



UCL

MSc Building and Urban Design
in Development
Student Report

REFRAMING RISK AS TRANSFORMATIVE POTENTIAL

In partnership with WFW, ACHR, CAN,
YTU and AMA



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EXECUTIVE SUMMARY

This report as a culmination of research conducted by the team of MSc students (studying BUDD at UCL), explores the transformative potentials with regard to developing city-wide strategies for slum-upgrading in a time of transformation in Yangon. The research spanned four months including a two-week long fieldwork in Myanmar. This was carried out by The Bartlett DPU in collaboration with their partners: Asian Coalition of Housing Rights (ACHR), Community Architects Network (CAN), Women for the World (WFW), Yangon Heritage Trust (YHT), Yangon City Development Committee (YCDC), Association of Myanmar Architects (AMA) and various other actors involved in urban transformation of Yangon.

The entire research has been framed under the theme of 'transformation in transition'. The main objective of this report is, therefore, to critically analyse the transformative potentials of the existing urban transformation in Yangon within the ongoing transition in Myanmar. With the acknowledgement of complex ground realities and the vision of the city, the report builds upon the analysis of primary findings in order to develop strategic proposals which emphasise the inter-relationship between critical infrastructure, collective action and microeconomic system through the processes of recognition, relatedness and reinforcement. This will act to shape the community-driven urban transformation that includes the meaningful collaboration of various actors.

The understanding of transformation in transition in the context of Myanmar is further reinforced by the synthesis of the pre-field understanding, the evaluation of fieldwork practices and the analysis of findings on the field, in the post-fieldwork stages. We define transition as a dynamic space of manoeuvre triggered by "tipping points" and transformed by a continuous process of change, driven by transformative potentials within the transition. In Myanmar, the tipping points of disaster relief and recovery, economic crisis, liberalisation

and political conflicts as well as democratisation. These are key tipping points that open up transition and, in turn, allows transformation with a multitude of challenges and opportunities.

As our objectives were based on developing city wide strategies relating to this period of transformation, our research maneuvered along three scales namely the City, Township and Village. The detailed site-study was done at village-scale while the collated study was done at township and city level, in order to enhance our investigation of transformative potentials. The findings from the site study and collated studies were analysed as per our framework of analysis related to risk. Through the understanding of coping capacities within the concept of risk as transformative potential, we further evaluate the challenges and opportunities of existing coping capacities to derive our vision, principles, guidelines and, ultimately, strategic interventions.

The overarching strategy is guided by the three key actions of recognizing, relating and reinforcing the dynamics of collective action, micro economies and critical infrastructures as a means of shaping city-wide upgrading towards a more people-centered urban transformation. The strategic interventions build upon the transformative potentials of risk resulting from our experiences and interactions at the community level, which we concurrently reflected upon at both the township and city scale. By attempting to link evident realities on the ground, with the ideas of livelihood and locality and, keeping in mind the larger vision of township and the city, we have envisioned a process of urban transformation that builds on the transformative potentials of risks in order to enhance constructive coping capacities.

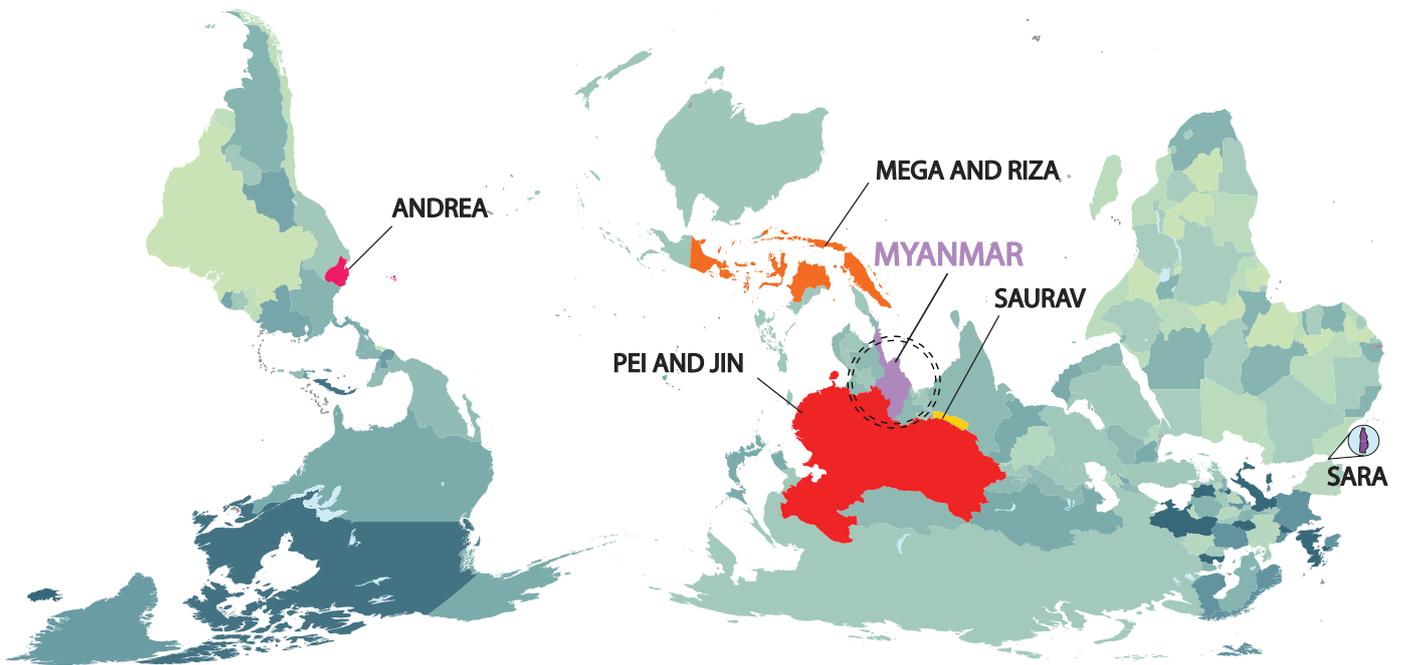
The report also reflects on the ethics of engagement of practitioner throughout all stages of research and fieldwork, emphasizing the challenges of practice and operation community driven transformation process.



ACKNOWLEDGEMENTS

This report is a culmination of our work, experience and reflections before, during and after the field trip to Myanmar, but it can represent much more beyond the efforts of our group. This was an amazing adventure filled with knowledge, engagement and wonderful and unforgettable memories. As members of the BUDD program, we would like to express our sincere appreciation to a number of people and organisations who offered us unlimited support and help. Thank you to all the residents in the Yoelay Village for your warm welcome and generosity, we were humbled by the overwhelming kindness and openness we encountered in your presence. Thank you to Thè Kyi Soe, our DPU alumni, and our peers from YTU, Myat Nandar Khine and Kyaw Soe Han. We deeply appreciate the efforts to collaborate with us on this research and the excellent translation skills that allowed us communicate with local communities so effortlessly. Thank you to all local organisations, including ACHR, AMA, CAN, YCDC, YHT, YTU and WFW. We sincerely appreciate the knowledge and expertise that you shared with us, all the resources you provided and your contributions in allowing us to successfully complete this trip. We would also like to thank the DPU staff for organising the journey and inspiring us throughout the whole process. Thank you for everything, Camillo Boano, Catalina Ortiz, Giorgio Talocci, Giovanna Astolfo, Camila Cociña, notably Ricardo Martén for the company during the field work, all the photographs you offered us and the guidance when we felt lost. Thank you all for supporting and assisting us through the whole trip and every effort of producing this report!

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ACRONYMS

BUDD	Msc Building and urban design in development
UCL	University College London
DPU	Development Planning Unit
YCDC	Yangon City Development Committee
DHSHD	Department of Human Settlement and Housing Development
WFW	Women for the World
THS	Township Health System
ACHR	Asian Coalition for Housing Rights
ACCA	Asian Coalition for Community Action
CAN	Community Architect Network
AMA	Association of Myanmar Architects
YTU	Yangon Technological University
3MDG	The Three Millennium Development Goal Fund
PHF	People's Health Foundation
MMCWA	Myanmar Maternal and Child Welfare Associations
MMA	Myanmar Medical Association
MRC	Myanmar Red Cross
MAM	Medical Action Myanmar
MSF	Médecins Sans Frontières
PU-AMI	Première Urgence – Aide Médicale Internationale
Alliance	Alliance for Health Promotion
BIM	Burnet Institute Myanmar
PSI	Populations Services International
YRHD	Yangon Regional Health Department
MoH	Ministry of Health
YHT	Yangon Heritage Trust
MMCWA	Myanmar Maternal and Child Welfare Associations
MOE	Ministry of Education
YCSD	Young Child Survival Development

GLOSSARY OF TERMS

Actors: Any participant in an action or process.

Agency: The capacity of an autonomous agent to act and the ability of social actors to make individual choices

Community: refers to a group of people who are spatially/geographically tied.

Collective Action: action taken by a group of people whose goal is to achieve common objective. It is usually led by a representative of the group.

Decapitalisation: an act of taking away assets and act of discouraging capital formation.

Infrastructure: the fundamental facilities and systems supporting and serving the area, such as roads, water supply, electricity and so on.

Informal Settlement: Areas where groups of housing units have been constructed on land that occupants have no legal claim to, or occupy illegally. (OECD)

Microeconomy: a term that describes how businesses, households and individuals allocate limited resources in terms of economy.

Network: an interrelated or interconnected of chain, system, or group

People's Knowledge: Information and skills that are passed from generation to generation as basis for of activities that sustain societies. (UNESCO)

Principles: These can be equated to guiding values that govern the proposed strategies and practice for development.

Settlements: A place where people establish a 'community', a group of people living in close proximity to each other with some commonality, often without secure land tenure or housing rights in this context.

Settlement Upgrading: Collectively plan and carry out improvement to the houses, environment, basic services and tenure security, using people as the centre of the process by managing and developing long-term comprehensive solutions to their problems of land and housing (ACHR).

Strategy: A plan and method to the aim of obtaining a specific goal or goals.

Strategic interventions: These are practical visualisations and manifestations within the realities of the context, showing the implementation of the intended strategy.

Squatter Settlement: A residential area in an urban locality inhabited by the very poor, which has developed without legal claims to the land and or permission from the concerned authorities to build

Urban poor: Those living with the daily challenges of limited access to employment and income, inadequate or insecure housing and services, no social protection mechanisms and limited access to healthcare services. (World Bank)

Upcycling: also known as creative reuse, is the environmental friendly process of transforming wasted or unwanted products into new better-quality products.

Upgrading: A physical/social improvements undertaken cooperatively among communities groups and local authorities to ensure sustained progresses in the quality of life for individuals. (Cities Alliance, 2003)

Risk

The potential of an event to form social, political, economic, moral and ethical opportunities for transformation.

Vulnerability

The exposure and susceptibility of communities to the negative effects of particular events.

Hazards

An event that presents the possibility of bringing opportunities for transformation through its adverse effects.

Coping Capacity

The availability of resources and power of individuals to utilise such resources as a means of enacting transformation.



1.2 GENERAL OVERVIEW

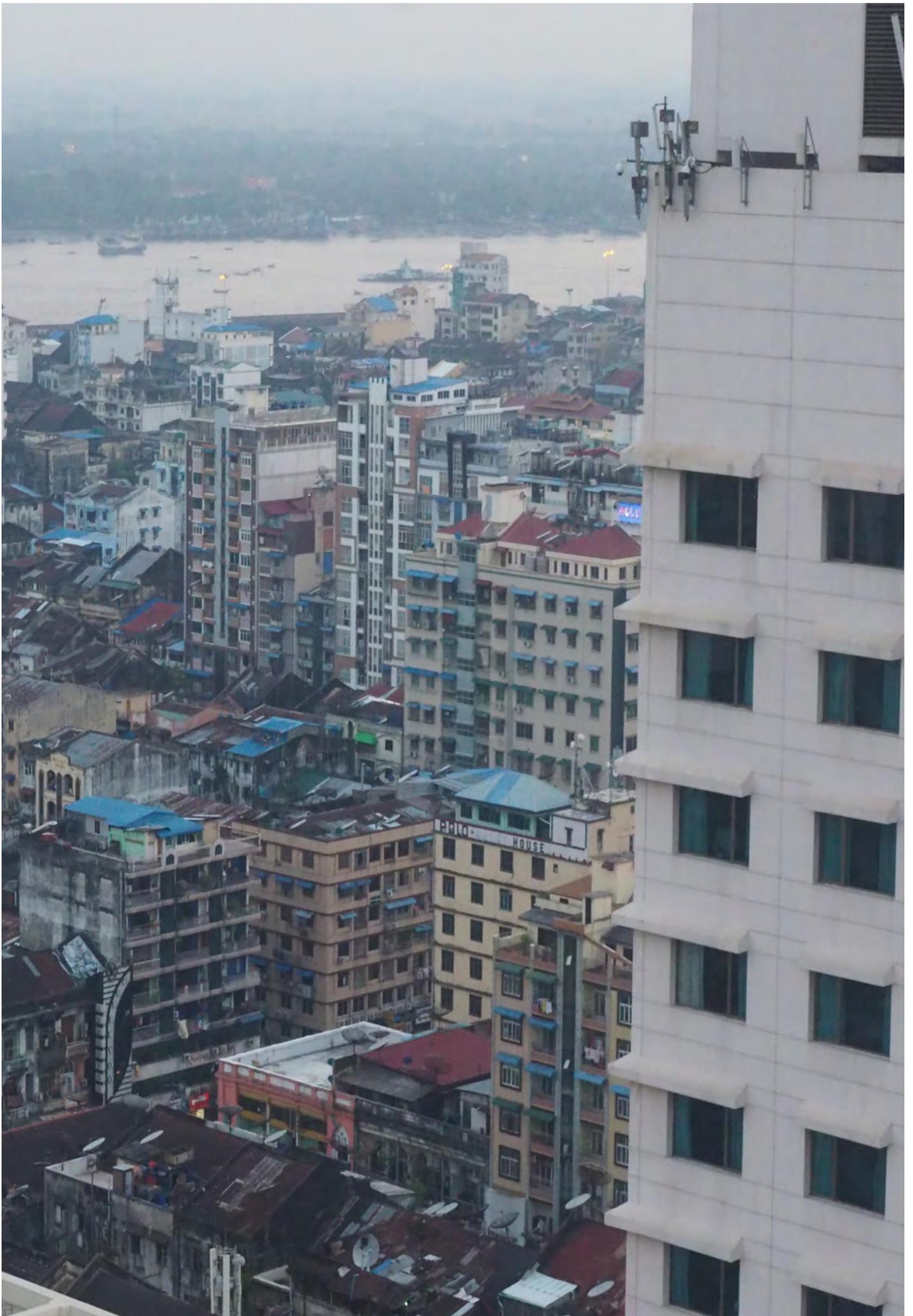
This report has been co-produced by the team of MSc students (studying BUDD at UCL), explores the transformative potentials on developing city-wide strategies for transformation in Yangon in the time of transition in Myanmar. The research spanned four months including two weeks long fieldwork in Myanmar. The research included 3 stages namely pre-field, on-field and post-field stages. Literature review of pre-field was evaluated with findings of on-fieldwork and were synthesized in post-field stage. The entire process is carried out by Bartlett DPU in collaboration with their partners like ACHR, CAN, WFW, YTU, YHT and YCDC. The theme of 'transformation in transition' framed the entire research with an objective of critically analysing the potentials of city-wide upgrading strategies in Yangon. The research starts with understanding of transformation and transition in context of Myanmar and followed by analytical framework that sets parameters for investigation in fieldwork. The analysis of findings is done in such a way that it becomes the basis for strategic interventions.

1.3 METHODOLOGY

Pre-field trip: our group was focusing more on researching and analysing transformative events and driving elements within different periods of transition. Multiple manners had been adopted through data collection, readings and gathering information from the lectures. The analysis and assumptions were made based on our knowledge and understanding of transition of Myanmar from diverse perspectives. Building on that, possible principles and strategies was put forward in response to specific problems. Furthermore, plan of actions was created in order to help guide our research in the field trip.

During field trip: all buddies were divided into eight groups for visiting 4 villages, working along with members from CAN, WFW, ACHR, with the help of translation from YTU students. A variety of methods had been adopted on the site, depending on different occasions and intentions. We collected data and information through personal observation, interaction with local partners, participatory workshop with residents, transect walk and interview towards a co-producing approach. Assumptions had been tested in the field and the understanding of Myanmar had been incrementally built through passing knowledge and experience with partners. Additionally, we gained rich information from YTU workshops and presentations delivered by the communities and other BUDDies.

Post field trip: we further strengthened our understanding through integrating the information gained before and during field trip in order to complete critical investigation and comprehensive strategies. In the process of redefining and rebuilding, we focus on risk as transformative potential in response to Myanmar's transformation in a time of transition



1.4 TIPPING POINTS IN MYANMAR

The transformation in Myanmar is the direct function of its ongoing multi-dimensional transitions triggered by tipping points seen in its recent history. The understanding of key tipping points like political change and democratisation, economic crisis and liberalisation, and disaster relief and recovery is crucial for understanding transformative potentials within transition that can shape transformation in Myanmar.

Myanmar, a former British colony underwent a turbulent period of post-colonial transition marked by political instability and the rise of armed ethnic groups and subsequent conflicts. Within a decade after its independence, the government was replaced by a Military regime which ruled Myanmar under single party socialist system that expropriated private businesses, followed policies of economic isolation and suppressed political opposition and minorities through violent means. The military junta was also responsible for human rights exploitation of minority ethnic groups and displacement of several hundred thousand of people both inside and outside of Myanmar. There are reportedly 600000 of internally displaced people in Myanmar today.

After years of international isolation and particularly after Cyclone Nargis in 2008 killed more than 140000 people, the military government agreed on

liberalisation through reforms. Gradual liberalisation processes started in 2010 with first multiparty elections which formed civilian government after five decades. Moreover, in 2015, following reforms of democratisation, an attempt towards national reconciliation was also attempted through a draft peace deal with armed ethnic groups for national reconciliation. Despite nominal powers of civilian government and incomplete national reconciliation, the reforms have ushered change in the political climate of Myanmar.

After political reforms in 2010, Myanmar is on an upward trend of liberalisation with rapid privatisation of public enterprises and increased foreign investments to exploit the country's vast natural resources and cheap labour. The market forces are driving the land prices. The fringe areas of the city are turning into Industrial areas attracting a labour force and migrants from rural areas. The higher pressure on supply of land for industrial and housing purpose is also increasing eviction. The problem of urban landlessness is further worsening.

Ultimately, the transformation in transition of Myanmar can be characterized by a shifting of power from actor to actor within the background of a growing economy, reforms towards democratisation and national reconciliation.

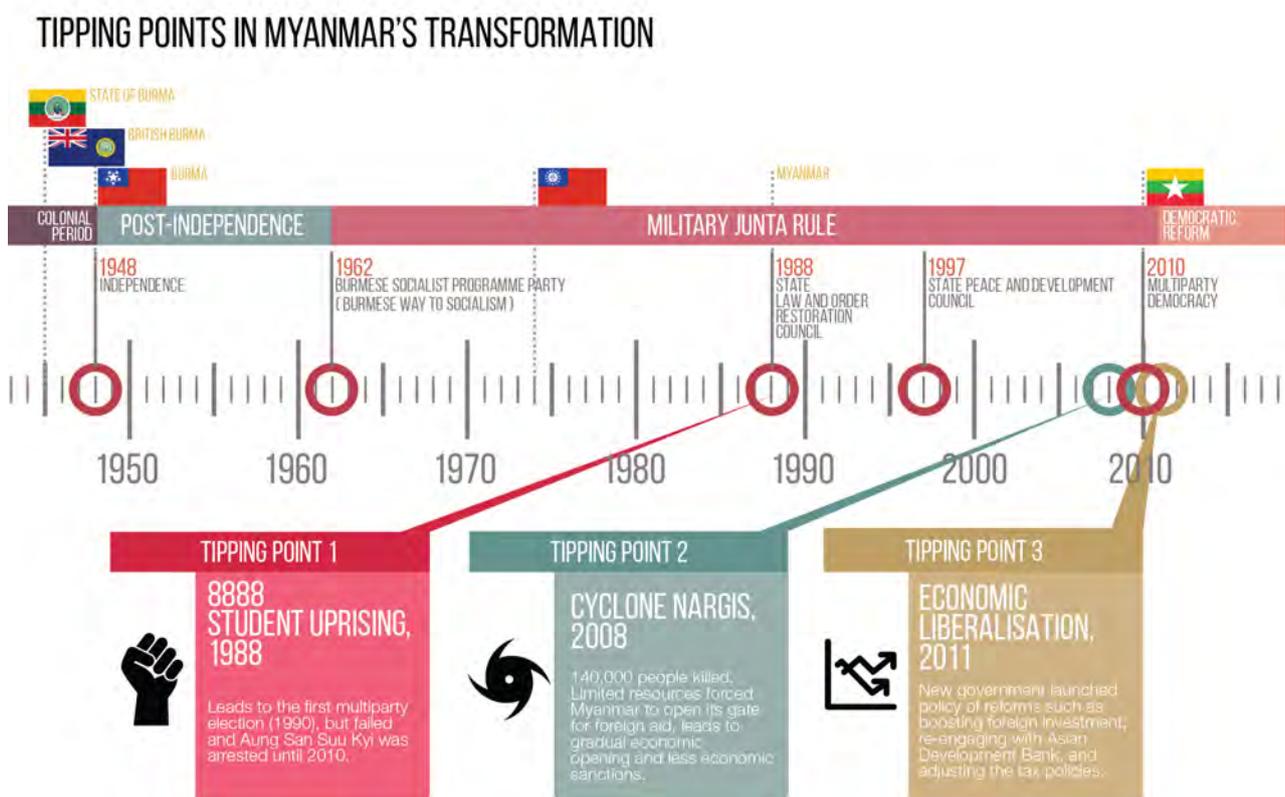


Figure 1.3 Timeline of critical events in Myanmar

1.5 TIPPING POINTS IN YANGON

Yangon has been transforming continuously along with successive different power regimes in the history of Myanmar. (Refer to annex 1:Timeline). With a population of over 7 million, Myanmar was former colonial city of British Burma which served as capital of Myanmar till 2006. Despite this, Yangon is still the largest city and is the most important commercial center.

The wide tree-lined streets with grand neo-classical buildings, lakes and pagodas often give identity of Yangon to the outsiders. However, beyond this picturesque image of the city center, there lies vast informal settlements where the urban poor are living without basic services. Although this has been acknowledged, the extent of recognition of informal settlements and population is varying as per the stakeholders involved in data production. For instance, census of 2014 claims 30% of urban population are living in slums. However, many organisations state it to be 40%.

The incremental growth of slums dates back to transformative events in the history of Myanmar when the British started to develop the colonial city of Rangoon. This resulted in the displacement of the local poor burmese population towards peripheral marshy suburbs while indian immigrants occupied the city center. However, after the socialist regime, there was a wave of internal refugees due to conflict in various parts of Myanmar, they moved to yangon which led to dramatic increase of number of informal settlements.

Moreover, 300000 squatters from downtown were relocated in three townships (Thaketa, South and North Okkalapa). Moreover under SLORC regime, Yangon continued to expand both east and west creating the townships of Dagon, Myothit, Hlaingtharyar and Shwepyitha. As a part of 'Burmanization' policy, the military regime resorted to forced relocation and land confiscation in order to transfer property from non-burmese ethnic to military elites.

Following the 1988 uprising, many poor urban communities and families of protesters were relocated to sub-urban satellite towns. Moreover, after the establishment of YCDC in 1990, Slum clearance became the key responsibilities of YCDC. Major incidents of fire accidents occur in Yangon, which has also been claimed as state-sponsored arson for slum clearance and relocation. As per UN-Habitat, it was estimated that DHSHD relocated at

in between 1988 to 1990.

In summary, the massive scale of forced relocation of the urban poor in Myanmar has been the main dynamic of urban space production since 1950s which further worsened in 1988. However, At present, the internal migration and displacement have grown exponentially, due to cyclone nargis and subsequent economic liberalisation. This has resulted in a massive increase in real estate value and land speculation. The economic forces have been strong in shaping existing urban transformation which creates an imminent risk of further displacement of the urban poor. However, this has also opened up opportunities for integration of the urban poor in the city's transformation.

The contemporary challenges in the transformation of Yangon are being shaped by rapid urban transformation, escalated by Increased industrial growth and foreign investment. This is likely to make the urban-poor victims of increased appetite for land for housing and industrial development. On the other hand, the industrial development also has immense possibility to provide economic opportunities.

The inadequate housing and infrastructure is another pressing challenge that needs to be addressed. The limited financial revenues and manpower of the state is making infrastructure provision difficult to facilitate. The likelihood of the embracing of a public-private partnership is seen but it has negative consequences as well possible opportunities for the urban poor. Moreover, insufficient housing by the state and unaffordable housing by the private sector is also leading to a rise in squatter settlements. Increased squatter settlements, in conjunction with the lack of recognition, further adds to the vulnerability of the urban poor. Thus, the reconfiguration of this public-private partnership can be transformative in terms of the provision of services and housing.

The crucial transformative potentials seen in yangon exist in the resilience and tenacity of the urban poor. Despite being relocated several times and still under the threat of eviction, the communities have demonstrated their ability to rebuild their lives within new settings and under very difficult circumstances.

