

**Approaching Disaster Vulnerability in a Megacity:
Community Resilience to Flooding in two *Kampung*s in Jakarta**

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Abbreviations and Acronyms

ADB	Asian Development Bank
BAPPEDA	Badan Perencana Pembangunan Daerah (Provincial Planning Agency)
BMP	Barisan Merah Putih
BPS	Badan Pusat Statistik (Statistics Indonesia)
DEPSOS	Department Sosial (Department of Social Affairs)
DKI	Daerah Khusus Ibukota (Special District of the Capital City)
FAD	Food Availability Decline Approach
FBR	Forum Betawi Remput (Betawi Brotherhood Forum)
FISIP	Fakultas Ilmu Social & Ilmu Politik (Faculty of Social & Political Science)
FKPM	Forum Mitra Polisi Masyarakat
FORKABI	Forum Anak Betawi
FPI	Front Pembela Islam
GDP	Gross Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
IDNDR	International Decade of Natural Disaster Reduction
IPCC	Intergovernmental Panel on Climate Change
ILO	International Labor Organization
JABODETABEK	Jakarta, Bogor, Depok, Tangerang, Bekasi
JI	Jalan
JPKM-GAKIN	Jaminan Pemeliharaan Kesehatan Masyarakat – Keluarga Miskin (Social Health Care System for Poor Families)
KIP	Kampung Improvement Program
KTP	Kartu Tanda Penduduk (Identity Card)
LINMAS	Perlindungan Masyarakat
LIPI	Lembaga Ilmu Pengetahuan Indonesia (Indonesian Institute of Science)
LSM	Lembaga Swadaya Masyarakat (NGO)
NGO	Non-Governmental Organisation
ORMAS	Organisasi Masyarakat
PAR	Pressure and Release Approach
PDI-P	Partai Demokrat Indonesia Perjuangan (Indonesian Democratic Party)

PETRUS	Pembunuhan Misterius (Mysterious Killings)
PKK	Pemberdayaan Kesejahteraan Keluarga (Family Welfare Movement)
PKPU	Pos Keadilan Peduli Umat (National Humanitarian Foundation)
PKS	Partai Keadilan Sejahtera (Prosperous Justice Party)
PP	Pemuda Pancasila (Indonesian Youth Organisation)
PU	Pekerjaan Umum (Department of Public Works)
RH	Natural Hazard Approach or Risk Hazard Approach
RI	Republik Indonesia
RT	Rukun Tetangga (Neighbourhood Association)
RW	Rukun Warga (Community Association)
SATGAS	Satuan Tugas
SATKORLAK	Satuan Koordinasi Lapangan (Crisis Management Unit)
SATPAM	Satuan Pengama (Security Service for Private and Public Objects)
SATPOL PP	Satuan Polisi Pamong Praja (Police Unit)
SD	Sekolah Dasar (Primary School)
SISKAMLING	Sistem Keamanan Lingkungan (Security System)
SMA	Sekolah Menengah Atas (High School)
SMP	Sekolah Menengah Pertama (Junior High School)
SOP	Standard Operating Procedures
TBK	Tomang Banjir Kanal
TEBAS	Tenabang Bersatu
TNI	Tentara Nasional Indonesia (Indonesian Armed Forces)
UN	United Nations
UNISDR	United Nations Strategy for Disaster Reduction
UNRAM	Universitas Tarumanagara (Tarumanagara University)
URDI	Urban and Regional Development Institute
UU	Undang Undang (Law)
VOC	Vereenigde Oost-Indische Compagnie
WHO	World Health Organisation

Glossary

Adat	Traditional law
Alfama	City quarter of Lisbon which used to be a red light district in the 18 th century
Arisan	Rotating savings club
Astrum	Greek word that can be translated as 'unfavourable aspect of a star'
Bajaj	Auto-rickshaw
Becak	Bicycle-rickshaw
Camat	Head of a <i>kecamatan</i>
Cari Uang	Common expression which can be translated as "to search money"
Cumat Cantik	"Beautiful friday" activity in which members of a neighbourhood join collective activities
Dangdut	Indonesian pop music
Desa	Village
Dewan Kelurahan	Member of the <i>kelurahan</i> council
Dinas Bintal dan Kesos	Municipal agency for social affairs
Gali-Gali	Gangs of young people
Garda Bangsa	Community organisation
Gardu	Security post
Gotong Royong	Mutual assistance
Hansip	System of uniformed guards contributing to neighbourhood security
Hiburan	Recreation event
Jago	Past expression for <i>preman</i>
Jawara	Past expression for <i>preman</i>
Jegger	Past expression for <i>preman</i>
Kabupaten	Regency
Kampung	<i>Kampung</i> can be literally translated as village. In the urban context, <i>kampung</i> usually refers to the settlements of the urban poor. Yet, in this thesis I will show that the term <i>kampung</i> can be hardly denoted
Karang Taruna	Youth club

<i>Katastrophé</i>	Greek word that can be translated as overturning or sudden turn
<i>Kecamatan</i>	Sub-district
<i>Kekeluargaan</i>	Family spirit
<i>Kelurahan</i>	Administrative unit of urban 'village' below <i>kecamatan</i>
<i>Kerja Bakti</i>	Duty work or collective activity
<i>Lurah</i>	Head of a <i>kelurahan</i>
<i>Martabak</i>	Indonesian version of either an omelette or pancake
<i>Mestizo</i>	Eurasian
<i>Mitra Jaya</i>	Community organisation
<i>Mufakat</i>	Unanimous agreement
<i>Musholla</i>	Praying room
<i>Musjawarah</i>	Community discussion
<i>Ojek</i>	Motorcycle taxi
<i>Ommelanden</i>	Dutch term that can be translated as 'surrounding land'. In Batavia, <i>ommelanden</i> referred to the surrounding land beyond the walled part of the city
<i>Orang Betawi</i>	'Native' people of Jakarta
<i>Orang Musiman</i>	Seasonal migrant
<i>Pedagang Keliling</i>	Street hawker
<i>Pengaijian</i>	Prayer meeting
<i>Posko (Induk)</i>	Coordination post
<i>Posyandu</i>	Maternal and child health post
<i>Preman</i>	Thug
<i>Rawa</i>	Swamp
<i>Ronda</i>	Neighbourhood security system
<i>Rukun Warga</i>	Community association
<i>Seismós</i>	Earthquake
<i>Singkong</i>	Cassava
<i>Slametan</i>	Communal meal
<i>Somay</i>	Indonesian version of the Chinese dumpling
<i>Sumbangan</i>	Contribution
<i>Theomenía</i>	God's wrath
<i>Tokoh Masyarakat</i>	Community leader
<i>Tonarigumi</i>	Former Japanese administrative unit of neighbourhood

	associations
<i>Tukang Parkir</i>	Parking attendant
<i>Ulama</i>	Islamic scholar
<i>Walikota</i>	Head of a <i>Wilaya Kota</i> , or mayor
<i>Warung (Kaki Lima)</i>	A small informal shop or restaurant either integrated in a building or a mobile push cart
<i>Wilaya Kota</i>	Municipality

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1 FLOOD IN JAKARTA: A LOCAL MANIFESTATION OF GLOBAL TRENDS

1.1 Global Trends: Urbanisation, Population Growth and Disasters

The morning I started to write this introduction, the United Nations Strategy for Disaster Reduction (UNISDR) published a press release with the headline 'Killer year caps deadly decade' (UNISDR 2011a). It reports that in 2010 a total of 373 disaster 'events' affected 208 million people, claimed 296,800 disaster victims and resulted in economic losses of around USD 109 billion. It further points out that disaster impacts will become more severe in the future. The press release quotes UN Assistant Secretary-General for Disaster Risk Reduction Margareta Wahlström in order to point to future trends:

Unless we act now, we will see more and more disasters due to unplanned urbanization and environmental degradation. And weather-related disasters are sure to rise in the future, due to factors that include climate change. (UNISDR 2011a)

Statistics identifying time trends of reported disasters indicate an increase of disaster 'events' over the last decades (UNISDR 2011b). The trend is expected to continue in the future because of different factors, such as urbanisation and adverse effects of climate change. However, models identifying future trends of disaster events are rare, due to the complexity and variety of factors involved. Reinsurance companies are one of the few organisations that maintain comprehensive data bases on disasters and develop disaster risk models. Munich Re, for instance, regularly publishes statistical data on disasters¹ and their models suggest a trend of an increasing number of disaster events (see Munich Re 2009, p. 38; Wirtz 2006, pp. 14-17). One has to be aware that these trends are based on disaster definitions which had been developed by the insurance companies themselves. Accordingly, these definitions partly reflect economic losses or insured losses. Since growing economic values as well as higher insurance densities do also influence the statistics on insured losses, it can be contested whether the frequency and intensity of disasters are really increasing (see Swiss Re 2003, p. 9).

Another dynamic that is frequently discussed in the context of disasters is urbanisation. Coaffee et al. show that in history cities had been always particularly vulnerable to natural hazards. Because of the high concentration of people and economic values, disasters have a greater impact on cities than on sparsely populated areas. Famous historical disasters became known because they had a great impact on dense settlements. The downfall of Pompeii due to the eruption of Mount Vesuvius, the tsunami destroying Alexandria or the 1755 earthquake affecting Lisbon are famous examples of historical disasters (Coaffee et al. 2009, pp. 13-15). As it was pointed out by Wahlström, continuous population growth and accumulation of resources in urban areas might be a cause why we experience more disasters (UNISDR 2011a). Elsewhere I introduced the case of Jakarta to underline the

1 See the discussion in chapter two for further information.

problematic. Today, a flood in the metropolitan region of Jakarta with around 24 million inhabitants might cause numerous victims and might result in severe economic losses. A similar flood happening hundred years earlier in colonial Batavia with slightly more than 100,000 inhabitants would surely have had a different impact. The flood might even have remained unnoticed. Accordingly, a comparable disaster event might cause higher economic losses and cause more casualties today than in the past (Wilhelm 2010, p. 322).

The conclusion seems to be at hand that urbanisation is a significant factor contributing to increasing disaster impacts. Dynamic urbanisation processes might thus be an indicator for future disaster trends. The year 2007 marked a turn when, according to the United Nations (UN), for the first time in human history the majority of the world population was expected to live in urban areas (UN 2004, p. 13). This so called 'urban turn' (Kraas 2007a, p. 8) is a symbolic date highlighting the rapid urbanization processes which took their peak in the second half of the 20th century. In its statistics, the UN refers to the year 1950 when 29% of the world population lived in urban areas. Since then the urban population grew by an average of 2.72% per year. Careful estimations assume that the world population will continue to grow and reach 8.1 billion people by 2030. Interestingly, the UN does not expect a net increase in rural population. Accordingly, future world population growth might be fully absorbed by urban areas. Following this projection, rural-urban migration will be a continuous phenomenon. In addition to that, urban areas will expand and numerous rural villages will transform into towns and cities (UN 2004, pp. 13-14). The UN further argues that these demographic trends will be largely concentrated in developing countries. Between 2015 and 2020, approximately 98% of the world population growth is projected to be absorbed by urban areas in developing countries. In addition to that, the growth rates of urban population in developed countries will slow down. Consequently, it can be assumed that urbanisation is a future trend which is limited to urban areas of developing countries (UN 2004, pp. 16-19).

The phenomena of megacities symbolically represent the urbanisation dynamics in developing countries. According to the UN, two-thirds of the megacities were located in developing countries in 2000 (UN 2004 p. 89). Pelling points out the generally high risk exposure of large cities in developing countries. He argues that hazard risk is in many cases a colonial legacy. Colonial cities were often established in coastal areas to fulfil the function of a node of trade. In the post-colonial period, these cities generally transformed into capital cities of independent nation-states. Due to their location, these coastal cities are today highly exposed to hydrological and meteorological hazards. In addition to that, many cities in developing countries are exposed to geophysical hazards, such as earthquakes and volcanic eruptions (Pelling 2003, pp. 22-24).

