).

Mode of communication and participation: The procedure was designed to initiate and support an exchange of arguments and findings, a deliberative discourse on the community's needs and future.

Functions of participation: An exertion of influence on public and society was the key function in order to create awareness of risks in the zone.

Obstacles: As the event was hold in the public school in Camp Corail Sector 3 (which is commonly named "Onaville" by its

inhabitants), many residents of the camps attended the event-even if targeted people were rather all inhabitants of the unplanned parts of Onaville. Underprivileged groups of societies tend not to participate in participatory procedures as there is no economic stimulus provided, compensating the loss of hours they need to spend on economic activity. Even though Tab Travay and TECHO had been advised to establish Community Assemblies as regular returning event to create a common platform for information sharing, no other further procedure has been organized after April 2014. Local authorities and decision-makers had not been invited to the event to pave the ground for constructive debates and avoid politicization. But as many examples show, upscaling of local improvements in the best case is backed by favorable, good governance on the local level.

Thematic Workshops, Charrettes

Thematic workshops (or *Charrettes*¹⁰⁵) have been the main method of citizen involvement in the work of TUM-USO students in Onaville, incorporating group formation, brainstorming and input sessions, Transect Walks and a wrapping-up of the elaborated findings and issues.

So far six have been hold on the topics "Rainwater Harvesting and Water Systems", "Environmental Risks, Gardening, Soil- and Watershed Protection", "Sanitation" and "Urban Structure", "Public Health", "Smart Household Layout and Design" (both held by Raphaela Guin and Sean Kerwin). Thereby, topics such as urban structure and growth processes, natural systems, environmental hazards, and ecosystem-services, agroforestry, value chains, sanitation, water provision, and others have been discussed extensively. 106

Starting by April 2014, a Contingency Plan has been elaborated in focused Charrettes—leading to a community- respectively leader-driven awareness-raising campaign in environmental hazard zones of Onaville by June 2014.¹⁰⁷

Goal of procedure: To use a flexible framework in order to bring academic findings back to the people, to unite and motivate residents (community-/network-building, community-driven action) and discover

knowledge and priorities from the community in an open-ended knowledge exchange between local people ("local experts") and experts (professional practitioners or researchers). Activation of joint reflection in constant change between individual, community and regional scale, between site-specific, technical input and cross-linking development of general correlations is thereby an inherent aim of this deliberative procedure: participants and students contribute visions, ideas and knowledge in view of specific topics/areas of intervention and collectively elaborate and provide practical low-cost Do-It-Yourself-solutions.

Area of influence: Tab Travay in Haut-Onaville and Bas-Onaville

Duration: Each thematic workshop takes between four hours and half-day. Charrettes are hold on consecutive weekends.

Number of participants: 5 to 20 participants from the community and more or less five volunteers from TECHO. A limit of about 20 to 30 persons seemed useful to ensure intensive and active collaboration of all attendants.

Selection and recruitment: Peoplestating interest in the General Assembly, as well as post-recruitment via personal invitation and mobilization by members of the *Tab Travay*. As in the case of the General Assembly, all interested persons are invited to attend the events (self-selection). Post-recruitment for sequent workshops is carried out if number of participants decreases. In the case of the elaboration of a Contingency Plan especially community leaders are invited by members of the *Tab Travay*. Director of Camp Corail-Cesselesse¹⁰⁸ and three leaders of Camp Corail were motivated to participate.¹⁰⁹

The term *Charette* is applied in this context as Architecture for Humanities Haiti Reconstruction Center has used the term for similar community activities in Villa Rosa neighborhood-development (Mehregan 2012).

¹⁰⁶ Details on discussions, findings and activities of the workshops can be found in the author's documentations of 2013 field work, in 'Designing for Uncertainty The Case of Canaan, Haiti' (Authors: Johann-Christian Hannemann'Designing for Uncertainty The Case of Canaan, Haiti' (Hannemann et al. 2014), Christian Werthmann, Thomas Hauck) in the book *Revising Green Infrastructure: Concepts between Nature and Design* (Editors: Czechowski, Hauck and Hausladen. Publication date: December 18, 2014 by CRC Press), as well as in the brochure of Raphaela Guin's Master's Thesis (Guin 2014).

¹⁰⁷ Design process, same as further details on the participatory elaboration and implementation of this contingency plan is described in Chapter 7.1.

¹⁰⁸ The Camp Director of the Camps Corail-Cesselesse is employee of the commune Croix-des-Bouquets.

¹⁰⁹ In *Charrettes* a mix of self- and additional, distinct (post-) selection is used—for example to recruit important stakeholders, multipliers and emphasize target groups.



Fig. 50: Sanitation Charrette, Haut-Onaville 2013

Obstacles in Selection and Recruitment in Onaville

Many people inscribing their interest in participation lists during General Assembly did not participate in workshops hold two or three weeks after the assembly—loosing interest or simply not remembering. Personal invitations were via mobile phone the day before the next events. Despite all efforts promoting participation in Onaville, most participants of Charrettes—and especially those participating in more than one—have already been either members of TECHO's community-organizing committees or are friends or neighbors of the first. This shows that motivation of people is greatly correlated with the fact, that charismatic individuals or local leaders actively promote participation.

Mode of communication and participation:

Communicative, open-ended dialogue on an equal basis between experts (students) and layman (residents) creates space for individual and common articulation of interests, as well as for an exchange of arguments, thereby creating conditions for deliberation and collective formation of opinion.

Functions of participation: Awareness-raising (enlightenment and information) of local people was designed to provide individual benefit and qualification of personal skills (enhancement of knowledge and democratic skills, contact building) during the activity. Further function of debates has been "community-building" and networking (leading to deliberative formation of opinion and elaboration of common positions) as basis for exertion of influence on a wider public in Onaville.

Obstacles: Language barriers caused different communication problems. A decreasing number of participants during the four workshops in 2013 showed the need for regular information of interested participants—especially when the promotion for the procedure had passed longer than two weeks.

Particularities: Thematic Workshops included partially the methods Focused Groups and Transect Walks. For communication, academic neighborhood workshops have been developed as reports in a manner that they can be handed out to the community but also that they document community's initiative for other actors.

while in general all interested are invited to participate (Nanz et al. 2012).

Time, Day, Location, and Compensation: Limiting Factors of Participation in Haiti

Finding the right time and place to enable participation across different social and residential contexts posed a major difficulty: During the week a large part of the interested residents are busy with work whereas on weekends many are occupied by religious activities differing in time and day (Saturday/Sunday). Sunday lunch with the entire family is very common. Events not respecting these customs risk very low attendance despite high interest—as observed at an inauguration of a major project arising from cooperation of residents and TECHO in another Haitian community. By joining people from both sub-sections of Onaville (Haut-Onaville and Bas-Onaville), exchanging information, ideas and techniques, the workshops served as a very first step to reduce the tendency of isolation and to build a network for collective discourse and vision making. As an answer to the great distances, related long expenditures in time and arising difficulties the residents would have to take on to participate in the workshops, it was decided to rotate locations between the community center in upper and lower Onaville.¹

¹ Many residents participated in more than one workshop, some in all four, many discovering "the other part of Onaville" for the first time. To continue the networking, during summer 2013 all workshop sessions had been worked up as documentary manuals and handed over to the community-organizing committees promoting further activity. In addition, the reports are meant to exchange those findings derived in collaboration with the residents with other stakeholders and actors.

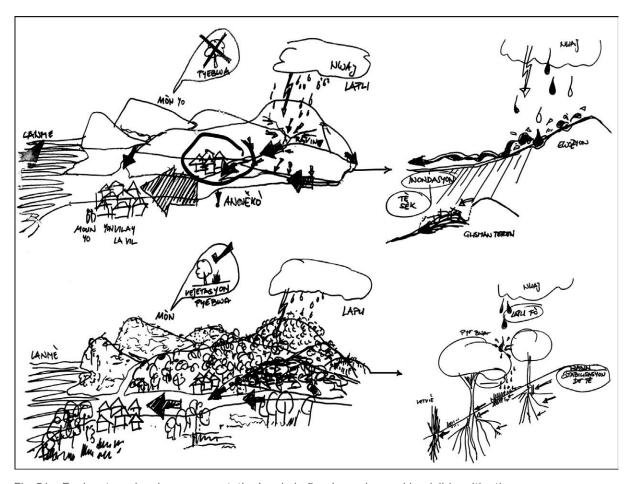


Fig. 51: Explanatory drawings on vegetation's role in flood, erosion and landslide mitigation



Fig. 52: Focus Group work on environmental hazard mitigation

Focus Groups

Goal of procedure: Assess needs and problems of the community on the one side and customs and assets on the other (Mehregan 2012, 62). Further, the tool has been used in Onaville to initiate active participation of all attendants, as well as to analyze behavior of participants to draw conclusions regarding their role in group discussion.

Area of influence: Participants of General Assembly and Thematic Workshops/Charrettes

Duration: 15 to 30 minutes

Mode of communication and participation:

In small groups interests are articulated and collected in an initial brainstorming. Arguments are exchanged in this small group first before problems and solutions are presented by each group and finally collectively prioritized by voting in the plenum.

Functions of participation: Focused Groups hold roles providing qualification of personal skills such as the enhancement democratic skills and contact building. On the community level, the tool leads to the elaboration of an assessment of living conditions in the neighborhood, as well of common positions how to proceed with the situation. As byproduct leadership can be observed and potentially good leaders identified.

Obstacles: Open discussion and brainstorming is new to many participants, as the educational system is structured hierarchically, contents are conveyed in traditional, teacher-centered mode, not as moderated self-learning process.

Particularities: In community workshops in Onaville, often the tools Focused Groups and Charrette have been inseparably melt. Mostly goals and method of opinion collection of Focused Groups have been applied in one big group.

Transect Walks

Transect Walks have also been integrated in most workshop/Charrette sessions in order to vividly illustrate and transfer discussed key points, findings and knowledge gained by other participatory methods and tools. For specific assessment of Transect Walks as participatory tool refer to the statements in section 5.4.2.1.

Validation and Feedback Sessions

Feedback sessions have been hold with both *Tab Tra*vay in Onaville in order to evaluate workshop activity and coordinate or recommend continuation.

Goal of procedure: Coordinate and evaluate activities in Onaville. To empower the committees as coordinating entity of community initiative.

Area of influence: Tab Travay in Onaville

Duration: One to three hours

Number of participants: 5 to 10 members of the Working Tables plus one or two coordinators

Selection and recruitment: All attending members of the committees

Mode of communication and participation:

Decisions and compromises for planning and execution of activities in the community are designed and evaluated in collaboration between students and Tab Travay members.

Functions of participation: Take-over and coordination of initiatives by Tab Travay (co-governance)

Obstacles: Evaluation of workshops has been carried out very roughly and not systematically due to lack of time resources of students.



Fig. 53: Transect walk with participants of Neighborhood Contingency Plan, 2014



Fig. 54: Weekly meeting of Tab Travay Haut-Onaville

5.4.2.3 Methods of Citizen Involvement for Decision Making and Implementation of Micro-Scale Projects

Working Table (Tab Travay)

In decision making the community-organizing Working Table (*Tab Travay*) is the used tool in citizen involvement. In the weekly meetings of the Tab Travay with project coordinators, TECHO volunteers and community leaders together with motivated residents elaborate events and projects with benefits for the entire neighborhood.

Goal of procedure: Empowerment of a local community-organizing committee that is able to assess the needs and visions of the community, to develop plans for improvement action, contributes to fundraising activity, project execution, evaluation and maintenance. The committee is designed also to promote pro-poor self-help and collective ownership over implemented projects.

Area of influence: Onaville

Duration: 1 – 3 hours per week

Number of participants 5 to 10 members of the Working Tables plus one or two coordinators of the *Tab Travay* (TECHO volunteers)

Selection and recruitment: Mode of selection is self-selection (of motivated residents and leaders) and additional, distinct (post-)selection of underprivileged people according to TECHO's charter for Tab Travay. Initial recruitment happens during construction of temporary shelters in the respective communities.

Mode of communication and participation:

Leaders report needs and visions of the community to the Tab Travay. All members discuss and decide on an equal basis and aspire collective formation of opinion. Thereby the negotiation of reliable decisions and compromises (co-governance) stands in the foreground.

Functions of participation: Functions range over an individual benefit and qualification of personal skills of members, over exertion of influence on the neighborhood up to the co-governance.

Obstacles: Due to the political situation both Working Tables' action in Onaville has been limited to micro-projects. Several times power-related conflicts made restructuring of the committee necessary—exchanging several leaders who tried to execute party-political power.