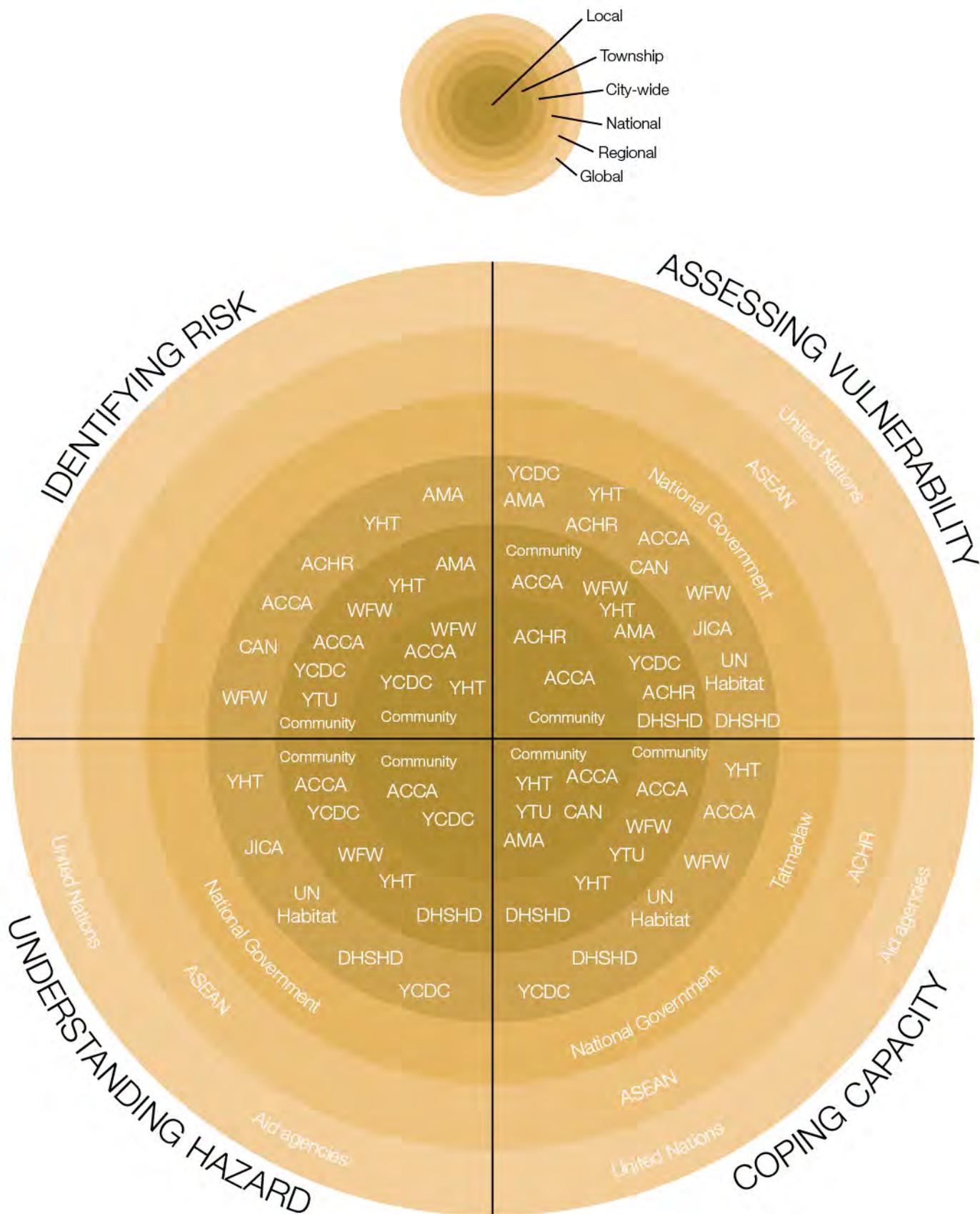


Figure 1.4 Transformative agents



“Disasters are viewed as politically potent and transformative ‘tipping points’-that is, as moments in which deeply etched political narratives and relationships are transcended and transformed.” - Venugopal and Yasir, 2017

2.1 RISK AS TRANSFORMATIVE POTENTIAL

As the recent political change and economic reforms in Myanmar have often been attributed to the aftermath of Cyclone Nargis, we began our quest for understanding transformation in transition in Myanmar with the guidance of theoretical concepts that are embedded within disaster literature. We understand transition as a dynamic space of possibilities that emerges as a result of specific tipping points and gives rise to multiple events from which transformative potentials can be identified. Furthermore, transformation is a continuous process that responds to events by translating transformative potentials into realistic opportunities to address existing vulnerabilities.

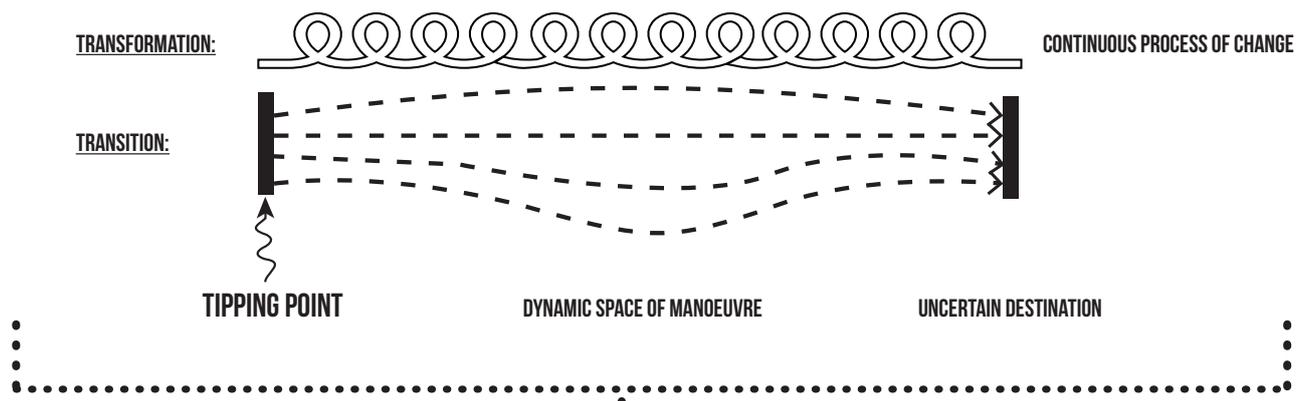


Figure 1-2. Definition of transformation and transition

Initially our understanding of risk stemmed from the use of an equation that is commonly referred to in disaster literature. By using this equation we were able to define risk in the form of a number of crucial components that have either a proportional or inversely proportional relationship to risk. This equation formed the basis of our analytical framework, however, in its initial state, the equation holds the concept of “risk as disaster” as its core focus. This was deemed problematic and contradictory to our definition of transformation.

$$\text{RISK} = \frac{\text{HAZARD} \times \text{VULNERABILITY}}{\text{COPING CAPACITY}}$$

Resultantly, we reconfigured the equation in order to ensure that the coping capacity formed the core focus of our investigation and analysis. By doing so, we were able to alter our perspective from “risk as potential disaster” to “risk as transformative potential”. From this reconfiguration emerged our key research question: What are the opportunities for enhancing both existing and potential constructive coping capacities for city-wide slum-upgrading?

$$\text{COPING CAPACITY} = \frac{\text{HAZARD} \times \text{VULNERABILITY}}{\text{RISK}}$$

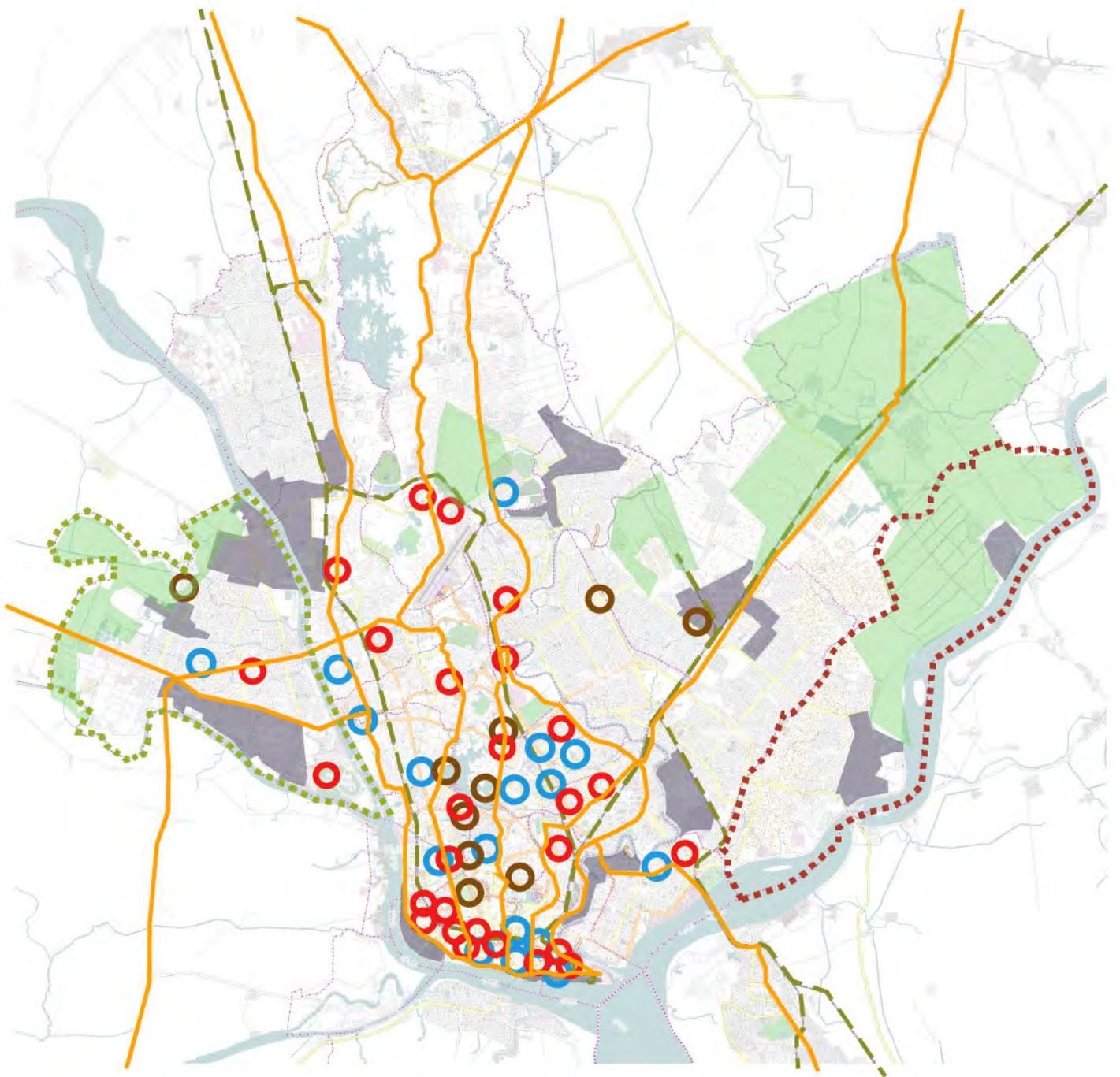


Figure 3.1 Land use of Yangon

3.1 SITE PROFILE: YANGON

Population: 7,360,703
population density: 742 persons/km²
Male to female ratio: 91:100
Total households: 1,582,944
Mean household size: 4.4

Yangon city, the former capital of Myanmar, lies at the confluence of Yangon and Bago rivers. The Yangon River and Shwedagon Pagoda are the two landmarks that give Yangon special characteristic. The latter bestows a religious identity, while the river grants the city its position of commercial trading hub for millions of consumers. By 2015, almost 20% of the total GDP for Myanmar had been produced in the Yangon Region.

This city experienced the process of expanding almost 30 times from south to north due to the barriers of the river. However, in recent years, the western and eastern parts of the city started to show rapid growth, mostly due to persistent industrial activities. Furthermore, on the outskirts of the west and a large part of eastern Yangon are still dominated by agricultural land. The central business district and all the key ports are situated at the meeting point of the two rivers.

Yangon is divided into 45 townships and one sub-township. There is an evident diversity between these townships in terms of area and population. It also can be expected that different townships would have various organisational arrangements and provisions for citizen engagement (UNDP Myanmar, 2015). Transportation in Yangon varies, however downtown Yangon mainly consists of cars, as a lack of adherence to road rules resulted in banning the use of motorcycles in the downtown area. People in city centre are mostly using private vehicle for their daily commute. Bus and train are the main public transportation there.





67 Ward



93 Ward

Figure 3.2 Land use of Dagon Seikkan and the location of two field sites

3.2 SITE PROFILE: DAGON SEIKKAN

Urban wards: 35
Village tracts: 5
Population: 167,448
Male to female ratio: 98:100
Total households: 37,905
Mean household size: 4.2
total area in km2: 77.12
density in pers/km2: 2,169.9
Hospital:
Market:
Schools: 13
Monasteries: 27
Pagoda: 12

Dagon Seikkan, located in the east-central part of Yangon City, is the second largest township. where the presence of slum dwellers is evident as displacement emerged after civil war, natural disaster and rural-urban migration. Land redevelopment for industrial and housing development has been increasing the land price, which results in unaffordable land prices for the squatters, thus, forcing them to illegally occupy state-owned and private vacant lands. Access to infrastructure remains a critical problem to the majority of squatters. Furthermore, lack of official recognition makes them more vulnerable and inhibits their access to education and health system (Astolfo 2017).

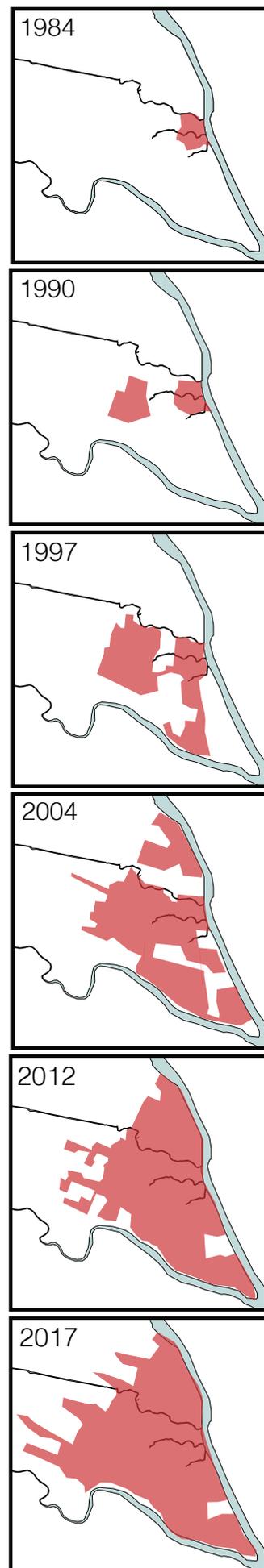
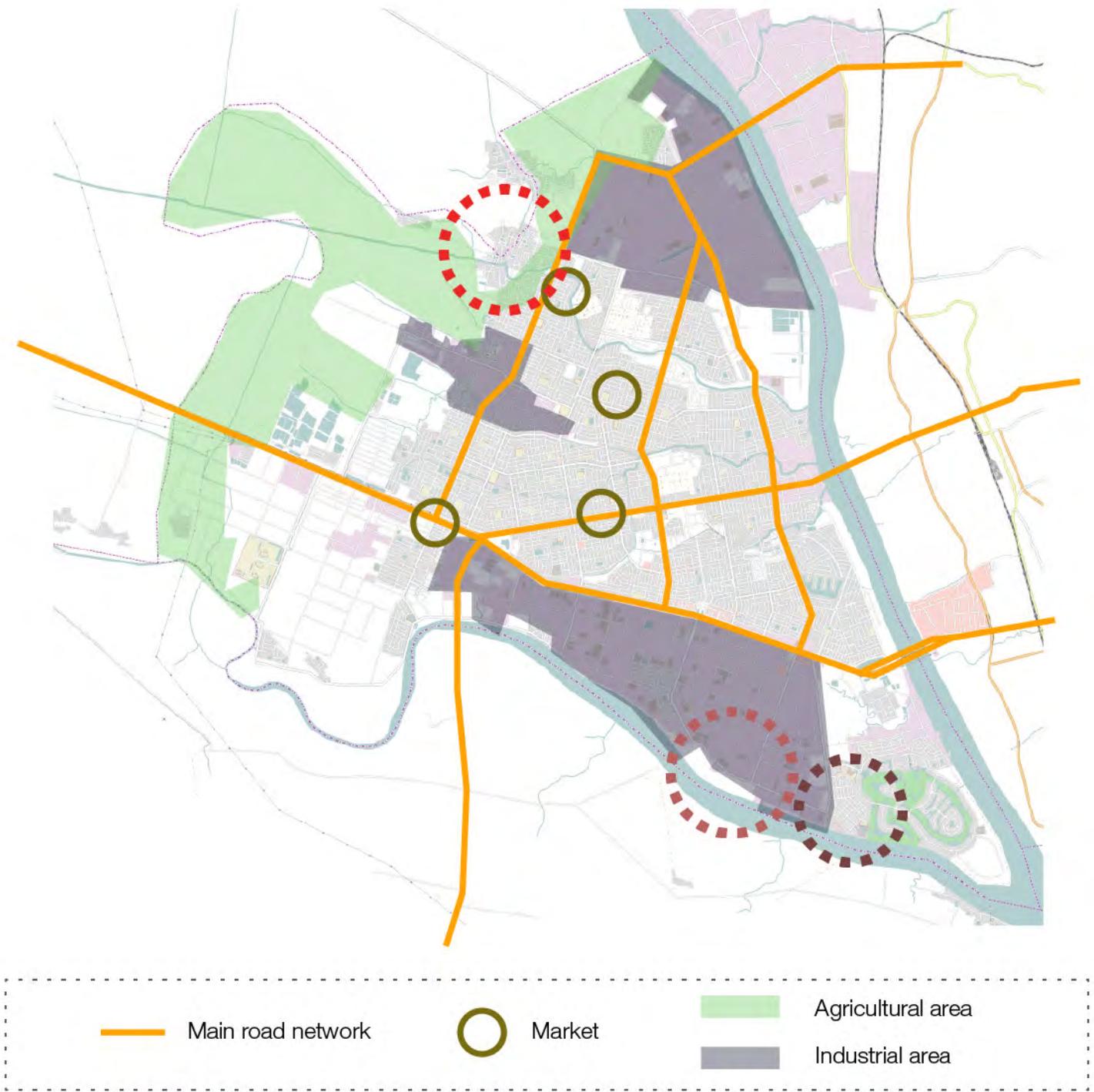


Figure 3.4 Historic land expansion of Dagon Seikkan



Yoelay Village



555 Village



Nyaung Village

Figure 3.5 Land use of Hlaingthar yar and the location of three field sites

3.3 SITE PROFILE: HLAINGTHARYAR

Urban wards: 20
Village tracts: 9
population 687,867
Male to female ratio: 88:100
Total households: 14,8711
Mean household size: 4.5
total area in km2: 83.46
density in pers/km2: 8,229.4
the area for industrial uses: 400 hectares
Hospital: 1
Market: 7
Schools: 51
Monasteries: 68

The Hlaingtharyar township, situated in the western part of Yangon, is one a rapidly growing town which acts as a gateway from Yangon City to the Ayeyarwady deltaic region. The large-scale industrial zone was built in order to create more job opportunities, stimulate investments, and upgrade social-economic opportunities within the township. Consequently, the proportion of land used for industrial purposes in Hlaingtharyar is 26.6% which is relatively higher than other townships. Additionally, almost 64% of workers prefer to work in the manufacturing sectors (HARUYAMA, Shigeko, 2015). This is also considered one of the manifestations of the transformation process in Myanmar: from a socialist economy to a market oriented economy (Kraas and Gaese 2005). Although several housing projects are emerging in the township with a more modern and higher-rise style, there is still a great proportion of about 43.63% of slum housing appearing. Land development is growing intensely in this township, helping relieve the housing pressure from Yangon City..

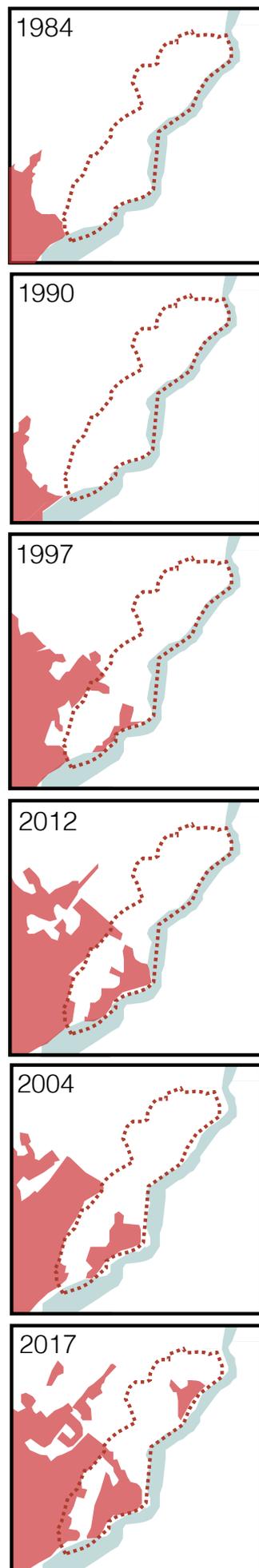


Figure 3.6 Historic land expansion of Hlaingtharyar

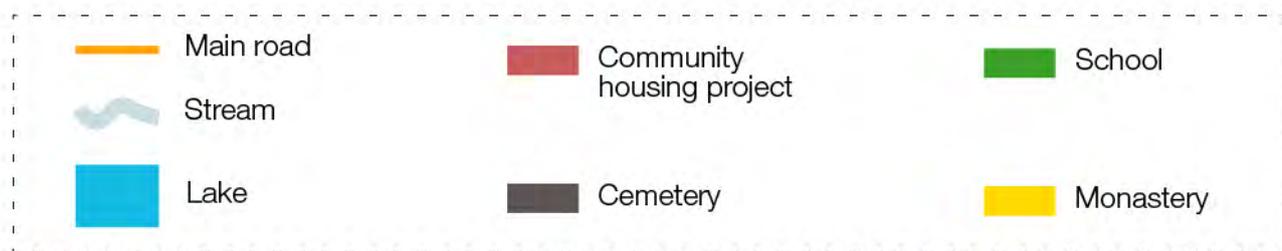


Figure 3.7 Land use of Yoelay Village

3.4 SITE PROFILE: YOELAY VILLAGE

Total population 6356
Number of housing 1379
Number of households 1482

Total population 6356
Number of housing 1379
Number of households 1482

Yoelay Village, situated on the northern edge of the Hlaingtharyar township, was originally transformed from farm land to settlement land. Existing villagers and internal migrants are two types of residents within the village. Most of the internal migrants are from the Ayeyarwaddy division. They migrated due to job scarcity after the Cyclone Nargis. The majority of residents in Yoelay village are working in industrial factories. In order to address the housing need, a housing project has been inaugurated as a result of a strong partnership between CAN, ACHR, WFW and investments from Korea. This project was made possible by the persistent efforts to inform and engage each resident through the processes of surveying, savings groups, planning and implementation. This project not only fulfils the basic needs of residents with regard to housing, but also creates opportunities for involving and empowering poor people in the process of city developments and upgrading.



Figure 3.8 Women for the World Housing Project

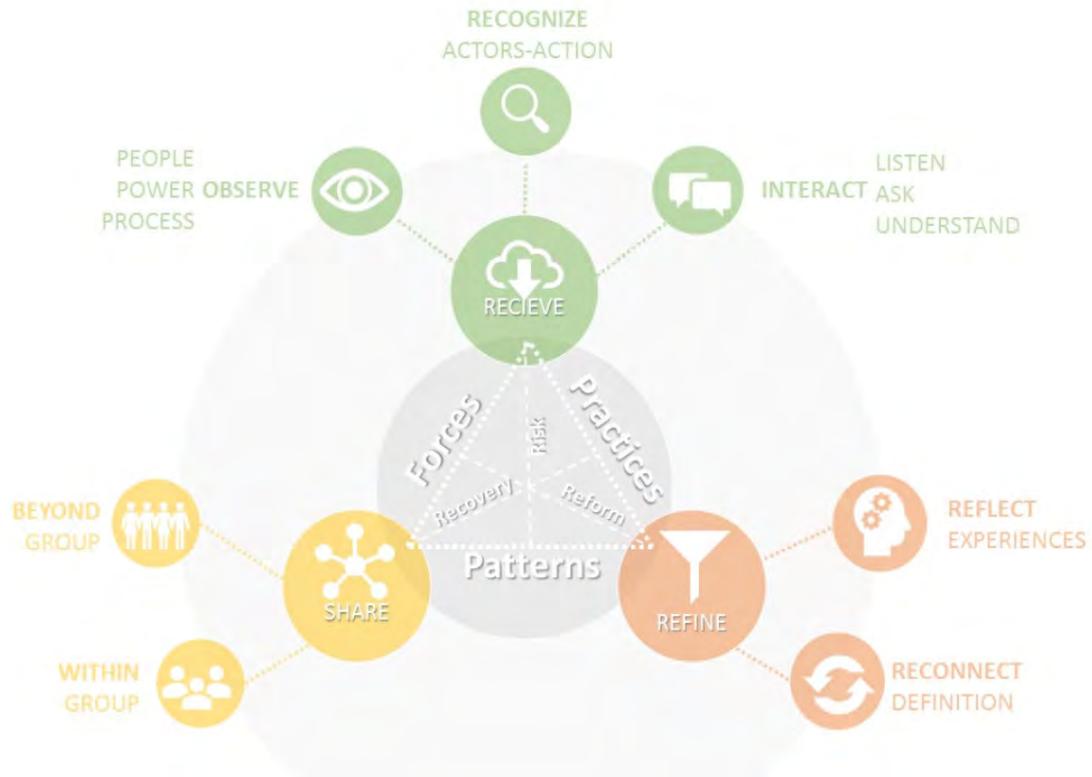


Figure 4.1 Plan of Actions



Figure 4.2 Discourse Mapping

4.1 PLAN OF ACTION

PRE-FIELD TRIP PREPARATION

Plan of action

Our research begins with a cyclic plan of action (Figure 4.1) where we receive, share and refine information focusing on forces, practices and patterns shaping the transformation that emerged due to the presence of clear tipping points. The process of operation includes receiving information through observation, recognition and interaction. The information thus obtained was to be shared within and beyond the group with an objective of the coproduction of knowledge. The knowledge obtained was to be refined through self-reflection and theoretical reconnection.