But megacities are not only vulnerable because of their physical exposure to hazard risk. Munich Re points out the large loss potential because of the high density of people and economic values in megacities (Munich Re 2004, p. 20). Moreover, the 'highly concentrated vulnerability' (Alexander 1997, p. 293) in megacities is explained by unplanned urbanisation processes that result out of the loss of governability in big cities (see Mertins & Kraas 2008, pp. 8-9). Wisner states that the scale and complexity of megacities are serious challenges

faced in disaster management (Wisner 2003, p. 182).

In addition to that, it is often pointed to the limited (financial) capacity of municipalities to make basic infrastructure available (see Freeman 2003, p. 36). In general, it is expected that disaster impacts are more severe in developing countries because they commonly lack the capacity to adapt to and cope with disasters adequately. For instance, in a report published by the Intergovernmental Panel on Climate Change (IPCC), McCarthy relates disaster vulnerability to problems of (under-) development by arguing that 'developing countries tend to have greater vulnerability and less adaptive capacity than developed countries'. He lists different factors that contribute to disaster vulnerability, such as limited financial resources, poor infrastructure and weak institutions (McCarthy 2001, p. 441). A similar argument is put forward by Freeman who introduces the term 'natural-hazard-resource gap' to describe the limited capacity of governments in developing countries to finance disaster rehabilitation (Freeman 2003, p. 39).

Given the fact that megacities can contribute to a major share of the national economy, the vulnerability of megacities can have an adverse impact on the economic situation of whole nation-states. Dhaka, for instance, contributes 60% to the GDP of Bangladesh (The Economist 2007). It is assumed that the risk exposure of large cities in developing countries will continue to increase because of climate change. Possible adverse effects of climate change, such as rise in sea levels, tropical cyclones or flooding, are expected to severely affect large cities. For instance, the strategic location of large cities in low-lying coastal areas and flood plains will increase their exposure to the possible impacts of climate change (De Sherbinin 2008, p. 39; Bigio 2003; see also Raission 2010, pp. 166-167). Megacities are thus perceived as nodal points of environmental pollution and hazard risk (Ehlers 2006, p. 53) or 'global risk areas' (Kraas 2007, p. 13).

Within developing countries and megacities the poor are considered to be a 'key vulnerable group' (Adger 2003, p. 388). It is generally assumed that slum dwellers are most vulnerable to natural disasters. Since slum dwellers are often forced to settle in marginal locations, Berner argues that spontaneous settlements (or slums) are 'as a rule *hazardous*' (Berner 2002, p. 233). It is also argued that in contrast to the rich, urban poor lack the financial resources to adapt to and cope with disaster risk adequately (see Raission 2010, p. 167; Fay & Wellenstein 2005, p. 91; Adger 2003, p. 388; Bankoff 2003, pp. 91-92). According to data published by UN-Habitat, the proportion of the urban population living in slums is declining. Yet, the absolute number of slum dwellers will further increase and reach around 889 million people by 2020 (UN 2008, p. XII). Accordingly, the slum can be considered a spatial representative of a location in a megaurban setting where different global dynamics, such as urbanisation, population growth and increasing vulnerabilities, are concentrated (see also Pelling 2003, p. 45). What we might conclude here is that the capacity of different social groups to adapt and to cope with similar disasters in the same geographic location can vary significantly. I will further explore the relation between poverty and vulnerability to disasters in the next chapter.

1.2 Concentration Of Global Trends In Asia

The global dynamics I discussed in the previous section will not be equally distributed around the globe. Urbanisation, population growth and natural hazards will be regionally concentrated in Asia (see Raison 2010, p. 169). Roberts and Kanaley (2006) remark that the urban population in Asia increased from 17% in 1950 to 40% in 2005. In the same period, developed countries as well as countries in Latin America and the Caribbean experienced rapid urbanisation dynamics and now are already highly urbanised. While in these countries urbanisation processes will slow down, the urban population will continue to grow in the developing countries of Asia. By 2030, Roberts and Kanaley expect an urban population of 55% in the region. In addition to that, future population growth will be concentrated in Asia where currently 60% of the world population resides. These rates are significant since they imply that a major part of the future world population growth will be absorbed by urban areas in Asia. Within Asia, urbanisation and population growth will be mainly experienced in China, India and the countries of Southeast Asia (Roberts & Kanaley 2006, pp. 13-15 & 19; see also UN 2004).

Megacities are evidently a manifestation of worldwide urbanisation dynamics. According to the UN, megacities with a population of more than 10 million people saw the highest growth rates among urban areas between 1975 and 2000. This is mainly due to the fact that during the same period, the number of megacities increased from 4 to 18. In 2000, 10 of the world's megacities were located in Asia with a total population of 142 million people. The UN assumes that the growth of megacities will slow down in the future. Yet, there is a general trend towards cities of more than 1 million people (UN 2003, pp. 84-94). Turning the focus on the urban poor, it is assumed that processes of urbanisation and population growth will also have an impact on slums. UN Habitat states that Asia showed the highest absolute number of slum dwellers in 2001. It expects that the number of slum dwellers will further increase with the same growth rate of urbanisation (UN 2003, p. XXV).

Asia is also at the head of statistics on 'natural catastrophes'. The reinsurance company Swiss Re suggests that Asia accounted for approximately 40% of natural catastrophes in 2008 (Swiss Re 2009, p. 8). The numbers on disaster victims appear to be unambiguous. Swiss Re concludes that '[m]ost of the 240500 people who died in catastrophic events in 2008 lived in Asia. Tropical cyclones, typhoons and an earthquake claimed more than 228400 lives in the region' (Swiss Re 2009, p. 3). According to Munich Re, cyclone Nargis in Myanmar alone claimed around 85,000 deaths and another 54,000 people entered the statistics as missing. Moreover, it is assumed that more than a million people became homeless (Munich Re 2009, pp. 35-36).

These figures from 2008 seem to be no statistical variance but reconfirm a longtime trend. Although the number of victims and losses due to disasters can vary significantly on a year to year basis, Munich Re states that Asia accounts for around 80% of disaster victims, or 1.5 million people, since 1950. In this context, it has to be noted that Asia contributed to only 10% of the insured losses during the same period (Munich Re 2008, p. 48). The low number of insured losses can be explained by the high concentration of economic values in

developed countries and the general low insurance density in the developing countries in Asia (see Swiss Re 2004, p. 40). Because of the absence of private insurance schemes, Kreimer and Arnold point out the role of individuals and the state to manage disaster risk in developing countries (Kreimer & Arnold 2000, p. 4).

1.3 Localising The Dynamics: Flood Risk In Jakarta

Raisson argues that population growth, urbanisation dynamics and exposure to natural hazards is mainly concentrated in urban agglomerations in Asia, such as Dhaka, Kolkata or Jakarta (Raisson 2010, p. 169). Considering population numbers, Indonesia is following China and India as the third largest country in Asia with a total population of around 237.5 million people in 2010. Until 2030, Indonesia's population is expected to reach around 277.5 million people. Compared to developed countries in Europe or North America, the level of urbanisation is relatively low. In 2000, 42% of the population lived in urban areas. Estimations assume that this number will increase to around 67.7% by 2030. Accordingly, urbanisation dynamics in Indonesia are in line with the general Asian trend. Future population growth in Indonesia will thus be mainly concentrated in urban areas. In this context, Indonesia's capital city Jakarta is at the centre stage of urbanisation processes. With a population of around 9.5 million people in 2010, Jakarta is the largest city in Southeast Asia². Within the Indonesian hierarchy of cities, Jakarta can be considered primate city, as it is the economic³ and political centre of Indonesia. The cities of Surabaya and Bandung rank second and third, but show far smaller population sizes⁴ (BPSa 2010; UN 2003).

The city of Jakarta commonly refers to the administrative unit DKI Jakarta (*Daerah Khusus Ibukota*, or special district of the capital city). DKI Jakarta is one of the 33 Indonesian provinces and further comprises five municipalities (North Jakarta, South Jakarta, West Jakarta, East Jakarta and Central Jakarta). The urbanisation dynamics in the capital city spilled over to the province of West Java and incorporated several surrounding cities which together form the greater Jakarta area *Jabodetabek*⁵. *Jabodetabek* is an acronym for the cities of Jakarta (Ja), Bogor (bo), Depok (de), Tangerang (ta) and Bekasi (bek). The Greater Jakarta area thus comprises five of the twelve largest cities in Indonesia (Silver 2008, p. 4; ADB 2006, pp. 161-162). As it is not an administrative unit and the number of unregistered people living in *Jabodetabek* is considered to be high, statistics on the metropolitan region

2 Jakarta's population number is slightly below 10 million. Accordingly, Jakarta is not considered in statistics that apply a definition of megacity with more than 10 million people.

3 The Asian Development Bank (ADB) assumes that the GDP per capita in Jakarta is almost four times higher than the national average (ADB 2006, p. 19).

4 According to statistics presented by the ADB, Jakarta had more than 8 million inhabitants in 2000. Surabaya ranked second with a population of 2.6 million people and Bandung third with around 2.1 million people (ADB 2006, p. 162).

5 In the 1970s urban planning included the region around the capital city. Initially greater Jakarta region, or Jabotabek, referred to the four cities Jakarta, Bogor, Tangerang and Bekasi (Silver 2008, p. 113). In the common usage the city of Depok was added to the acronym, which is now Jabodetabek.

are rare. Kurniawati claims that around 25 million people live in the greater Jakarta area. This number might increase to 35 million by 2020 (Kurniawati 2009, p. 8). Kurniawati's estimation would imply that today almost ten out of hundred Indonesians live in *Jabodetabek*.

As I will show in the following sections, data on urban poverty is hardly accessible. For DKI Jakarta, BPS (Badan Pusat Statistik, or Indonesian Statistics) estimates a poverty rate of 3.48% for the year 2010 (BPS 2010b). However, the official poverty rate can be disputed. In 1995, Somantri introduced Jakarta as one 'gigantic *kampung*' due to the large parts of the so-called *kampung* settlements⁶ in the city area (Somantri 1995, p. 1). Recent publications still claim that the majority of Jakarta's citizens live in *kampungs*. Bronger, for instance, states that 60% of the urban population lived in *kampungs* in 2002 (Bronger 2007a, p. 17; see also Somantri 2007, pp. 77-79). In contrast, McCarthy argues that 20-25%⁷ of Jakarta's population live in *kampungs* (McCarthy 2003). The diverging numbers indicate that evident statistics about urban poverty in Jakarta do not exist. Thus, numbers about the proportion of *kampung* settlements or the number of urban poor have to be carefully considered.

The previous discussion on disasters can also be illustrated by the example of Jakarta. The location at the juncture of four tectonic plates makes Indonesia highly exposed to geophysical events, such as earthquakes, tsunamis and volcanic eruptions. These events are regularly in the news since they can cause much damage and claim numerous victims. The last prominent examples of major disasters are the 2006 Java Earthquake in the province of Yogyakarta which claimed 5,749 lives and the 2004 Indian Ocean Tsunami which claimed 165,862 victims and people missing. Yet, due to the high proportion of low-lying areas in marshes and the tropical climate, hydro-meteorological events, such as floods and landslides, represent the most frequent events (RI 2006, pp. II-1-II-5).