Particularities: In each different phase of action different tools are introduced in the general working methodology of the *Tab Travay*—ranging from weekly Working Table Meetings that include Thematic and Vision Charrettes, and Micro Planning Sessions, over Implementation Activity¹¹⁰ via Self-Construction (supported by cooperation partner TECHO or other actors), up to Validation and Feedback Sessions. Each tool follows slightly different goals, involves other actors and holds differing functions. TUM-USO students have been involved in decision making and implementation of micro-scale projects only to a small degree.

¹¹⁰ In the case of the street sign campaign in Bas-Onaville (see Chapter 6.2), Transect Walks were used for negotiation of decisions: street names were negotiated with residents by *Tab Travay* members on the ground.

Chapter 6: Case Studies of Academia Fostering Local, Cooperative Community Action in Onaville

6.1 Neighborhood Contingency Plan

Preconditions and Objectives of the Neighborhood Contingency Plan

Already in June 2013 basic knowledge and awareness of environmental hazards in Onaville have been conveyed by the author to residents and community leaders during one of the four thematic Charrettes in the community. The other important background of the initiative is Valentin Heimhuber's flood hazard analysis—which showed huge flooding hazards for Onaville (refer to Chapter 2.3).

Result Verification and Risk Management of Heimhuber's Flood Hazard Analysis in Onaville

Activity of the Contingency plan has started with extended site visits in the end of March 2014, with the target to validate Heimhuber's research results and proposals. On site visits a small focus group on environmental hazards was built from a group of four TECHO volunteers and a few community leaders of Onaville—introducing them into working and research methodology of the hydraulic and hydrologic research. During this field research, residents in endangered zones have been confronted with the flooding risk by carrying out qualitative interviews. Based on Heimhuber's studies on spatial and temporal distribution and occurrence of inundation risk, the focus group decided on coordination with the Tab Travay in Onaville to start an extended awareness-raising campaign of environmental risks in Onaville.

Alexis's Story

Alexis Leonciau had been living in Delmas 24, Port-au-Prince when the earthquake struck his neighborhood and destroyed his home in 2010. Since than he lives in his poor-quality home in extremely steep slope as even in the first months after the quake he could not afford buying a less risk-exposed lot in the area. He manually terraced the steep slope to place his hut in this hostile terrain— (thereby potentially increasing his family's vulnerability to landslides and erosion).



Fig. 55: Alexis Leonciau with his hut in the steep slopes, Onaville-en-Haut

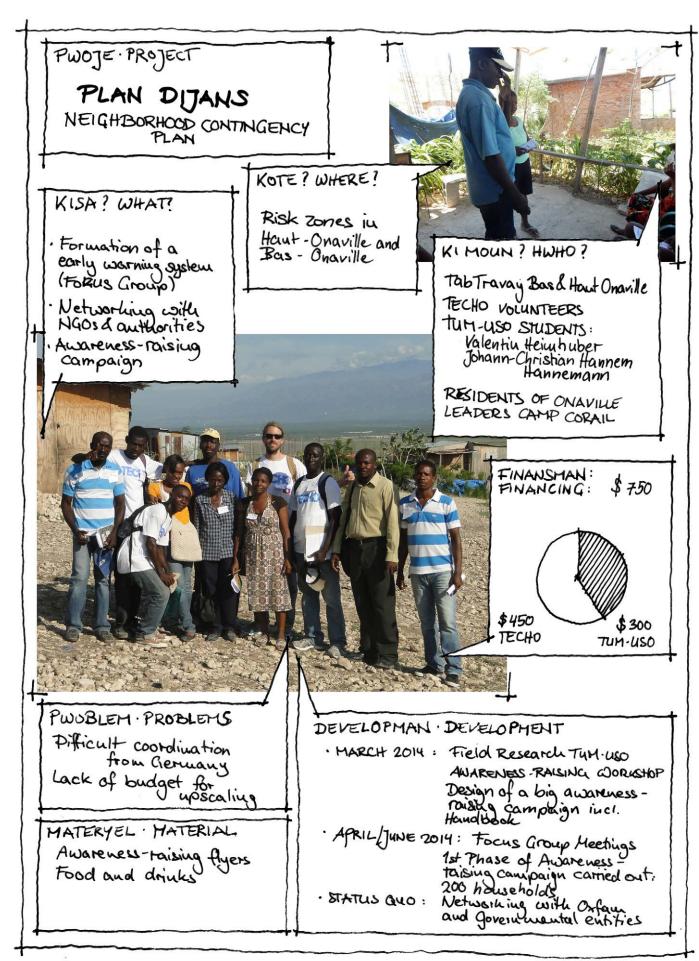


Fig. 56: Neighborhood Contingency Plan (Right photo: Courtesy of TECHO Haiti)



Fig. 57: Erdem Ergin from CIAT in talks with the market woman in Ravine Madaniel, 2014

Madansara (Haitian name for the "market women")

The market women we met during a site visit in the riverbed of Ravine Madaniel lives since more than 2.5 years with her children in a tent close to Camp Corail Sector 4. Her home is only separated by the non-reinforced dam from Ravine Madaniel. Originally living in a Port-au-Prince neighborhood, she was displaced after the earthquake to Onaville. Everyday, the woman purchases vegetables at the market in Bon Repos and resells them in Camp Corail and the surrounding neighborhoods to feed her family. She needs to cross the riverbed regularly.

Last year it was impossible for her to cross the river as it had turned into a torrential flood with an estimated water height of 60cm (two feet). The water did not top or erode the river banks in the lower course, but the heavy rainfalls inundated the women's tent and belongings. By April 2014 the lose dam hardly reaches 1.5 to 2.0 meters above river bed (due to bed-rock accumulation) and thus—according to Valentin Heimhuber's 2013 research on inundation hazard—does not offer security for bigger rainfall events.

Ravines and their economic potential

Ravines bear monetary potential: stonemasons collect big-sized rocks that can be used for fundament construction and sell them to builders. Smaller stones of the torrents' rock-load are crushed with a hammer to small-sized construction gravel for sale—e.g. for the beautification of entries.



Fig. 58: Conversation on flood risk with a local stonemason



Fig. 59: Validation of risk map on site with recent bed laid deposits, Onaville-en-Haut 2014

Awareness-Raising and Establishment of a Neighborhood Contingency Plan

Planning phase for a community-wide awareness-raising campaign in risk zones started with a kickoff-event on April 12th, 2014. Together with TECHO volunteers, Tab Travay members and a group of community leaders from Camp Corail (the director of the camps, as well as three representatives of local CBOs), a basic emergency management plan was elaborated during a thematic Charrette on flood hazard in Onaville. In focused groups, strategies have been searched in order to prevent catastrophes in the community. Fundamentals about the relationship between vulnerability and unawareness of hazards were explained (fig. 60). The base of the emergency plan is a network consisting of six leaders which were identified and elected during the workshop. In order to take over emergency information coordination, each leader will be a contact point for residents of his specific neighborhood,

coordinating danger alarms inside of his neighborhood, as well as with the Contingency Plan leader network, and local and national authorities (Communes Croix-des-Bouquets and Thomazeau, as well as with Department for Civil Protection and the national meteorological center). The planned communication methods vary from the context (fig. 62): SMS, tele-dyol (word of mouth), megaphone announcements, to local radio stations (Radio Vihamo). In the search of possible emergency shelters, adapted buildings and structures had been discussed, same as necessary requirements such as good construction quality, location in "safe" zones, building size and use, good accessibility, and so on. Further, a pre-designed awareness-raising flyer was discussed. Unanimously its use in the following community-based awareness-raising campaign in Onaville's risk zones was decided by the leader network (fig. 62).



Fig. 60: Flood risk workshop, 2014



Fig. 61: Brainstorming on "What can we do to avoid catastrophes?"

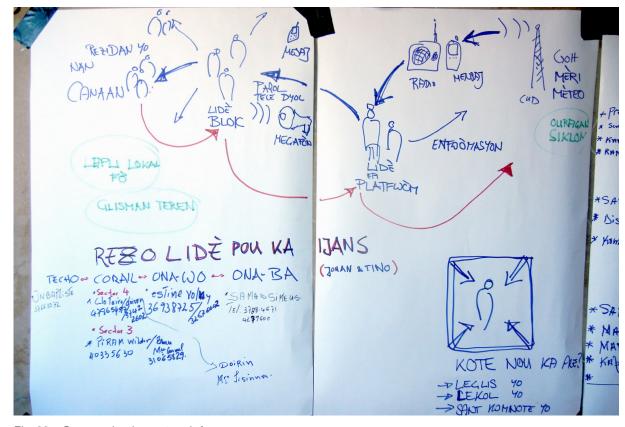


Fig. 62: Communication network for emergency cases

In a final site-visit all participants experienced the existing issues with construction in risk areas on the ground. The activity has contributed essentially to a collaboration among different leaders from Onaville and Corail camps. Spreading of information in both camps Corail has been facilitated since CBO representatives and the director of the camp have been involved from there on in collective coordination and planning of upcoming phases by the leader network.

Awareness-Raising Campaign by the Focus Group

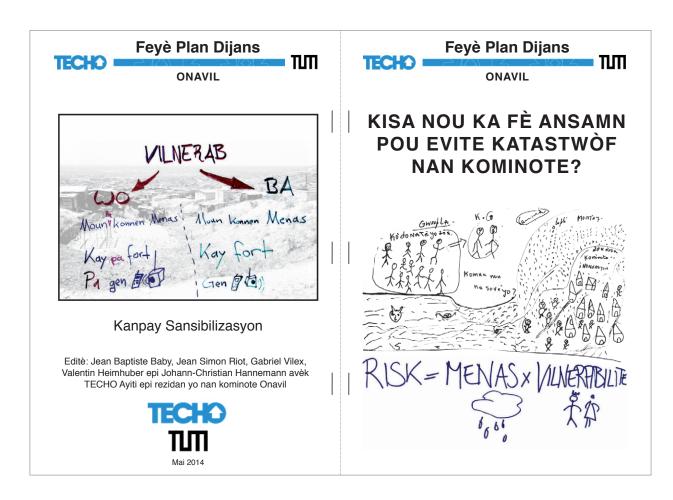
The first phase of awareness-raising campaign in risk zones was carried out with about ten people (community leaders and coordinating TECHO volunteers) on three following Saturdays in June 2014, distributing about 200 flyers to households in hazard-exposed

areas of the ravines and steep slopes of Ti Sous and Fon Dyab (eastern and upper Onaville).

In personal talks with the residents, risk exposure, prevention measures such as an Emergency Kit, and the Neighborhood Contingency Plan had been explained, the telephone numbers of contact leaders handed out to allow bilateral communication in case of risk observations or announced alerts for tropical storms and heavy rains. It turned out, that most families living in the hazard zones actually know their risk exposure, but simply have no other choice as they cannot afford the elevated land prices in safer zones. This shows, that in Onaville, the unhampered land market and real estate speculation is one of the mayor drivers for the invasion of risk zones by underprivileged families.



Fig. 63: Awareness-raising campaign by the focus group, 2014 (Courtesy of TECHO Haiti)



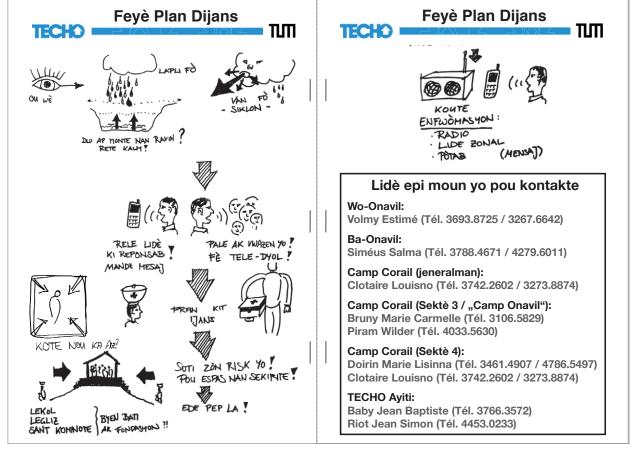


Fig. 64: Neighborhood Contingency Plan flyer



Fig. 65: Poster presentation at the Forum "Understanding Risk in Haiti," 2014 (Courtesy of Christian Werthmann)

Exchange with Different Actors

- Since May 2014, independent meetings of TECHO's volunteer coordinators and community leaders with disaster experts and the Ministry of Environment (MDE) have been held in order to present the project and evaluate potential support. MDE has shown interest in the initiative as the used volunteer, and grassroots-methodology for disaster prevention has potential for upscaling on a regional or national level (pers. comm. with Salma Siméus, member of Tab Travay Bas-Onaville, June 30, 2014).
- The pro-active and volunteer work of leaders in the awareness-raising campaign has further led to the fact, that the magistrate of the commune Thomazeau has made contact with involved community leaders.
- Confronted during heavy rainfalls in May 2014 by active citizen with the flooding of several precarious homes in the wetlands of "Ti Sous"—the most eastern part in the lowlands of Onaville—the annex of the commune Thomazeau has marked four houses to demolish. In the first moment, this looks like a big achievement, but without providing or negotiating a new place for the residents, the communal action potentially leads to the displacement of the families into other, or even more risk-exposed areas.
- Presentation of the neighborhood contingency plan and Heimhuber's risk analysis on the international experts' and practitioners' Forum "Understanding Risk Haiti: Innovate to Prevent" in Pétionville, Port-au-Prince (July 14 to 18, 2014) by community leaders and TECHO volunteers

• The initiative has been communicated with the NGO Oxfam Italy which is working on a regional watershed and environmental hazard study that includes community participation in a territorial committee on environmental hazard. As a result, two participating leaders of the Contingency Plan are now involved in Oxfam's activities in the Community Resource Center Corail Cesselesse.