Action Strategy

Building upon the plan of action, we intend to employ flexible action strategy where we plan, act, observe, reflect and refine if necessary as we move along. This was further developed in daily plan of actions (Figure 4.3) as per schedule of brief.

Discourse Mapping

We had prepared a potential discourse mapping scheme to aid in fieldwork (Figure 4.2). As shown in the figure, the scheme intends to map potential discourses along four quadrants which guides and shapes our possible questions in the fieldwork. For instance, if we compare the discourse of local partners and authorities we can observe power relations that ultimately shape transformation.

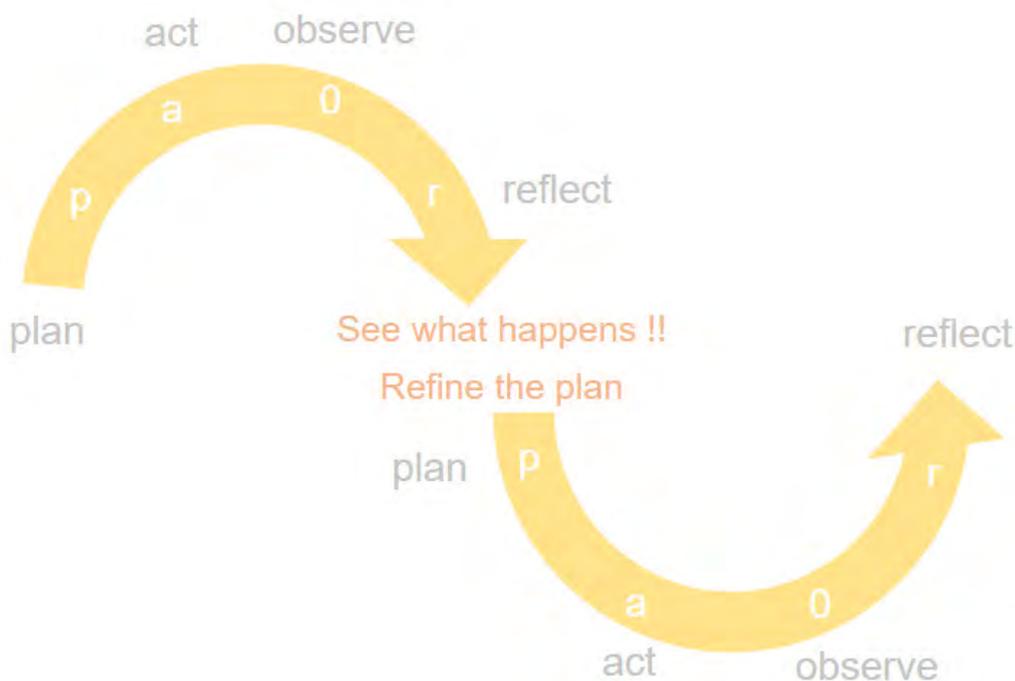


Figure 4.3 Action Strategy

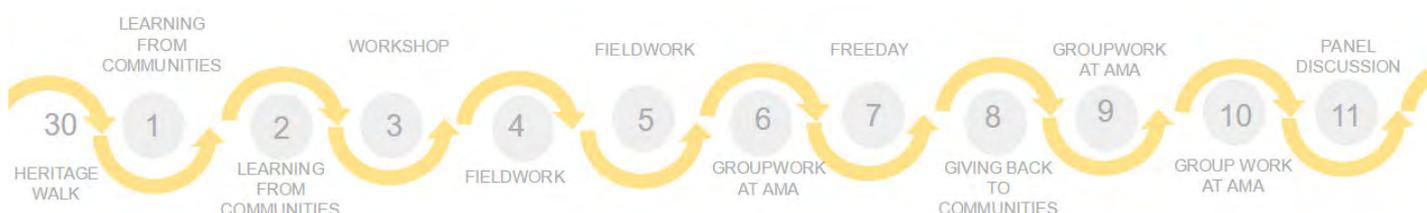


Figure 4.4 Daily Plan of Action on Fieldwork

4.2 DISCOURSE MAPPING

ON-FIELD OPERATIONS

On-field operations includes activities like mapping, interviews, observations, transect walk, interactions with local partners, presentation with communities and presentation with authorities.

MAPPING

Our fieldwork included displacement mapping, mapping with children and household mapping. The Displacement mapping with women from WFW revealed that cyclone Nargis was a major cause driving migration. Mapping with children involved a mapping exercise conducted with one of the most vulnerable group to ascertain what they value most in the community. This question resulted in them envisioning and mapping their ideal playgrounds. Furthermore, Household Mapping within the houses of the WFW housing project was carried out in order to locate issues related to their houses. The critical concerns relating to their houses were located.

Interviews were conducted inside and outside the WFW housing project. We included a variety of interviewees, such as members from WFW, monk leader, shop owners, landlord, boy who does recycling, residents from different qualities of housing. The main questions were centered around their daily lives, everyday hazards, and existing coping mechanisms. Although the saving helped some members successfully run their own businesses, we found there was an evident disconnection between the housing project and the rest of the village as some villagers outside the project were not aware of the operation of project and saving group.



Figure 4.5 Methods used on the field

4.3 INTERVIEWS

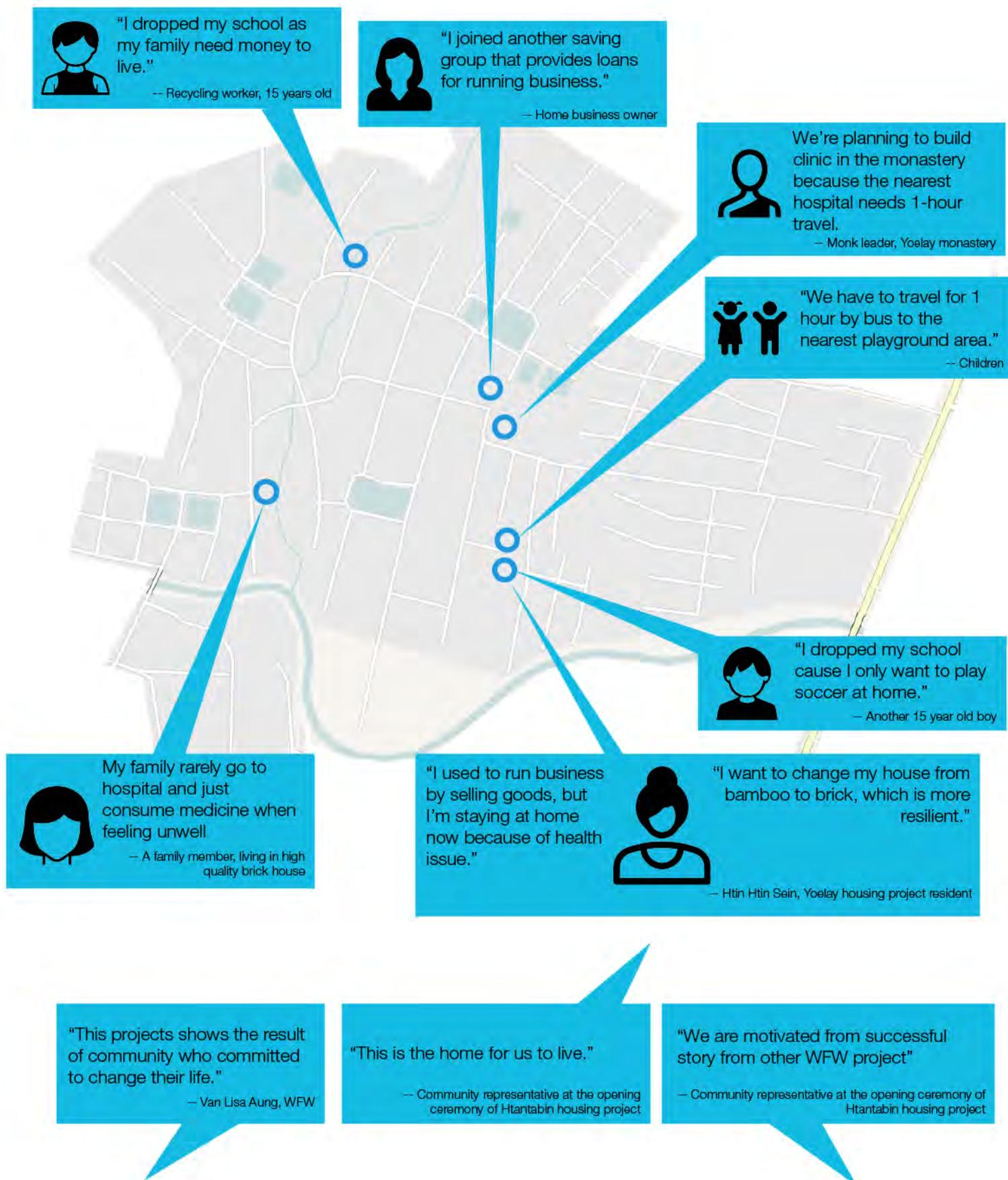


Figure 4.6 Discussions with the community

4.4 OBSERVATIONS AND TRANSECT WALK

Transect walk

In our fieldwork, we carried out a transect walk in the upper and lower part of Yoelay village. We visited houses, the monastery, shops and small businesses, public and tuition schools, the village market and township market.

Observation

Observations include our encounters during the transect walk as well as observations on the way from downtown to Hlaing Thar Yar.

Observation were recorded when doing the transect walk through different places related to our lens of analysis. We discussed and gathered all findings every day after the field trip. Photographs were also adopted to help support our observations. Based on our perspectives, we found that most evident risks were related to health issues, waste management, water, environmental pollution and land speculation. However, transformative potentials are also evident under each of these risks.

YTU Workshops

In the YTU Workshop, Dr. Jayde Robert introduced us to the term “intimate economies” which utilised intimacy as the main framework of economy and it is based on direct interactions. The woman savings group is a key example of this concept, which takes advantage of the unity between women. They work together to potentially reduce the possibility of land speculation and explore the potential of land, housing and slum upgrading. Nalehmu is one of the Burmese local wisdoms which refers to an understanding, a mutual relationship, or a spoken agreement for exchanging goods and trades. She also points out that informality becomes a part of the everyday life of the people within a dual track system of official government regulation and informal nalehmu transaction.

“The purpose of Planning is to unlock a system that has been locked for many years.”

“‘Slum’ is not something in people, slum is something in the system, you are the one who gives that label on them.”

--- Somsook Bonyabancha

Somsook Bonyabancha pointed out that people’s common perception of slums is illegal and unhealthy. To address that, it is significant to enable energy of

poor people and encourage them to become actors rather than victims in the process of slum upgrading. She also indicated the need and challenge to work at city-wide level by understanding slum structures at the city-wide level, and then linking between slums by building communities as networks. Furthermore, there was mention of the needs and challenges to work at scale at a city-wide level and not a single project approach. Active demand-driven on housing provision can support urban poor communities to be active actors and provide a greater sense of ownership. Regarding the city-wide process, decentralize the work to communities and cities to work as partners in a joint development process which can bridge the gap between people and authorities. A new financial support system (community finance) can be a mutual benefit between the community and the city development fund. Those processes are also need to be integrated with each other in order to address secure housing, thereby leading to a new community system that has an integrated approach; better social, economic, democratic, and a healthy community.



1. Local economy



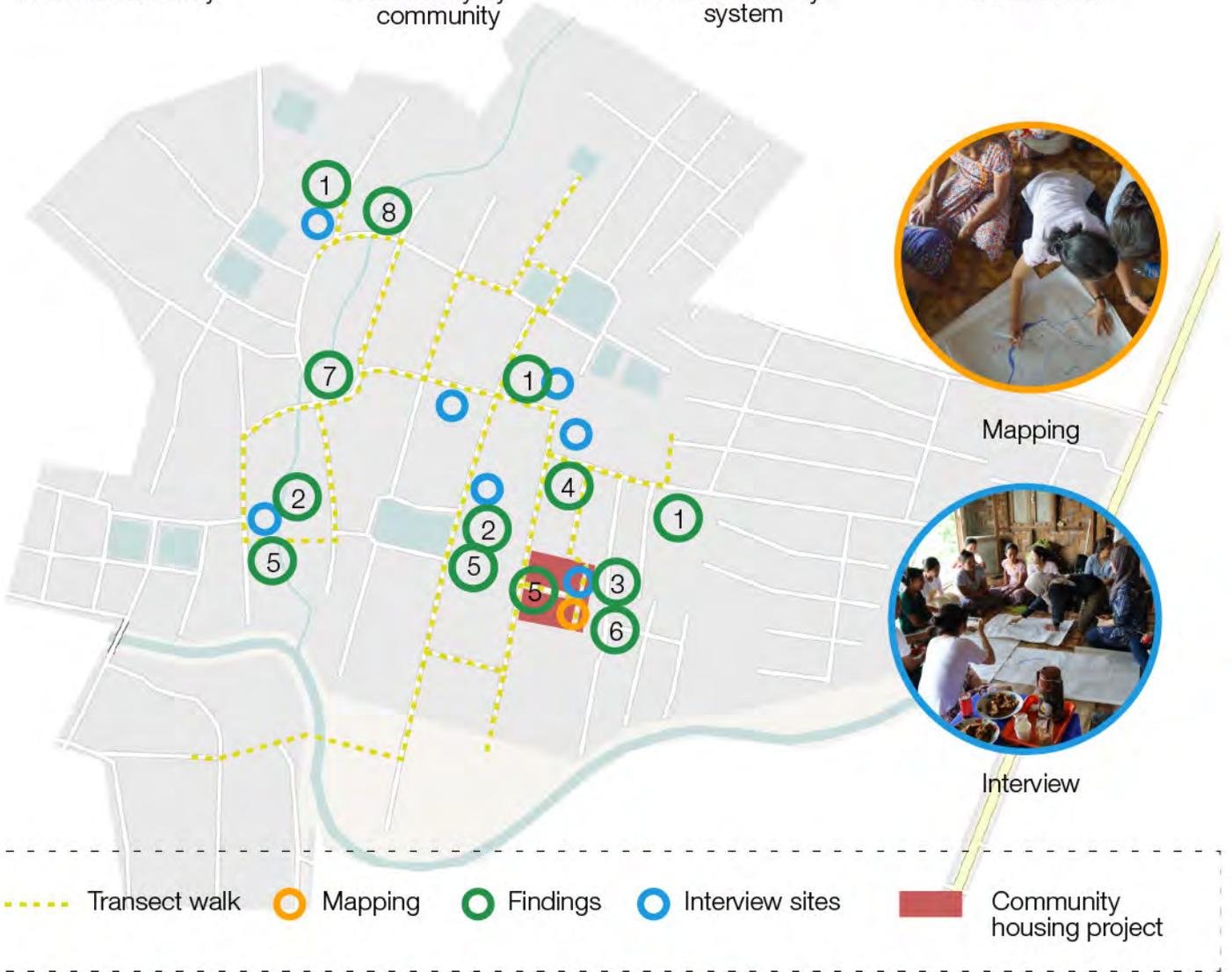
2. Electricity by community



3. Water delivery system



4. Fire tower



5. Independent water source



6. Savings group



7. Community guard post



8. Recycling

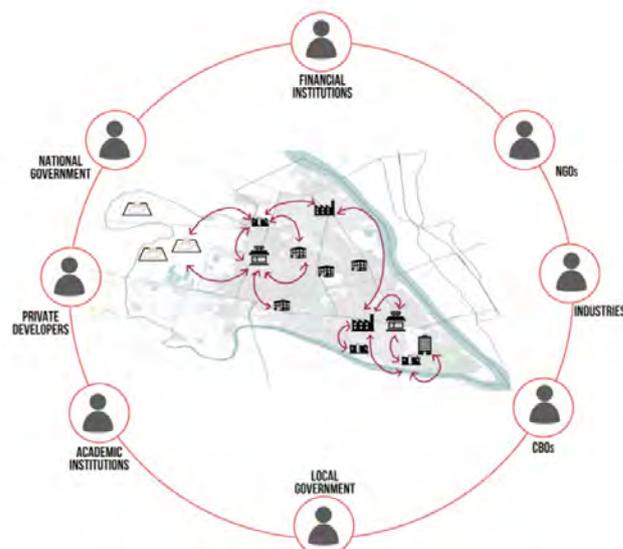
Figure 4.7 Diagram of the routes of transect walk



4.5 INTERACTIONS AND PRESENTATIONS

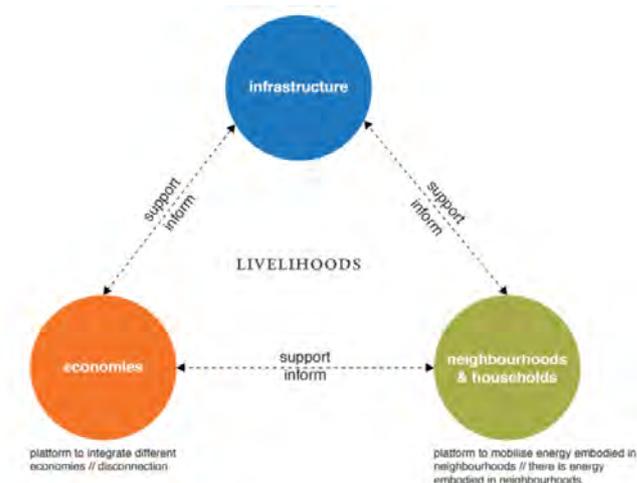
Connecting People to create the City

Starting with the identification of existing socio-economic relationships, the group work envisioned the enhancing of socio-economic relationships through the process of collaboration in order to secure a prosperous future for Hlaingtharyar. The strategy framework emphasized the independent forms of management as well as missing links and elements. This is illustrated in the proposal of meeting demands through connectivity which had 3 key strategies, The first strategy was 'Reinvesting in a yangon for all with objective of utilisation of a city development fund for promoting local economies. The second strategy was related to People-powered infrastructure with an objective of broadening infrastructure provision through the connectivity of the community and the resourcefulness of the city system. Lastly, the strategy of 'housing by the people' attempts to imagine flexible housing solutions supported by the people.



Livelihood Oriented Development

Starting with the understanding of transformation in yangon as an industrial and transit-oriented development, the group work presented livelihood- led development where the interaction of infrastructure, economies and neighbourhoods shapes livelihood-led transformation. The transformation thus envisions the multi-scalarity of economic partnerships and networked infrastructures in the form of three platforms of manufacturing, infrastructure and services. Through partnerships, mutual platform building and capacity enhancements. This was illustrated with an example of alternative housing production. Lastly, It concludes with existing sites of action as well as potential sites of action through partnership among our actors.



5.1 ANALYSIS OF FINDINGS

The main objective of our analysis is to assess existing coping capacities along with its challenges and opportunities. For this purpose, our analytical framework includes three key steps:

1. Identification of Risk
2. Understanding of Vulnerabilities
3. Assessment of existing coping capacities.

To make our mode of synthesis more human-centered, we have attempted to focus our diagnosis in terms of issues related to life, livelihood and locality. Having said that, the idea is not to compartmentalize the findings in 3 sections but to explore issues in terms of its relationship to life, livelihood and locality. The diagrammatic representation of this framework will be a nucleus with two elliptical orbits where the issues of everyday life forms the central nucleus surrounded by non-concentric orbits of livelihood and locality.

Identifying the Risk

Risk related to Life:

The interviews and interaction with local communities revealed the concerns for health, safety and well-being.

Risk related to Livelihood:

Both pre-field literature reviews and On-site Interviews with communities highlight the trend of decapitalisation and intensive labour

Risk related to Locality:

The pre-field research had already indicated the risk of eviction, flood, waste, accidents and crime. However, risks due to waste and crime emerged as prominent issues in our site.

Interconnectedness of Risks:

Although the interaction with local communities was focused on their immediate concerns for health, safety and well-being, The issues of livelihood and those related to livelihood were crucial in shaping and magnifying the risk

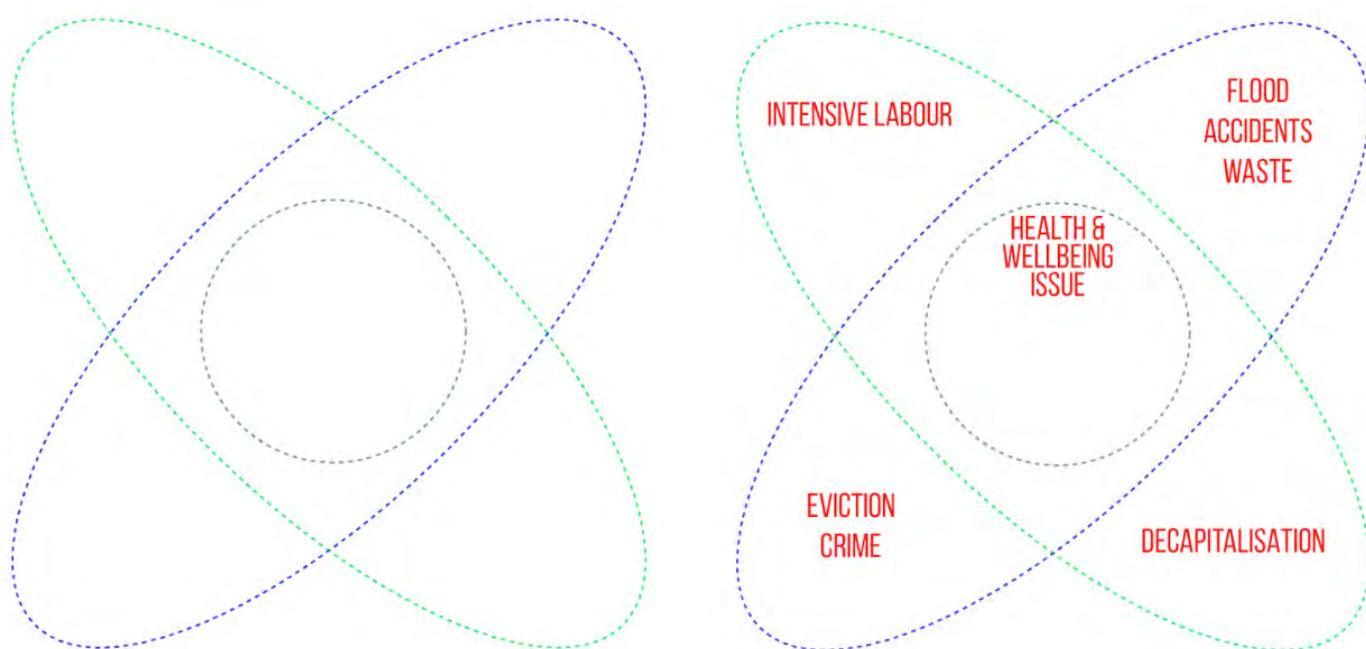


Figure 5.1 Analytical framework for findings

Understanding Vulnerabilities

Related to Everyday Life:

Inaccessibility and insufficiency of basic infrastructure can be considered an underlying core issue of everyday life. Our field investigation found out that basic services related to health provision were inaccessible due to lengthy travel distances and associated costs. Similarly, services such as waste management, drainage and sewage was insufficient which had serious impact in health and sanitation. This scenario is making people more vulnerable to risks associated with health and well-being.

Related to Livelihood:

In our post-field research we found low-incomes and unemployment to be a major cause leading intensified work and decapitalisation (the selling property and assets to cover household expenses).

Related to Locality:

It was found that issues of settlement location, materiality of houses and ownership status were key issues making people vulnerable to eviction and flood risk.

Accessing Coping Capacities

Informal upgrading of Infrastructure:

In our fieldwork, we found examples of the informal upgrading of infrastructure like roads and the provision of services like drinking water supply through informal networks.

Collective community Action:

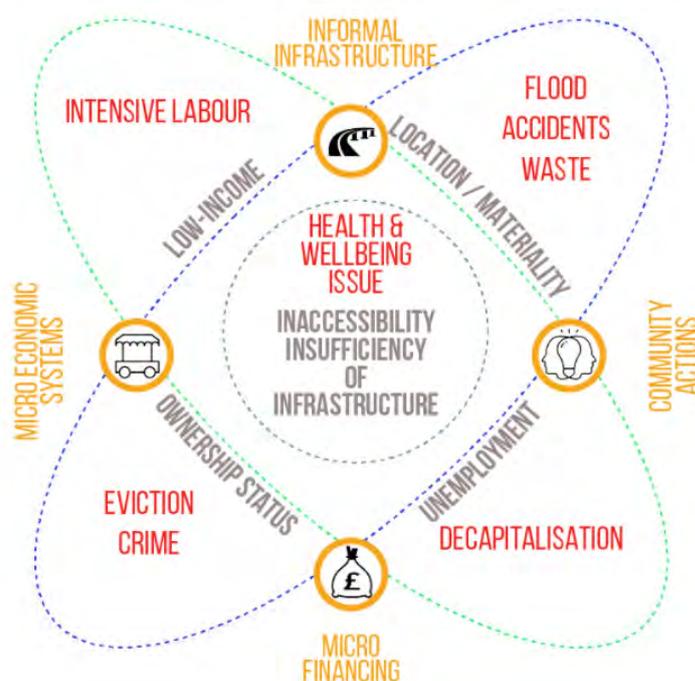
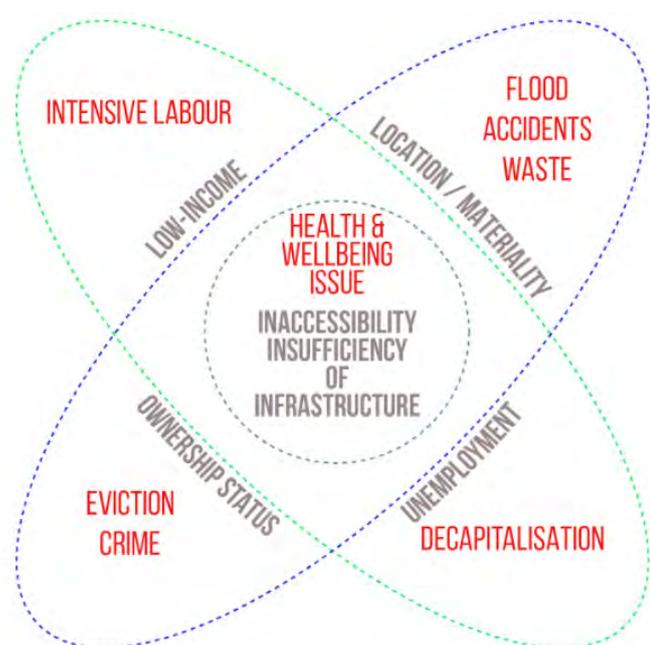
Two forms of community engagement were visible in our study. Firstly, we saw an example of housing upgrading led by women in communities and supported by WFW. Secondly, we found many examples of community leadership under elders.