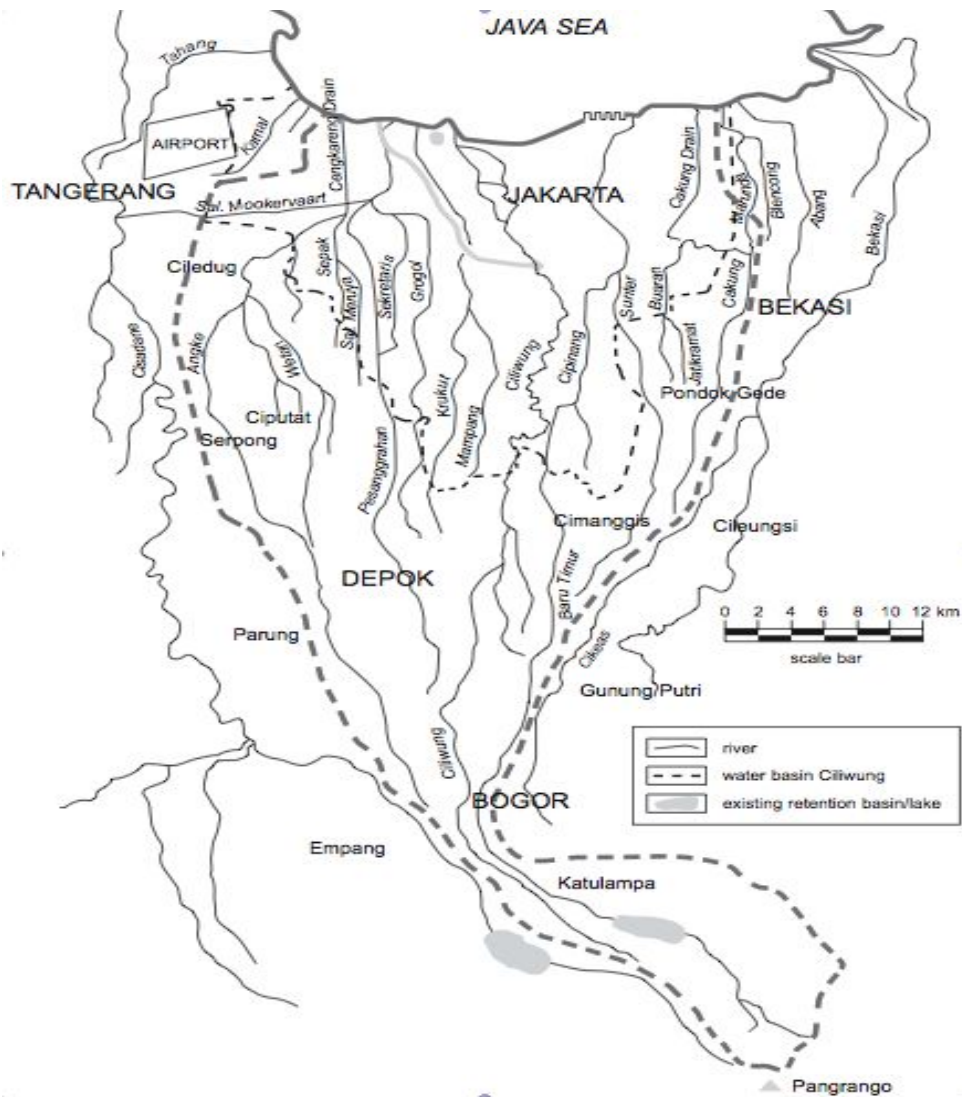
Located in a low-lying plain area close to the sea, Jakarta is particularly exposed to flood risk. As I will show in chapter 3, flood risk has been a major challenge since the Dutch colonial power founded the city of Batavia in 1619. At that time a first system of canals was developed and flood management became integral part of urban planning. Continuous urban growth has further increased the vulnerability of city dwellers to floods because it resulted in higher population densities and higher economic values in the city. In the years 1996, 2002 and 2007, Jakarta experienced large scale flooding. The last major flood happened in 2007. On February 2, heavy rainfalls in the city caused the water levels of the major rivers to rise. Two days later on February 4, water run-off from rainfall in up-stream areas further increased water levels so that the major waterways overflowed (Brinkman 2007, pp. 3-8 & 3-9). Depending on the report, it is argued that flooding covered 60-80% of the city area. The flood claimed 52 lives and resulted in financial losses of approximately USD 871.2 million. In

6 *Kampung* is often translated as 'slum'. However, it is disputed whether slum is an appropriate translation. I will not further elaborate on the term *kampung* here as it will be discussed in the following chapters.

7 McCarthy quotes numbers provided by the Urban Poor Consortium. However, his source is not accessible since the link to a website that he quotes does not provide results.

addition to that, 450,000 people became displaced and had to stay with relatives, in hotels or in emergency shelters. For several days, public life came to a complete stop. The public transportation system and the electricity supply were interrupted. Since the toll road connecting the airport with the city was flooded, the airport was cut-off. Because of the far reaching consequences, the flood was also given attention by the international media (Kurniawati 2009; Bronger 2007a, p. 16; see also Wilhelm 2010). The WHO called the 2007 flood '[t]he greatest flood to fit [sic] Jakarta in the last three centuries' (WHO 2007, p. 1).

Figure 1: Jabodetabek and the Major Waterways



Source: Nedeco 2002 (quoted in Caljouw, Nas & Pratiwo 2005, p. 474⁸)

The root causes leading to the 2007 flood are complex and involve various factors. 40% of the city area is, for instance, located below sea level. While Jakarta is located in a low-lying flood plain, groundwater extraction contributes to the subsidence of the city. In the last decades, the city area subsided around 1-2 meter and will continue to subside with an

8 The original source could not be accessed.

average of 5-10 centimetres per year. Jakarta is, as Cochrane puts it, a 'sinking city' (Cochrane 2009). In addition to that, urban redevelopment puts pressure on the capacity of the waterways. 13 rivers and canals flow through Jakarta and discharge into the Java sea in the North. Deforestation in up-stream areas causes an increased water run-off and thus requires a higher capacity of the major waterways. At the same time, green space in the city widely disappeared as it was transformed into sealed surfaces, such as shopping malls, office buildings, apartments and roads. That way, Jakarta lost a significant size of water catchment areas. The pressure on the rivers and canals is increased by sedimentation due to deforestation and waste disposal through the waterways. Around 1,800 cubic meters of waste are dumped into Jakarta's rivers and canals each day. Solid waste is also blocking the drainage system and thus causes rising water levels. Moreover, the scarcity of land forces people to settle in flood prone areas in the city (see Kurniawati 2009; UN 2008, p. 22; Yamin 2009; Pwa et al. 2007, p. 3; Caljouw, Nas & Pratiwo n.d.; Pichel 2004, Nagtegaal & Nas 2000, pp. 279-287).

This list of root causes is not complete. Yet, the flood situation shows that flooding in Jakarta cannot be reduced to monocausal explanations. Moreover, disregarding the impact of continuing urban transformation, the flood situation will be aggravated in the future. In the past, sea level rise did only to a minor degree contribute to floods. But in the future it will significantly contribute to the flood exposure in Jakarta. An astronomical tide, resulting out of the gravity of the moon and the sun, will cause the sea levels to constantly rise by another 80-100 cm until 2025. At the same time groundwater subtraction will cause land subsidence of up to 50 cm over the same period (Brinkman 2007). It has to be noted here that this prediction is not including scenarios on the adverse impacts of climate change. Ward et al. argue that the impact of climate change will be minor compared with the consequences of land subsidence. Moreover, they claim that the potential exposure to a centenarian flood totals to around USD 4 billion. Based on their scenario for 2100, they suggest an increased flood exposure of USD 17 billion (Ward et al. 2010).

The solution to the flood situation is often seen in large scale engineering projects. Recently the central government together with the World Bank agreed upon a USD 150 million flood control project aiming to dredge the 13 rivers in the city. Already in 1972, the East Flood Canal (Banjir Kanal Timur) was planned. The canal was designed to channel six rivers in East and North Jakarta and thus contribute to a significant reduction of flood risk. However, the implementation slowed down because of budget constraints and unclear landownership. Until today, the government only succeeded in acquiring 30% of the land required (Yamin 2009; Asrianti 2008b). Another project currently discussed is a 22 kilometres long tunnel which would run from East Jakarta over South Jakarta to North Jakarta. The tunnel would be built 18 meters underground and function as a major roadway. The tunnel could be also used as a catchment area for water. However, it is disputed whether this USD 1.8 billion project will be ever realised (Asrianti 2008a). In addition to that, it is regularly discussed that a solution to rising sea levels and land subsidence would be a dyke built in the Java sea based on the example of the dyke system in the Netherlands. Regarding the challenges the city will face in the future, Jakarta's governor Fauzi Bowo is quoted to have said: '[T]here's no choice

but to build a dyke' (quoted in EarthTimes 2011).

As Caljouw, Nas and Pratiwo point out, the flood exposure in Jakarta is closely connected to urban planning issues, such as housing, infrastructure, waste and watershed management. They assume that the inability of the governmental system to solve these issues is also the major factor why the flood risk cannot be adequately managed. Since adequate flood management would require big investments, they question whether it would be possible at all to make Jakarta flood free. Instead Caljouw, Nas and Pratiwo remark that 'nowadays water specialists increasingly tend to propose a risk approach for dealing with flood' (Caljouw, Nas & Pratiwo 2005, p. 481). Jakarta's governor Fauzi Bowo, quoted in a newspaper, sums up the current flood situation as follows: 'It is impossible to make Jakarta totally free from flood [...] [a]ll we can do is to minimize the effects and avoid destruction' (quoted in Yamin 2009). The ultima ratio to the megaurban challenges in Jakarta would be to relocate the capital city. The idea is not new as a relocation of the capital was already considered earlier by the former presidents Sukarno and Suharto. The recent speculation was fuelled by quotes of President Susilo Bambang Yudhoyono: 'Going forward, the idea of moving the centre of the administration must again be considered and developed, considering Jakarta has become exceedingly crowded' (quoted in Kwek 2010).

The short introduction to the flood situation in Jakarta points out the complexity that evolves when local manifestations of global trends are analysed. Flooding in the greater Jakarta area *Jabodetabek* reflects the dynamics and consequences of population growth, urbanisation and increasing impacts of natural hazards. However, the introduction to the contemporary flood situation in Jakarta also indicates that flood is not an unexpected event. Several major floods happened in the last decades and minor floods happen almost weekly during the rainy season. In the discussions it is also generally assumed that *kampung* dwellers are affected most by flooding (Bronger 2007a, p. 16). The physical vulnerability of *kampung* dwellers to hazards is partly related to urban land markets. In the real estate market the flood situation is anticipated and hazard zones become increasingly unimportant for investors (Caljouw, Nas & Pratiwo n.d.). Since hazard zones are excluded from formal land markets and urban space is becoming a scarce resource, it can be observed that *kampung* dwellers often settle in the most hazard prone locations. For instance, *kampungs* concentrate in areas close to the major waterways. As a consequence, the river bed of the Ciliwung river did in some parts narrow down from 15 to 5 meters because of the urban sprawl (Nagtegaal & Nas 2000, p. 281).

1.4 Research Question And Structure Of The Thesis

Research question and motivation for this thesis

Since it is generally agreed that *kampungs* are highly exposed to hazards, we could ask for the measures that have to be taken to reduce disaster risk. In this thesis, I would like to formulate the question in a different way. The case of Jakarta points out that the governmental system and urban planners will not be able to prevent floods. Rather, the focus turns to the question of how to deal with flooding. It has to be noted here that in the absence

of comprehensive flood management, Jakarta's citizens obviously had to develop their own strategies to adapt and cope with floods. Consequently, we can also argue with Caljouw, Nas and Pratiwo that '[o]ver the centuries Jakarta's inhabitants and government officials have become familiar with the inconveniences of floods' (Caljouw, Nas & Pratiwo 2005, p. 482). However, the reports and academic work on the flood situation in Jakarta do rarely provide insight into the living conditions of city dwellers and what kind of strategies they apply to manage flood risk. This leads us to the question of how people living in Jakarta, particularly the urban poor, have become familiar with floods? Or, to put it differently, what are the resources and capacities that allow the urban poor to adapt to and cope with disasters in general and with flood in particular?