Contributions by TUM-USO Students to the Cooperative Process

- Capacity building and technical training
- Initiation of the awareness-raising campaign and conceptualization of a local contingency plan
- Network-building among local leaders, and between the leaders and external organizations
- Development of community-driven risk mitigation measures
- Prioritization of the intervention zones for the awareness-raising campaign (has not been used)

Outstanding Activities, Necessary Improvements, and Potentials

So far "seeds" for a Neighborhood Contingency Plan have been set as the information dissemination has started within the neighborhood networks. In order to improve efficiency and working method, the first phase of awareness-raising campaign needs to be evaluated by the focus group. Cooperation with other actors and organizations (such as Oxfam Italy) needs to be fostered to upscale the campaign for the entire zone of Onaville—and especially for the high-risk zones along the Ravine Madaniel. This zone, including both camps had been put aside in the first phase the small starting budget only covered printing of 200 exemplars of

the information flyer. For further awareness-raising, additionally an exemplary listing of an Emergency Kit should be included in the distributed flyer.

As for the emergency plan in general, the leader network needs to be reinforced by involving other established community leaders such as teachers, pastors, and so on. The network has to collect experiences in the execution of alerts, as repeated false alarms could lead to ignorance of the alert network among the residents. As specific sites and structures for refuge yet have not been selected in the first phase of action, participating leaders need to get in touch with the owners of respective community-centers, churches, schools or kindergartens. A site-specific assessment of the available structures and their surroundings would be required in a further step to assure the safety of the location. Once such a community leader emergency network is really established and works reliably, it provides a low-cost, highly autonomous basis for risk prevention and mitigation strategy—based on the community's own resources and information dissemination networks—which could additionally help the (local) authorities to become better prepared and react to unforeseeable local disasters.

6.2 Street Denomination Bas-Onaville

Preconditions and Objectives of the Street Denomination Project

Street denomination was seen as one of the first possibilities of communitarian action for the two new Tab Travay. This refers to the fact that "place-making" and improved orientation has been seen as urgent common need among Onaville's residents. This "place-making" for a new beginning after the earthquake can be already interpreted into the fact that people denominated the vast occupied area "Canaan" and "Jerusalem"—the promised land of their future. Individually and collectively people all over the area have started to write street names on walls or improvised street signs, and to place house numbers for better orientation (fig. 66).

The latter may be also seen as manifestation of their right of permanent residence. As a result, both *Tab Travay* identified this subject as an opportunity to strengthen community-ties and establish the Working Tables as advocating committees of the residents of Onaville. This project overview refers to action carried out in Bas-Onaville; an overview over action carried out in Haut-Onaville is presented in the end of this section.

Planning for the street denomination initiative originally started in early 2013 in *Tab Travay* Haut-Onaville, but was interrupted a short time after the implementation of 70 road signs in the neighborhood in Haut-Onaville due to conflicts which caused necessary restructuring of the committee.

In late 2013 *Tab Travay* Bas-Onaville took over the initiative and rapidly headed forward towards implementation. On request, the *Tab Travay* obtained the permission for project execution by both conflicting authorities Croix-des-Bouquets and Thomazeau.



Fig. 66: Street denomination in Onaville

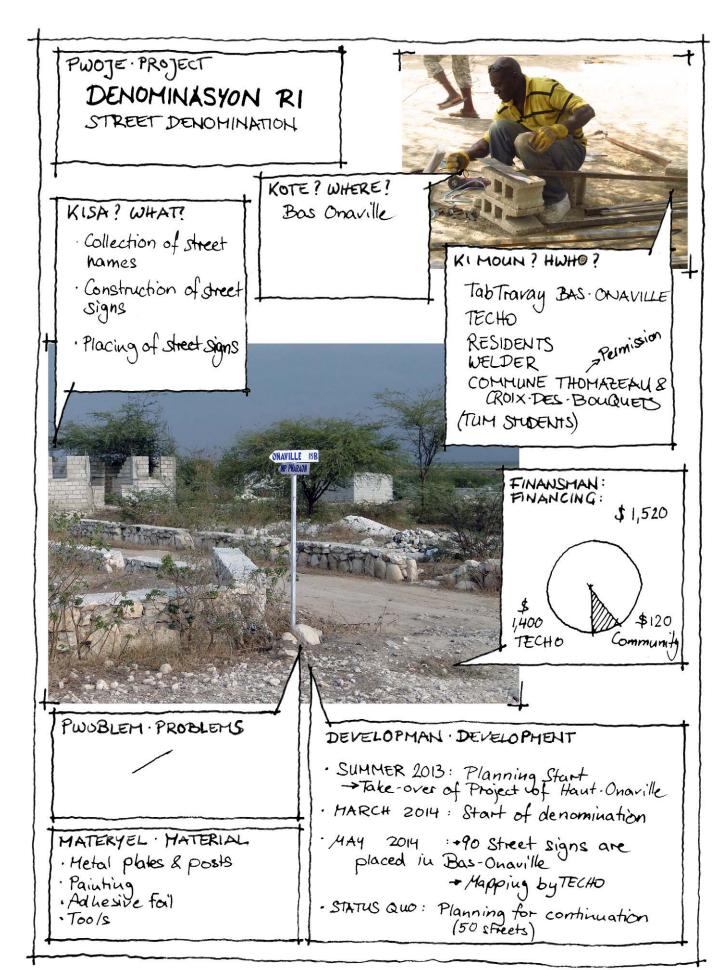


Fig. 67: Street denomination project, Bas-Onaville (Right photo: Courtesy of TECHO Haiti)



Fig. 68: Discussion on future street names, Place Onaville, Onaville-en-Bas

Denomination Process

Members of Working Table Bas-Onaville walk through the neighborhoods and inform neighbors and residents about the planned street denomination initiative, same as about Tab Travay's background as communityorganizing committee. In personal talks, the leaders inquire about existing street names or ask residents of a particular street to propose a name. Proposed or existing street names are matched with the statements of different residents, counter-checked on-site with the member's street name documentation list in order to avoid unnecessary duplication, and negotiated pragmatically on the ground (fig. 68). The list is later used to label the street signposts, that are placed in joint initiative with members of the Working Tables, TECHO volunteers and residents at road junctions. To improve take over of responsibility and ownership in the community, Tab Travay collected in total a voluntary financial contribution of 5,500 HTG (\$120) from the neighborhood.

Construction Process

While the procurement of materials, such as the metal plates and posts, painting, colored adhesive foil, and cement was done by TECHO, *Tab Travay* members, TECHO volunteers and a local welder carried out the conceptualization and construction of the street sign posts: Constructed by the hired local craftsman (fig. 67) the signs were painted and labelled by members of the community (fig. 70). By the beginning of March 2014, the denomination of streets started with the placement of the first signs, the last ones of the 90 were completed by May 1st, 2014.



Fig. 69: Street sign construction by a local welder in Bas-Onaville



Fig. 70: Members of Tab Travay label the signs



Fig. 71: New street signs in Bas-Onaville, 2014

Evaluation of the Initiative

If seen as a catalyst in the community for future initiatives, the street denomination project has several strengths:

- During the walks and talks with residents on the ground, as well as in the negotiation of street names the community leaders reinforce the networks inside the neighborhood and inform the inhabitants about *Tab Travay*'s mission in the zone.
- As a low-tech, labor-intensive working method has been chosen, everyone is able to contribute to the initiative with his own resources and means.
- The activity has led to a pro-active coordination of activities between the *Tab Travay* and the local authorities.
- The high visibility and contribution of the initiative to improve orientation and place-making serves as

a good strategy for the motivation of other residents to contribute voluntarily to community-led projects.

There is only one weakness visible: At the moment of the author's second visit to Onaville by April 2014 the placement of street signs was seen as a last step of action in a denomination process—no documentation of intervention (mapping) and data sharing with other actors such as local authorities was planned.

Outstanding Activities and Possible Improvements

By June 2014 again both *Tab Travay* are working on the second phase of street denomination—Bas-Onaville planning for the denomination of 50, Haut-Onaville of 35 streets.

Local construction material traders could be involved in the process and motivated to contribute with donations in kind-metal plates and posts, painting, cement—to the initiative.

Potentials of the Initiative

The author introduced the idea to combine the placement of street signs with a mapping of denominated streets in Onaville to participating community leaders and residents in Bas-Onaville in order to increase the impact and benefits which this street denomination project could generate for the community. This could reach from individual capacity building (map reading, (GPS-)enumeration, data processing and map production), up to collective creation of basic maps that can be used as pro-active tool for later community action planning processes, governance or even land management. The provision of this data with other local, national and international actors would strengthen the community's position in future planning processes.

A threat for this is, that the focus is rather much on the map than on the learning effect provided for the community. This would be the case if high-tech mapping with GPS-devices and GIS-processing of acquired data which is carried out exclusively by experts without giving community members the chance to get involved in the mapping process via specific trainings and field work.

During May 2014 it turned out, that Onaville is a pilot zone for participatory and collaborative mapping of C.OSM-HA.¹¹¹ In this context stand the aerial imagery mapped in two overflies with unmanned aerial vehicles (UAV; "civil drones"), one from April 2013, another performed in March 2014.¹¹² A nine-day-long GPS-field study with mappers in training, advanced mappers and local guides was carried out in Onaville in September 2013, mapping humanitarian objects, infrastructure, risk zones and other objects. (C.OSM-HA 2013)

Evaluation of Potential Project Partners

In order to achieve community mapping and training of skills, two potential cooperation partners have been identified, all have already carried out community mapping in Haiti and thus would be the perfect starting point for future action:

- Habitat for Humanity, an NGO that partners with Shack/Slum Dwellers International (SDI) and Architecture for Humanity for community surveying, mapping and enumeration in Simon Pele neighborhood, Port-au-Prince. All three organizations use Community Mapping as an entry point to the community with the objective to prioritize its needs and elaborate an action plan.
- OpenStreetMap Community Haiti (C.OSM-HA), a volunteer organization consisting of a small team of local mappers and GIS-experts. C.OSM-HA can revert to contacts and collaboration with Humanitarian OpenStreetMap Team (HOT), IOM, OSM France, and CartONG. Together they have carried out baseline, humanitarian, and community mapping, as well as capacity building programs for volunteers in Haiti.

¹¹¹ Information can be accessed on: http://wiki.open-streetmap.org/wiki/UAV-HAITI and https://docs.google.com/file/d/0B23KIWXOmZhJdzJGczJUU24xWlk/edit

¹¹² Available imagery of Onaville/Canaan can be looked up here: https://map.openaerialmap.org/#/-72.26210117340088,18.665640164427206,14?_k=79yt2n

Exchange with Different Actors

In April and May 2014, the author tried to work in close collaboration with the Working Tables, community leaders, TECHO, and C.OSM-HA in order to initiate the proposed collaboration in Onaville.

April 30 to May 12, 2014: The author prepares large format, high-resolution map plots with DroneAdventures/HOT-aerial image for an analogue mapping of street names by TECHO-volunteers and Tab Travay members. ONU-Habitat agrees to print out the maps, TECHO would deliver the prints to Tab Travay and would assist analogue and GPS-mapping.

May 8 to 11, 2014: The author starts contact building and information exchange with C.OSM-HA to evaluate the possibility for collaboration and expert assistance during first mappings. 113 Project leaders from C.OSM-HA, IOM, and CartONG and volunteers from C.OSM-HA confirm their interest in potential collaboration.

May 9, 2014: TECHO's Monitoring and Evaluation Team maps in an ad-hoc action with a GPS-device 220 points (streets, community centers, points of interest) in Onaville. Several members of the Working Tables are involved with the mapping activity. The Google Earth- and Excel-file containing GPS-points tagged with street names is exchanged with the author.

May 13, 2014: Coordination of a first data and information exchange is decided in a joint telephone conference with representatives from C.OSM-HA, OSM Fr, IOM, CartONG and TECHO in order to enable possible cooperation.