Informal Entrepreneurship:

We also found the informal entrepreneurship creating micro-economy within the village by connecting the village with the market in both the township and city level.

Micro-financing:

We found the role of microfinance in housing upgrading done by women's savings group project. Likewise, we also discovered the existing pooling of resources for collective community action.



5.2 CHALLENGES AND OPPORTUNITIES



INFORMAL UPGRADING OF INFRASTRUCTURE



COLLECTIVE COMMUNITY ACTIONS



LOCAL ENTREPRENEURSHIP



MICRO-FINANCING

CHALLENGES

Inaccessibility and Insufficiency

The accessibility to basic infrastructure and services is a key concern. Moreover, existing infrastructure and services are insufficient and unaffordable. This scenario is having a direct impact upon health, safety and well-being of people in the communities.

Disconnected forms of engagement

Different forms of community engagement exist in the village but have failed to scale up due to disconnectedness and piecemeal approaches. For instance, the WFW savings group and community-based self-upgrading exists in the same village.

Lack of Recognition and Promotion

The local entrepreneurship is often unrecognised and neglected. Along with discouragement, there is a constant fear of displacement of livelihood which encourages the tendency of decapitalisation and a heavy reliance on the labour market.

Low and Unstable Income

The reliance of poor people on unstable jobs or intensive labour has deprived people of surplus income and time to harness the potentials of microfinancing in order to improve their everyday lives.

OPPORTUNITIES

Accessibility & Affordability

Self-upgrading of infrastructure and services can promote easy accessibility and affordability for the communities. Moreover, If informal upgrading gets adequate support from the government, it can reduce liabilities on the part of the state as well

Empowerment

Collective actions and community engagement brings opportunities to solve their own issues as a collective. This can lead to socio-political-economic empowerment for the people in the community

Autonomy and Interconnectivity

The local entrepreneurship can reduce dependency upon the exploitative labour market as well as enhancing accessibility to basic resources and services. Moreover, It is also enhancing the connectivity of the local market with the township and, thus, the city-level.

Self-reliance

Micro-financing allows the maximum utilisation of available resources through collective means. It can also reduce the trend of decapitalisation and intensive labour by giving alternative opportunities to build self-reliance.

“Whenever we go through difficulties we don’t change our vision, but our will of doing”

- Women For the World Representative

OVERARCHING STRATEGY

Reflecting upon our understanding of risk as transformative potential and our investigation into the existing coping capacities on site; Our vision aims to enhance the constructive coping capacities of citizens at the village, township and city level, as well as those of existing institutions and the municipality. This can be done through the strengthening of productive interdependencies, the encouragement of inclusive engagement activities and the building of critical infrastructure.

The overarching strategy seeks to highlight our multi-themed approach towards city-wide slum-upgrading in Yangon. Our proposals focus on the three core aspects of collective action, microeconomy and critical infrastructure, which emerged from our findings on site. From these core themes we developed a single, flexible strategic framework which seeks to extract the transformative potentials through the processes of Recognition, Relating and Reinforcement, when any given risks are applied to it. However, in order to utilise these three core themes we first sought to define them.

We define collective action as action taken by a group of people whose goal is to achieve common objective. The presence of a common aim or objective is absolutely essential to this concept as it both initiates and defines the actions to be taken. Furthermore, Our understanding of micro-economy stemmed from the multiple start-up businesses prevalent on site. These reflected both the independency and interdependency of the sites of investigation.

In every city, infrastructure maintains a paradoxical position as both simultaneously tangible and intangible, visible and invisible (Steele et al. 2017). In the industrial city of the 19th century, the urban

infrastructure was envisioned as an anatomical linkage of individual organs (i.e. transport, energy, water) that could be controlled, supported and maintained by a principal regulatory entity (Gandy 2005). This vision developed later in cities with urban systems characterised by entrenched and bureaucratic regulatory arrangements, where urban planning and infrastructure provision includes numerous and different actors who manage each infrastructure scheme independently and separately (Brown, cited in Steele et al. 2017). However, cities in 21st century are increasing their population, morphology and urban dynamics at high speed, causing the mentioned inherited infrastructure provision scheme, to be slow and insufficient to reach the new urban spontaneous areas accordingly.

However, what is critical infrastructure? Critical infrastructure is commonly defined as the physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society (UNISDR 2017). But critical infrastructure is also a “diffuse and interconnected realm of human interaction” (Gandy 2005, p.35), therefore, should not only be seen on the physical realm within its definition. The provision of critical infrastructure includes the reorganisation of territory mediated by patterns and processes of property ownership, distribution and consumption in constant flux, movement and exchange, resulting in socio-ecological change and transformation from the local through to the global scale and strategic partnerships for action and provision (Swyngedouw, cited in Steele et al. 2017, p.75).

VISION: ENHANCE CONSTRUCTIVE COPING CAPACITIES

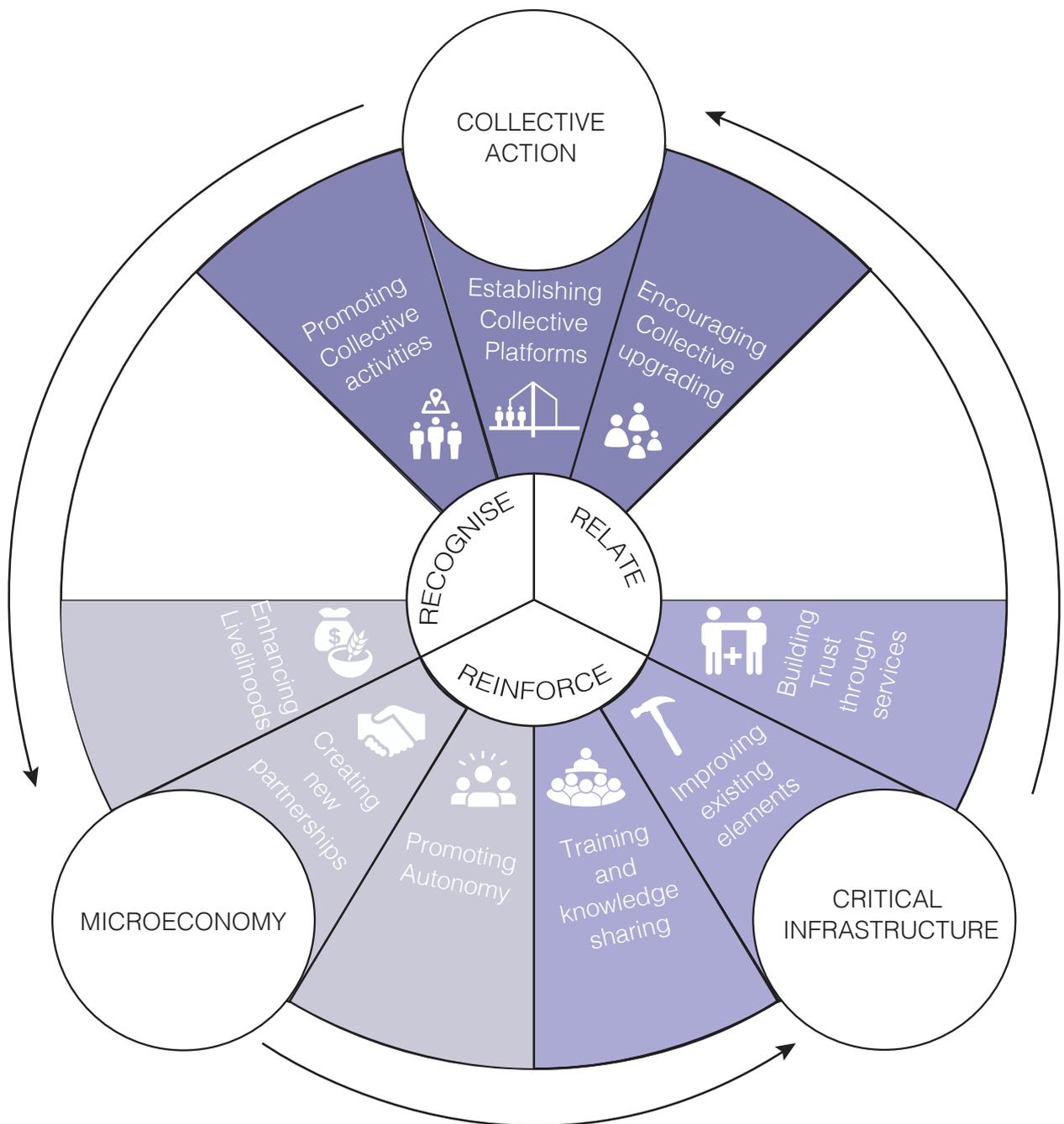
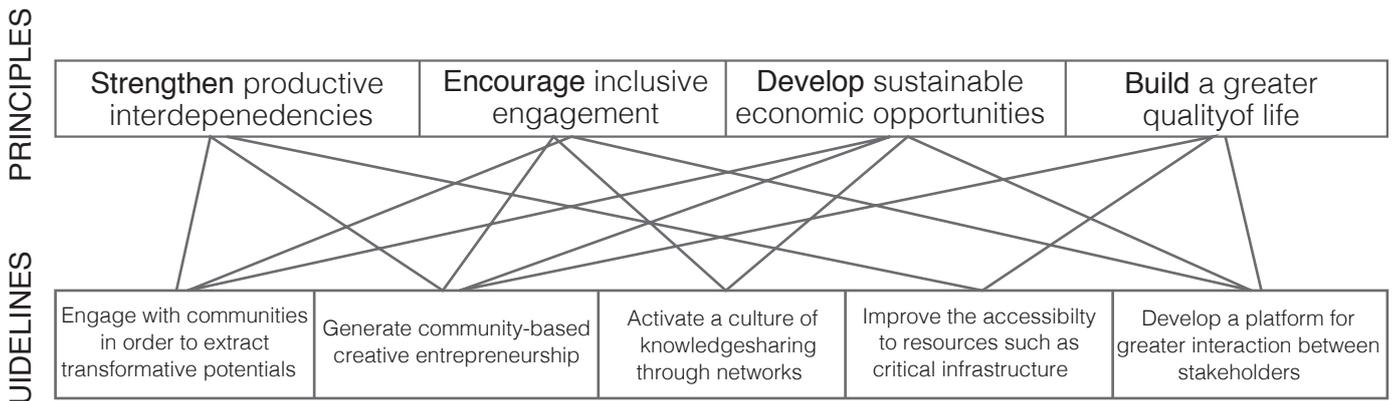


Figure 6.1 Vision, principles, guidelines and strategy framework

STRATEGIC EXAMPLE 01

SPACES FOR LEARNING

Building upon the opportunities from our findings within the workshop carried out during fieldwork, we recognised several aspects of transformative potential within Yoelay village. The well established women savings group is one of them. This collective savings group has already shown the result of a successful slum upgrading project through community building and collective saving.

This successful story is urgently needed to be communicated to the other residents who require access to knowledge on a community-centered slum upgrading process. For example, some people in Nyaung village (Hlaing Tharyar Township) have the capacity of self built housing but they struggle with the legal status of their house. Therefore by acknowledging those challenges and opportunities within Yoelay village and Hlaingtharyar, the strategic proposal that can be done is by activating platform for sharing knowledge that addresses all people.

This strategy is started by identifying the potential coping capacity actions and actors that have already emerged within Yoelay village. The women savings group by women for the world, other women savings groups, collective road improvement, language and computer classes in the monastery, several tuition schools, and other possible actions that can create interaction between people are on the list of this stage.

After identifying these actions and actors, the next stage translates those activities into a systematic and organised platform. This collective platform will work if each actor can get incentive by joining this collective platform. Therefore, to raise this motivation, this platform is not created only for interaction but also addressing people's needs regarding learning something new. One example of this proposal for Yoelay village is adding a daycare or vocational class for working age people, and

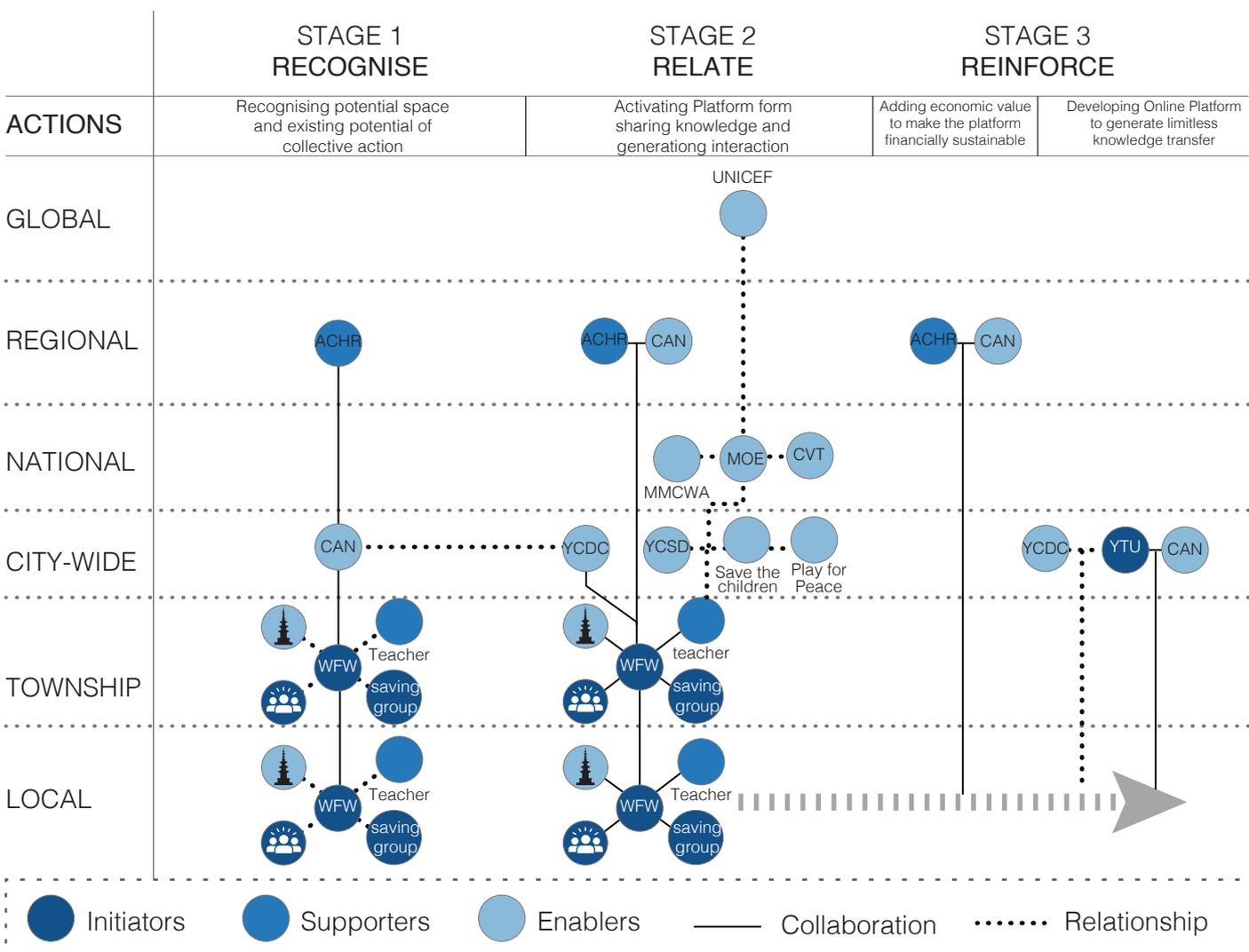


Figure 6.2 Transformative Agents: Collective Platform

language and computer class for student.

By providing a place that encourages residents to come to Yoelay village, it creates an opportunity for them to know and understand more about the physical aspect of the housing project by experiencing the neighbourhood firsthand. This basic knowledge of how the saving group system works and how people addressing housing issues through that group can be shared through the informal interaction of people or, if it is necessary, sharing knowledge can be done by facilitating training from women for the world to other communities that have not yet joined with the saving group. By creating this network of learning within the saving groups throughout Yangon, with Yoelay village as a precedent, it is expected that this process of sharing knowledge can influence other communities in order to create a more systematic and accountable collective system in achieving their objectives.

The well established system of saving group is urgently needed to be informed to be well recognised by the public. This process of disseminating this platform to the public can be executed by utilizing social media through the participation of youth that also form part of the creation of an online platform. The fact that the people in Yangon are already active on online media can be seen by their everyday practices of using smartphones. This can be one opportunity for spreading the word. For the long term goals, we set a timeline to develop a website by collaborating with students from Yangon Technological University (YTU) as part of their project and research. This online system can also stimulate the women savings group members to improve the saving system and better organise with greater accountability.

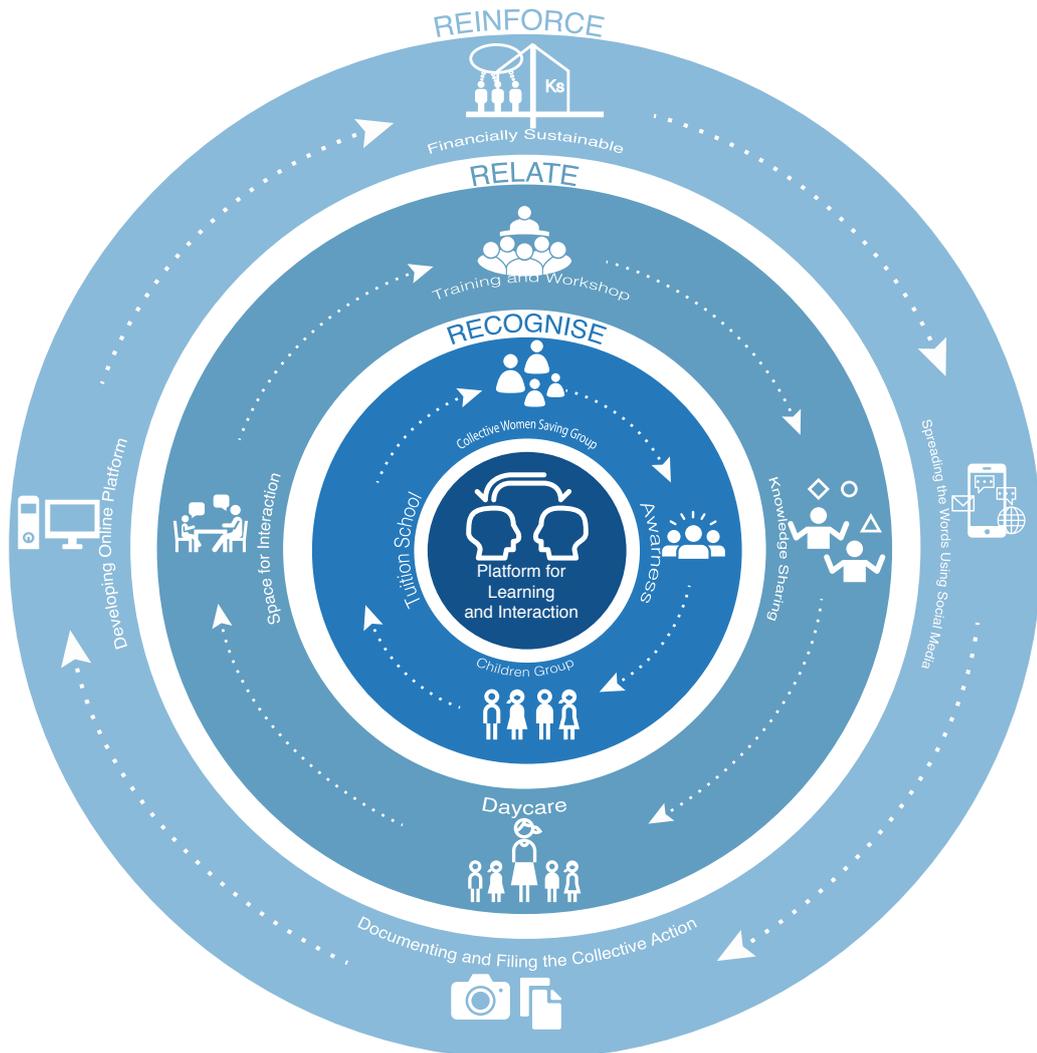


Figure 6.3 Collective Platform Strategy Summary

RECOGNISE

Recognise potential space and existing potential of collective action.

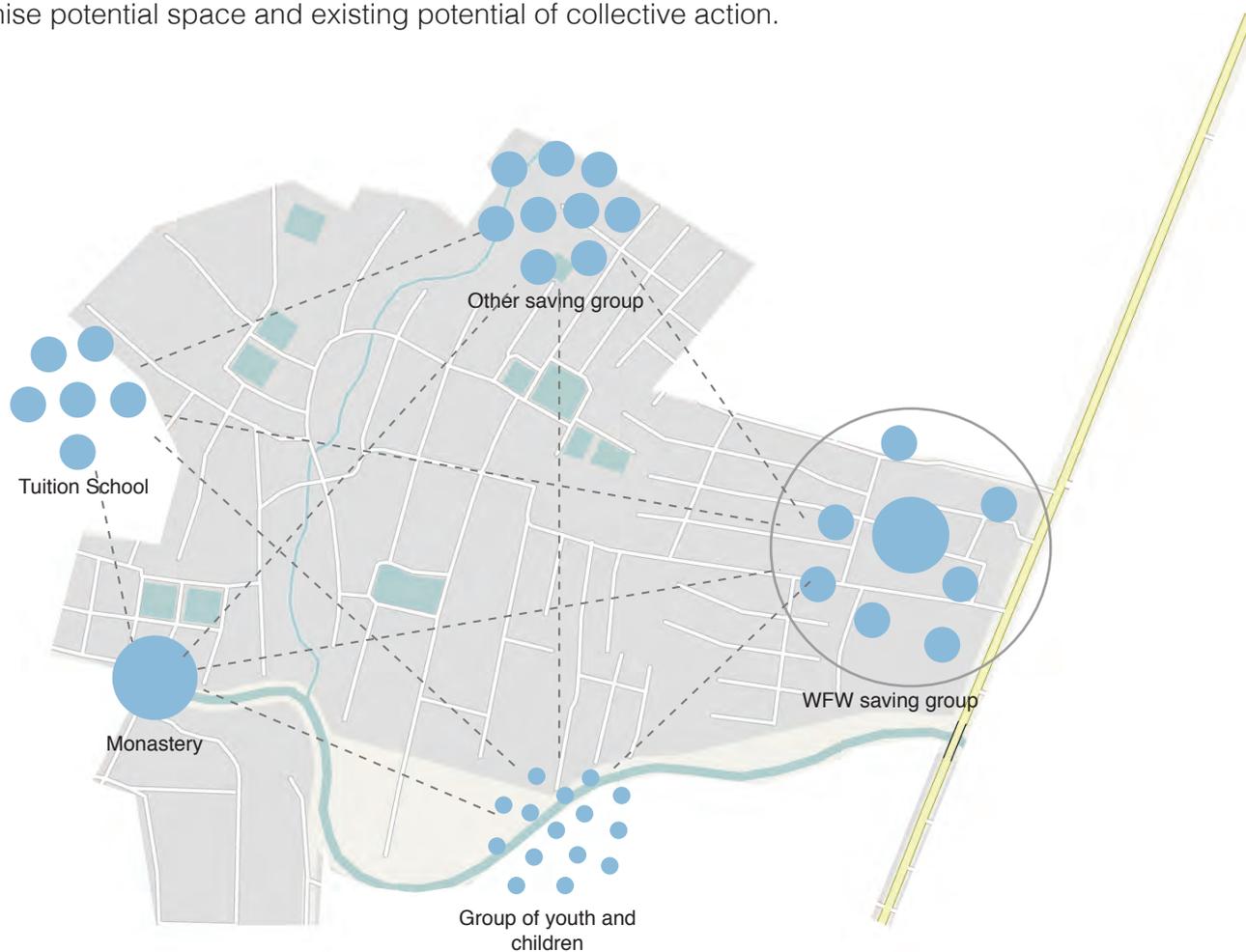


Figure 6.4 Village-scale Collective Platform

RELATE

Activate a platform for sharing knowledge and generating interaction.