Before I start to answer this question, I would like to lay out my motivation that stands behind my research. My research motivation to study the disaster vulnerability of local communities arose in the aftermath of the 2004 Tsunami. Since the tsunami had devastating impacts on Southeast Asia, the department of Southeast Asian Studies at the University of Passau decided to tackle disasters from a scientific perspective. Therefore, a student working group on disaster had been established in which I became involved. In 2005, I joined a research group to conduct an empirical study on the social and economic impact of the tsunami in the area of Khao Lak in Thailand. The dimension of the impact on local communities was beyond my imagination and I was amazed by the rapid changes the area experienced during the rehabilitation phase. Rehabilitation activities had been mainly dominated by foreign aid organisations and government programs. Given the fact that local communities cannot always rely on foreign aid, I wondered how local communities generally adapt to and cope with disasters. After the tsunami, the media reported that people in the Nicobar and Andaman islands survived because of oral traditions and local knowledge. The behaviour of animals warned them to evacuate to higher grounds (see Stern 2005). This experience motivated me to study the discourse on disasters and vulnerability in social science in order to learn about the disaster vulnerability of local communities. I then decided to pursue this research question in my PhD research.

Since my regional focus and main interest is Indonesia, I was aiming to conduct the research for my PhD thesis in Indonesia. In May 2006 I had the opportunity to conduct a two-week study at Merapi volcano in Yogyakarta, Indonesia. The aim of the study was to understand how the communities on the slopes of Merapi adapt to the risk of a volcanic eruption. However, my study was interrupted by the Java earthquake on May 27. Two days after the earthquake I joined a German team of paramedics which provided medical assistance to the earthquakes victims. During that time I realised the challenges research can face in the direct aftermath of a disaster. From an ethical point of view, it can be disputed whether a research should be conducted in a phase when people's first goal is to secure their livelihood. In addition to that, during the emergency phase many actors, such as government agencies and/or international agencies, become involved. As a consequence, the situation on the ground is subject to rapid change and I personally found this situation hard to

approach with scientific research methods. With the words of Holling (1973)⁹ one could also argue that in this phase local communities are in the process of absorbing disturbance and are thus aiming to reach a new domain of attraction. These processes are of scientific interest, but they can hardly be analysed without being able to refer to the original domain of attraction. During a study tour to Aceh I realised that even two years after the Tsunami the local communities are in the process of coping with the disturbances caused by the 2004 Tsunami. In this complex and dynamic environment it is almost impossible to analyse the vulnerability of local communities without knowing the original everyday life situation of local communities. The presence of international organisation and the massive influx of disaster aid further contributed to the complexity.

In February 2007, Jakarta experienced the biggest flooding in the city history. During a work assignment with the German Technical Cooperation (GTZ), I had the chance to conduct a feasibility study on microinsurance, which also included flood risk in Jakarta. During the feasibility study I realised that a study on flood risk in Jakarta is doable and it is a situation which can provide some answers to my initial research question. Although media reports argued that the urban poor were hit hardest by the flood, I found that two months after the flood *kampung* dwellers did not mention the impact of the flood as a serious problem. Obviously *kampung* dwellers had been able to sufficiently adapt to and cope with a 'disaster' that was extensively discussed in the media. I decided to follow-up on flood risk for another reason. Research on flooding in Jakarta's *kampungs* provided me the opportunity to combine three areas of personal interest – disaster research, urbanism and development research. I thus prepared a research proposal and was accepted by the Indonesian Institute of Science (LIPI) to conduct research in Indonesia between September 2007 and April 2008. From September 2007 I joined the Faculty of Social and Political Science (FISIP) at the University of Indonesia (Universitas Indonesia) as a research fellow. I will describe my research approach and the methodology I applied during the field research in chapter 5. In 2009 I returned to Jakarta for another nine months work assignment that was not related to the research. I thus had the chance to regularly visit both research locations and follow-up on some of the questions that emerged during the data analysis in 2009.

Structure of the Thesis

The capacity of a society to adapt and cope with disasters is generally discussed under the term resilience. It is a concept that entered vulnerability research recently and that will still need further theoretical underpinning and empirical grounding. The vulnerability context of urban poor can be approached from different angles, such as urbanism or development studies. My thesis has the aim to contribute to a better understanding of resilience within vulnerability research. I decided to follow recent approaches in vulnerability research for two reasons. First, integrated vulnerability concepts highlight the value of interdisciplinary approaches. Second, the integrated vulnerability discourse offers a analytical framework that can be modified and applied to the empirical study of vulnerability in Jakarta's *kampungs*. In

9 Please see the discussion on resilience in chapter two.

chapter two I will introduce the theoretical embedding of the analytical framework. This will be necessary, as disaster research in social science is a relatively young research stream. Terms such as *disasters*, *catastrophes* and *hazards* are often used synonymously. Moreover, different definitions of vulnerability and resilience lead to diverse applications of the concepts. Thus, I would like to outline some aspects of disaster research in social science and present the definitions I will apply in this thesis. Moreover, at the end of chapter two, I will refine my research question and present the methodological framework I use for the analysis of my empirical data.

The integrated vulnerability framework is pointing out the importance of the temporal and spatial scale in vulnerability analysis. In chapter three, I will therefore provide the temporal and spatial embedding of my research by presenting a historical perspective on Jakarta. Since it is not possible to present almost 500 years of city history in one chapter, I will concentrate on two aspects. The first focus will be put on the origin and development of Jakarta's *kampung*s. The second focus will be put on the flood situation. Accordingly, I will shortly present the different phases of Jakarta's history. In each phase I will point out the aspects relevant for *kampung*s and aspects that will be relevant in regards to the flood situation. Finally, I will conclude how the situation of the *kampung*s and its dwellers changed over time. In addition to that, I will discuss the historical development of flood risk in a separate section in order to contribute to a better understanding of recent flooding.

Since the integrated vulnerability framework is a place based approach, I would like to introduce the theoretical discussion on urbanism and space in chapter four. I will show that the analytical value of the concept of slum in approaching the local level in Jakarta's *kampung*s is limited. I will also present the concept of informality as it is often discussed in the context of slums and urban poverty. Moreover, I will argue that informality is an integral part of megacities in developing countries and it reflects processes of self-organisation on a local level. Aspects of social organisations are, again, also important for a vulnerability analysis. I will then link the concepts of institutions and social capital in order to show how social organisation can be approached as a resource for communities. I will conclude the chapter with models of social space, particularly the concept of locality, that will provide a framework for structuring and analysing the empirical field data.

In chapter five and six, I will leave the theoretical discussion and present the data I collected during my empirical research in two *kampung*. Chapter five will begin with a short introduction to the research approach and the methods I used in the research process. Then I will present the field data following the structure provided by the concept of locality which is basically referring to the categories of material space and social organisation. I will add two categories to this structure. In order to link the previous discussion on informality with the empirical research, I will present data on the informal-formal continuum in both research locations. In addition to this I will sum up my empirical findings on how people adapt to and cope with hazards, particularly flooding. I decided to separate description and analysis of my research findings because I would like to first provide a general understanding of the local situation in both research locations in a descriptive way before I analyse and interpret the data. Accordingly, I will analyse and interpret the data in chapter six. The main focus will be

put on aspects of space and social organisation so that local communities can be conceptualised. In chapter seven I will finally analyse aspects of vulnerability and resilience by applying the integrated vulnerability framework to my research findings. Lastly, I will briefly summarize the thesis in chapter eight and provide an outlook.

2 DISASTER DISCOURSE

2.1 The Challenge Of Quantifying Disasters

The discussion on disasters presented in the introduction highlights the general perception of disasters as extreme events, or natural hazards, which originate in nature and have adverse effects on people. Extreme events are often defined in quantitative terms by their geo-physic causes. Earthquakes are, for instance, measured by their magnitude on the Richter scale or cyclones are defined by their wind speed on the Beaufort scale. The impacts of these events are then determined and quantified. Depending on the purpose of the statistic, disaster impacts are commonly measured by the number of deaths and affected people or the value of economic losses. These numbers, again, are generally accepted criteria determining whether an extreme event is considered a disaster or not (see Alexander 1997, p. 290). That way disaster statistics are compiled and allow the reader to compare disasters on temporal or spatial scales. Historical data commonly serves as a basis to identify future trends. Alexander introduces the example of the journal *Disasters* which maintains a list of disasters. The journal considers events with a minimum of USD 1,000 million in economic losses or 1,000 victims as disasters. Only events which exceed these thresholds enter the list (Alexander 1997, p. 285).

Disaster statistics also serve as an important basis for decision-making of international organisations and the private sector. Because of the complexity related to the processes of identifying and compiling extreme events, only few databases exist. As I mentioned in the introduction, the reinsurance industry is probably one of the most comprehensive sources for disaster statistics. However, each database uses different quantitative definitions. For instance, Swiss Reinsurance sets certain thresholds defining a disaster. These thresholds can be a minimum value of insured claims, total losses or number of casualties (Swiss Re 2009, p. 5). Munich Reinsurance, in contrast, categorizes disasters by the number of deaths and value of economic losses. The highest category of disasters - 'great natural catastrophes' - are considered events that exceed the self-helping capacity of the region. This situation is given:

when there are thousands of fatalities, when hundreds of thousands of people are left homeless, and/or when overall losses – considering the economic circumstances of the country concerned – and/or insured losses are of exceptional proportions. (Munich Re 2009, p. 38)

Alexander points out the challenges associated with disaster definitions that are based on pre-defined criteria. In his perspective, these criteria can be very selective and could lead to

exclusion of some disaster events. Moreover, he argues that because of the complexity of extreme events data collection always involves a high degree of uncertainty (Alexander 1997, pp. 285 & 291-292). Alexander's arguments might lead to the conclusion that disaster statistics always have to be read cautiously. In addition to the challenges related to quantitative approaches aiming to define disasters, studies on risk perception point out another challenge. Risk perception studies assume that risks are not objectively given but do highly depend on risk awareness and risk assessment. For instance, Douglas and Wildavsky (1982) assert that risks have to be always interpreted against the background of social organisation. In this view, risk perception develops through social value and believe systems and thus highly depends on the subjective judgement of a society. Accordingly, they argue that risk is socially constructed and '[t]here is no gap between perception and reality' (Douglas & Wildavsky 1982, p. 8). Quarantelli points in a similar direction. He argues that "'Risk" is always socially constructed by humans and has no objective existence' (Quarantelli 2003, p. 211). For instance, the public perception of the risks related to nuclear power in Europe varies significantly. In France nuclear power is generally perceived as an acceptable risk while in Germany a strong movement against nuclear power has been formed.

In practice the risk perception of so-called experts often dominates the perception of laypeople who value risks based on their individual local knowledge and experience with risk. Referring to an unpublished paper from Schmuck-Widmann (1998)¹⁰, Quarantelli provides an example from the Brahmaputra-Jamuna River Islands in Bangladesh to point out contrasting risk perceptions. He puts forward that the 30,000 people living in the region are perceived by Western engineers as helpless and vulnerable to floods. Accordingly, technical measures are suggested to protect the people. However, the local communities do not perceive flooding as a major risk since they have developed their own strategies to cope with annual flooding. Moreover, local communities also see positive aspects in flooding as it contributes to better agricultural results (Quarantelli 2003, p. 211).

The limitations of quantitative approaches, as well as the discourse on risk perception, underline the challenges in analysing disasters. Accordingly, I argue that quantitative approaches alone are not able to provide answers to questions, such as: What is perceived as a risk or disaster by local communities? How do people adjust to disaster risks? What factors lead to disasters? What is the impact of a disaster? Are different social groups affected differently? How do people cope with and adapt to disasters?

This thesis aims to provide answers to these questions. While quantitative approaches seem not appropriate for a study on adaption and coping strategies on Jakarta's *kampungs*, I am also aware that qualitative approaches in disaster research might face challenges. Only recently, disaster research entered the mainstream discourse in social science. Therefore, I will briefly summarize the discourse on disasters in social science in the following and point out the aspects relevant for the field research. At different times in history, disasters required people to respond and to cope with disaster impacts. Since disasters were often experienced

¹⁰ The original source could not be accessed.

as something unexpected and extraordinary, people were required to explain and digest the experienced. Accordingly, disasters entered different spheres of social life, such as religion, art and science. While disaster research has a long tradition in natural science, it only entered the mainstream discourse in social science in the 1970s. At that time, the concept of vulnerability stipulated new approaches in social science. However, the concept of vulnerability is applied by different disciplines and thus a multitude of definitions and methodologies exist (see Manyena 2006, pp. 439-443). Since the methodology I applied in my thesis is based on the concept of vulnerability, I will present the main research traditions on vulnerability as categorized by Adger (2006). Finally, I will present the vulnerability framework introduced by Turner et al. (2003a) as I derive the analysis of the field data as well as the structure of the thesis from this methodological framework.