June 4, 2014: C.OSM-HA invites TECHO representatives and interested volunteers at short notice to join a mapping party on June 7 for a training but neither members of Tab Travay can join as they have a Focus Group meeting that day nor TECHO volunteers or directors have the time to join.¹¹⁴

¹¹³ Used networking method: E-mail to OSM Haiti mailing list (talk-ht@openstreetmap.org).

In a remote mapping campaign led by the American Red Cross, entire Canaan was mapped via Humanitarian OpenStreetMap mid 2015. After this, the author integrated the street names mapped by TECHO volunteers in Onaville into the map.



Fig. 72: GPS street sign mapping by TECHO volunteers (Courtesy of TECHO Haiti)

Recommendations

A collaboration or cooperation of TECHO and C.OSM-HA—respectively of the Haitian volunteers of both organizations—is highly recommendable, as this could lead in the long-term to data acquisition based on socio-economic surveys, "community mapping," and enumeration with residents, which would provide professional data for community-based action planning.

If such a cooperation among organizations does not happen, at least knowledge about leaders, CBOs, and important community-structures in Onaville should be exchanged among TECHO and C.OSM-HA—so they could be accessed by the respective other. If joint action for community-based street name mapping does not evolve, the author, TECHO or TUM-USO should insert the GPS-mapping in OSM and provide both *Tab Travay* a hard copy of the map, so they could use it for negotiations with other actors.

For analogue community mapping, The Community Mapping for Housing by People's Process Handbook by The Asian Coalition for Housing Rights (ACHR) can serve as a planning aid,¹¹⁵ for digitalization or GPS-mapping, the applied mapping methodology of C.OSM-HA should be a reference.¹¹⁶

The manual is available on ACHR website: http://achr.net/upload/downloads/file_13122013125107.pdf

¹¹⁶ A Creole user handbook for OpenStreetMap is available in different formats on FlossManuals: http://fr.flossmanuals.net/openstreetmapayiti/

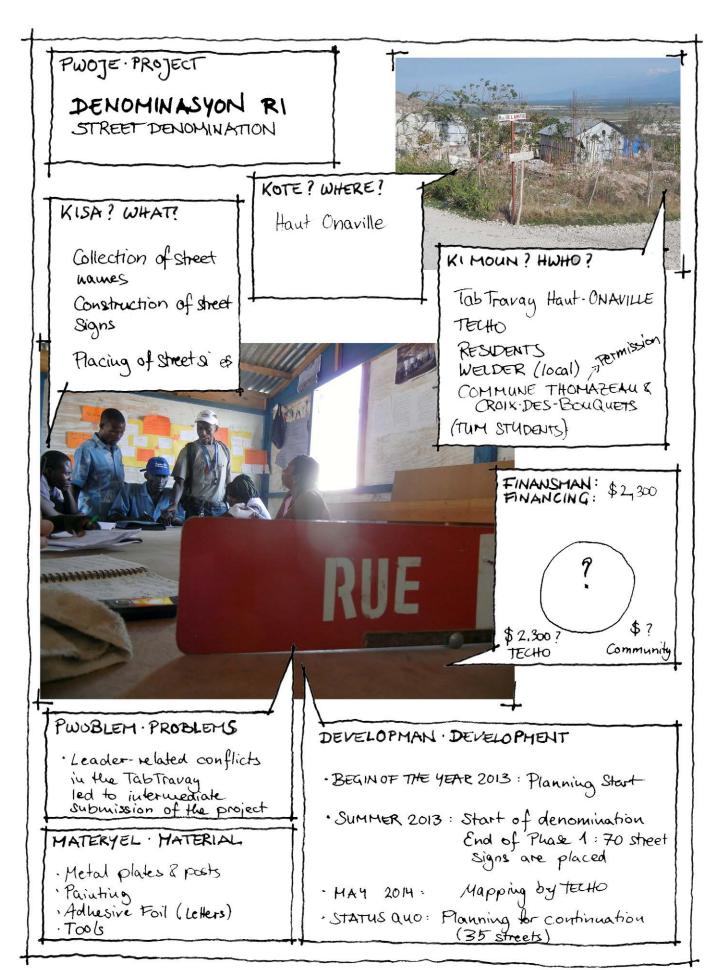


Fig. 73: Street denomination project, Haut-Onaville

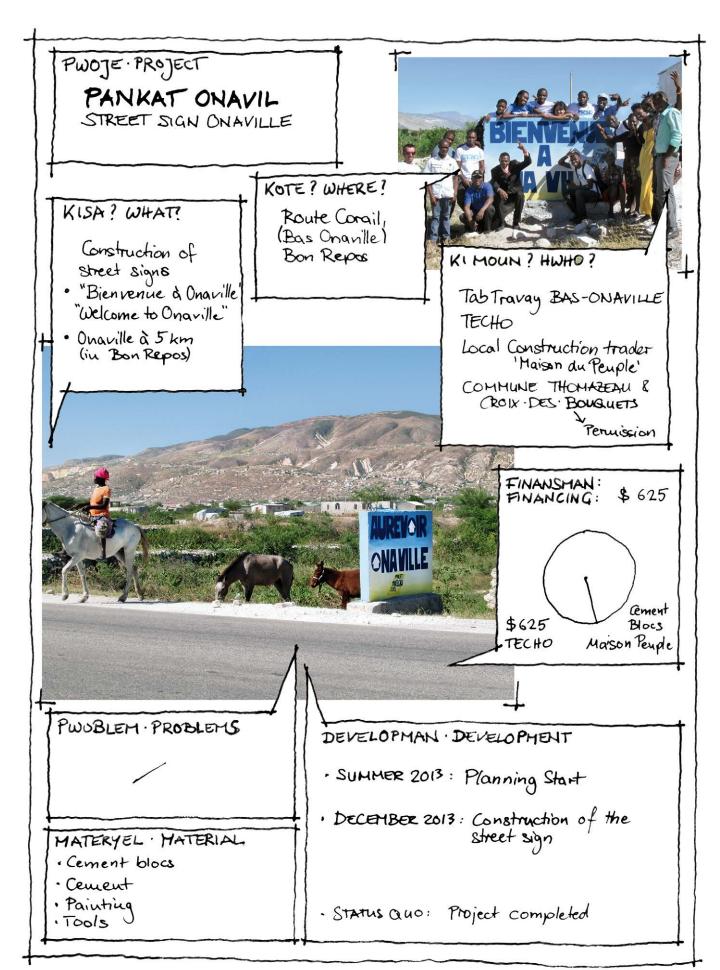


Fig. 74: Town sign, Onaville (Photos: Courtesy of TECHO Haiti)

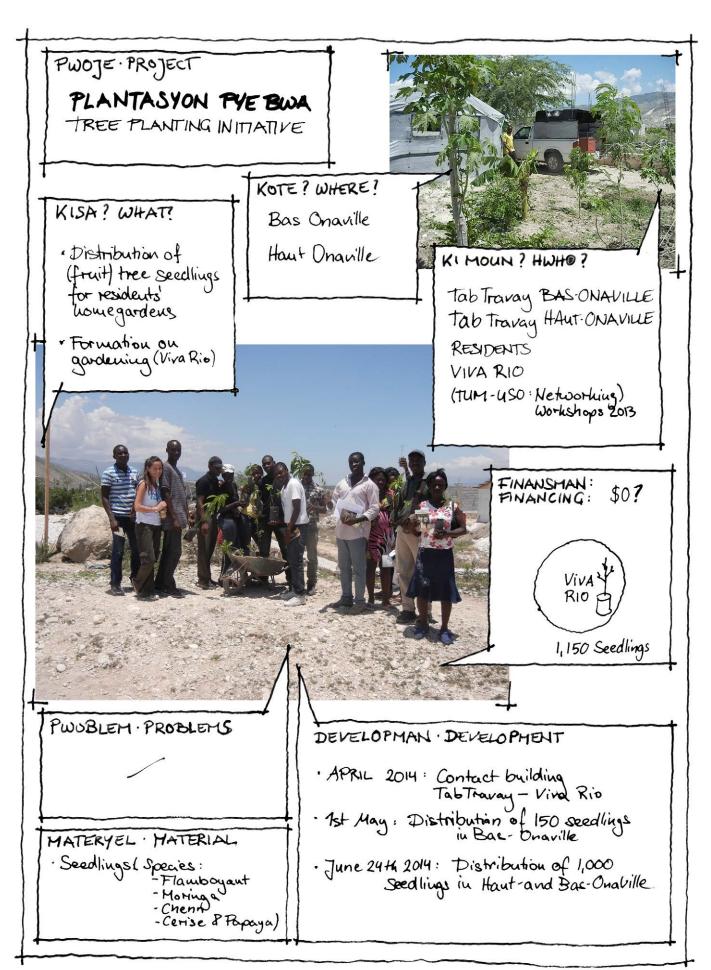


Fig. 75: Tree planting initiative

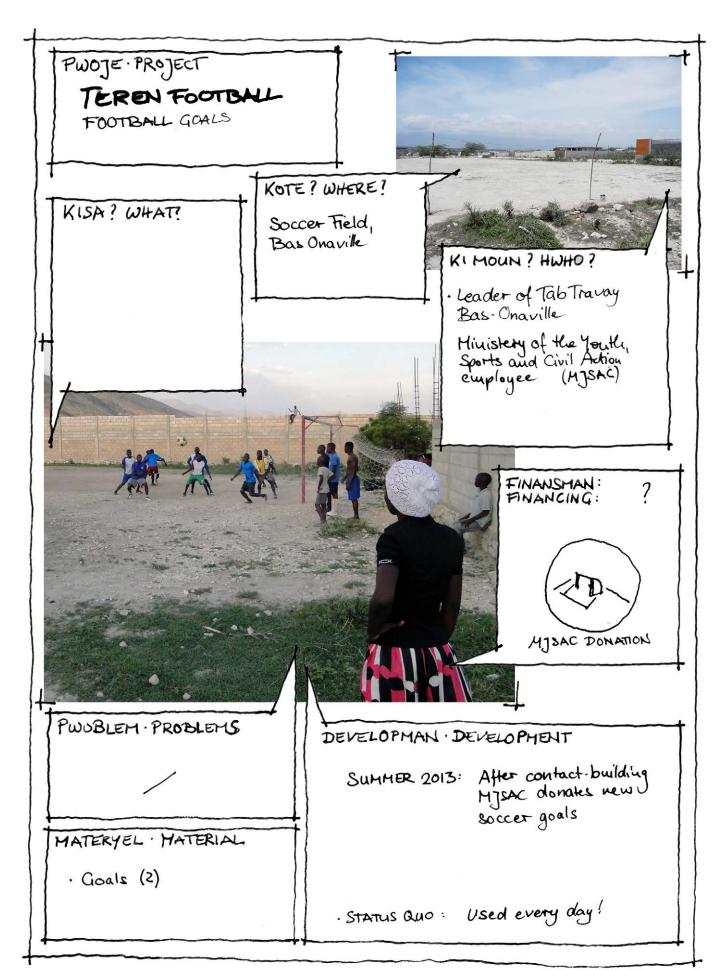


Fig. 76: Football goal construction

Chapter 7: Reflections of Working Methodology, Achievements, Obstacles, and Recommendations

The 21-month study was optimistically ambitious in scope-by far exceeding the frame of regular academic projects and theses in a Master's program. Throughout the different stages of research and community-based activity in Haiti, many problems have arisen, including conceptual, methodological, technical, cultural and logistical ones. In order to draw conclusions from this open-ended work for a continuation of TUM-USO's presence in Onaville, for academic action in similar circumstances, as well as for upcoming intervention of local, national and international actors in the development of Canaan, the final chapter of the thesis features two parts. The first part, analyzes obstacles, achievements, opportunities and threats encountered, while the second part focuses on actor-specific suggestions and recommendations to reveal different adjustment possibilities.

7.1 Evaluation of the Work in Onaville, Canaan, and Haiti

7.1.1 Analysis of the Present Illness

Most of the actual obstacles, issues and deficits that have been observed specifically on the formation and evolution of Onaville neighborhood and Canaan, can be reduced to key factors that are related to political or historical preconditions, de-facto practice in development and weak governance from the side of decision-makers in Haiti. Reasons for the failure of many well-intentioned projects, programs, and policies are, above all other, related to one or more of the following facts:

- The Haitian government for years has not been equipped with the financial and human resources to maintain public sector services, nor to implement fundamental reforms. Long-term accompaniment and capacity building of administrative structures respectively of the national and local authorities remains under-funded or is not pursued.
- Huge discontinuity between ambitious legislation, (policy- and) decision-making, and planning on one side, and a lack of enforcement of rules, reforms, projects, and methods in practice on the other side have dominated the action of the Haitian authorities, as well as development practitioners for decades. Aside from this, many governmental entities lack coordination and often overlap in their responsibilities.