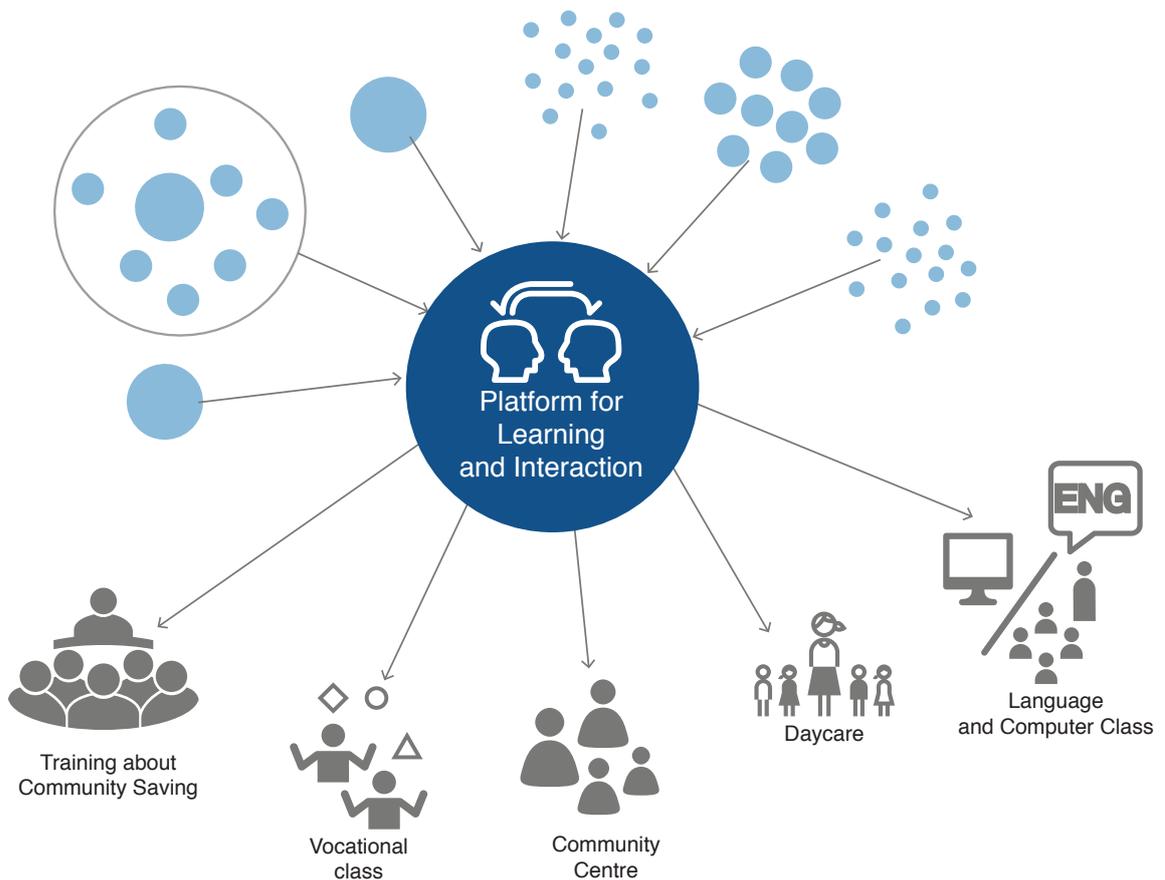
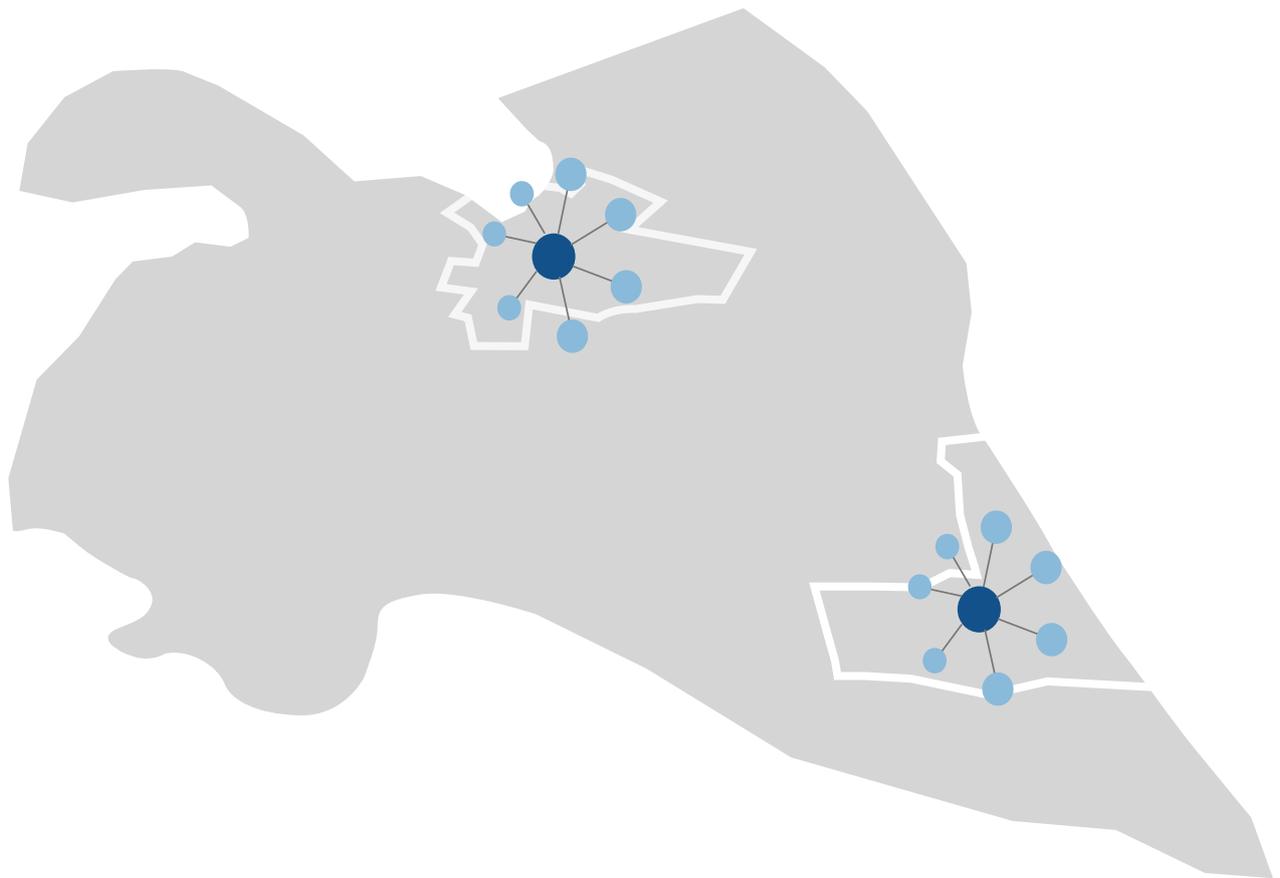
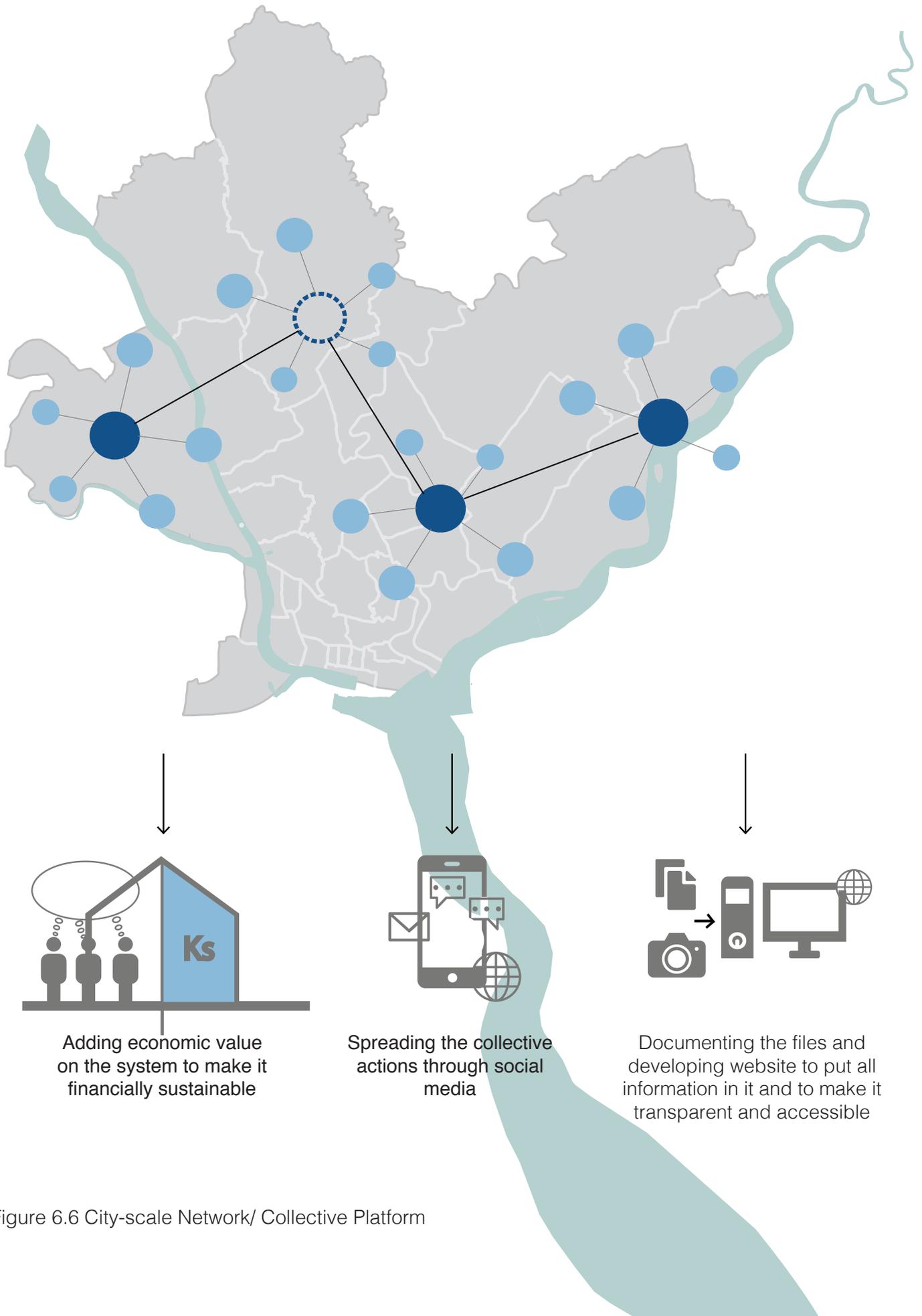


Figure 6.5 Township-scale Network

REINFORCE

Adding economic value to make the platform financially sustainable and Develop an online platform to encourage knowledge transfer.



Adding economic value on the system to make it financially sustainable

Spreading the collective actions through social media

Documenting the files and developing website to put all information in it and to make it transparent and accessible

Figure 6.6 City-scale Network/ Collective Platform



Figure 6.7 Village-scale collective spaces



STRATEGIC EXAMPLE 02

COMMUNITY UPCYCLING

This scenario seeks out transformation by encouraging community mobilisation and the building of its networks and agency through the processes of waste management.

The strategy initially focuses on the community of Yoelay Village as a microcosm of the wider city, with particular regard to waste management issues. While there exists a culture of littering around existing houses, the firm establishment of the Women for the World housing project, and its associated leadership strengths, has the potential to provide a springboard for collective action, in order to address such matters. Further to this, there are multiple locations within the village in which copious amounts of waste have accumulated, such as the bridge located along GantGaw street. This potentially results in exacerbating flooding and causing disruption to those who travel to work by boat.

The evidence of bought or hand-crafted trash bins on site highlight the local efforts to address the growing waste issues, however, the weaknesses lie in the classification and transport of this waste. Nevertheless, the existing, sophisticated micro-businesses developed, such as customised motorcycle taxis and pushcart recyclers, emphasises the potential for the utilisation of similar systems in the case of waste management.

While there are calls for township and development committees to develop more regular waste collection systems for “informal communities and peri-urban zones”, the standard cost for such services are often too expensive, at 300-900 kyats per month/household. Resultantly, this strategy addresses the need for a more “integrated and holistic” approach towards waste management, that is significantly community and people-centred.

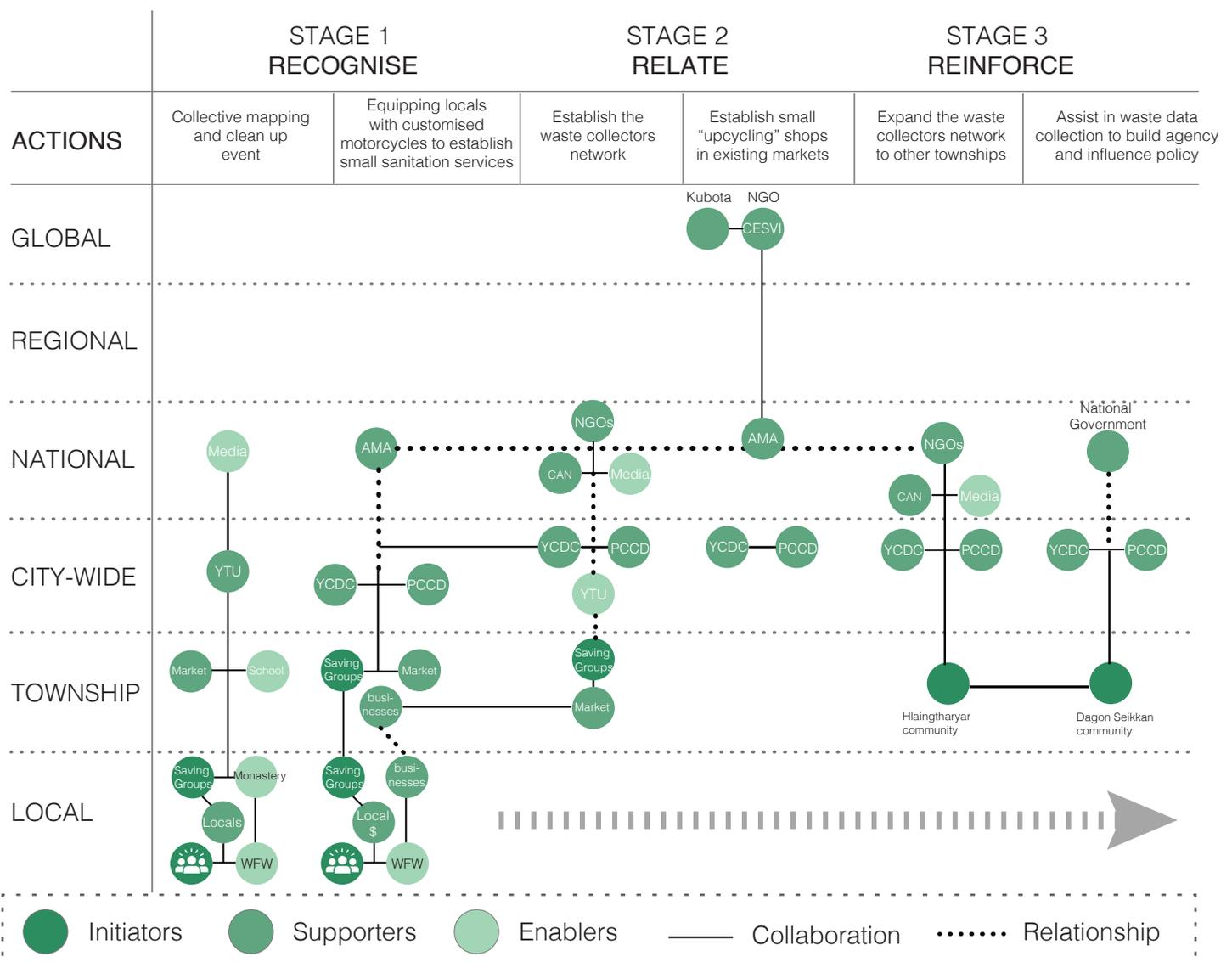


Figure 6.8 Community “UPcycling” transformative agents

One of the key objectives of this proposal is to build greater awareness among community members by linking the transformative potential of waste management to the health and well-being of the community. Furthermore, this strategy aims to support small enterprises to develop waste management services as a means of creating livelihoods. Finally, this strategy aims to build networks which can assist in waste collection data in order to help develop efficient waste monitoring systems and allow for the more stringent implementation of waste management policies .

The proposal begins with a collective community mapping activity that identifies key areas for waste clean up. By building upon existing relationships with YTU and YCDC there exists the opportunity to mobilize manpower, equipment and resources in order to implement a flagship waste clean up and classification event from household to village

scale. Additionally, by collaborating with existing NGOs and car workshop businesses, community members in need of employment can be equipped with customised bikes in order to establish their own waste collection and classification services. In conjunction with this, community members can collaborate with existing NGOs such as CESVI who have established “upcycling” shops which focus on creating crafts from recyclable materials. These shops and their associated activities could provide a revenue for newly established waste collectors.

Finally, in order to scale up to city-level through the process of replication. By replicating these activities within other villages and neighbouring townships, a stronger network of waste collectors can be established. This can assist the government in waste data collection, in order to build greater community agency and influence future policy to an extent.



Figure 6.9 Community “UPcycling” Strategy Summary

RECOGNISE

Collective mapping and clean up event and work with existing NGOs and small businesses to equip locals with customised motorcycles to establish small waste and sanitation services.

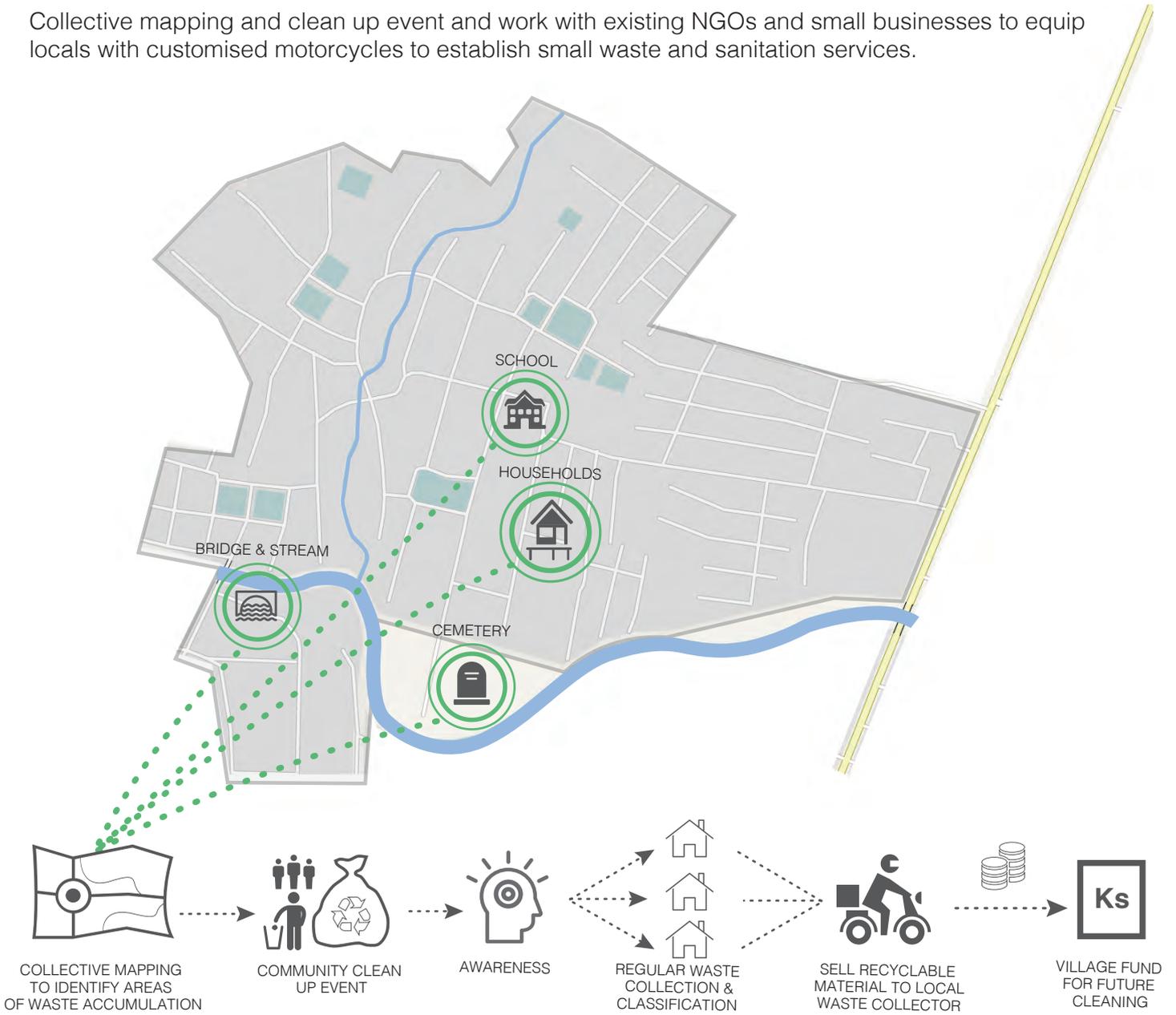


Figure 7.0 Village-scale collective mapping and clean-up event

RELATE

Establish a waste collectors network and set up small “upcycling” shops in existing markets.

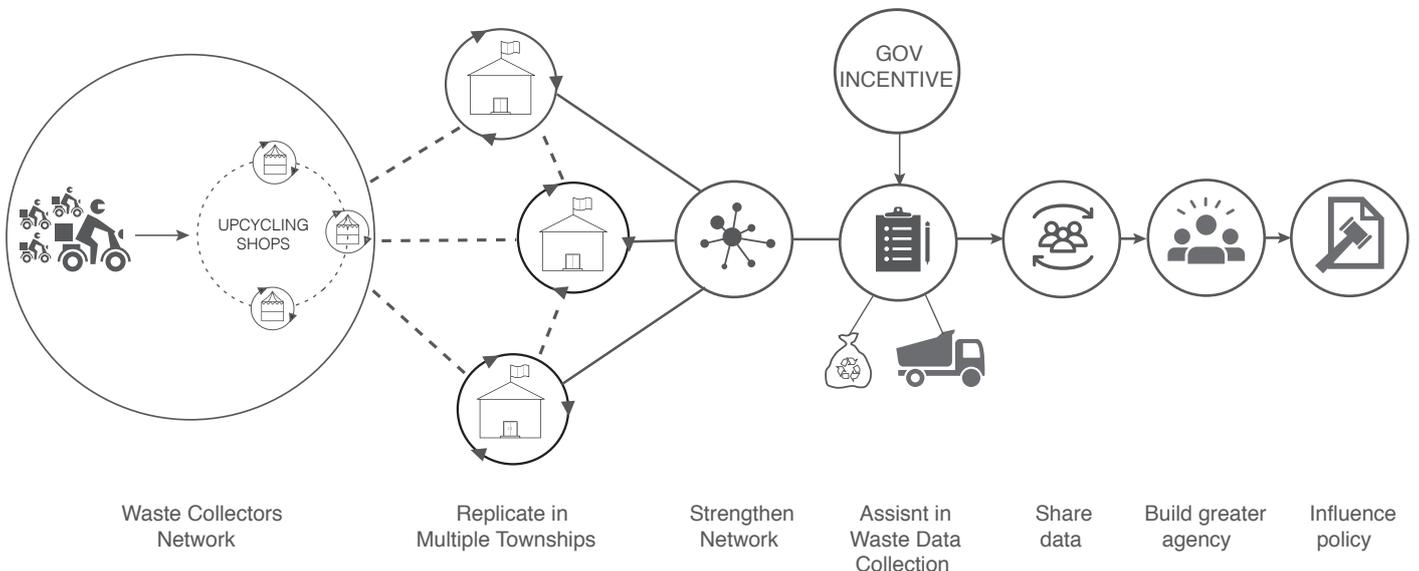
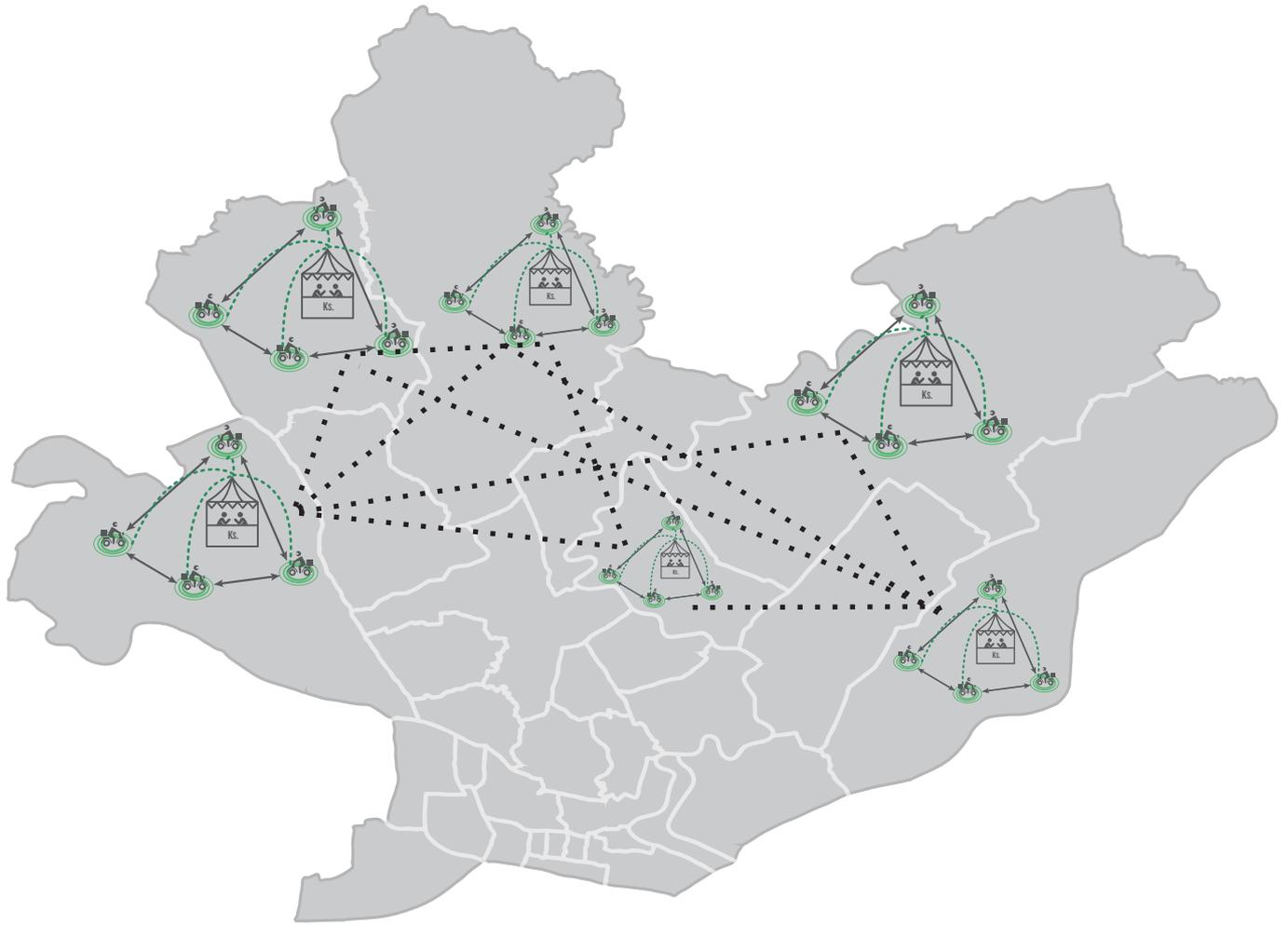


Figure 7.1 Township-Scale waste collectors network and “UPcycling” shops

REINFORCE

Reinforce the established network by carrying out other activities related to waste data collection, share data, and gain greater agency in order to influence future policies.