2.2 Origins Of Disaster Research

Approaching a definition or concept of disaster is challenging as, according to Drabek, the term 'disaster' has different linguistic meanings (Drabek n.d.). Following Skeat, the term disaster has its origin in the latin word *astrum* (unfavourable aspect of a star) which refers again to the greek word for 'star'. As pointed out by Schenk, in some languages the term disaster translates into a version of the greek word *katastrophé* which can be translated as 'overturning' or 'sudden turn' (Schenk 2009a, pp. 10-11; Skeat 1994, p. 20; Onions 1966, pp. 152 & 271). Based on the etymology of both terms, Schenk argues that the origin of disaster and catastrophe is closely linked to astrology and dramaturgy. The term *katastrophé* was used in greek dramaturgy to describe a fateful turn, either for the worse or for the good. Following a controversy between the medical doctor Röslin and the astronomer Kepler about possible political (catastrophic) implications of a comet, the term catastrophe was later also linked to astrology. That way, catastrophe and disaster were connoted with a similar meaning: a constellation of stars that is believed to have a fatal influence on society (Schenk 2009a, pp. 10-11).

The linguistic roots show that the terms disaster and catastrophe describe phenomena which can not be explained in ordinary ways. Accordingly, the terms refer to something supernatural or miraculous. Until today, disasters are imputed to magic or spiritual powers, such as religious patterns of explanation indicate. In the following I will show that these forms of explanation can be considered as coping mechanisms since they allow people to collectively explain and digest a phenomenon which is intangible and unfathomable (see Schenk 2009a, pp. 10-12; Voss 2006, pp. 13-14). These collective forms of disaster coping strategies can be observed in many cases. For instance, Meier shows that religious interpretations of disasters, particularly of earthquakes, dominated in the late antiquity. In christian historiography the greek term for earthquake *seismós* was even renamed into *theomenía* (god's wrath) in the 5th century. The rationale behind religious interpretation of disasters as god's punishment for sinful behaviour seems to be evident. The unexplainable became explainable and integrable into everyday life (Meier 2009, pp. 42-44).

Schenk suggests that the theological interpretation of disasters as sign or punishment of god

continued to be dominant until the late Middle Ages. However, this pattern of explanation started to raise questions. For instance, it was discussed whether the government has to be partly blamed for disaster impacts since it is acting on behalf of god. This way, the disaster was interpreted as the failure of the government to fulfil its obligation to god. Disasters were also interpreted as signs against excessive luxury and the addiction to vice. Accordingly, disasters put the norms and values of a society to test and adjustments were made respectively. But not only society, also god itself was challenged. Given the existence of evil in the world it was asked how the goodness of god can be justified (Schenk 2009b, pp. 72-73).

The question of theodicy¹¹ came to a head in the aftermath of the Lisbon Earthquake. On all saints day 1755, a severe earthquake and a following Tsunami lay waste to major parts of the city. The destruction of Lisbon was noticed all over Europe. With its harbour on the Atlantic coast, Lisbon was a hub of trade and the centre of the colonial power Portugal. Moreover, it was also a religious centre in the catholic Europe. While three-quarters of buildings including all major churches had been destroyed, Lisbon's red light district *Alfama* remained unaffected. Metaphorically speaking, people visiting the church service on a major catholic holiday were affected while people visiting *Alfama* survived the earthquake. Accordingly, the Lisbon Earthquake triggered a Europe-wide debate about the interpretation of the earthquake. The different attempts of interpretation by clerics on the one hand and philosophers on the other perfectly fitted in the *Zeitgeist* of the early *Age of Enlightenment*. While the cleric used the *Act of God* to harangue people upon sinful behaviour, some philosophers began to challenge the theodicy. Emanuel Kant, for example, was aiming to understand the natural causes of earthquakes and published his theories about the phenomenon of earthquakes in three publications. Kant's publications can thus be considered as the beginning of (western) seismology. Another interesting aspect of the Lisbon earthquake is the detailed information on disaster management. The first minister of the king, José de Carvalho e Melo, reestablished security to prevent looting, organized the clearing of debris and coordinated the distribution of food to the victims. He also initiated a survey on the size of the earthquake and the impact on infrastructure. In addition to that, he initiated a master plan on the reconstruction of Lisbon. Apparently, these activities are well documented and are the first information on comprehensive disaster management after a major disaster (see Hammerl 2009, pp. 19-23; Oeser 2009, p. 42; Bordat 2006; Günther H 2005). Accordingly, the discussion and activities following the Lisbon earthquake can be interpreted as the beginning not only of disaster management but also of modern disaster research (see Hammerl 2009, p. 23; Felgentreff & Dombrowsky 2008, p. 26; Susman et al. 1983, p. 276).

One has to be aware of a possible euro-centric bias in perceiving the 1755 Lisbon Earthquake as the starting point of modern disaster research. In different regions and at different times, people experienced disasters in everyday life and had been forced to cope with the impacts. Accordingly, it can be assumed that disaster research developed

11 For further reading on the concept of theodicy see Bordat (2006) and Poser (1999).

independently in other parts of the world. As Andrea Janku points out in the context of the 1556 Shaanxi Earthquake in China, natural causes of earthquakes were discussed much earlier in China. For instance, the first seismograph was developed by a Chinese scientist in 132 AD (Janku 2009, pp. 86-88). In 1920, Samuel R. Prince published a study on the explosion of the munition ship Mont Blanc in the harbour of Halifax in 1917. This study is often considered as the beginning of disaster research in social science in the US¹². Prince was concerned with the social processes following a catastrophe and the way of human response (republished in Prince 1968; see also Zenklusen 2007, p. 17; Hoffman & Oliver-Smith 1999, p. 1). Prince saw catastrophes as a stimuli for social change 'which accompany sudden interferences with the equilibrium of society, break up the status-quo, dissipate mental inertia and overturn other tendencies resistant to structural modification' (Prince 1968, p. 15).

2.3 Natural Hazard Approach Or Risk Hazard Approach (RH)

Following Prince, scholars became increasingly interested in understanding catastrophes and the human response to them. However, in contrast to Prince, the majority of studies approached catastrophes by their physical agents. In these studies the physical agent was seen as the main driving force for disasters. Only in a second step the social aspects, such as the response to physical agents, were analysed (see Dombrowsky 2008, pp. 72-73; Drabek (n.d.); Hoffman & Oliver-Smith 1999, p. 1). Developed in geography, natural hazard research, or also called risk hazard approach (RH), became one of the most influential research traditions. The RH approach was established by a group of scientist around Gilbert White who initially worked on challenges of flood control in the United States (Watts 1983, p. 239). White highlights the relation between 'natural events' and 'social systems' in natural hazard research by arguing that:

Extreme natural events illuminate one aspect of the complex process by which people interact with biological and physical systems. Every parameter of the biosphere subject to seasonal, annual, or secular fluctuation constitutes a hazard to man to the extent that his adjustments to the frequency, magnitude, or timing of its extremes are based on imperfect knowledge. Were there perfectly accurate predictions of what would occur and when it would occur in the intricate web of atmospheric, hydrologic, and biological systems, there would be no hazard. (White 1974, p. 3)

With White's quote it becomes apparent that in the perspective of hazard research, natural events, such as storms, floods, earthquakes and volcanic eruptions, are rooted in the natural system and happen largely independently from human activities. At the point of intersection, where the natural and social system meet, natural events can be both - productive and destructive. For instance, floods can be a resource for people living in flood plains as they regularly fertilize fields. At the same time, floods can be a destructive agent when property is damaged or people are killed. Consequently, a hazard is considered a risk imposed by the

¹² Given the fact that railway and ship accidents were already systematically analysed in the 19th century, Wolf R. Dombrowsky states that perceiving Prince's work as the beginning of disaster research can be considered a myth (Dombrowsky 2008, p. 64).

natural event in the form of a destructive agent on a social system (see White 1974, p. 3; Burton, Kates & White 1978, p. 19). In this context, it is important to note that in hazard research natural systems are considered neutral. Only in relation to a social system, natural events come into existence and can turn into hazards: '[i]t is people who transform the environment into resources and hazards' (Burton, Kates & White 1978, p. 19).

Burton, Kates and White further state that '[t]he search for measurements of physical phenomena appropriate to analysis of human response is carried out in the margins between physical and social science' (Burton, Kates & White 1978, p. 22). Since it is assumed that only the extreme forms of natural events can become a hazard, hazard research is aiming to determine the aspects of natural events relevant for human response. These so-called 'thresholds' can be, for example, measured in the form of the level of magnitude, frequency, duration or spatial dispersion of an event (Burton, Kates & White 1978, p. 22). That way, hazard research is mainly concerned with technical challenges in measuring natural events. For instance, the way magnitudes of earthquakes are measured depends on different factors, such as data availability. In addition to this, different scales identifying the magnitude of an earthquake do exist. Another challenge arises when a threshold has to be defined as it should reflect at what magnitude an earthquake can become a hazard for human response (Burton, Kates & White 1978, pp. 24-26).

Hewitt criticises hazard research for ignoring the complex linkages between the natural and the social environment. Instead, hazard research perceives hazards as events rooted in the natural environment and external to society. That way, hazards are reduced to objective geophysical processes which can be generalised and measured. In this perspective people could only respond to hazards, if they were aware of hazard risk and the impact on everyday life. Hewitt concludes that hazard research became a field of technocratic approaches aiming to model physical processes and to quantify hazard risk (Hewitt 1998, pp. 4-8 & 22-24; 1997, pp. 71 & 351-352). Summarizing the critique, Turner et al. point out the inadequacies of the quantitative application of hazard research. According to them, physical science cannot explain how systems positively or negatively influence the consequences of hazards, aspects that lead to variations in hazard impacts and the role of institutions (Turner et al. 2003a, p. 8074).

Critique is also formulated within hazard research. Burton et al. express their concern over the dominance of natural science in the usage of the hazard approach (Burton et al. 1978, pp. 212-215). Pelling argues that the environmental determinism in hazard research 'has directed the bulk of policy and research towards a preference for physical rather than social science analysis' (Pelling 2003, p. 47). Despite the critique, today policy makers do mainly follow technocratic rationalities in disaster management. This became, for instance, manifested in the International Decade of Natural Disaster Reduction (IDNDR) in the 1990s. In this context, the United Nations followed a top-down approach in disaster management. Disaster response was mainly understood as a challenge of transferring knowledge and appropriate technology from the first to the third world. Therefore, disaster prediction, monitoring and early-warning have become fields of disaster management where technology is playing a crucial role (see Hewitt 1997, pp. 13-15; Blaikie et al. 1994, pp. 218-219).

2.4 Human Ecology Approach

Resulting out of this critique, the focus shifted to the social aspects that determine whether a natural event turns into a disaster or not. Although not directly linked to disasters, Amartya Sen's (1981) study on entitlements and famines¹³ had a major impact on the development of new approaches in disaster research (see Bohle & Glade 2008, pp. 99-101; Felgentreff & Dombrowsky 2008, p. 18; Adger 2006, pp. 270-271). While Sen's work on famines is considered a corner stone in the discourse on vulnerability, he is criticised for assuming a universality in the application of entitlement theory. According to these critiques, entitlement theory fails to explain the complex causes of famines since they can take different forms in each situation. Consequently, Sen's ideas was taken up and further developed in more flexible approaches (see Pelling 2003, pp. 50-51; Blaikie et al. 1994, pp. 76-77, 88 & 99).