- Cronyism and corruption within the Haitian elites or the international business sector can be other factors that impede the execution of fundamental reforms.
- A dysfunctional, privatized education system—lacking (tuition-free) public schools, kindergartens and universities, application of general education standards and qualitative teachers, universal educational methods, unified curricula, fair remuneration of teachers, as well as social support for tuition costs and learning material—leads to a very low level of education among the Haitian population. Only a few high qualitative universities exist, their high tuition fees exclude—as in private schools and vocational trainings—the biggest parts of Haitian society from qualitative education.
- Brain-drain continues on regional and international level: On the regional level centralization of education and job market in Port-au-Prince leads to an unbowed rural-exodus of students and people in search of further education. On the international level, still many qualified Haitians leave the country for the U.S.A., Canada, and other countries where they, as qualified workers, are provided a more secure living environment. Those who stay, are farmers, working-class people, and underprivileged families that have not the necessary means to access education.
- A big part of Haitian society suffers permanently under the lack of formal employment, searching for jobs in the informal market, which does not provide any job security. This social grievance is combined with the absence of governmental, social insurance networks.
- The informal business sectors that dominate most economic activity in the Haiti leads to the fact, that the government misses out on tax revenue.

- Uncertainty and insecurity of land tenure and ownership, respectively the lack of proper land management and administration dominate Haiti's production, building, and housing reality. A "wait-and-see" attitude of political decision-makers hampers a comprehensive reform of the national land management system.
- While basic infrastructures are located in the "centralized Republic of Port-au-Prince," the andeyò, the "outside country" suffers extreme under-servicing, especially in adequate health care and further education (Montas-Dominique in Farmer 2012, 260).
- Although the government is mandated to attend its duty to supply its population with basic services, any action in this direction is highly politicized.
- Local authorities fundamentally lack the budget to execute their mandate for self-administration and planning. Mayors and representatives often are vulnerable towards favoritism and suggestibility by particular or party-political interests. As local officeholders are exchanged continuously, steady decision-making and collaboration is very difficult. International actors therefore often bypass local authorities.

7.1.2 Evaluation of Development Practice in Haiti

All those points have led-in the context of decades of suppression, political nepotism and instability, societal conflicts, and constant discrimination of a poor majority—to a "disappointment with democracy," 117 and the resulting disconnect between politics and the living reality of people in Haiti. Rules and laws have become widely bypassed and ignored by both locals and foreigners; the people have lost their trust in their politicians. Development and humanitarian aid agencies, due to their closeness to Haitian upper class and decision-makers, have lost reputation as well. Despite decades of presence and billions of dollars spent, international organizations have not been able to improve the living conditions of the masses. Failed projects and programs, and unfulfilled expectations of the beneficiaries have led in the Haitian society to skepticism, frustration, or rejection of foreign "paternalism" on one side, and indignant demand for donations and development on the other. The failure of sustainable development and the loss of trust in foreign aid and development agencies can be often related to some of the following factors:

- Due to a lack of immersion, globally acting organizations that intervene in post-disaster situations often lack knowledge of local, cultural, societal, and historical characteristics. Action rests on biased presumptions of needs and projected development wishes, and therefor often does not meet the real needs of a target group.
- Adapted, "Haitian" approaches and working strategies conflict with the typical application of "Western-world" standards and values. This is

true not only for international actors, but also for the "beneficiaries" of development aid. People and representatives strive for occidental solutions no matter if those have shown to be improper.

- NGOs do not have the mandate to serve the entire population and further are only able to serve a limited number of individuals from specific target groups.
- Planning is volatile, and implementation is carried out hastily. "Quick-win" projects are executed by international actors instead of farsighted, sustainable ones—in order to present visible success to investors and donors.
- Information exchange, coordination and cooperation among local, national and international actors are (still) in deficit. Existing exchange platforms remain understaffed or unused by many actors. Furthermore, there is no exhaustive census of active NGOs, their activities, specific tasks, and resources in Haiti that could promote and facilitate project-specific cooperation.
- Development and protective measures concentrate primarily on the development of "hard infrastructure," instead of development of human resources, networks and spaces—where people are the subject of action. Often hard infrastructure is not accompanied respectively maintained by the implementing organization after finalization of construction works— "dead infrastructure" remains creating new problems.
- Project time-frames in development practice are inflexible and mostly limited to a period ranging from several months to a maximum of two years, neither permitting basic research and profound analysis of local conditions in advance of project planning and implementation, nor useful, extended educative aspects, social programs, and vocational trainings. Project managers are often contracted on this basis.

[&]quot;The redemocratization after the end of the dictatorship [in Brazil] did not empower the poor as hoped, or bring benefits to their communities as expected." (Perlman 2011, 202) This theme can be fully transferred to Haiti after the end of Duvalier's dictatorship in 1986 and the following oppression of democratic tendencies via bloody revolts and coups in the 1990s. For more information refer to chapter 2.1 Historic Preconditions.

Project budgets and funds cannot be administered flexibly in use and allocation.¹¹⁸

- The same issue arises with citizen involvement: Community-building, formation of democratic skills, and a community-led elaboration of priorities, visions, strategies and solutions requests long-term involvement of experienced actors, network building and distinct coordination within a multi-stakeholder framework. This stands in contrast to the high rotation of staff in the development sector.
- Local population is often insufficiently empowered—via professional accompaniment—for an assumption of ownership over and maintenance of the delivered (infra-) structure.
- Terminated projects lack accurate documentation and evaluation of the entire process—covering needs assessment and prioritization, planning, implementation, delivery and maintenance by the users.

The combination of the weaknesses and deficits of both Haitian authorities and development agencies, is that in Canaan so many resources of expertise, labor and funding still remain untapped as the planning entities and international actors struggle with the dimension and complexity of coordination and information exchange. Residents significantly lack any viable information about the current state of work and planning of the government and international actors; it is de facto impossible for them to participate at some point in the planning process concerning the neighborhoods of Canaan.

¹¹⁸ These preconditions essentially collide with project planning and implementation that is carried out as part of an open-ended, cooperative process with future users.

7.1.2 Lessons Learned from Citizen Involvement Procedures

It has turned out that in the domain of participatory processes the most important requirement for successful, respective, mutually satisfactory decisionmaking is absolute transparency in the communication of objectives, goals, modalities and impact of a procedure. Only then wrong expectations can be limited widely. The goal of participatory procedures should be to reach an identification of the participants with made decisions, rather than a better acceptation of decisions by the participants, as only the first may lead towards long-term support or own contribution. On the other side, it can be clarified that the outcome participatory procedures may either result in a final consensus or in disagreement. Even by not solving a problem in accordance, the latter may contribute essentially to enhance transparency and to specify existing issues on the basis of concrete arguments. This cannot be the case when participatory procedures are abused for subsequent legitimization of already determined decisions, but is possible in the case that decisionmakers are willing to share decision-making power with citizens in specific fields.

The selection and design of the respective involvement method and time frame, as well as good preparation of the sessions widely decide over general satisfaction of the participants with the procedure. Lack of transparency, lack of the clarification of wrong expectations, and predetermined decision-making only further increases disillusion with politics and democracy. In the worst case this may impede participants' future action in other participatory procedures. Field research in Corail camps has revealed that the planners had held many community meetings, and even established community committees, but frustration is extremely high, as decisions and promises made in the meetings have not led to action (for example in job creation, vocational training, and so on). Of further importance is the mode of recruitment and selection of participants and interest groups: this decides over the representation of different social groups' interests in the procedure (inclusion/exclusion), and thereby over the commitment of respectively democratic legitimation of decisions.

In this context also stand the protection of minorities and their interests in decision-making, as well as the recruitment of specific target groups for participation: both require specific modes of selection and methods of recruitment. In the author's participatory work specific selection of target groups has been adapted only in a very limited manner due to the lack of resources. For the recruitment for the general assembly in 2013 a combined strategy of personal promotion via flyers and "word of mouth," backed by recruitment of active citizen by community leaders proved to be a promising strategy for the little available resources. This could be further improved by involving local CBOs and leaders, using local radio stations for information distribution, and establishing public information boards in the community.119

From the perspective of democratic legitimacy of decision, the tool Working Table is very critical as it cannot easily be adapted with only two committees in Onaville, a community with the size of more than 10,000 people. Both work groups are generally open for all who want to be part of long-term, propoor neighborhood activity (self-selection), but this by no means signify that the small committees build a representative platform for Onaville. Problems have occurred with low information dissemination within the vast area of Onaville which led to the perception among non-involved residents that Tab Travay are advocacy groups that instead of acting for the entire community, act only for their own interests and power. But recent restructuring of the committees in member composition, as well as their recent neighborhood initiatives have lead into the right direction - promoting of openness of procedures, network-building with other

There is at least one local radio station in Onaville: Radio Vihamo, a religious broadcasting station.

community leaders, and the creation of a wider public. Onaville's Working Tables should be seen as great opportunity to start pro-active, participatory decision-making on a small-scale, neighborhood level.

Especially socio-economicly underprivileged people, such as day workers, single mothers, disabled people, and so on, in the absence of economic reserves do not have the means to participate in community-based activities if they are not compensated for the loss of working hours and eventual expenses on nutrition, working material and transport. Concluding one can say that without appropriate compensation, proper mode of selection and method of recruitment even participatory procedures that aspire pro-poor action risk to continue exclusion of the most vulnerable people from joint decision making and action.

Last but not least, communication rules need to be clearly followed, to permit equal treatment of participants and prevent digression (for example into political debates on basic principles). An unconcerned moderator or mediator who holds a high degree of personal neutrality is therefore highly recommendable. Students and TECHO volunteers have acted in participatory processes in overlapping roles as co-initiators of procedures and events, if needed as a moderator of joint discourse, and last but not least as a provider of knowledge input. This required very sensitive and critical self-observation to reduce potential sources of conflict, or misunderstanding. A clear separation of the moderating and input-providing person could be desirable in order to maintain impartiality of the moderator. The very necessity depends however on the nature of the procedure: while a neutral moderator is not necessarily needed in a Vision Charrette, impartiality and neutrality of the mediator is absolutely required in a Mediation between conflict parties. From the perspective of a foreign student, who is restricted by cultural and language barriers, it is additionally important that the moderator is either a skilled, native Creole speaker, or that the moderator may use supplementary assistance by a native Haitian.

For concerns of Canaan a Community Resource Center (CRC)¹²⁰ had been established in Corail-Cesselesse in 2013 as a common platform for "coordination of extern aid, technical assistance and information for community leaders, community-based organizations, and the residents in the neighborhoods." (ONU-Habitat Haiti 2011) However, at this point in time, the platform has worked very sporadically, recruitment of community representatives and CBOs has remained fragmented, information exchange, data collection, as well as promotion of the CRC's activity widely lacks.

¹²⁰ The Community Resource Center Corail-Cesselesse is located at Route Corail at the entrance of camp Corail Sector 4 (18°38'56.41"N; 72°15'11.80"W).

7.1.3 Lessons Learned from Community-Based, Academic Work in Onaville

Having followed a praxis-oriented, educative concept in academic field work in Onaville, we see the possibility of academic intervention to gear towards the integration and empowerment of residents by establishing a dual learning relationship between researchers and their local counterparts. The contact with concerned people furnishes academic research and design proposals with realism and local strategies: in community and actor meetings students receive important inside-views into the realities of the site, into project management and public works in the Haitian context.

Achievements

Participatory diagnostics, workshop sessions and capacity building all have shown to incorporate the potential to carve out major problems, basic needs and visions, and to challenge controversies across socio-economic, cultural and national boundaries. The working methodology to bring cognizance in form of "applied science" back to the reality of the neighborhood has proven very successful—with the limitation that to this point in time only a relatively small group of residents has been able to benefit from that. Participants of community workshops have been trained with technical, site-specific, and methodological knowledge and skills. Low-tech, low- respectively no-cost solutions—applicable on the individual, family level or the neighborhood level—have been demonstrated in combination with important background knowledge. In certain cases, joint self-construction followed in the procedure or afterwards. Especially gardening trainings have contributed to individual application and the cultivation of adapted tree species in home gardens.

Practice-oriented Vision-Charrettes have contributed to motivation of personal and joint self-initiative of participants and *Tab Travay* members in Onaville neighborhoods, as well as to the strengthening of social ties

and contact networks: By summer 2014 both increasingly exchange information and cooperate in certain projects and planning (examples: awareness-raising campaign of the contingency plan, street denomination and tree planting initiative); this had not been the case when the author started field work in March 2014: both committees had been working uncorrelated among each other.