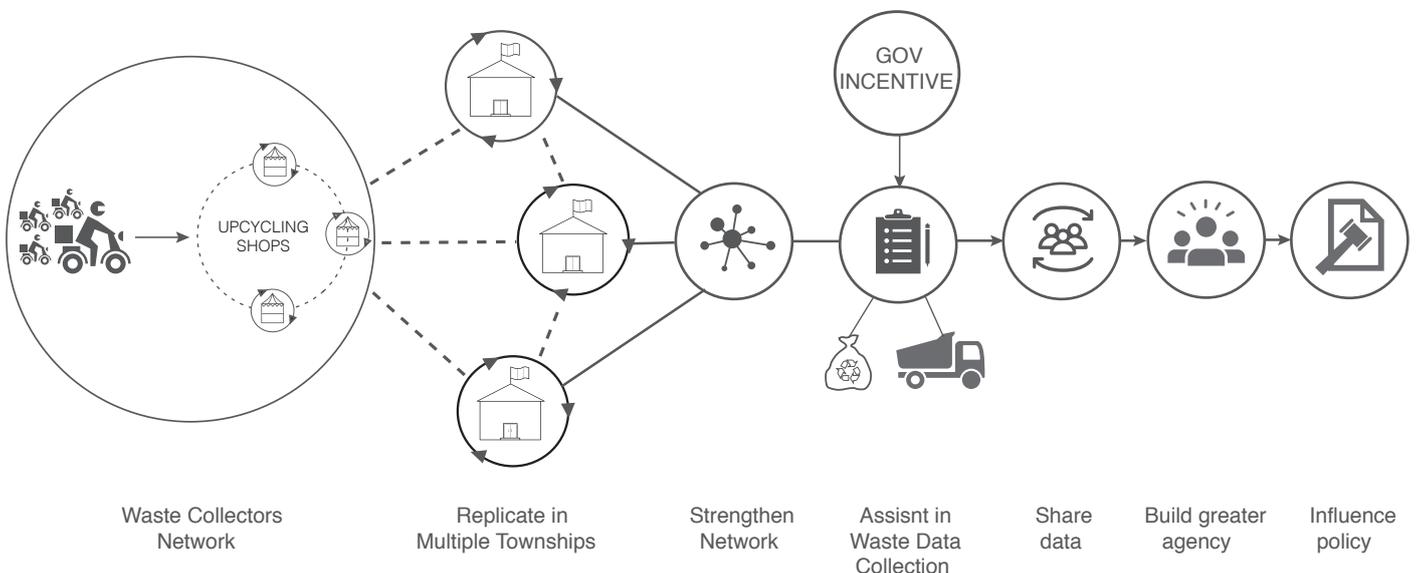
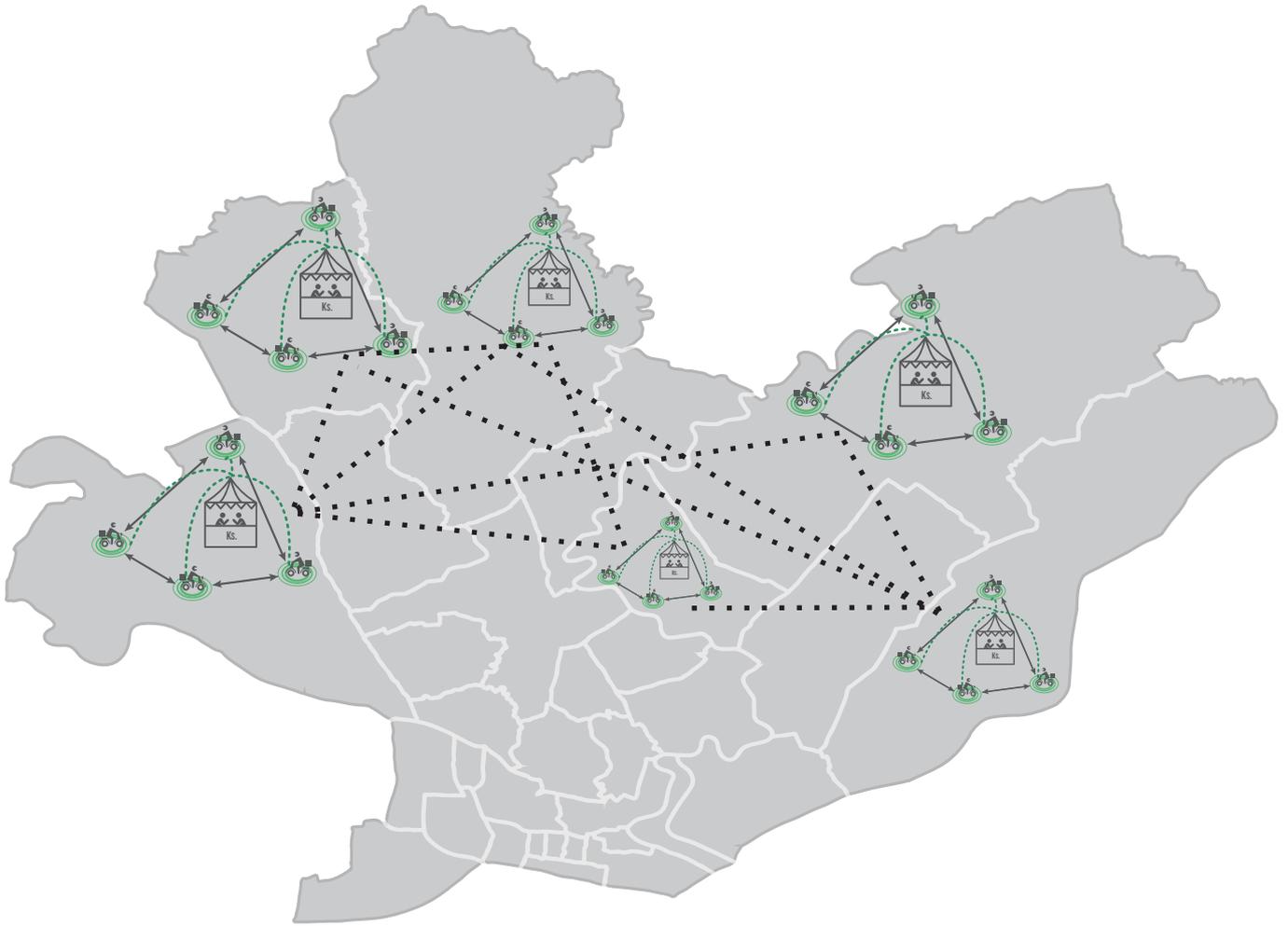


Figure 7.2 City-scale Waste Collectors Network



Figure 7.3 Existing waste collection and disposal



STRATEGIC EXAMPLE 03

HEALTH INFRASTRUCTURE

Based on the specific key findings related to health (see annex 10), we have acknowledged the importance of proposing a community based health system, considering that health issues are directly linked to the vulnerability in the slum areas.

The main challenges summarized are: insufficient essential health services, inadequate medical supplies, lack of alternative health services, poor coordination among health agencies from national, local and other medicine providers, direct relationship with environmental and water pollution and vulnerability.

The main opportunities summarized are: community organization and mobilization capacities, local solidarity, trust linkages within the community, emergent health awareness, creation of local spaces for health provision, vibrant commerce, increasing entrepreneurship, international medical

assistance and support.

For building and strengthening trust, an incentive for gathering and encouraging community action must be developed. Based on the strategies used by WFW project, the idea is to create a communal pool saving group for building a Community Based Health System in each locality. It will include the construction of the physical space of a health centre in the monasteries, local schools or other available communal spaces, and a Local Fund for Health and Emergencies. The fund will help to provide medicine, mobilisation to the main hospitals in emergencies, current expenditure, salaries, donations to the monastery and welfare support for emergencies. This system will be the incentive to create stronger trust and cooperation links within the members of the community, considering that every member is interested in having an efficient medical assistance in the area. Also, it is proposed to be the missing

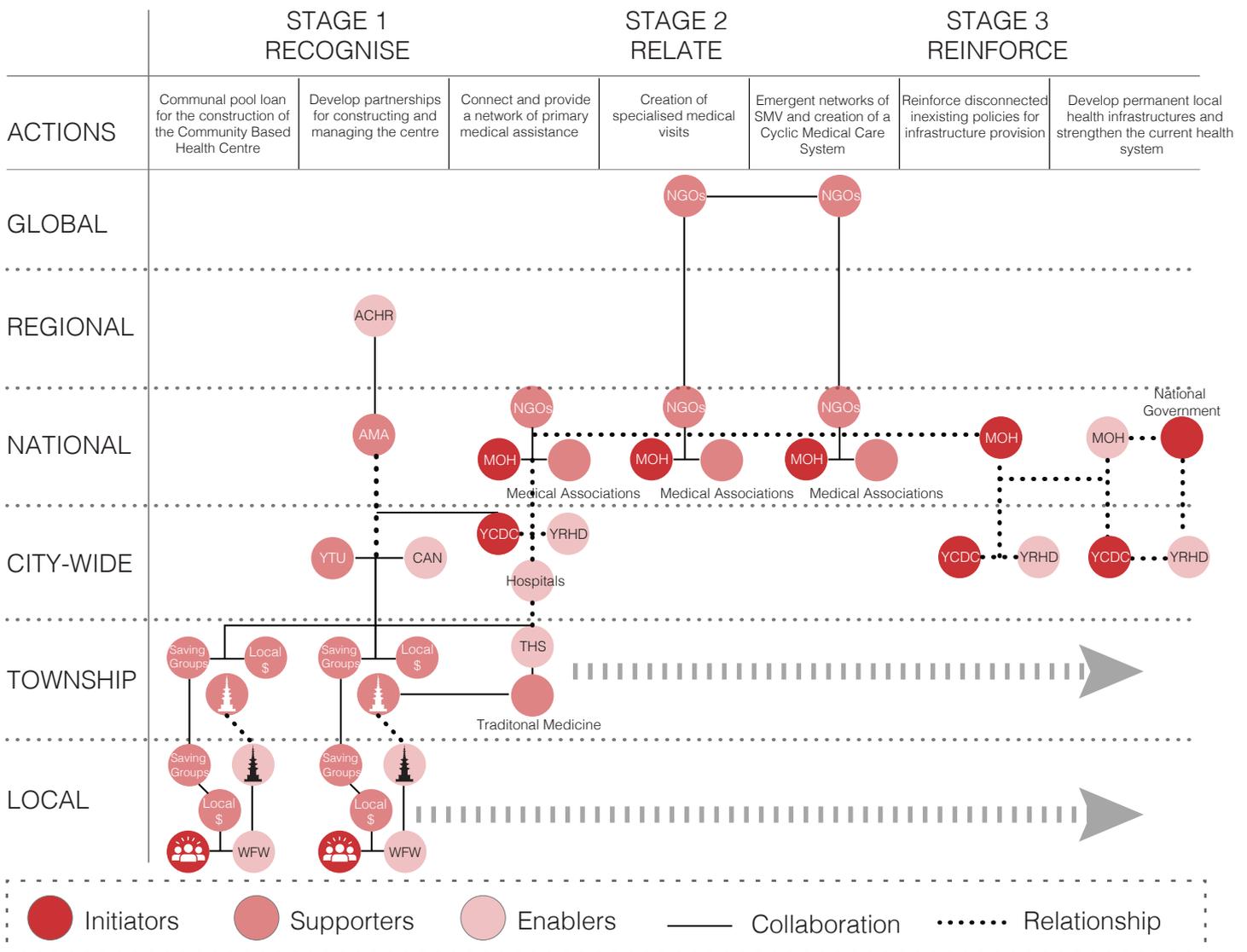


Figure 7.4 Health infrastructure transformative agents

link between the policies, actual THS and the informal settlements.

The proposal requires the following key steps:

1) Broadening the saving group mechanism into a communal pool loan to support the construction of a health center in available community spaces in monasteries. The construction will be made in partnership with local organisations (ACHR, CAN, AMA, YTU) and community members using a similar scheme of the WFW project. Local entrepreneurs and labourers of the informal sector will be key actors in the funding of the program.

2) Connect and provide a network of medical assistance focused on traditional medicine, first aid, primary health services and maternal, newborn and child health. The THS will be strengthened in each locality, and the new centres will provide a new link and opportunities for action to the current NGOs supporting medical assistance. Furthermore, it will promote internship and job opportunities for the medical practitioners, nurses and midwives that are being currently trained in the region.

3) The new centers will work as headquarters for regular and constant Specialized Medical Visits (SMV) that will be encouraged by linking and strengthening the partnership of medical associations, local and international NGOs (3MDG, PHF, MMCWA, MMA, MRC, MAM, MSF, PU-AMI, Alliance, BIM, PSI), medical institutions and governmental health agencies (YRHD and MOH). The SMV will visit other new medical centers in other parts of the Township and the city regularly. The creation of a Cyclic Medical Care System will start to emerge in the city, bringing hospitals to the people, and not people to the hospitals.

4) These new spaces of health will foster the reinforcement of the disconnected policies for health infrastructure in the informal settlements. The reinforced mechanism and new spaces created will encourage permanent local health infrastructures that will be easily replicated not only in other parts of Yangon, but in each of the 330 townships in Myanmar. The proposed system will significantly reinforce the existing health system in the country, reducing the vulnerability related to health issues in the localities.



Figure 7.5 Health infrastructure strategy summary

RECOGNISE

Start a Communal pool loan for the construction of the Community Based Health Centre Develop partnerships for constructing and managing the centre

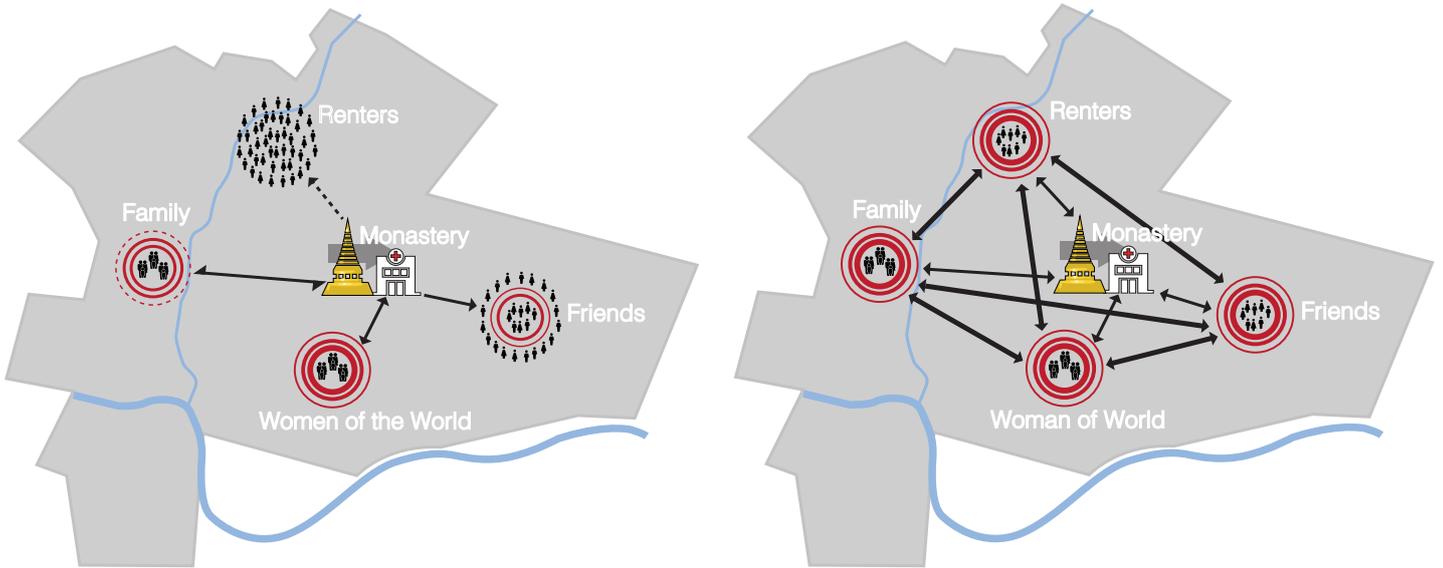


Figure 7.6 Village-scale Health infrastructure

RELATE

Connect and provide a network of primary medical assistance, Create Specialized Medical Visits and Emergent networks of SMV and creation of a Cyclic Medical Care System

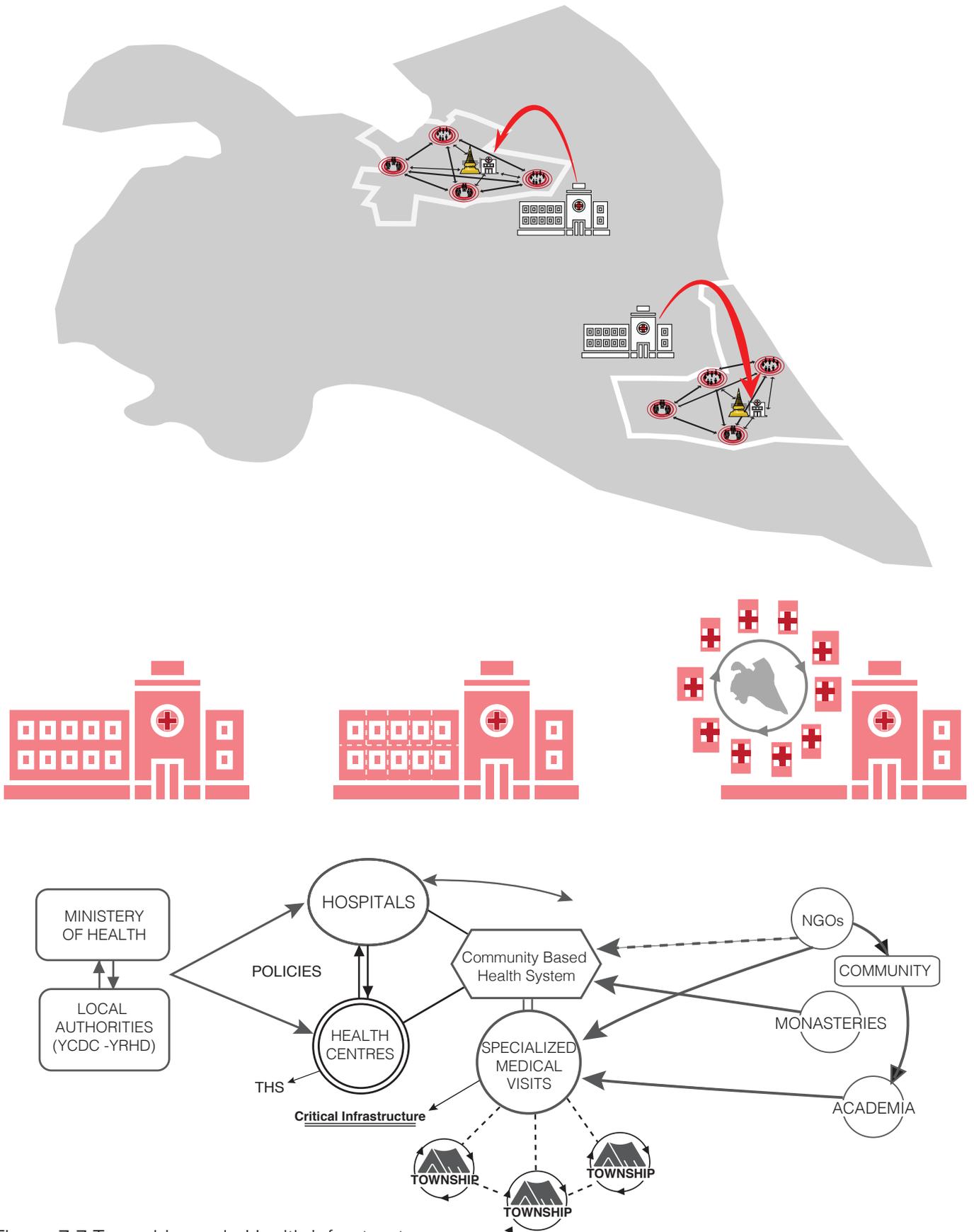


Figure 7.7 Township-scale Health infrastructure

REINFORCE

Reinforce disconnected existing policies for infrastructure provision
 Develop permanent local health infrastructures and strengthen the current health system

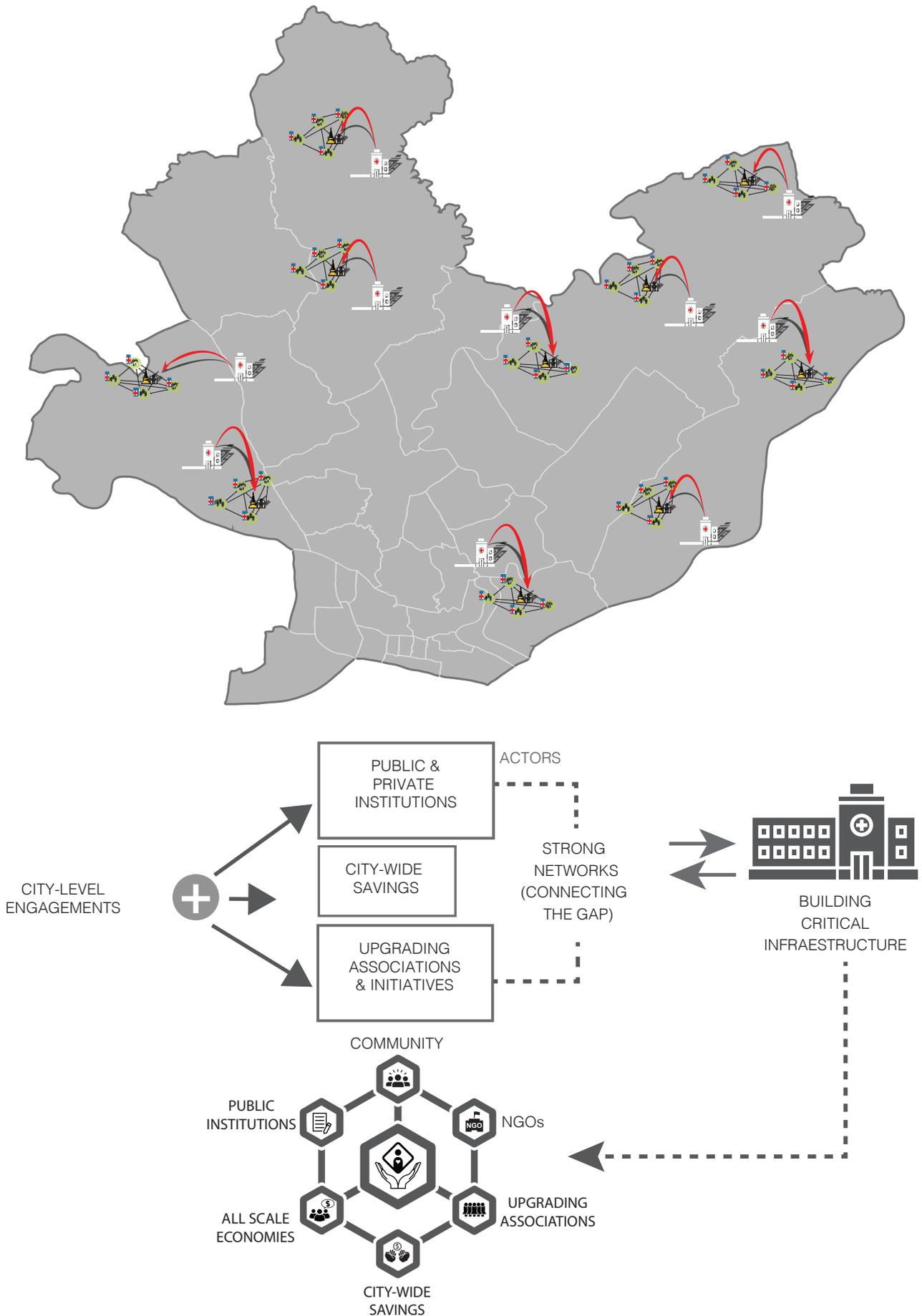


Figure 7.8 City-scale Health infrastructure network



Figure 7.9 Existing area around monastery and contaminated water supply





8.1 REFLECTIONS

Myanmar is a nation marked by a series of social, political and natural disaster events that, until today, keep the country on a phase of constant transition between several thresholds of uncertainty. Despite the apparent political progress that the 2011 election brought to the surface, promising a more democratic and just society through the leadership of Aung San Suu Kyi and the National League for Democracy, the internal disparities of its urban sphere show that this progress is only a curtain hiding strong phenomenon of exclusion, inequity and continuous displacement manifestation that still happen inside and outside the country's borders. Our goal was to define strategies that could support in setting the path in this period of transition, to help minimize the impacts and disparities, taking as a premise that all risky situations can be seen also as opportunities for change. It is precisely this concept that we have taken as the core of our proposal, reframing risk as transformative potential, through analyzing the existing coping capacities of the people in the risks of their everyday lives.

Our strategy consists of integrating the emerging micro economies, creation of critical infrastructure and mobilization of the community, as nodes for generating mechanisms of reaction against vulnerability, sharing the knowledge and creating networks of strategic alliances of action. This is all based on the notion that urban people-centered transformations coming from the local communities are the catalyst that begin the process of transformation. During the fieldwork, it was found that there are already existing and emerging community driven opportunities for change, although this are not interconnected or well supported by foreign organisms or local governments. Through the recognition of this dilemmas, the actors of change and potential opportunities, these community driven initiatives can be related and reinforced to expand their influence into citywide and national levels. As Somsook Bonyabancha mentioned in her exposition in YTU, "The purpose of planning is to unlock systems that have been locked for many years."