Directly responding to hazard research, human ecology (or human geography) developed as a new research stream. In the early writings, Susman et al. picture disasters as extreme and negative phenomena of the 'human-environmental relationship'. In a Marxist tradition, they point out that different classes in society show different everyday life realities and thus have different experiences with disasters. Disasters are, in this perspective, closely connected to everyday life conditions of people. The concept of vulnerability is then introduced in order to describe that different social classes might face different probabilities of hazards. Moreover, they might also show different forms of responding to hazards (Susman et al. 1983, pp. 264-265). Accordingly, Susman et al. define disasters as 'the interface between an extreme physical event and a vulnerable human population' (Susman et al. 1983, p. 264).

Later publications in human ecology extended the view on natural hazards to a broad range of 'dangers' or 'calamities'. Since disasters were now approached from an everyday life perspective, it became apparent that not only natural forces disrupt or destroy social routines, functions and institutions. Other dangers, such as technological accidents, epidemics or social violence, can have similar impacts (see Hewitt 1997). Accordingly, in the application of the human ecology approach, the focus shifted from the natural environment to

13 The Sahel experienced disastrous famines in the 1970s and 1980s. Initially, it was assumed that droughts, harvest failure and population increase are the main causes for famines. In the rational of the Food Availability Decline approach (FAD), droughts have a negative impact on food production and thus limit the availability of food. In his study on the 1943 famine in Bengal, Amartya Sen challenged the general validity of the FAD approach by showing that famines were not primarily caused by lack of food availability. Rather, a decline in rice production and price speculation led to a severe increase in rice prices while wages declined slightly. Accordingly, some social groups, such as wage labourer or service providers, could not afford to buy sufficient food. They were thus vulnerable to increasing food prices. In contrast, farmers who had access to their own land were directly involved in food production. Regarding the availability of food, they were more independent from food price fluctuation. As a consequence, Sen argues that vulnerability to famines has to be thought as a relation between productive capacities (or entitlements) and the cost of a basic commodity bundle. Starvation is, in this perspective, a result of poverty since people lack the entitlement to produce or exchange commodity bundles to cover basic needs. Finally, Sen argues that famines are not necessarily a direct result of droughts, cyclones or floods. In the context of the Bengal famines, he theorises that the food crises has to be rather seen as an economic disaster that is closely linked to poverty (Sen 1981, see also Bohle & Glade 2008, p. 101; Pelling 2003, p. 50; Blaikie et al. 1994, pp. 85-87).

vulnerable societies. Human ecology is thus mainly concerned with factors contributing to different vulnerabilities of social groups, such as gender related factors, the economic situation or cultural and ethnic differences. In this perspective, poverty is seen as a structural weakness making the poor more vulnerable to disasters compared to the rich. Because of poverty, not only the availability of financial resources is limited but also the participation in the political arena. By identifying poverty as a major root cause for vulnerability, human ecology suggests that the number of disaster victims rather than the number of disaster events is increasing. Disaster impacts in 'underdeveloped' countries appear to be more severe since poverty has a significant impact on the vulnerability of people (see Hewitt 1997, pp. 2-4, 8, 28 & 144; Susman et al. 1983, pp. 264-267).

As pointed out by Susman et al., the same natural event can have different impacts on the rich and the poor. Compared to the rich, the poor can, for instance, not afford to apply to building codes. The poor might also not be able to afford earthquake proof houses because of poverty. In contrast, homes of the rich located in the same region might be build to resist earthquakes. Moreover, the poor are often forced to settle in the most hazard prone and unhealthy places. On top of that, it is argued that the poor do often degrade their environment in order to make a living which even further increases their vulnerability (Susman et al. 1983, pp. 274-278). Accordingly, Susman et al. state that it is necessary 'to consider the process of underdevelopment to understand the reality of disaster vulnerability' (Susman et al. 1983, p. 267). They underline this argument by the case of the 1976 Guatemala earthquake. The earthquake had a comparatively severe impact on the poor. As a consequence, Guatemalan slum dwellers did not consider it as natural event but rather as 'classquake' (Susman et al. 1983, pp. 267 & 277).

Within the human ecology tradition Hewitt then criticises the strong focus on physical hazards in disaster management planning and its practical application. He suggests that disaster management should rather concentrate on the factors contributing to vulnerability. These factors are often deeply rooted in society and do thus suggest a broader perspective on hazard vulnerability. That way, vulnerable people might not only be vulnerable to specific hazards, such as natural hazards, but to hazards in general (Hewitt 1997, pp. 186-187). Hewitt (1997) then broadens the hazard definition and differentiates into natural, technological and social hazards. Although the human ecology approach points out negative factors contributing to disaster vulnerability, Hewitt also warns that people should not be regarded as 'merely passive or unwitting victims of disaster' (Hewitt 1997, p. 28).

2.5 Pressure and Release Approach (PAR)

It becomes apparent that the human ecology approach and the risk hazard approach both see disasters as extreme forms in the human-environmental relationship. However, in the application of both approaches the focus is set differently. The application of hazard research results in quantitative approaches analysing disasters by the underlying physical event. Studies in the human ecology tradition, in contrast, analyse social factors contributing to different vulnerabilities. As Adger points out, the 'pressure and release' approach (PAR) was

introduced by Blaikie et al. (1994) in order to overcome the strict focus on either the natural or the social system. The PAR approach suggests that equal focus has to be put on the impact of physical processes on people on the one hand, and processes contributing to vulnerability on the other. That way the PAR approach can be considered a concept bridging the natural hazard approach and the human ecology approach (Adger 2006, p. 272). Blaikie et al. suggest that the combination of hazard exposure and vulnerability constitutes a pressure which might result in a disaster. Accordingly, the PAR approach perceives disaster risk as a product of hazard and vulnerability. Disaster risk is then put in a simple equation: 'Disaster Risk = Hazard + Vulnerability' (Blaikie et al. 1994, p. 22).

Blaikie et al. identify vulnerability as a core component of disaster risk. They define vulnerability as 'the characteristics of a person or group in terms of their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard' (Blaikie et al. 1994, p. 9). In the context of the PAR approach¹⁴, vulnerability is seen as a progressive chain that is triggered by a) *root causes*, such as power relations or the distribution of resources. These root causes are then translated by b) *dynamic pressures* into c) *unsafe conditions*. Dynamic pressures can be regional and global dynamics, such as rapid urbanisation or population growth. The result are unsafe conditions which are interpreted by Blaikie et al. as 'the specific forms in which the vulnerability of a population is expressed in time and space in conjunction with a hazard' (Blaikie et al. 1994, p. 25). By linking unsafe conditions to different root causes and dynamics, the PAR approach points out the complexity of vulnerability (see Blaikie et al. 1994, pp. 21-26).

With the PAR approach, Blaikie et al. suggest that disaster impacts have to be explained by the vulnerability of people. Even if disaster impacts can be directly related to a specific natural hazard, they have to be mainly approached by the vulnerability of people. Amongst different factors, poverty is considered a major factor contributing to vulnerability. In line with the arguments introduced by the human ecology tradition, the PAR approach perceives the poor as being less able to minimize the frequency of disasters compared to other social groups. For instance, they lack the financial resources to adjust to and cope with hazards. They also settle in hazard prone areas because it is often the only land affordable to the poor or close to the places where they can find employment. Moreover, the poor suffer more from the consequences as they do not have, for instance, access to insurance or they cannot continue with their income generating activities in the aftermath of a major disaster (Blaikie et al. 1994, pp. 3-5 & 9-10).

Although the PAR approach is aiming to equally focus on the natural and social system, it is being criticised for failing to take a holistic view of coupled social-environmental systems. Turner et al. argue that in this perspective the concept of vulnerability is limited to the social system without reference to the natural environment. That way, the PAR approach fails to provide a comprehensive view on vulnerability which should, for instance, also include the vulnerability of biophysical sub-system (see Turner et al. 2003a, p. 8074).

14 In this thesis I will not fully present the PAR approach. For further reading see Blaikie et al. (1994).

2.6 Integrated Vulnerability Framework: A Methodological Concept

2.6.1 Vulnerability and Resilience

Vulnerability

With the previous discussion it becomes apparent that the concept of vulnerability developed into an important concept in disaster research. In this section I would like to make the concept of vulnerability more explicit. In a paper published in 1997, Alexander criticises the mono-disciplinary approaches in hazard and vulnerability research. In his perspective, 'differential funding' and the 'desire for legitimacy under the duress of peer review' particularly supported and legitimised technocratic disciplines. Alexander further states that this '[a]cademic tribalism' resulted in the 'overspecialisation' of the natural and social factors culminating in disasters. Because of the dominant position in the field of hazard and vulnerability research, technocratic disciplines prevented science to take a holistic view and hindered the development of theory (Alexander 1997, pp. 297-298). Voss also points out the limitation of mono-disciplinary approaches in understanding the complexity of disasters. According to him, the social and natural factors involved in disasters 'overlay each other in a highly complex, ambivalent or blurred and multi-dimensional manner' (Voss 2008, p. 48). Moreover, Voss states that disaster research has to go beyond interdisciplinary approaches of social and natural science. He remarks that 'transdisciplinary' approaches are required which also include practical considerations of people involved in disasters (Voss 2009, p. 107).

The last decade saw a lively discourse and the emergence of interdisciplinary studies in disaster research. As Plapp points out, the concept of vulnerability turned out to be the central concept as it was not only applied by different scientific disciplines but also by practical oriented fields, such as disaster management as well as the development discourse (Plapp 2003, p. 64). However, the wide acceptance of the concept is also translated into a broad range of definitions and conceptualisations of vulnerability. Given the variety and complexity of the concept, a comprehensive overview on the vulnerability discourse is hardly possible (see Felgentreff 2008, p. 18; Alexander 1997, pp. 291-292). One of the most prominent application of the concept of vulnerability is within climate change research. Adger claims that the reports published by the Intergovernmental Panel on Climate Change (IPCC) set the agenda for research in climate change (Adger 2006, p. 273). The IPCC defines vulnerability as:

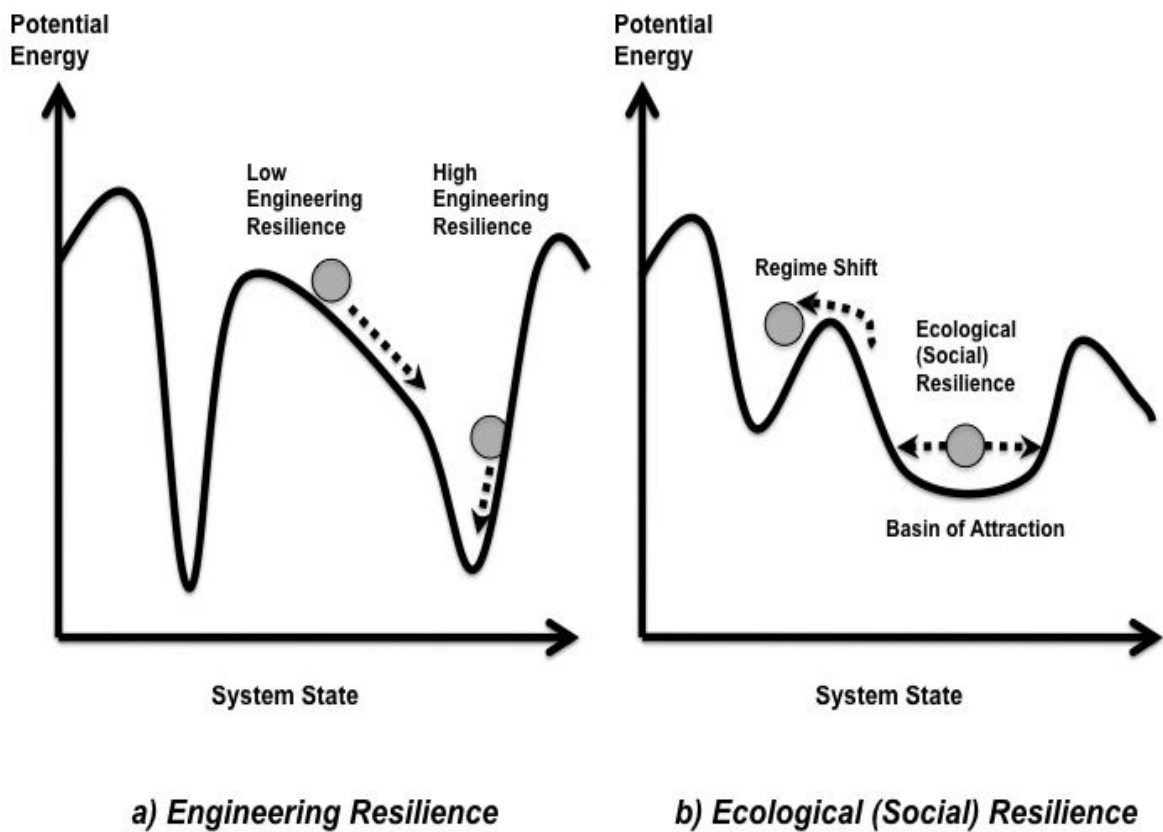
the extent to which a natural or social system is susceptible to sustaining damage from climate change. Vulnerability is a function of the sensitivity of a system to changes in climate (the degree to which a system will respond to a given change in climate, including beneficial and harmful effects), adaptive capacity (the degree to which adjustments in practices, processes, or structures can moderate or offset the potential for damage or take advantage of opportunities created by a given change in climate), and the degree of exposure of the system to climatic hazards. (McCarthy 2001, p. 89)