Personal contact has been established among NGOs, decision-makers, the community-organizing committees, and community leaders. This has led to an integration of Tab Travay members into activities of Oxfam Italy, key actors have been on the ground introduced to Tab Travay meetings to leaders and working methodology (examples: UNO-Habitat, USAID, Cordaid, CIAT), other contacts have been built remotely (example: Viva Rio, Oxfam Italy, and others). In a consequence of this direct contact exchange both, local community leaders and extern actors, now are provided with a contact point to for future action. By summer 2014 this has already led to first examples of autonomous cooperation in Tab Travay's community action: With the NGO Viva Rio more than 1,000 tree seedlings have been distributed for production of shade, (fuel-) wood and food in private homegardens; recipients have been trained. The success shows the benefit, what may happen if community leaders take over responsibility for action from its beginning and are supported with the necessary contacts networks and means.

Together with other leaders and representatives of local CBOs an awareness-raising campaign for about 200 families living in environmental risk zones was executed, the Neighborhood Contingency Plan is further pushed forward via network building with the Ministry of Environment, and extern disaster risk experts.

TECHO volunteers have been included in trainings and workshops, as well as in the organization and execution of participatory community action. Especially the work on establishing a Contingency Plan has led to individual improvement of technical, site-specific, and



Fig. 77: Construction and test of a Tippy Tap for hand washing (Courtesy of Mariana Aramayo Donoso, 2013)



Fig. 78: Tippy-Tap in participant's home garden

methodological knowledge and skills, the identification of motivated co-planners of joint initiative, and to the motivation of personal and joint self-initiative on the side of Haitian volunteers.

At this point in time in July 2014, TUM-USO students, through contact building, repeated exchange of findings, and joint site visits, have reached a position in which they are invited to present their findings, and, in certain cases, consulted by international organizations and governmental agencies. Environmental hazard analyses-with a focus on the results Valentin Heimhuber's hydraulic and hydrological flooding hazard analysis of Ravine Madaniel (Ravine Lan Couline)-have been presented to key actors in the Haitian government (UCLBP, CNIGS, CIAT, DPC) and international agencies (Oxfam, ONU-Habitat, CordAid). Together with the participatory field work of Onaville's Neighborhood Contingency Plan the results have been presented by involved volunteers of TECHO on the exhibition of the international experts' and practitioners' Forum Understanding Risk in Haiti: Innovate to Prevent in Port-au-Prince, on July 14 to 18, 2014.

Data has been further provided to central databases: Flooding hazard map has been shared with CNIGS to enable future integration into the central geo-information platform for housing and city quarters SILQ. Field mapping GPS-data has been integrated in Open-StreetMap, all public results of TUM-USO research is made accessible under Creative Commons-NonCommercial-ShareAlike license on the project's website. Non-public research reports and data has been shared directly with different national and international actors.

Limits of action and Obstacles

Due to the lack of appropriate tools for remote communication and language barriers, remote prosecution of action in Onaville has proofed to been extremely hard to coordinate. The lack of direct communication with leaders and gaps in information distribution between partner organizations and residents' committees been the origin of some frustration among active residents. Several neighborhood initiatives could have been supported by available research data and students' recommendations, but due to a lack of communication and data exchange have not further developed.

Improved collaboration—regular, bidirectional communication with subsequent prosecution of agreement, as well as better coordination of action—remains fragmentary despite time-consuming coordination attempts and agreements with different actors. 121 Despite mutual expression of interest in future collaboration most efforts of researchers on linking extern organizations with community initiatives have ended in talk, especially when networking activity focused on NGOs instead of community leaders or CBO members in Onaville.

Informal organization of TUM-USO research group further hampers formalization of cooperative agreements for improvement of cooperation with the hosting organization TECHO and other local project partners. The disparity between the necessary time frame for academic research of sustainable solutions or community-based knowledge production and the very limited time frames of project planning and execution in development agencies propose a challenge for cooperation.

Fund-raising has been another obstacle as TUM-USO research group is not grounded on a formal research project but on the loose cooperation of students and chairs. The TUM-IAS Fellowship of Christian Werthmann would have provided funding only for PhD students in the research group—as part of IAS's supports strategy for early-career scientists.

¹²¹ At times the author spent up to fifty percent or more of working time for communication with project partners in Haiti—especially after returning from field work, in order to coordinate prosecution of community action in Onaville or establish new cooperation among actors met.

Opportunities

Concerted intervention under the auspices of UCLBP in Canaan area becomes more and more likely as key actors of the Haitian government and international agencies have been raising a budget and collecting available data. The opportunity would be that multistakeholder framework for integrated neighborhood development is applied similarly as in Villa Rosa and Simon Pelé neighborhoods—with local communities in a leading role in the decision-making of development.

Taking a moderating role in participatory processes, academia, backed by local partners, may bring together different groups of interests, and conflict parties on the basis of mutual knowledge exchange, discourse and decision-making.

Cooperative, praxis-oriented academic work in the neighborhood provides a crucial method to dissipate paternalistic structures and kick-start local change though neighborhood initiative, self-help. It provides the possibility to combine abstract academic work with empirical field studies on the execution of micro-scale pilot projects. Especially "do-it-yourself" solutions that use locally available resources to the maximum possible level seem to lead to contribute to increased own initiative and take over of common responsibility.

In the role of an advocacy planner in an integrative neighborhood approach students and researchers may provide—in cooperation with local partners—technical and methodological assistance for community-based needs assessment, planning, implementation, and project evaluation, while assuring that interests of minorities, underprivileged parts of society are included in public discourse and decision-making.

Threats

One major threat is that national and international decision-makers will remain inactive within the next

few years while Canaan, lacking any affordable basic "soft" and "hard" infrastructure, continues to consolidate in a completely unplanned, speculation-driven way, resulting in *bidonvilles* in the *ravines* and steep mountain slopes. A very similar development is likely to occur, if singular, uncoordinated interventions such as provision of basic services are carried out without developing integrated strategies to prevent further growth in environmental high-risk zones, and reduce risk exposition.

Even if national and international decision-makers and implementation bodies take action, there exists the possibility, that development business "as usual"—with hard infrastructure as the "subject" of development—is combined with prestigious interventions in retrofitting action, instead of concentrating on cooperation with communities, building and integrating their capacities, needs and visions, and so on. Under the public pressure, actors in any extern development process risk that they provide ready-made solutions, materials or structures too fast, thus risking to impede real take over of responsibility and ownership, to circumvent real empowerment, to neglect capacity building, to not make use of local resources, and to put creation of intelligent and adapted productive (land-use) activities, economic business networks, and social security networks aside.

Even though sharing findings with involved actors, academia risks that research results are not taken into account in decision-making as academic outcomes are not sufficiently adapted to development practice as often lacking clear methodological, technical and strategical recommendations.¹²²

¹²² Personal communication with Erdem Ergin, specialist in disaster risk management, CIAT. This happens not only to academic research but also to studies such as the flooding hazard study in 2010 Analysis of Multiple Natural Hazards in Haiti (NATHAT) report prepared by GoH in collaboration with The World Bank, Inter-American Development Bank and United Nations System.

One can conclude that the established mutual learning relationship and joint action between students, community leaders, and residents in neighborhood projects-reinforced by networking activities with extern actors-has led to increased self-initiative, as well as to enhanced perception of complex interdependencies between the built environment, society, and natural systems. Focusing rather on individual improvement of skills than on representative assessment of needs and decision-making the grassroots work of TUM-USO, at this time, provides no answer to the question if the chosen working methodology can lead to recovery over a minimum of control in the unregulated urbanization processes in Onaville and Canaan. In order to do so the approach followed would need further continuation, same as up-scaling of public relations work and participatory procedures—thereby searching cooperation of local authorities, key stakeholders, and potential partners.

7.2 Recommendations for Future Action in Development and Citizen Involvement

To guide the upgrading process in the multiple hazardzone, a development framework for Onaville and the entire Canaan area should be elaborated—using a multi-stakeholder approach, that should bring together the following actors:

- Important main actors from the national authorities and governmental units concerned with urban and environmental planning, project implementation, job creation and jurisdiction
- Municipal and local authorities such as mayors,
 CASECs, ASECs, and municipal planning entities,
 as well as local police and tribunal
- Local committees, community leaders and initiatives from civil society including residents and different religious leaders
- Other stakeholders such as technical and legal assistants, funding and implementing bodies with backgrounds from NGOs, private economy and academia
- Wrapping up, three indispensable aspects for the framework can be specified: A Community Action Plan embedded into an integrative neighborhood approach should launch a democratic, participatory development process, which is open for all concerned stakeholders and especially includes the residents of Canaan. Especially in the case of Canaan participatory elements need to be fostered from the early beginning-specifically through direct inclusion of residents, community leaders and initiatives into local decision-making. Even though bottom-up initiatives may in some cases require more time and trained human resources to integrate, communicate and negotiate a consensus, they generally lead to higher efficiency in budget management as measures have residents' acceptance or-in a better

case - their identification with the outcomes. Inevitably this working method requires a well-designed participatory approach where interventions arise from fair cooperation with community leaders and residents, including their priorities and needs. Liability of recommendations and results derived from these participatory processes need to be communicated from early on and transparently among all participating actors. Project platforms (such as Tab Travay in Onaville, the Community Resource Center Corail-Cesselesse, or the Canaan Work Group of UCLBP) should be installed on different levels in order to create an improved communication and information exchange, enabling a joint and transparent program framework for interventions. As longterm improved living conditions can only be found through integrated, intelligent local solutions within and across the disciplines of urban design, landscape architecture, environmental planning, education and economy, solutions need to be derived from a joint, trans-disciplinary discourse with residents on the consequences of human interaction with the environment, always referring to the specific local context. Hence, people need to be seen as "the "subject" of development." (ACHR 2011, back cover) As Canaan's urban structure is not yet consolidated, but with increasing speculation on real estate and ongoing occupation of the steep surrounding hills of Canaan this unique but extremely short possibility needs to be used to start now a concerted, integrated and sustainable upgrading and development. Otherwise urban density will reach a level where there is simply no space left to intervene.

• The reinforcement of data-platforms and information exchange structures should be a primary goal of all actors in order to improve coordination and cooperation among local, national and international actors. All actors should make use of existing structures for information exchange and coordination of activities, respectively reinforce the same if necessary. Depending on the technical and financial means and on the organizational level accessible structures may vary greatly, therefore actor-specific

recommendations are given in the sub-sections. One exception is the Community Resource Center (CRC) Corail-Cesselesse: The CRC should be used as a central point of coordination, data and information exchange between the local and the national level. The reinforcement of a locally accessible data platform for the collection and exchange of available data on Canaan at CRC seems therefore indispensable. The platform could be managed through ONU-Habitat as independent facilitator who has been involved in research in Canaan and consulting of different actors since early on.¹²³

¹²³ ONU-Habitat Haiti has been involved from the beginning in research and planning process for Canaan, collecting research results of different universities, research institutions and PhD students. In the elaboration of a strategic master plan for Jerusalem section of Canaan, ONU-Habitat played an intermediary consulting role between UCLBP and urban planners.

7.2.1 Recommendations for Local and National Authorities

7.2.1.1 National Authorities

- National authorities should take over responsibility as the initiator of any development and upgrading process in Canaan by providing national rules, guidelines and policies. The national authorities should also play the major role in the acquisition of funds. National authorities should much more motivate actors within local, regional and (inter-)national economy to become part of public development programs in order to create bigger impact, to assume higher social responsibility, and to tear profit from a fair and stable social environment.
- As insecure land tenure and uncertainty of ownership is one big factor of (informal) urban development and failure of many planned development projects, the government needs to take a leading role in the reformation of the land tenure and land management system-backed by international experts and the Work Group on Land Tenure at UCLBP's housing unit.124 In the case of Canaan in particular, the government should aim at a clarification of tenure and ownership situation projecting legalization in the long-term. The Haitian government should further pro-actively foster local governance both on the formal level of commune and communal section, as well as on an informal level via encouragement of participatory procedures. It needs to provide the communes with a sufficient budget so they could execute self-administration, decision making and planning on the communal level. It should rigorously take action against corruption, cronyism, same as against excessive exertion of influence of the national authorities on topics of local concern. In the case of Canaan, both

7.2.1.2 Communal Authorities

- Communal authorities should take over much more responsibility and strengthen their role as the initiator of municipal planning. The integration of mayors and local planning entities should be pursued by national and international actors to pave the way for future local decision-making and decentralized governance. The governance tool Local Technical Agency (Agence Technique Locale; ATL), created after the earthquake to reinforce communes' capacities in the administration, reconstruction and development of basic services, should be used to support both communes in their work in Canaan.
- As soon as possible the communes Croixdes-Bouquets and Commune Thomazeau should solve their differences in territorial responsibility in Onaville respectively Canaan. Including important stakeholders from both local authorities, national authorities (among others UCLBP, CIAT, and CNIGS), and key actors from Onaville and Canaan (among others representatives of the population), a mediation procedure, that should be hold by an impartial mediator, should encourage a clarification process of delimitations and responsibilities and further promote collaboration among both communes—at least in the case of Canaan. In the special situation of Onaville, a transparent clarification of responsibilities and the consequent following of a transparent local administration policy in the annexes of both communes should help to improve the relationship

national and communal entities should closely collaborate with other (international) key actors, such as UNDP, UNO-Habitat, UNOPS, IOM, USAID, IDB, World-Bank, and so on. Especially in the context of development and neighborhood retrofitting the government should "dare more democracy" by building on stronger citizen involvement and real cooperation in order to access locally available resources and to bundle local initiatives for successful and sustainable development.