In conclusion, we saw that with the current examples of community driven projects like Woman for the World; and by experiencing the strength against adversity of the people of Myanmar, it is possible to generate changes within the community itself towards a better and more efficient health system, that would move the existing hospitals to the people; the generation and dissemination of platforms for knowledge; and waste management based on recycling which embodies both both environmental and economic advantages. Perhaps, with the success of these initiatives, the government could be influenced in changing their perspective of managing the city into a more realistic community-based, and people-centered approach. This has significant potential, because as we witnessed, the people and their knowledge are one of the most valuable assets of the city.

APPENDIX





9.1 BIBLIOGRAPHY

3MDG. 2017. The Three Millennium Development Goal Fund. Available at: <http://www.3mdg.org/> [Accessed May 28, 2017].

Hordijk, M. & Baud, I. 2006. The role of research and knowledge generation in collective action and urban governance : How can researchers act as catalysts ? [online] 30, pp. 668–689. Available from: <https://doi.org/10.1016/j.habitatint.2005.04.002> [Accessed] 20 May 2017.

Ali, A. 2014. Health Care for the Urban Poor in Myanmar. Assessment to identify the scope of problem and intervention options - Consultancy Mission Report.

Cassels, A., Myint, P. & Sein, T.T. 2015. How can the township health system be strengthened in Myanmar? , (3).

Gandy, M. 2005. Cyborg urbanization: Complexity and monstrosity in the contemporary city. *International Journal of Urban and Regional Research*, 29(1), pp.26–49.

Gillinson, S. 2004. Why Cooperate ? A Multi-Disciplinary Study of Collective Action. Working Paper, Overseas Development Institute.

Haruyama, S. 2015. Land use change of Hlaingtharyar township, Yangon. Available at: <https://confit.atlas.jp/guide/event-img/jpgu2015/00075/public/pdf?type=in> [Accessed date: May 29, 2017]

IDMC. 2014. IDMC » Myanmar: comprehensive solutions needed for recent and long-term IDPs alike. Available at: <http://www.internal-displacement.org/south-and-south-east-asia/myanmar/2014/myanmar-comprehensive-solutions-needed-for-recent-and-long-term-idps-alike/> [Accessed May 30, 2017].

JICA. 2013. A Strategic Urban Development Plan of Greater Yangon – Final Report I – The Master Plan. Japan International Cooperation Agency.

Kraas F, Gaese H, Kyi M M. 2006. Megacity Yangon: Transformation Processes and Modern Developments, Second German-Myanmar Workshop in Yangon/Myanmar 2005. LIT Verlag Münster.

Marshall, G. 1998. *A dictionary of sociology*. Oxford University Press, New York.

Meinzen-Dick, R., Di Gregorio, M., McCarthy, N. 2004. Methods for studying collective action in rural development. *Agric Syst* 82(3):197–214.

MIMU. 2016. The 2014 Myanmar Population and Housing Census - Thematic Report On Mortality.

Montgomery, J. D. 1998. Towards a Role Theoretic Conception of Embeddedness, *American Journal of Sociology*.

Myanmar Insider. 2015. A Glance at Traditional Medicine in Myanmar | Myanmar Insider. Available at: <http://www.myanmarinsider.com/a-glance-at-traditional-medicine-in-myanmar/> [Accessed May 28, 2017].

Olson, M. 1965.)*The Logic of Collective Action*, Cambridge MA: Harvard University Press.

Peters, R.P. and J. 2015. Myanmar's National Ceasefire Agreement isn't all that national. *Vice News*. Available at: <https://news.vice.com/article/myanmars-national-ceasefire-agreement-to-end-68-year-civil-war-isnt-all-that-national> [Accessed May 30, 2017].

Premakumara, D. G. J., Hangesbaugh, M., Onogawa, K., Hlaing, O. M. T. 2017. Waste Management in Myanmar: Current Status, Key Challenges, and Recommendations or National and City Waste Management Strategies. Kanagawa: Institute for Global Environmental Strategies (IGES)

REUTERS. 2017. Myanmar trains midwives to tackle maternal death rate | Reuters. Available at: <http://www.reuters.com/article/us-myanmar-midwives-idUSKBN1733J8> [Accessed May 28, 2017].

Steele, W., Hussey, K. & Dovers, S. 2017. What ' s Critical about Critical Infrastructure ? What ' s Critical about Critical Infrastructure ? , 1146(May).

Nwe, T. T. 1998. Yangon: the emergence of a new spatial order in Myanmar's capital city. *Sojourn: Journal of Social Issues in Southeast Asia*, 13(1), pp. 86–113.

UNDP Myanmar. 2015. The state of local governance: trends in Yangon.

UN-OCHA. 2016a. Myanmar: Natural disaster risks and past events (as of 31 May 2016) - Myanmar | ReliefWeb. Available at: <http://reliefweb.int/map/myanmar/myanmar-natural-disaster-risks-and-past-events-31-may-2016> [Accessed May 30, 2017].

UN-OCHA, 2016b. Snapshot of displacement and population movement in 2015. Available at: http://img.static.reliefweb.int/sites/reliefweb.int/files/styles/attachment-large/public/resources-pdf-previews/496476-Snapshot_Humanitarian_OCHA_25Jan2016.png?itok=jPWNYRtc [Accessed May 30, 2017].

UNISDR. 2017. Terminology - UNISDR. Available at: <https://www.unisdr.org/we/inform/terminology> [Accessed May 27, 2017].

Vanni, F. 2014. *Collective Action : Definition and Characteristics. Agriculture and Public Goods: The Role of Collective Action*. London: Springer.

Venugopal, R., & Yasir, S. 2016. The politics of natural disasters in protracted conflict : the 2014 flood in Kashmir. *Oxford Development Studies*, (December), Available from: <https://doi.org/10.1080/13600818.2016.1276160> [Accessed March 5, 2017].

ANNEX 1: HAZARD IN MYANMAR



MYANMAR COMMON HAZARDS



↑

2015

Impacts are expected to increase in the near future due to climate change

One of the most vulnerable countries to the effects of climate change

40 years National conflicts has caused displacements and humanitarian crisis including the Rohingya population

Myanmar Government seek to maximise level of assistance from international partners to increase country development

GOVERNMENT OF MYANMAR PROGRESS IN DISASTER MANAGEMENT POLICIES SINCE 2008



Cyclone Nargis

Not enough resources created a slow development

-  Creation of new authorities
-  New plans for Disaster Management

MYANMAR AS A LEAST DEVELOPED COUNTRY ACCORDING TO THE UNITED NATIONS

 Low Income

 Weak human resources

 Economic vulnerability

MYANMAR RURAL AREAS

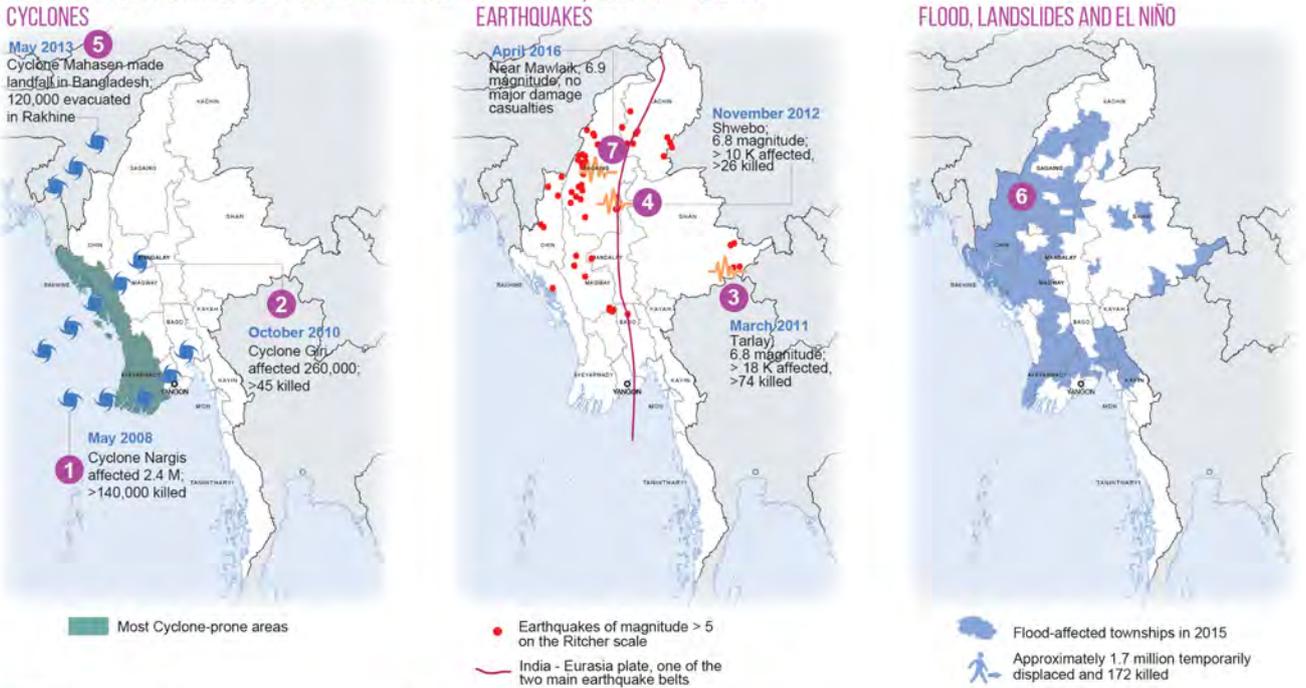
 70% of the population

 More compromised to civil unrest

 More vulnerable to climate factors and natural disasters

Migration to more developed urban areas is a common practice

MAJOR NATURAL DISASTERS IN MYANMAR, 2007 - 2017

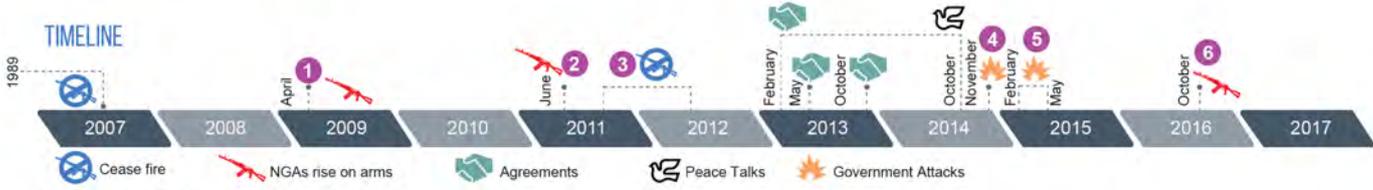


TIMELINE



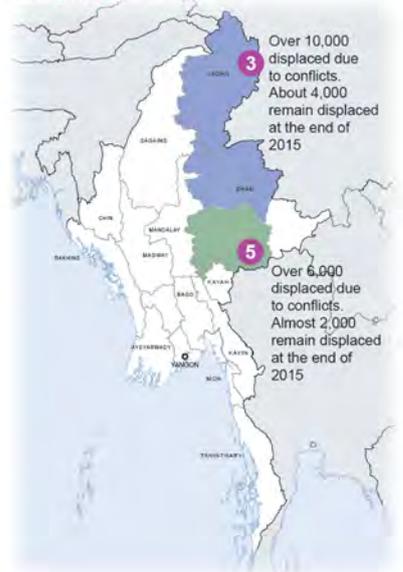
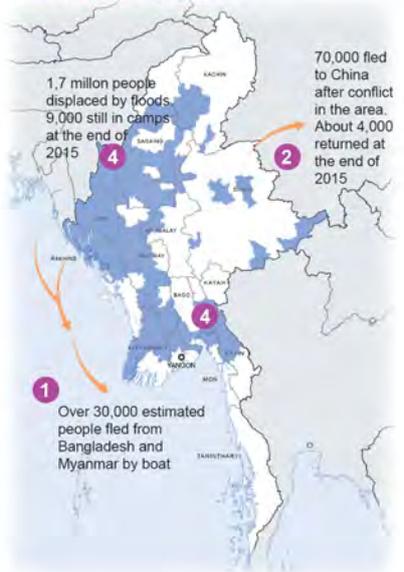
Source: Reliefweb 2016
Made by authors

CONFLICTS IN MYANMAR, 2007 - 2017

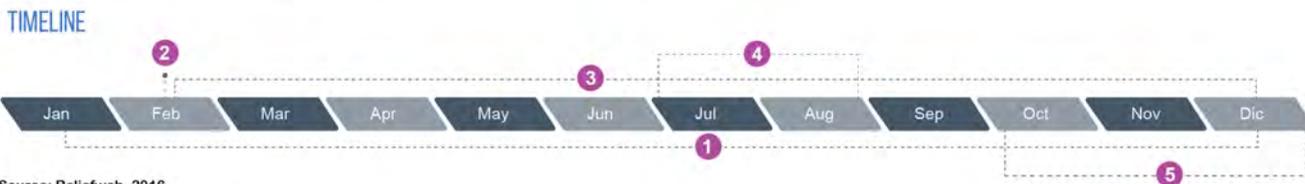


Source: Internal-displacement, 2014 - Wikipedia, 2016
Made by authors

DISPLACEMENT AND POPULATION MOVEMENT IN 2015



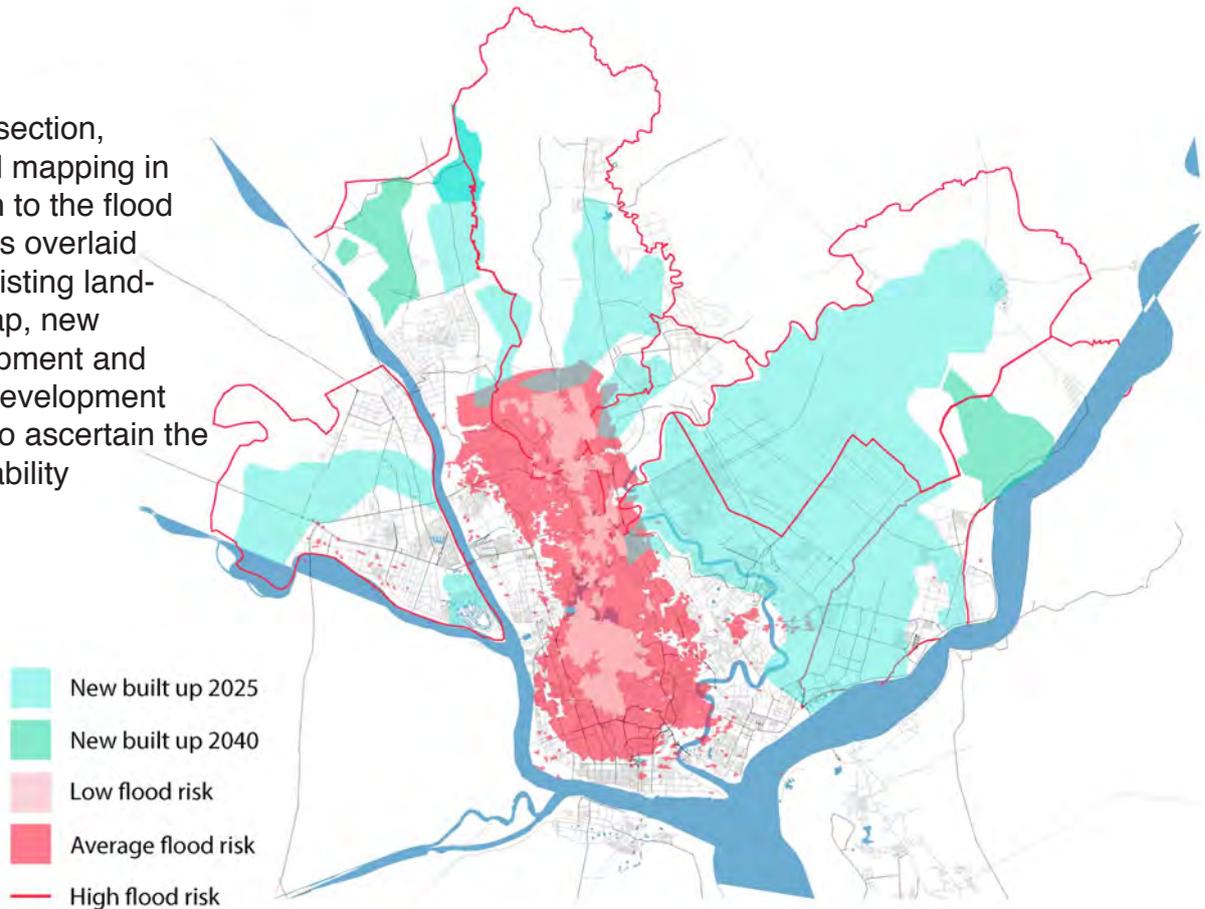
Sites People still displaced



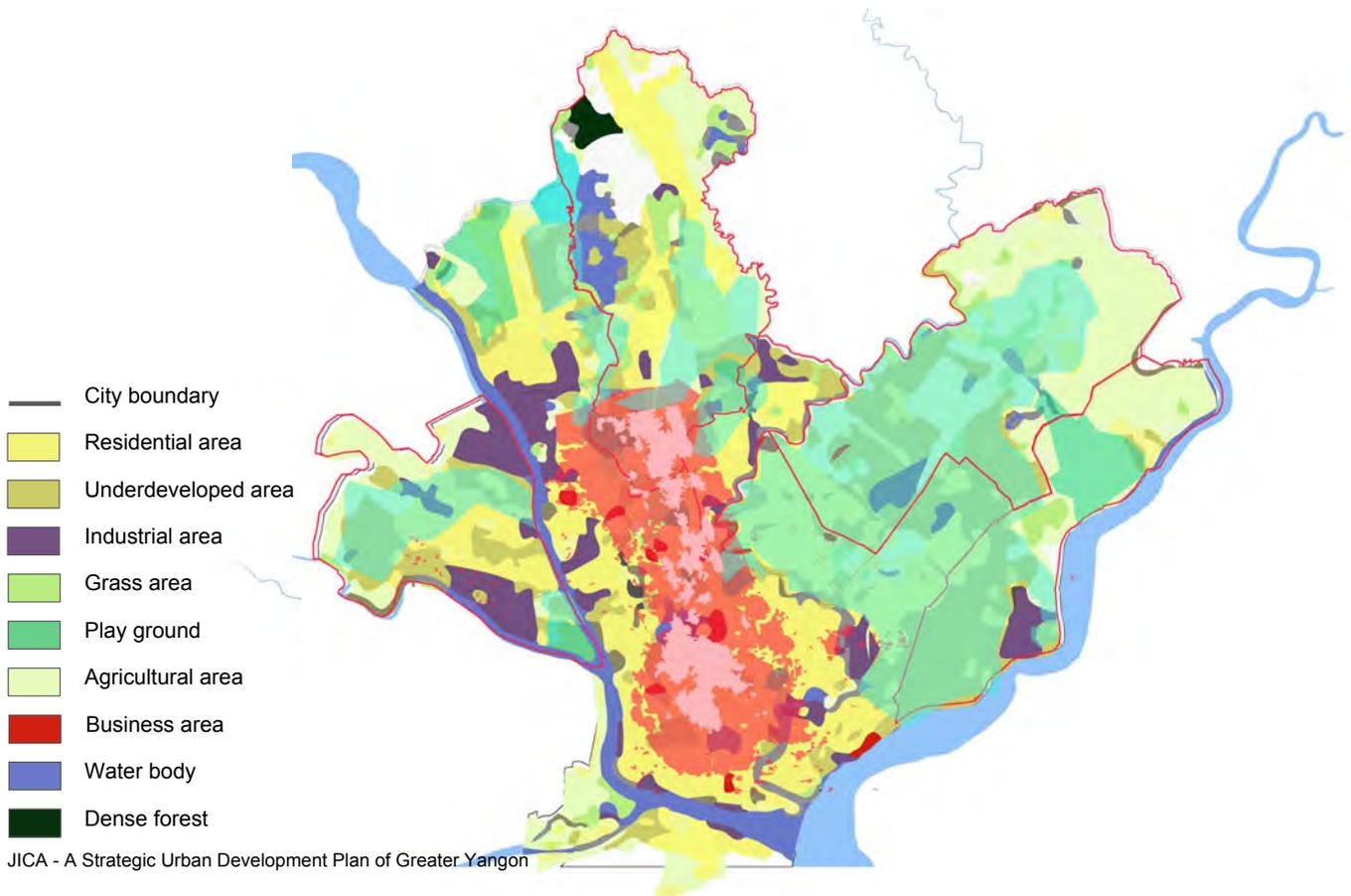
Source: Reliefweb, 2016
Made by authors

ANNEX 2: HAZARD MAPPING IN YANGON

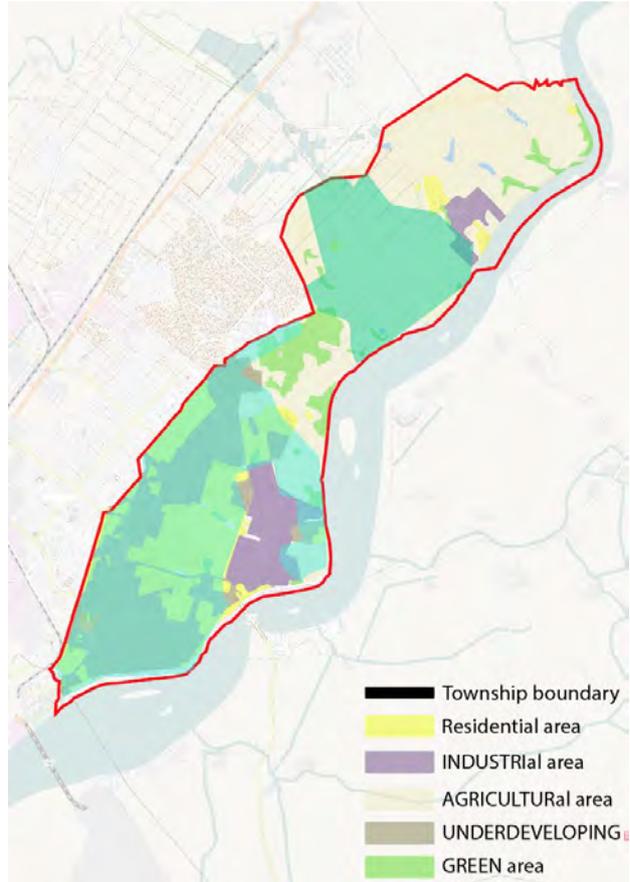
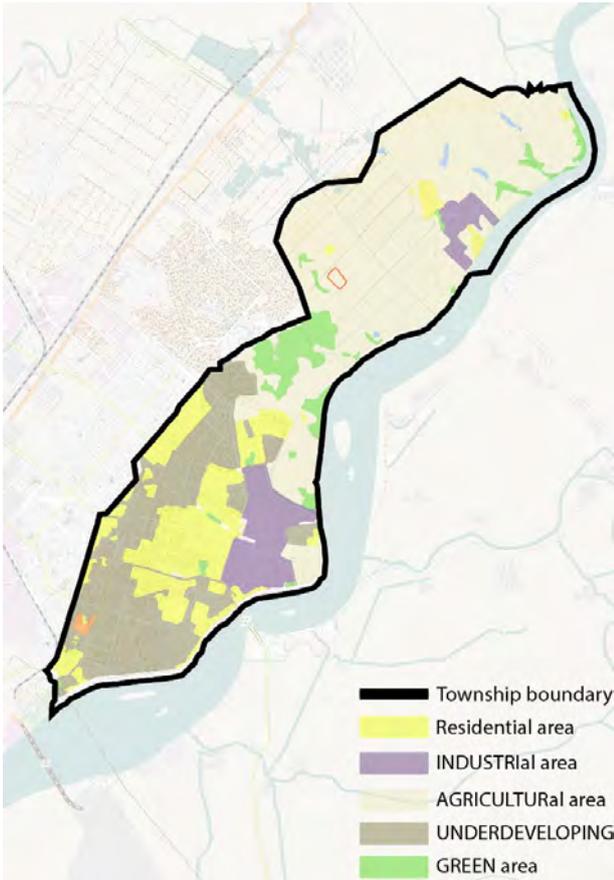
In this section, Hazard mapping in relation to the flood risk was overlaid with existing land-use map, new development and underdevelopment areas to ascertain the vulnerability



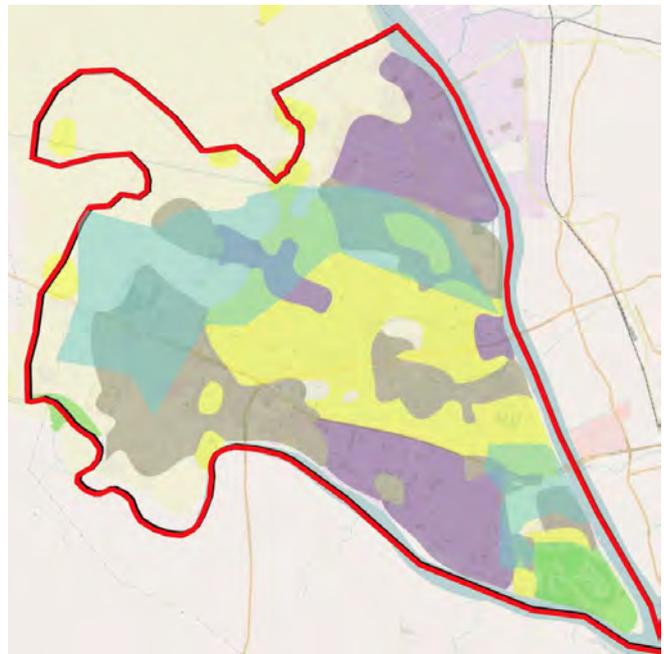
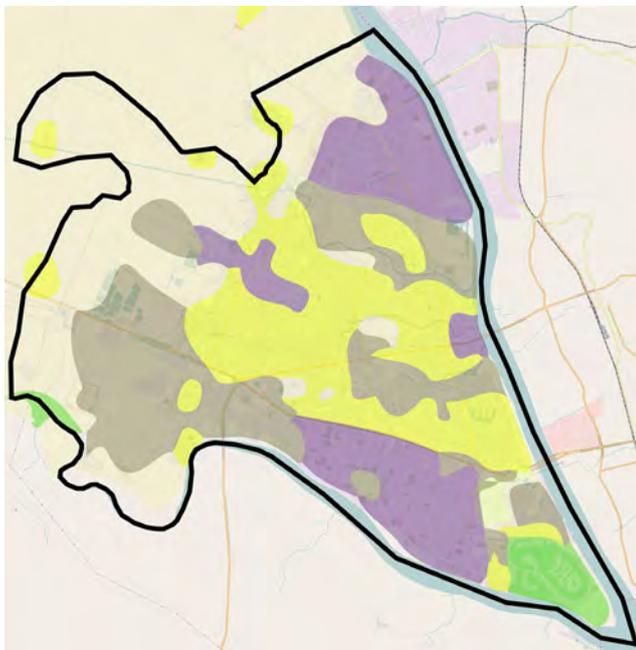
Source: JICA - Strategic Urban Development Report of Greater Yangon



ANNEX 3: LAND USE MAP IN DAGON SEIKKAN AND HLAING THARYAR



JICA - A Strategic Urban Development Plan of Greater Yangon



JICA - A Strategic Urban Development Plan of Greater Yangon



ANNEX 4: LOCAL PARTNERS

ACHR

ACHR is a coalition of groups of Asian NGOs, professionals, and community organizations that have vision on finding way to make change in the country where their work is rooted. After built the network in 1989, we began exploring ways of joining forces and supporting each other through several amount of collective initiatives, workshops, study tours, projects to promote community saving and community funds and city wide slum upgrading. Through those collective works over many years, all these professional and organizations have found that they have one issue in common, which is a belief that the the key resource to solve enormous problems of poverty and housing is the people who experience those problems directly.