The concept of vulnerability used by the IPCC can be shortly summarized as a function of sensitivity, adaptive capacity and exposure. Adger points at a paradox in the application of the IPCC concept. According to him, adaptive capacity is directly translated by the IPCC into economic indices, such as the gross domestic product per capita. That way, developing countries are per se labeled as highly vulnerable to climate change. Yet, evidence indicates that some regions and groups developed adaptive capacities which cannot be measured in economic terms, such as local knowledge or strategies that developed following previous experience with hazards (Adger 2006, p. 274). Hewitt also points at the ambivalence of the term vulnerability. On the one hand it stipulated disaster studies, on the other hand it generally suggests a passive role of people or social groups. That way, 'vulnerability can treat human individuals, the public or communities simply as pathetic and weak' (Hewitt 1997, p. 167). In the following I will introduce the concept of resilience as it responds to this critique by highlighting the capacity of people to cope with and adapt to hazards. Rather than assuming a passive role of disaster victims, the concept of resilience underlines aspects of social agency in vulnerability assessment. It also entered the integrated vulnerability framework that I will present below.

Resilience

Because of the controversy about the origin of the term resilience and its use in science (Manyena 2006, pp. 433-434), I will shortly introduce the concept here. In disaster research, scholars mainly draw on a concept of resilience that emerged in ecology and that was mainly influenced by C. S. Holling (1973). Holling analysed the disappearance and reappearance of species and concluded that major research traditions focus on a static equilibrium of natural systems which implies a constant behaviour of populations. However, according to him ecological systems are exposed to external change and thus force the system to constantly absorb change. That way, stability can be regarded as the result of dynamic interactions between different factors. In this view, change can disturb a system's stability either temporarily or permanently. The basin of attraction illustrated in figure two determines the different equilibria states a system can take. A system is considered stable, if it rapidly returns to the original equilibrium stage after a disturbance occurs. The system will be considered resilient, if it has the capacity to absorb the disturbance and move to a new domain of attraction. Therefore, the concept of resilience visualizes that multi-stable equilibria can exist. A system will collapse, if the disturbance cannot be absorbed and the system is moved out of the 'basin of attraction' - a 'regime shift' would take place (Holling 1973, pp. 1-23; see also Voss 2009, pp. 115-116). Accordingly, Holling defines resilience as 'a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between population or state variables' (Holling 1973, p. 14).

Figure 2: Engineering and Ecological (Social) Resilience



Source: Modified from Gunderson et al. (2002, p. 5)

Gunderson et al. compare two definitions of resilience - engineering and ecological resilience. Referring to Pimm (1984), they define engineering resilience as 'the speed of return to the steady state following a perturbation' (Gunderson et al. 2002, p. 4). As illustrated in figure two, engineering resilience refers to a single stable state, or equilibrium, to which a system has to return after a major disturbance. In contrast, ecological resilience recognises multiple equilibrium states, or domains of attraction, within a basin of attraction. In the first case, resilience can be expressed in time units. In the second case, resilience refers to the magnitude of disturbance a system can absorb until a regime shift takes place. The difference rationals of both concepts are expressed by Gunderson et al. as the 'focus on maintaining efficiency of function' versus the 'focus on maintaining existence of function' (Gunderson et al. 2002, pp. 4-5).

Initially developed for ecological systems, the concept of resilience was later also applied to social systems. Social resilience is defined by Adger as 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change' (Adger 2000, p. 347). Voss points out that integrated approaches of vulnerability merge the concepts of resilience and vulnerability. With the concept of resilience, hazards cannot be seen as objectively given, they have to be rather analysed in relation to a basin of attraction. That way natural hazards are only one type of different

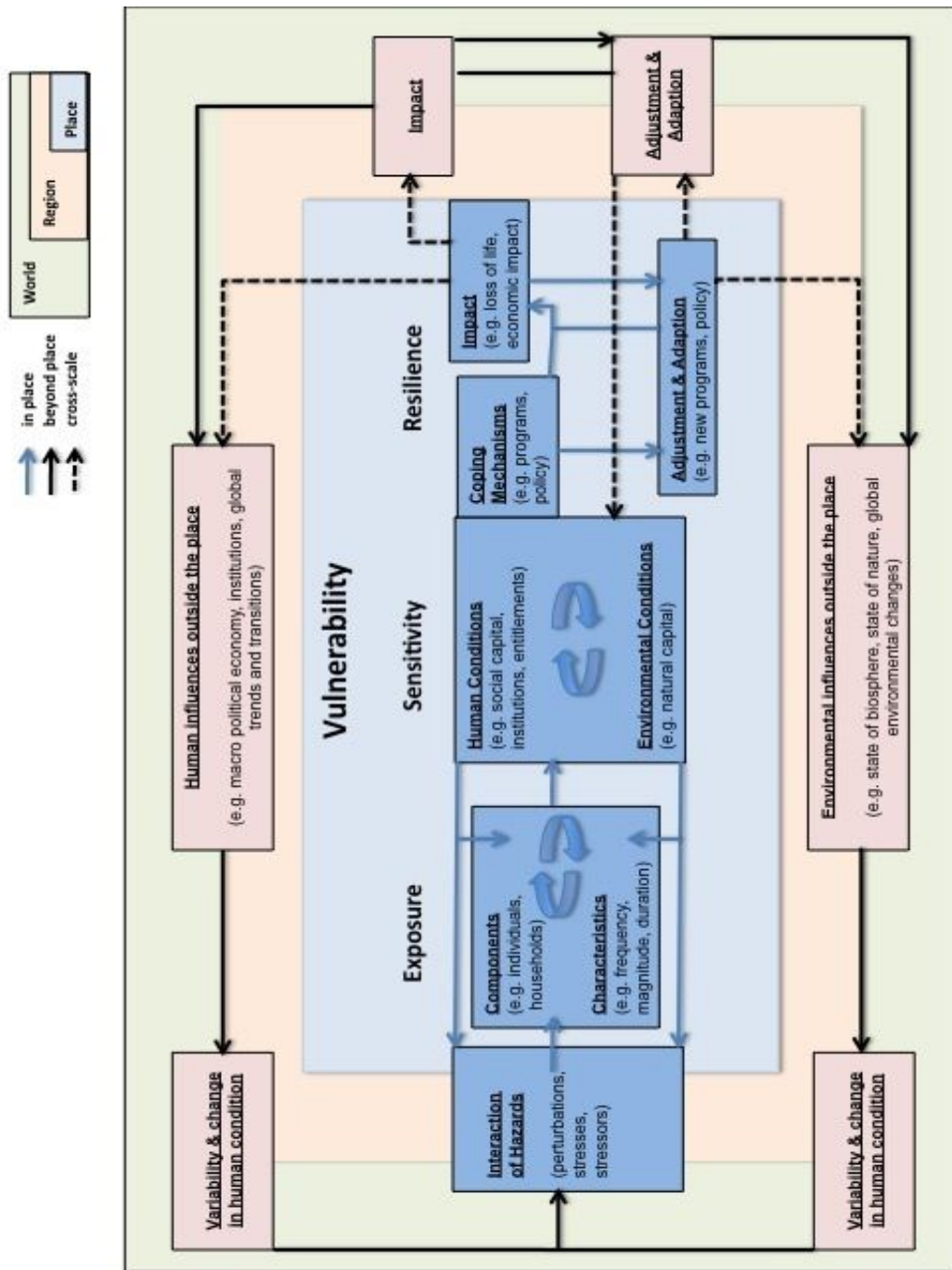
possible disturbances. Resilience largely depends on the ability of a system to absorb these disturbances. Therefore, resilience is closely connected to processes of organisation and it allows to capture the non-linear relationships and dynamic scales that characterize the complexity of coupled human-environmental systems (Voss 2009, pp. 114-117). Turner et al. (2003a) developed an integrated vulnerability framework that connects the concept of vulnerability to the concept of resilience. Since I will use the integrated vulnerability framework as an analytical concept to interpret my empirical data, I will introduce it in the following.

2.6.2 The Vulnerability Framework

The previous discussion about the theoretical discourse on vulnerability leads us to the conclusion that a natural disaster cannot be equated with an event originating in nature, such as an earthquake. As I presented before, a hazard can be as much a resource as it can be a destructive force. Rather, the sensitivity of a social unit determines whether a hazard turns into a disaster or not. Moreover, the concept of resilience has to be considered here. People are not just sensitive to natural hazards because they live in hazardous locations or because they are poor. The concept of resilience points out that people might have the ability to absorb disturbances. Accordingly, vulnerable people should not be approached as passive objects or victims but rather as active agents. Dombrowsky concludes that not the earthquake is the disaster but the failure of people to adapt to and cope with the impact of the earthquake. That way, disasters are closely connected to aspects of social organisation, such as institutions. Consequently, Dombrowsky perceives disasters as a 'negative seal of quality' of human learning. Disasters are thus a 'real falsification' of social organisation (Dombrowsky 2004, p. 183).

Integrative vulnerability approaches aim to reflect the complex interaction of human-environmental systems. One has to be aware that these approaches reduce the complexity to a limited set of variables which are regarded relevant. But they might suit well as a methodological framework to approach the vulnerability context in Jakarta's *kampungs*. In the following I will present the integrative vulnerability framework developed by Turner et al. (2003a), as I will apply it as an analytical concept to interpret my empirical findings in the context of local vulnerability and resilience. The framework is referring to concepts of hazard and vulnerability research I presented before.

Figure 3: Integrated Vulnerability Framework



Source: Modified from Turner et al. 2003a

The Core of Vulnerability: Exposure, Sensitivity and Resilience

The core of the place-based vulnerability analysis is comprised by three components: (i) exposure, (ii) sensitivity and (iii) resilience. Exposure (i) is understood as the way a reference unit experiences a hazard. Therefore, it is important to understand the characteristics of a hazard relevant to the reference unit. As I introduced with the RH approach before, a threshold marks a critical point when the hazard becomes relevant for the reference unit. The threshold can be defined, for instance, in terms of frequency, magnitude or duration of the hazard (Voss 2009, pp. 111-112; Adger 2006, p. 270; Turner et al. 2003a, p. 8077). Sensitivity (ii) is understood as the interaction of human and environmental conditions that shape the quality of a reference unit in relation to a hazard. Turner et al. operationalise these conditions as being manifested in different forms, such as entitlements, institutions or capitals in the human system. In the environmental system, natural capital is provided as a factor shaping the environmental condition (Turner et al. 2003a, pp. 8075-8077). While the role of entitlements and different forms of capital for vulnerability analysis was introduced before, Voss points out the importance of institutions¹⁵. Institutions in the form of collectively shared expectations contribute significantly to the reorganisation of social order following a disaster. Institutions are therefore an important aspect of human conditions. I will further discuss this point in the context of coping strategies (Voss 2009, pp. 113-114).