A fist manual by the Haiti Property Law Working group has been already published. It can be accessed, same as news on the working process of the multistakeholder group online: http://landlaws.org/home/

marked by mistrust between the local population and the communes.

- When it comes to the distribution of power in governance, the communes Croix-des-Bouquets and Thomazeau should pro-actively foster local governance both at the formal level of the communal section (CASEC and ASEC), as well as on the informal level in its neighborhoods respectively communities. For the next communal elections. special attention should be paid to the CASECs and ASECs of the first Communal Section Crochus (Commune Thomazeau) and the second Communal Section Crochus (Commune Croix-des-Bouquets) as they cover Canaan and Onaville: the population of Onaville and Canaan should be enable to nominate and vote for local candidates, thereby democratically designating local representatives for communal decision-making. In order to assure participation of underprivileged parts of society by eviction of long transport ways, the communes should establish election offices-either in their local annexes in the zone or in CRC Corail-Cesselesse.
- Additionally, CBOs, local leaders and residents should be consulted and involved into local decision-making and planning via participatory procedures, and solidarity with neighborhood initiatives should be targeted in the different neighborhoods of Onaville and Canaan. Co-governance and cooperation (of authorities, civil society, and business sector) should be targeted in order to make use of the scarce locally available resources and to bundle local initiatives for joint development, effective governance and better management in the fields of urban growth, environmental protection and hazard protection or mitigation, public security, infrastructure provision, tax collection, and so on.
- When managing urban growth, economic development and densification of the settlement structure in Onaville and Canaan, local authorities (annexes) should act pro-actively and search the support of specialized organizations: they should not only focus

to close construction down sites, but to prevent construction in environmental risk and protection zones, simultaneously designate appropriate building, economic and densification zones. In the case of necessary displacement care should be taken not to push underprivileged parts of society further into environmental risk zones. Therefore appropriate, affordable strategies and alternatives for the displaced need to be elaborated with the concerned in an open and pro-active manner—best in the discourse with community leaders within the distinct neighborhoods, and in collaboration with local police and jurisdiction.

7.2.2 Recommendations for **International Organizations and Development Practitioners**

- Where existent, NGO's protectorate in national and regional decision-making needs to be exchanged for empowerment on national, municipal and community level. In the context of Canaan, NGOs should search their primary role in facilitating information exchange and acting as agent between disadvantaged parts of the society, local and national stakeholders. In general, international organizations and NGOs should act more transparently towards the Haitian Government. They are committed to use the Aid Management Platform MGAE¹²⁵ of the Ministry of Planning and External Cooperation (MPCE) and update their information on a quarterly basis.
- · International actors intervening in Onaville and Canaan should push forward clarification of territorial responsibilities of the communes Croix-des-Bouquets and Thomazeau forward, and search the collaboration or cooperation with the latter in order to enhance their capacities.
- Organizations interested in low-budget, and small scale projects should revert to collaboration and cooperation with the TECHO Working Tables (Tab Travay) in Onaville, or with other existing CBOs. If the latter are not known, the actor should first of all identify CBOs and community leaders in the zone of intervention, a list should be submitted to *Tab Travay* in Onaville, CRC and UCLBP's Canaan Work Group. In cooperation with local organizations and leaders, a clear focus should be on providing trainings for good leadership.
- Extern organizations should focus on the support of existing capacities and further formation of local

125 The External Assistance Management Module cooperation partners and residents by provision of technical, economic, social, and technological trainings, joint development and establishment of strategies, and the supply with money, materials, and expertise for implementation or execution. Local authorities should be integrated in the decision-making process and implementation if this is suitable, at least permission for intervention should be obtained. To reinforce their capacities they need to be provided with status reports on projects and interventions carried out inside of their administrative boundaries. Organizations who plan bigger-scale intervention in Onaville and/or Canaan should run a local office (Resource Center) as contact point for inquiries within the community in order to improve communication with the community, to do educational work (trainings), facilitate construction work, and build capacity of existing local CBOs in project execution and management (empowerment, ownership). 126 The increased presence of extern actors on the ground will essentially help to overcome bias, to identify local resources and strategies for project implementation, to allocate financial resources more effectively and flexibly, to solve disputes in time and execute well-designed and well-applied participatory procedures. Apart from that, recommendations are the same as for smaller projects.

- Coordination and cooperation with other local, national and international actors becomes increasingly important in order to build the capacities of the authorities in good governance, and to facilitate the creation of a multi-stakeholder framework for an integrated urban development of the entire zone of Canaan.
- Acquired data and information about the own interventions and projects should be submitted most importantly to the staff of CRC Corail-Cesselesse, same as the Canaan work group in UCLBP, and

⁽MGAE) can be accessed online: https://haiti.ampsite.net/ The intention of this tool is to "encouraged to use this resource as a catalyst for dialogue, management and [project specific] collaboration between both domestic and external partners." (MGAE: About)

¹²⁶ As reference may serve the CRC of Habitat for Humanity in Simon-Pelé neighborhood in Cité Soleil, Portau-Prince (http://www.habitat.org/disaster/active_programs/transforming_communities.aspx).

ONU-Habitat. An additional transmission of geospatial and statistical data to the national dataplatforms of CNIGS¹²⁷, CIAT, of (eventually) Haitian Institute of Statistics and Information Technology (IHSI), and to the Haitian Civil Protection Agency (DPC), or other national institutions should be considered and arranged on request. For open accessibility of data, improved information exchange and public communication the insertion of mappings, findings and intervention in open data platforms such as OpenStreetMap, OpenArchitectureNetwork¹²⁸, Wikipedia (in French, English, or Creole language), and other should be considered.

¹²⁷ More information online on the website of CNIGS: http://www.cnigs.ht/CNIGS/projets.php

¹²⁸ No longer existent, note as of 2017.

7.2.3 Recommendations for TECHO

Additionally, to the ones in the section before, specific recommendations for TECHO's activities in Onaville and cooperation with students from TUM are outlined. Some already have been discussed and are still in deficit, others evolved from recent work.

- In order to anticipate misconception and exclusivity of the work of *Tab Travay*, objectives, process of work, and openness for participation in the work should be promoted more transparently and regularly with different communication methods in the extensive community. One of the most simple and cheap, but very effective recommended method is the erection of outdoor information boards on public spaces, presenting basic information about *Tab Travay's* objectives, working methodology, contact persons, regular meeting times, current projects and events.
- General assemblies, organized at least once every two months by the two community-organizing committees would serve on another, more active level to involve a greater public into community work and to inform about TECHO's work, thereby opening space for the identification and prioritization of common needs, visions, and solutions in joint decision-making. Inviting both communal authorities to general assemblies could help to solve latent conflicts between authorities and residents.
- Future action should be analyzed under the aspect how it could intelligently use existing neighborhood initiative as vehicle for further change via empowerment, capacity building, skills training, cooperative execution, and evaluation of subsequent projects. Cooperation with specialized organizations and enterprises should be searched to reinforce TECHO's limited technological and financial capacities, while TECHO can focus on its strengths: volunteer-driven pro-poor action, community-led decision-making and planning, and support of

- self-help, self-construction, and participatory cogovernance. 129 Together these strategies could help to decrease significantly expenses and increase mutual benefit of involved cooperation partners, by creating a network of interlinked interventions, by one building on the other advocating long-term effect on community's wellbeing.
- Onaville-wide awareness-raising campaigns should be expanded together with partner organizations and the local authorities. An Onaville-wide upscaling and reinforcement of the Neighborhood Contingency Plan activities is highly recommended, as already in the first (pilot) phase different stakeholders have been involved, and very positive feedback for the community-driven working methodology of the leader-led focus group has been reported from international and national entities, same as from the community. The organizing focus group of the Neighborhood Contingency Plan should be supported in its grassroots approach in awareness-raising and the planning of further steps (identification of refuge, coordination of information transmission, and so on). The campaign should be backed by technological prevention infrastructure such as the construction of simple methodological stations in the hills of Onaville, and water-gage instruments in crucial points of the major water course Ravine Madaniel/ Ravine Lan Couline.
- Once intervention options are clarified with local authorities and national key actors, evaluation and participatory planning methodology should be reinforced in Onaville's two Tab Travay as applied in La Hatt, Gariche Prince, and La Digue communities. The used methods Participatory Rapid Appraisal (diagnostic participatif rapide des besoins de la communauté) and community-based Comprehensive Site Planning for community infrastructure should be adapted in Onaville, too. TUM research

¹²⁹ The contact network of TUM-USO students to national and international actors could serve as a starting point for collaboration and cooperation of mutual benefit—as tree planting initiative and contingency plan have proofed.

and concepts should be taken into account in the elaboration of concepts, arising knowledge deficits, technical, technological, methodological and strategical obstacles should be reported to the respective student or the research group coordinator(s) in order to evaluate further research and support.

- Both *Tab Travay* of Onaville should, together with TECHO, search the discourse with the commune Thomazeau for the demanded displacement of *Tab Travay* Haut-Onaville. Due to the strategically good location—before all as refuge in upper Onaville in the case of natural disasters—both should advocate remaining in place, or if necessary, a replacement to central, public open spaces.¹³⁰
- Once it will be evaluated, TECHO should promote the results of Onaville survey with the staff of CRC Corail-Cesselesse, with Canaan work group at UCLBP, and with ONU-Habitat Haiti.
- In cooperation with TUM-USO students, TECHO should better comply with agreements made on improved cooperation, remote communication, documentation of community-based action and feedback. Long-term coordination and the cooperation strategy of both TECHO's and students' activities in Onaville should be further improved to avoid stranding of projects caused by minor complications. As generally agreed, the by the author established online forum for bilateral exchange of updates, activity documentation, remote discussions, and coordination of action should be intensively used by volunteers, coordinators, directors, (and community leaders) involved in Onaville work.

¹³⁰ Well suited locations would be the public park *Plas Horèb* in the upper part of Onaville (GPS point: 8°40'25.47"N; 72°14'4.27"W) or *Plas Onavil* in the center of Onaville (GPS point: 8°39'48.52"N; 72°13'56.92"W). For the latter, Raphaela Guin, master in urbanism, elaborated a strategic planning concept for a community resource center (Guin 2014).

7.2.4 Recommendations for neighborhood committees, residents' initiatives

- Community committees and leaders need to be integrated into the process by municipal and national planning entities and should take over responsibility in an integrative neighborhood approach for example through forming a Community Action Plan inside an integrative neighborhood approach. If government action or initiative would fail, this could ensure a certain success as community committees and leaders would be empowered with the skills to manage conflicts independently. Good leadership is a necessary prerequisite. It needs to be promoted via trainings from extern organizations.
- In order to anticipate misconception and exclusivity of the work of *Tab Travay*, objectives, process of work, and openness for participation in the work should be promoted more transparently and regularly with different communication methods in Onaville. One of the most simple and cheap, but very effective recommended method is the erection of outdoor information boards on public spaces, presenting basic information about *Tab Travay's* objectives, working methodology, contact persons, regular meeting times, current projects and events.
- General assemblies, organized once half a year by both *Tab Travay* would serve to involve a greater public into community work and to inform about their work on finished and ongoing projects, thereby opening space for the identification and prioritization of common needs, visions, and solutions in joint decision-making. Inviting both communal authorities to general assemblies could help to solve latent conflicts between authorities and residents. Workshops of TECHO, TUM-USO students, and other organizations should be repeated by the workshop participants for other residents and children in order to distribute knowledge in the community. To reinforce this activity local TECHO volunteers should be involved and additionally recruited. Establishment

- of a small library with documents about community-based action, located in the Working Tables, would document already achieved work and allow further studying. Easy communicable, re-organized academic findings and lessons learned from other community initiatives could be provided to the community to become common knowledge. In the return, the Tab Travay should for their part document their working process, achievements, and lessons learned in reports that are handed out to TECHO and TUM-USO—in order to contribute to better coordination of activities.
- An Onaville-wide upscaling and reinforcement of the Neighborhood Contingency Plan activities is highly recommended, as already in the first (pilot) phase different stakeholders have been involved, and very positive feedback for the community-driven working methodology of the leader-led focus group has been reported from international and national entities, same as from the community.
- In the elaboration of concepts and projects, *Tab* Travay can take into account TUM research and concepts, and report (via TECHO) feedback respectively the need for further technical or technological support by the respective student or the research group coordinator(s). Future action of Tab Travay should be analyzed under the aspect how it could intelligently use existing initiatives as vehicle for further change. The two Tab Travay of Onaville should cooperate to a great extent to reinforce their knowledge and capacities. Cooperation with local business holders in Onaville or specialized extern NGOs should be searched autonomously or by demanding TECHO or TUM-USO students to build the contact—in order to make neighborhood initiatives possible. Networking with other CBOs respectively committees from other neighborhoods could help to exchange profitable experiences and "best practice" knowledge in the context of community-based action in Haiti. Examples for favorable exchange and communication could be other Tab Travay of TECHO, or neighborhood committees that recently have been

participating in large-scale neighborhood retrofitting action—such as from Villa Rosa, Jalousie, or Simon Pelé neighborhood in Port-au-Prince.