WFW

WFW, our main partner on the field, is committed to organise women in communities through the mechanism of saving groups. In 13 years of operation they have been able to start up and then facilitate the work of big network by now spreading in various cities including Yangon and Mandalay. Backed up by ACHR and the ACCA programme for loans and grants for poor communities., the have conducted and facilitated surveys, mapping and upgrading of many poor settlements around the country. They are in the process of creating a local community architects network group to support the housing process. WFW has fostered cooperation with the local, municipal and national authorities in order to pursue the objectives of citywide upgrading.

CAN

Community Architect Network is a regional network of architects, planners, engineers, young professionals, builders, lectures, and volunteers that active in community driven process of participatory design in Asia. Over years, CAN focused on conducting projects that related to community-driven development, capacity building programs, and education engagement. ACHR is one of main organizational partner. ACHR provided funding and financial system, and CAN supported on technical logistic.

Since 2010 as the network and networking started, there are 27 groups of young professional in 17 Asian countries involving by working on participatory design and planning, city-wide mapping and surveys, seeking design solution to improve quality of life and health of community, as well as training community builders

YCDC

YCDC is the administrative body of Yangon which consists of 20 departments. YCDC is a technically independent from the government and raise its own revenue through tax, licenses. and property development. Since 2003, YCDC has been organizing to provide e-Government. The purpose of the program is to bridge information gap between government and common people. YCDC as legal committee of Yangon city has duty and responsibility on providing policy level. Several policies and regulations which are managed by YCDC related to waste management system, transportation, infrastructures, water supply, post-disaster management, and other beneficial municipals work, such as related to environmental issues.

YHT

YHT has developed the Yangon Heritage strategy emphasizing how the term heritage should refer to a complex set of ideas, objects, buildings, traditions and values that we have inherited from past generations. Heritage conservation should thus lead to foster cohesion and the continuity of cultural traditions, and to the creation of knowledge based economies as well as opportunities for new manufacturing and service industries.

This vision partially overlaps the one of our partners ACHR and CAN, whose work on heritage (especially through the activity of TIBET heritage fund) has highlighted the need of involving local communities in the process of conservation, and warned against the risks of using the heritage trademark to promote new massive operations of development, geared towards tourists and often leading to the eviction of local residents and to the weakening of historical and cultural fabric of the place. Generally YHT has five responsibilities on dealing with urban heritage in Yangon, which are; advocacy and outreach, public policy development, building conservation, capacity building on sharing knowledge on young generation, and research and archive.

ANNEX 5: MATRIX OF TRANSFORMATIVE AGENTS

PRIORITIES

		IDENTIFYING RISK	ASSESSING VULNERABILITY	UNDERSTANDING HAZARD	COPING CAPACITY		
ACTIONS	Community Based Disaster Preparedness and Risk Reduction	Hazard, Vulnerability and risk assesment	Mainstreaming of Risk Reduction	Multi - Hazard Early Warning Systems	Policy and Insitutional development	Preparedness and Response Programs	Public Awareness, Education and Training
	GLOBAL	ACF GRET STC ADRA HAI WRTC ACTED IIFWP WVI ARC IO UNICEF CARE PI WFP CDN PC UNDP MRC RI FRC STC	ASPD GNI MC UN-Habitat UNDP DRRWG	GRET UNICEF IFRC OCHA MC WFP PA UN-Habitat PC UNDP WRTC USAID	UNICEF WFP UN-Habitat UNDP DRRWG	ACF HAI PA ACTED IFRC WFWP ARC IRC USAID CARE IO OCHA CWS Malteser WFP DRC NPA UNDP MRC NRC IOM FRC Oxfam	Saetanar STC WRTC WVI UNICEF WFP UN-Habitat UNDP
REGIONAL		ASEAN ACDM	ADRC	ASEAN ACDM	ASEAN ACDM AHA ADRC	ASEAN ACDM AHA ADRC ACHR	ASEAN ACDM AHA ADRC
NATIONAL		MSWRR IRWC MoHA FFMWC MoH ECWC NDMC DRRWG NNDMWC	RCG MoHA MFA MoH IRWC SRWC ECWC DRRWG	NDMC NNDMWC NIWC DRRWG	RCG FFMWC MSWRR TWC MoHA RRD MFA ECWC MoH DRRWG IRWC	Tatmadaw DMC IRWC RWC FFMWC MSWRR SRWC MoHA TWC MFA NIWC MoH RRWC NDMC RRD NNDMWC EOC	Tatmadaw MFA MoH NIWC RRWC ECWC
CITY-WIDE	LWF WFW WVI AMA IFRC YTH ACHR RRD ACCA MSWRR CAN	UN Habitat MGS IFRC MEC YCDC CDC ACHR MCCR ACCA MRC CAN SWM WFW MoC AMA DUHD YTH	LWF JICA IFRC RRD YCDC MSWRR ACCA CDC WFW DRRWG AMA DUHD	MGS MEC CDC UN Habitat MCCR MRC DRRWG Local media DUHD	YCDC DRRWG YTH SWM JICA MoC MSWRR DUHD CDC ECHO UN Habitat	IFRC UN Habitat ACCA MCCR WFW MRC YTU DRRWG AMA Local media YTH SWM Donors MoC ECHO DUHD	LWF IFRC UN Habitat MCCR MRC Local media
TOWNSHIP	Community YCDC ACCA WFW WSDN YTU AMA YTH	Community YCDC ACHR ACCA WFW WSDN YTH MoC	Community AMA YCDC YTH ACCA MoC WFW DUHD WSDN	Community ACCA WFW WSDN DUHD	YCDC YTH MoC DUHD TDAC	Community ACCA WSDN DUHD	Community ACCA CAN WFW YTU YTH
LOCAL	Community ACCA YCDC WFW WSDN AMA YTH	Community ACHR ACCA WSDN	Community ACCA WSDN	Community ACCA WSDN	YCDC TDAC	Community ACCA CAN WFW WSDN YTU AMA YTH	Community ACCA CAN YTU YTH BUDD

ANNEX 6: LIST OF ACTORS (LOCAL-TOWNSHIP-CITYWIDE)

LOCAL	TOWNSHIP	CITY-WIDE
Community	Community	Investors
YCDC	YCDC	LWF Lutheran World Federation
ACCA	ACCA	WVI World Vision International
CAN	CAN	MPSWA Myanmar Professional Social Workers Association
WFW	WFW	IFRC
WSDN Woman Savings and Development Network	WSDN Woman Savings and Development Network	YCDC
YTU	YTU	ACCA
AMA	AMA	CAN
YTH	YTH	WFW
BUDD - DPU	DUHD Department of Urban and Housing Development	YTH
		JICA
		RRD Relief and Resettlement Department
		MSWRR Ministry of Social Welfare, Relief And Resettlement Department
		MGS Myanmar Geo-Sciences Society
		MEC Myanmar Earthquake Committee
		CDC City Development Committee
		Academy (Search the universities involved)
		Donors
		ECHO European Commission's Humanitarian Aid and Civil Protection department
		NMFA Norwegian Ministry of Foreign Affairs
		UN Habitat
		MCCR Myanmar Consortium for Community Resilience
		MRC Myanmar Red Cross
		DRRWG Disaster risk reduction working group
		Local media
		SWM Social Welfare Minister
		MoC Ministry of Construction
		DUHD Department of Urban and Housing Development

ANNEX 7: LIST OF ACTORS (NATIONAL-REGIONAL-GLOBAL)

NATIONAL

Tatmadaw Army, Navy Air Force

RCG Regional Consultative Group

DMC Disaster Management Centre

RWC Rescue Work Committee

MSWRR Ministry of Social Welfare, Relief And Resettlement Department

MoHA Ministry of Home Affaris

MFA Ministry of Foreing Affairs

MoH Ministry of Health

NDMC National Disaster Managment Committee

NNDMWC National Natural Disasters Management Working Committe

IRWC International Relation Working Committee

FFMWC Financing and Fund Managment Working Committee

SRWC Search and Rescue Working Committee

SWC Security Working Committee

TWC Transport Working Committee

NIWC News and Information Working Committee

RRWC Rehabilitation and Reconstruction Working Committee

ECWC Environmental Conservation Working Committee

RRD Relief and Resettlement Department

DRRWG Disaster Risk Reduction Working Group

EOC Emergency Operation Centre

REGIONAL

ASEAN Association of Southeast Asian Nations

ACDM ASEAN Comittee on Disaster Management

AHA Centre Asian Humanitarian Assistance Centre

ADRC Asian Disaster Reduction Centre

ACHR Asian Coalition for Housing Rights

ACF Action contre la Faim

ADRA Adventist Development and Relief Agency

ACTED Agency for technical cooperation and development

ASPD Asian Disaster Preparedness Center

AVSI Foundation

ARC Australian Red Cross

CARE International

CWS-Asia / Pacific

CDN Consortium of Dutch NGO

CESVI Fondazione

DRC Danish Red Cross

MRC Myanmar

FRC French Red Cross

GNI Good Neighbors International

GRET Groupe de Recherche et d' Exchange Technologique

HAI Help Age International Myanmar

IFRC International Federation of Red Cross

IRC International Rescue Committee

IIFWP Interreligipus and International Federation for World Peace

IO Istituto Oikos

Malteser International

GLOBAL

MC Mercy Corps

NPA Norwegian People's Aid

NRC Norwegian Refugee Council

Oxfam

PA Partners Association

PI Plan International

PC Progetto Continenti

RI Relief International

Saetanar

STC Save the Children

WRTC Water Research and Trainign Centre

Women's Federation for World Peace

WVI World Vision Myanmar

USAID

UNICEF

OCHA UN Office for the Coordination of Humanitarian Affairs

WFP World Food Program

UN-Habitat

UNDP

DRRWG Disaster Risk Reduction Working Group

IOM

ANNEX 8: INTERVIEW

Interview with people within saving group

Interview 1: Chou Chou Swei

She came from Ayeyarwady Region and moved to Yangon without any property left because of Cyclone Nargis. Since she did not have house, she with her family rent land and built a house on it behind someone else's house. She needed to pay monthly payment 10,000 kyats for 88 sqm property.

'I knew this project from other member of women saving group'

'I started by getting ID card, getting citizenship first and then join WFW'



Interview 2: Htin Htin Lie

She came from Ayeyarwady Region. She joined in the saving group for running business and collects 1000 kyats per week, so that she could invest 20,000 kyats for her teashop in cemetery. She usually wakes up at 5 am, and then prays and prepares for the tea shop. Her daughter is in charge on preparing meals for family members. At night, she goes back home and cooks for family, watches TV, and takes a rest around 10 to 11 pm.



Interview 3: Htin Htin Sien

She used to run business by selling goods but now she has health issues, so she spent time at home or most of the time now. She regularly sleeps at 12 pm and wakes up at 7 am, and then she cooks, prepares for food for the whole family. She washes clothes, cleans house and takes nap. She usually has small interaction with her neighbours during the afternoon. Her family member consists of 5 members, her husband, 2 sons (one worker and one student), and 1 daughter.

She told us she uses water for cleaning and washing from ground water, but use delivery water for drinking (400 kyats/big bottle). Water





from lake is also used during rainy season, which would be rested for a night and then filtered by cloth. Yoelay villagers mostly go to clinic/ pharmacist to cure their health problems and go to hospital if diseases are getting serious. The regulation of saving group doesn't allow people to fight or make problems, which it's the main value.'

'This village area can't be perceived as safe area except this project.'



'Religion is part of our life. Monks from monastery come and collect food every morning, and we usually do ritual/religious ceremony in the monastery. Monastery provides language class for high school student during summer break and they provide *Damma* school or Buddhist school.

Interview 4: Lady from Yoelay

She with her family moved to Yoelay Villagers and joined the women saving group.

It was basically nothing in Hlaing Tharyar in 2011. They started the project by building their houses in 2011. They planned the size of their land pocket as 20 ft x 25 ft, and then it was changed to 13 ft - 15 ft x 35 ft. They usually do renovation of houses by themselves. Women can do painting, but they would hire local builders to do more technical renovation.



Interview with Embroidery Home Industry

They did not join the WFW saving group because they thought the WFW project was only for housing, so they are in other saving group for helping run business. In the interview, one of ladies from the Yoelay Village who was accompanying us corrected them that the WFW saving group is not just for housing but also provides loan for running business. They usually sell the products to Mingalar market in the downtown by taking bus, but if they have a lot of commodity to be delivered, they would take taxi, which costs 15.000 kyats.



Interview with boy who does the recycling

He is from other village, so has to walk 2 hours from his place to Yoelay Village. He dropped out from school at 4th grade. He usually collects the garbage from houses, such as glass bottle, can, plastic bottle at the price of 10 kyats for each and then sells them for 20 kyats.

Interview with the family of Daw Nunu Aye

Although there is a community housing project nearby, she said that there is no community groups in the area, but they have some "charity group" which works like banks. Their houses in two-story brick house, and they have a house that rented for the nearby factory worker. The renting system is done by *nahlemu*. Although they have a well-built house they still have concerns regarding electricity and drainage system.





Interview with Monk Leader in local Monastery

The Monastery is planning to build clinic in the monastery area, they will provide doctor as well because the nearest hospital needs one hour time travel. There is a big concern on the elderly with eyes problem and the monastery is in charge of sending the elderly to hospital for a intensive eyes care. Due to lack of space in the houses, the dead body have to be kept in the hospital before being burnt and buried. The monastery are also planning to provide incinerator and mobile funeral facilities.

Female Shop owners in front of school

She moved from Mogok-Mandalay region to Hlaingtharyar. Every rainy season, she goes to Mogok and buys Ruby stone there for selling it in Yangon, which is her main source of earning money. Her shop can basically cover her daily needs and the money from ruby stone trading is mostly for saving. She joins KBZ Bank saving for investment. She saves 300.000 kyats/months and she will get interest in various percentage (3000 kyats - 60.000 kyats/month).



Interview with residence in the housing project

She is one of the examples of micro business happening inside the housing project: she used to go to downtown to buy Longji and sell it in the Yoelay using installment payment. She explained a lot about the facts in the housing project. One of the interesting thing is the way how they resolute the conflict: by signing the community's contract letter so there's no need to go to police station.

ANNEX 9: PRESENTATION TO THE COMMUNITY IN THE FIELD

Yoelay village is located fortwise north of the Hlaing tharyar township. There are two projects going on within the village, one is established for 11 years and another one is recently completed.

Yoelay village is located in northernmost part of Hlaingtharyar township where WFW has two housing projects out of which one project has already been in operation since two years and another one had been recently completed

Our aim of engagement was to better understand the village, people, way of life in order to identify the opportunities for improvement. We too transect walk along the route and we found monastery as potential community space. We came across examples of clinic being run in monastery, that recognized the needs to address health issues. We found many small businesses operating around the village as well as various methods of saving linked with institution such as banks and the market. We also came across formal education system as well as tuitions classes being operated. Likewise, we saw lakes in the areas used as source of water. We found that water from these sources are collected and filtered to use it as drinking water. It was also evident on the site that there has been construction of new houses for renting purpose. This also revealed the trend of housing demands in the area. Likewise, we also observe the layers of materiality in the village with bamboo, wooden and brick houses. Especially, in the WFW project in Yoelay village we found the role the micro-finance in upgrading and improvement of settlement areas. Moreover, we also found sophisticated fire strategy with fire towers and buckets. in our observation in housing project, we found cyclone nargis as key cause of displacement. From our observation we found that strong link between routine of children , recreational space and issues of waste. Our strategy therefore is to create a process or a cycle of improvement through small changes related to everyday life of childrens. We envision the activation of the existing areas to

create more lively place which can be point of social interaction or community gathering. Moreover, Creative workshops can be held to raise awareness of children in waste management. For instance, awareness regarding waste can be disseminated among children . Moreover the community can also undertook the collection and classification of waste so that it can be taken for recycling.

Linking existing recycling network in which they collect or buy trash to recycle with sophisticated network of water deliver system, the activation of community spaces can be done. With this form of activation the women can get community based day care services for their childrens and also free time to explore economic opportunities that will make them independent in longer run. This can further create opportunities for upgrading activities throughout community. The further activation of the space can be change for other communities to connect with the existing project and develop similar systems. All in All , we want to encourage the creation for more economic opportunities and spaces of solidarity through small changes.

ANNEX 8: FINDING RELATED TO COLLECTIVE ACTION

Challenges

Lack of space to interact (Yoelay village and people from wfw project)

Lack of safe space for children to play

Problems of the leadership within the community outside the women for the world saving group

Opportunities

The established women saving group that can show the real example of how collective action could successfully improve people's life

Tuition schools that can be easily found in the village
Computer and language class in the monastery - during summer break

Monastery as a collective space for local people (they listen to the words of monk leaders)

Strong connection between WFW saving group in different townships in Yangon

Community worked to provide electricity to individual houses - Opportunity for further community mobilisation and engagement.

Collective road improvement project within the village (World Bank existing 4 year project)

Evidence of community mobilisation to address certain issues - trash falling into lake and collecting funds to build a wall around lake to avoid this occurrence.

ANNEX 9: FINDING RELATED TO CRITICAL INFRASTRUCTURE (MICROECONOMY)

Challenges

The waste deposited in the stream has accumulated near the bridge, thereby creating an unsanitary 'dumping point' which is potentially vulnerable to flooding. This has also resulted in the deterioration of the water source and the surrounding area due to the strong odour of amassed rubbish.

There is a culture of littering around the houses, both within and external to the Yoelay Village housing project, reflecting an inadequate trash deposition system.

While there is evidence of dustbins for trash collection, there is a lack of mobilisation of this waste to the necessary deposition points due to a lack of resources (finances, transport, equipment etc.)

Inadequate drainage often polluted with waste, exacerbates flooding.

Opportunities

Existing motorcycle taxi businesses introduce the mobilisation of people and can assist in the same way regarding waste.

There is an understanding of the value of waste with on site recyclers that find or buy waste for 10 kyats and earn profit by selling it for 20 Kyats

The existing established WFW savings group presents the springboard for collective action and community mobilisation

Strong existing leadership within the WFW project creates the potential for awareness and mobilisation at village level

International assistance with the world bank conducting infrastructure projects such as road building within the area.

ANNEX 10: FINDING RELATED TO INFRASTRUCTURE (HEALTH)

Challenges (-) and opportunities (+)

(-)

① The rapid urbanisation in Yangon is making the provision of infrastructure from national and local agencies to be slow and inefficient. Moreover, in the analysed sites, we observed that the critical infrastructure related to health, sanitation, drinkable water, electricity, security and waste management are in a high extend inaccessible, insufficient and unaffordable for the population of the rural areas. The informal settlements are concentrated in peri-urban industrial zones, located in flood prone, poorly drained areas with limited or inexistence formal garbage disposal and minimal access to drinkable water and sanitation. This combined with the high density in the areas, is exacerbating the spread of diseases and vulnerability (Ali 2014).



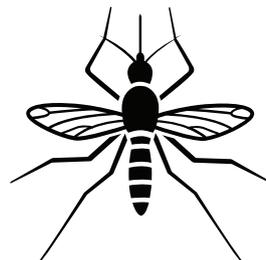
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② Dwellers have developed easy access for drinkable water from the local lakes or rain collection, with basic but effective mechanisms of water treatment like filtration with fabric, and sedimentation processes. There are also sophisticated delivery systems for treated water, and the tube-well water systems are also a common alternative. However, tube-wells still result expensive for most of the families (the system and the installation cost around \$11,00,000 kyats). Nevertheless, some families are buying the well systems together and sharing the cost and its use.



(-)

③ Despite of this effort, water obtained from ponds and lakes still remain as an important focal zone of infection, since the water obtained from these sources is boiled but not chlorinated. Also, it was common to see that the recipients where the drinkable water is stored, are kept without lids, which increases the chances of reproduction of mosquitoes and diseases linked to them, like Malaria, Dengue, Zika virus, Japanese encephalitis or Yellow Fever. The polluted water also increases the chance for common diseases like Cholera, Typhoid and other diarrhoeal diseases.



(+)

④ However, we also found that there is an increasing awareness of the importance of lids in the containers, and a significant number of houses visited are managing the consumable water more consciously.





(+)

⑤ In areas with lack of electricity, families have rechargeable batteries that allow them to have basic light at night, access to TV and cell phone charge. Main roads and its principal arteries are paved. There are also informal mechanisms of transport like moto-taxis that allow the people to mobilize themselves and get promptly to the bus stations or the downtown area. However, the uncontrolled and chaotic vehicular traffic is also a high cause for accidents.



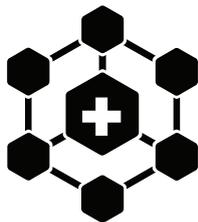
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⑥ In the actual times, there are several external medical service providers and NGOs for foster and deliver primary health care (PHC) in the urban and rural areas, who support the work of the YRHD and MOH. Some of these are 3MDG, PHF, MMCWA, MMA, MRC, MAM, MSF, PU-AMI, Alliance, BIM, PSI, among others.



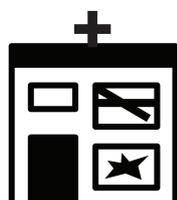
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⑦ However, there is absence of a Myanmar Urban Health Sector Strategic Plan to establish a mechanism of governance structure incorporating all ministries, agencies, and institutions with responsibility for urban health with the core aim of stimulating the demand for, provision, and monitoring of, services in the new informal settlements at the same speed they are emerging (Ali 2014).



(+)

⑧ The government of Myanmar has established a network of basic health facilities in the 330 townships of the country for both rural and urban areas. For most of the people, particularly the 70% who live in rural areas, this township health system (THS) is the only government-funded source of medical services and attention.



(-)

⑨ Despite of this, the rural health centres in the localities are poorly equipped and underutilized, systems of supervision do not work effectively, and usually the township medical officers (TMO) lacks of effective leadership and management since they do not have training for this. In addition, some THS remain inequitable and neglected, especially those in more conflictual zones which are also too far from the newest settlements (Cassels et al. 2015).

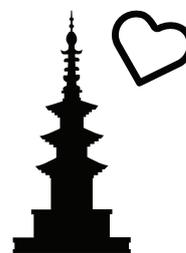
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10 In the interview held with the Monk Leader of Yoelay Village Monastery, he told us that one of his biggest concerns of the community was related to health issues and the difficulties to access to the local health infrastructure due to its proximity to the village. As mentioned, the THS in the locality does not work well, and getting to the Insein General Hospital, the closest hospital, takes around two hours. Considering that even when local services are free, the whole journey to the hospital means half or even an entire day without salary, and this situation is unaffordable for the people who live on the daily incomes. Hence, medical system is unreachable due to its disconnection.



(+)

11 As a positive consequence, the monastery is building a local health centre to provide basic attention to the people of the village using some of the donations and support gathered in the same community.



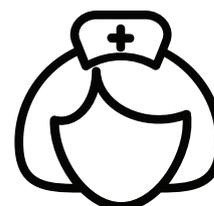
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12 In the fieldwork, we identified women and kids as the most vulnerable members in the community. Maternal and child health is need of improving as a priority. According to the last census (2014), 282 women die per 100,000 births in the country, equivalent to about eight deaths every day. This ratio is double than the regional average, being only 20 deaths per 100,000 in neighboring Thailand or six per 100,000 in Singapore. Mortality rate of children under-5 is 62. Moreover, the THS has not kept up with population growth. Between 1990 and 2014, the population grew by 2-4%, which also affects the medical attention in the health centres.



(+)

13 Myanmar is training up hundreds of midwives in an effort to reduce the number of women who die in childbirth (REUTERS 2017). In addition, the THS is relying on efforts and involvement of volunteers to increase the effectiveness on medical attention.





(+)

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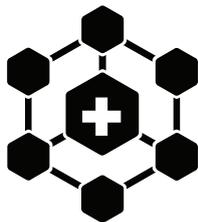
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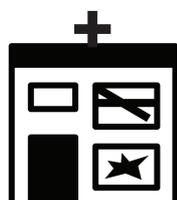
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