- Both *Tab Travay* of Onaville should, together with TECHO, search the discourse with the commune Thomazeau for the demanded displacement of *Tab Travay* Haut-Onaville. Due to the strategically good location—before all as refuge in upper Onaville in the case of natural disasters—both should advocate remaining in place, or if necessary, a replacement to central, public open spaces.¹³¹
- *Tab Travay* leaders should participate in the Community Resource Center's activities in Corail-Cesselesse in order to represent the *Tab Travay* in the bigger context of Canaan.

¹³¹ In accordance with the municipalities and land owners, *Tab Travail* Oaville-en-Haut was relocated in 2015 to Place Horeb—a public square in upper Onaville.

7.2.5 Recommendations for Academic Intervention

Academia in general, and TUM-USO in special, should further act in an intermediary position between the community, NGOs or other actors and authorities—mediating between technical assistance and conceptual thinking, academic research and problemoriented, practical workshops in Onaville—exchanging gained knowledge with local and national actors and authorities. Educational aspects and visionary, integrative concepts need to be submitted to the other stakeholders.

7.2.5.1 Recommendations for the General Framework of TUM-USO Research Group

From the author's own and development practitioners' experience in Haiti, short term participation of students only make sense if an core-team of the research group (PhD-students, assistant researchers, professors) coordinates single academic activities—for example Bachelor's or Master's theses, practice-oriented field trips, summer-schools and pilot projects—with local project partners in a long-term framework for community-based academic action.

Formalization of TUM-USO research group is therefore recommended to the collaborating chairs, distributing responsibilities and designating project coordinators in the position to sign formal agreements with partner organizations, and raise (third-party) funds. They further should be entrusted with project management and continuous maintenance of contact with local stakeholders and partners. Doctoral students could take this special position as time frame for elaboration of a PhD thesis in Germany in general varies between two and five years-thus providing a long-term time frame for academic intervention. Funding programs and scholarships for research visits and practical work on the ground much better available in the context of PhD theses and formal research projects. If embedded in this bigger research framework, Master's projects, theses or summer schools may contribute crucial research to the project, while allowing practical experiences and knowledge exchange for participating Master's students and local residents. To improve time management and work load following order is proposed for students' activities within the scope of a Master's thesis:

1. Cross-over literature review (specialist in field of work and site as well as cultural, social, political, environmental and economic). This step should be in great parts already finished prior to registration of the thesis.

- 2. Extended research trip to Haiti and Onaville community, hosted by a local organization (preferably TECHO). This step should be done best in the beginning of the working out of thesis. The objective should be to get into the local reality, immerse into culture, discover and research local problems, needs and visions of the people living in the area. Duration should be one to three months to perform field research and participatory procedures with locals, to walk, listen, meet local experts, raise awareness, ... live in Onaville respectively Haiti.
- 3. Get back to your home university, document the community-based field work process, send brief reports and documentations back to the community (first milestone within the process) and start designing respectively working on the respective, scientific topic. Regular feedback sessions with representatives of the partnering organization, and the community should be hold in order to reflect the chosen approach, strategies and outcome in time.
- 4. Get the academic project respectively thesis done.
- 5. Revisit the community, present your work, bring your knowledge via trainings, workshops and participatory procedures back to the community. Share information, knowledge, findings, and lessons learned with important stakeholders in Haiti. (If this is not possible, this step should be done by academic successors or the program coordinators.) Introduce your findings and local knowledge to your academic successors who will follow up the process. The latter should evaluate in their work previously terminated academic action.

7.2.5.2 Mode of Cooperation, Collaboration, and Communication

In general, a local partner organization—in the best case a locally active volunteer, grassroots, or propoor organization (such as TECHO, SDI, or local OSM communities)—should be established at the interface between the foreign students and local community and host students during research stays in Haiti. The partner in the best case focuses on community-based work, is able to bridge cultural, organizational and linguistic gaps, and builds a stable, participatory platform of long-term community involvement. By its constant presence on the ground and in community-based work, the organization may facilitate and promote confidence towards students and researchers in the local community despite high fluctuation rate and idle times between different research visits.

Academia should provide assistance for actors in community-based planning and decision-making by researching technical and specific knowledge, elaborating options for action, integrating feedback, and offering technical and methodological help via recommendations for actions to be taken. To avoid conflicts and disenchantment, intentions and frame of the academic intervention in development contexts must be clear and communicated transparently with all involved actors—including community. Modes and methods of cooperation have to be clearly identified in conceptualization phase, community involvement selected accordingly.

In cooperation with TECHO, TUM-USO should improve cooperation, remote communication, documentation of community-based action and feedback. Long-term coordination and the cooperation strategy of both TECHO's and students' activities in Onaville should be further improved to avoid stranding of projects caused by minor complications. To overcome communication gaps among project partners, and exchange information and feedback with community-organizing committees or CBOs regular phone contact of project

coordinator or involved researchers with selected leaders in Onaville and TECHO's Haitian volunteers turned out to be the most recommendable method—as long as other technological methods remain unaffordable or improper. For communication with partners from international background or governmental agencies, web conferences proofed to be the easiest communication method assuring bidirectional information exchange.

Joint capacity building sessions between TUM students, Haitian students, and volunteers of TECHO, C.OSM-HA or other organizations should be another focus of cooperation in order to encourage mutual knowledge-transfer, self-initiative and autonomous exchange of better practice on a local, national and global level.

To improve bilateral learning, local partner universities could be identified for collaboration or cooperation. This becomes interesting if action is part of a formal research project. Networking with UC's and MIT's Haiti initiatives would be promising options.

Site specific research in Onaville should be reflected in the context of Canaan settlement as a whole, as national and international actors plan extensive intervention. Research should be better coordinated and findings exchanged among the researchers and academic institutions that have been researching in Canaan. The setup of a joint database and contact network is therefore indispensable. Making use of the Habitat University Network Initiative UNI, ONU-Habitat

Haiti could act has host and coordinator of this interacademic platform.

Research findings need to be communicated with stakeholders in Haiti in a much more condensed, consulting form (for example as summarizing fact sheets) providing clear and practicable technical, economic, social and environmental assessment, so they can be taken as basis for decision-making, project development and implementation more easily. For community-based work, research results should be re-organized in an easy communicable manner.

Especially for research institutions it is important that acquired information and data are submitted to the key actors, such as the staff of CRC Corail-Cesselesse, the Canaan work group in UCLBP, ONU-Habitat, CNIGS, CIAT, (eventually) the Haitian Institute of Statistics and Information Technology (IHSI), the Haitian Civil Protection Agency (DPC), or other national institutions. Community-organizing committees and partner organization should be provided with a copy of all available research. All terminated, public data and project information should be published on open data platforms such as OpenStreetMap, Wikipedia (in French, English, or Creole language) in order to reach highest transparency and promote maximum knowledge exchange.

¹³² Skype calls from side of TUM-USO students turned out to be the easiest and least time-consuming—but also most expensive—communication method for communication with volunteers and residents. Communication and coordination via mail or web platforms turned out to be extremely complicated. Due to privacy and policy reasons Facebook Groups have not been used for coordination and communication of TUM-USO activities so far. Nevertheless this could be a very successful method as Facebook is a widely common communication platform which is accessed on a regular basis by all young Haitian students—same as the messanger WhatsApp.

7.2.5.3 Community-Based Field Work and Citizen Involvement

Especially in the context of general political inaction in Onaville and Canaan, academia should follow a praxisoriented, educative concept in field work in order to gear towards the integration of residents by establishing a dual learning relationship between researchers and their local counterpart. Based on its social responsibility, academia should thereby take an advocacy role for minorities, underprivileged parts of society and community in (public) discourse. In interaction with authorities and extern actors, academia should promote neighborhood-based decision making and local co-governance in Onaville and Canaan, same as contact-building and enhanced networking between local initiatives and extern actors.

Backed by partners, academia may extend activity by taking a moderating or mediating role in participatory processes, there bringing together different groups of interests respectively conflict parties on the basis of an open platform for mutual knowledge exchange, community-led decision-making, and negotiation of directory guidelines. As it has been proved on a theoretical level during field work in Onaville, answers for general and strategic planning issues can be developed from intensive collaboration between residents, community leaders, academics and professionals, and thus should be further promoted.

Students should continue to elaborate, reflect and carry out micro interventions in an open-ended, community-based process—in order to empower people to mitigate poverty and to transform society by collective reflection, dialogue and voluntary action. Participatory and pro-poor working methods such as Popular Education (Paulo Freire), Community Mapping and Comprehensive Site Planning (ACHR), Community Action Planning (Nabeel Hamdi and Reinhard Goethert), and integrative neighborhood approaches should thereby serve as first references for practice-oriented work in the community.

Students should continue work on an Onaville-wide upscaling and reinforcement of the Neighborhood Contingency Plan activities, supporting the focus group in the community in the development of future strategies and with technical, technological, and strategical research and design of solutions related to environmental hazard protection and mitigation respectively the elaboration of early warning and evacuation systems. On the ground and in joint field visits with participating TECHO volunteers and community leaders TUM-USO members should retest if the same specific information and recommendations have been disseminated among the residents of Onaville—or if another recapitulating training is needed for the focus group. To let real action follow, students should actively support contact- and network building between the existing focus group, the community in Onaville, and extern actors. For an upscaling, a partnership or coordination with the Haitian Civil Protection Agency (DPC) should be built.

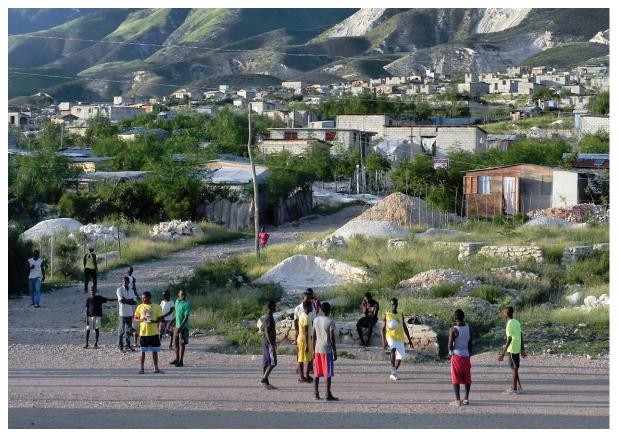


Fig. 79: Onaville has been greened by its residents—the foothills of Montagne des Pensez-y-Bien are marked by landslides (Courtesy of Mariana Aramayo Donoso, 2013)



Fig. 80: Handmade public square "Place Horèb," Onaville-en-Haut, 2103

Chapter 8: Outlook

With two new Master's theses being prepared regarding further flood hazard assessment and the elaboration of protective measures in the upcoming half year, the TUM-USO platform continues to research for integrative development solution for Onaville. Extended research stays are planned for both Master's students in the autumn of 2014 in order to check first designs with both academic and participatory field work.

The author will continue to coordinate, promote and evaluate the ongoing neighborhood initiatives in cooperation with community leaders, volunteer project coordinators, and external partners. It is further planned to compile the most important analyses, research findings, proposals and recommendations of almost two years of TUM-USO activity in Onaville into a succinct orientation guide for decision-makers and development practitioners in Haiti. Raphaela Guin and Johann-Christian Hannemann have planned to present their final working results in the community of Onaville and at TECHO's office in Port-au-Prince. The objectives are thereby to promote the increased further engagement of TECHO in Onaville despite the difficult working circumstances, as well as to continuously support Tab Travay leaders in the continuation of neighborhood initiatives.

By personally communicating the final research results with local, national and international key actors in Haiti, another important objective is to raise external actors' confidence in mutual benefits arising from integrative neighborhood approaches, community action planning, and participatory procedures—in order to promote a consequent application in Canaan.

In spite of the grievances caused by the nation's troubled history, social exclusion, and environmental disasters, and the frustrations caused by the interminable wait for improvements through external aid, many Haitians are optimistic about the country's future—if only its people are given a much bigger role in this change.

Ayiti p'ap peri Haiti will never be finished

Freising, 2014

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