Resilience (iii) enters the vulnerability framework from the field of ecology and is seen as an important element in the analysis of coupled human-environmental systems (Adger 2006, pp. 268 & 271-272; Turner et al. 2003a, p. 8075). Within the framework, Turner et al. directly link resilience to the coupled human and environmental conditions. Resilience is further divided in three interlinked components: a) *impact*, b) *coping mechanisms* as well as c) *adjustment* and *adaptation*. Loss of life or economic losses can be a direct impact (a) of a stressor or perturbation. Coping mechanisms (b) can be either direct (human) actions or policies that take effect in response to the impacts. Coping mechanisms could also be collectively shared strategies which had been developed because of previous experience with hazard impacts (Turner et al. 2003a, pp. 8076-8077). Voss further adds that through institutions, such as religion, unexplainable aspects of hazards are attributed with meaning. By creating meaning people might better cope with hazards. In that sense, institutions create meaning and can be thus considered as coping mechanisms. For instance, it can still be observed that religious explanations allow people to attach meaning to disasters and to reestablish social order. Religious explanations can support people in finding a meaning in the unexplainable and thus assist people in coping with hazards. If we understand coping mechanisms as the way social order and everyday life is reestablished, we also have to point to the differences in cultural perception of hazards (Voss 2009, p. 119; Turner et al. 2003a, p. 8077).

Adjustments and adaptation (c) refers to changes in the human-environment conditions, such as new policies. Adjustments can be active and reflective or based on trial and error. Adjustment can also be limited when actors cling to existing coping strategies and ignore

15 I will take up the discussion on institutions in the context of informality in chapter four.

alternative strategies (Voss 2009, pp. 117-118; Turner et al. 2003a, p. 8077). The role of adaptation becomes obvious in the context of climate change. It can be observed that various actors are aiming to anticipate expected adverse effects of climate change. Since social capital has an important role in facilitating collective action, it is often mentioned as a form of adaptive capacity in the context of adaptation to climate change (Adger et al. 2003, p. 186).

Spatial and Temporal Scales in Vulnerability Analysis

Voss points out that the integrated vulnerability approach allows an interdisciplinary vulnerability analysis. In addition to that, not only non-linear structures and cross-scale dynamics can be integrated in the analysis, but also the wider spatial and temporal scales (Voss 2009, p. 48). The crucial role of spatiotemporal dynamics is widely acknowledged in disaster research. It is generally assumed that vulnerability is not just there, it is rather historically produced. It is also possible that people develop forms of adaptation that are effective in the short run, but will increase vulnerability in the long run (see Bankoff 2003, pp. 12, 18 & 158; Holling, Gunderson & Ludwig 2002, p. 18; Oliver-Smith 1999, pp. 29-30). Accordingly, processes leading to hazards can be deeply rooted in history and unintentionally develop over time. Blaikie et al., for example, suggest that the root causes of the potato famine in Ireland in 1845-1848 can be traced back to the 1650s, when intensive resettlement led to high dependency on potatoes as a source for dietary energy (see Blaikie et al. 1994, pp. 5 & 110-111).

Different studies on disasters describe the relevance of spatial dimensions. The impacts experienced in a specific place can have their root causes in a distant location. Krämer argues that the impact of the 1815 outbreak of the Tambora volcano on the island of Sumbawa in Indonesia was experienced as the 'year without a summer' in Europe in 1816. Because of the eruption, ash reached the stratosphere and reduced solar radiation. The consequences could be felt in Europe as a drop in temperature and the darkening of the sky. The impact of the eruption is perceived as a root cause for famines in different parts of Europe in the years 1816 and 1817. In some communities in Eastern Switzerland these famines resulted in the death of up to 11% of the population (Krämer 2009, pp. 132-146).

The Application of the Integrated Vulnerability Framework

The integrated vulnerability framework developed by Turner et al. (2003a) responds to the complexity of socio-ecological systems and appears to be an advanced tool in vulnerability analysis. However, the operationalisation of the approach is a serious challenge because of the complexity and the different scales involved. Accordingly, it is not surprising that, as remarked by Damm, only in few cases the model has been operationalised (Damm 2009, p. 38). Turner et al. (2003b) applied the vulnerability approach in three case studies. Based on their experience with the application of the vulnerability framework they state that:

A full vulnerability assessment is no easy task given the complexity of factors, processes, and feedbacks operating within even relatively simple coupled human–environment systems. The difficulties of the task are amplified by scalar dynamics, be they global processes operating on the local system of assessment, the asynchronous character of important social and natural processes, or the various, even incompatible goals of the different stakeholders in the system. Indeed, a full vulnerability assessment

following the framework developed by the Sustainability Systems Program may lie well beyond the capacities of most research efforts. Yet this general conceptual framework provides a useful point of departure for examining vulnerability. For practical and theoretical reasons, such frameworks should be modified (simplified) to suit the specifics of a given application. (Turner et al. 2003b, p. 8085)

Turner et al. point out the challenges involved in vulnerability assessment. Yet, I assume that the integrated vulnerability framework can serve as a valuable starting point to approach the complexity of the flood situation in Jakarta. Being aware that I will only be able to partly reflect this complexity in my research, I will use the integrated vulnerability framework as a methodological framework to analyse the situation of the urban poor in Jakarta. In the introduction I formulated my research question by asking for the *capacity of a society to adapt and cope with disasters*. Following the integrated vulnerability framework, I will have to reflect and adjust my initial research question. First, the reference unit has to be clearly defined. The reference units of my research are two communities in Jakarta. Both communities are connected to a certain place in a megaurban context, namely the *kampung*. Second, adaption and coping mechanisms are comprised under the concept of resilience. Accordingly, my research question explicitly asks for aspects of resilience. And third, the concept of disaster, understood as a 'negative seal of quality' for social organisation, refers to a situation in which the reference unit does not succeed in adapting to and coping with a disaster. Although flooding in Jakarta is commonly described as a disaster, I will rather prefer to use the concept of hazard as suggested by the integrated vulnerability framework.

As I presented in the introduction, the overall objective of my thesis is to contribute to a better understanding of the local response to disasters in a megaurban context. With the discussion in this chapter I would like to reformulate and specify the research question to: *What are aspects of resilience that allow urban poor to adapt and cope with hazards?* In particular, I would like to provide a differentiated view on the unchallenged hypothesis that the poor are most vulnerable to disaster risk. While I am generally not disputing this hypothesis, I argue that it does not leave much room for aspects of resilience. I will provide an answer to the research question by describing and analysing aspects of resilience of two *kampung* communities in Jakarta in the context of flooding. But not only the research question is derived from the integrated vulnerability framework. As I presented in the introduction, also the general structure of the thesis will follow the components suggested by the framework.

3 HISTORY OF JAKARTA: FROM BATAVIA TO JABODETABEK

3.1 Urbanisation In Southeast Asia

As I described in the introduction, Asia is one of the main regions where future population growth and urbanisation dynamics will be concentrated. In the context of Southeast Asia, Evers and Korff argue that in the past the countries in the region were comparatively slowly urbanising because they are generally characterised by rural societies (Evers & Korff 2003, p. 25). However, Southeast Asia is also home to a number of large cities¹⁶, such as Bangkok, Manila and Jakarta. These cities are often capital cities and reflect the concentrated political and economic power of a nation state¹⁷. This hierarchy of cities and the evident discrepancy between cities leads us to the question of how large cities could emerge in a rural society.

Bairoch argues that data on aspects of urbanisation in pre-colonial societies in Southeast Asia is rare. In the case of the Philippines, he suggests that the concept of the urban only entered the region with the arrival of the Spanish. In contrast, mainland Southeast Asia and Indonesia might have had developed urban forms before colonialism came to the region. Monumental architecture, such as *Prambanan* and *Borobodur* in Java, indicate that urban forms might already have existed in the 8th and 9th century. There is also much information on the Malay empire of *Srivijaya* from the period of the 7th to the 11th century. Although there is little architectural evidence, urban forms might thus have existed on the island of Sumatra in Indonesia (Bairoch 1991, pp. 48-49). According to McGee, the early cities can be roughly grouped into the 'sacred city' and the 'market city'. The common pattern of sacred cities is an architecture that resembles cosmology. Therefore, monumental architecture is important in these cities. The sacred city mainly lives on agricultural surpluses. The market city, in contrast, has a trading port and mainly draws on income from maritime trade. Because of the regional or international orientation, market cities are more cosmopolitan than sacred cities. Since the authorities gain their wealth from trade, monumental architecture is not necessary. That way it can be explained why empires engaged in maritime trade, such as *Srivijaya*, did only leave limited built evidence (McGee 1967, pp. 30-35). Korff adds a third category of small cities to this distinction in order to recognize the numerous small cities in the region (Korff 1990, p. 142).

¹⁶ I avoid to use the term 'megacity' in the context of Southeast Asian cities. As Mertins and Kraas point out, megacities are generally defined by the number of population. But in different concepts, megacities are defined by a minimum population number of 5, 8 or 10 million people (Mertins & Kraas 2008, p. 4). In a recent publication, UN-Habitat considers megacities with a population of more than 20 million people (UN 2008). According to the UN- definition, no city in Southeast Asia would classify as a megacity. Apparently, the megacity definition is rolling forward with population growth. In order to avoid definitional confusion, I will use the term large city here.

¹⁷ Urban primacy can, of course, not be generalised. For instance, in Vietnam the political and economic power is divided between the cities of Hanoi and Ho Chi Minh City.

McGee further argues that in the first phase of colonisation, harbour towns had the function to control regional trade in Southeast Asia. In the 19th century, with the second phase of colonisation, an extensive network of cities developed in the region. On the one hand, urban centres functioned as a hub of trade connecting the colony with the homeland. On the other hand, these cities accommodated an administrative system and established communication networks in order to control the hinterland where the production of cash crops was located. European colonial powers thus installed several trading ports in Southeast Asia. Cities like Singapore, Manila, Saigon, Georgetown and Batavia initially had the function to serve as a hub of trade between the colony and the homeland. With territorial expansion, these cities also became the centre of colonial administration (McGee 1967, pp. 53-61). Benevolo points out that European colonial powers also brought their concepts of urban planning to the region. That is why colonial cities are often characterised by a geometric pattern and resemble European cities (Benevolo 2007, pp. 647-687).

Most colonies in Southeast Asian became independent in the 20th century. After independence, the colonial city transformed in many cases into the capital city of an independent nation state. Evers and Korff suggest that capital cities in Southeast Asia had an important role for the national integration of former colonies. In the process of nation building, capital cities became a symbolic centre. The administration, economy and the cultural sphere were concentrated in these cities and still are. Capital cities therefore transformed into primate cities. Since the second half of the 20st century, Southeast Asia runs through a period of rapid political, economic and social change. These modernisation processes are stipulated by policies aiming at international integration. Like national integration, international integration is mainly concentrated in certain cities. Accordingly, primate cities transform into metropolises and thus become part of a global network of cities (Evers & Korff 2003, pp. 1-5).

From the above it might be concluded that, similar to the concept of the market city, metropolises are characterised by a social heterogeneity of city dwellers. As I will show in the following, the city history of Jakarta follows the general urban development pattern in Southeast Asia. I will present the different periods outlined before and thus follow the common urban transformation from colonial city to metropolis. I mentioned before that I will highlight two aspects: Since the integrated vulnerability framework is a place based approach in which the spatio-temporal dimension is important to understand the context of vulnerability, I will place the focus on the historical development of the everyday life situation of *kampung* dwellers on the one hand. On the other hand, I will highlight aspects regarding the origins and development of the flood situation. These aspects will not only allow to better understand the current flood situation, they will also provide some insights into the past experience of *kampung* dwellers with hazards and the transformation of vulnerability over time.

3.2 The Transformation Of Jakarta

3.2.1 Colonial Batavia: From 'Queen of the East' to 'Cemetery of the East'

The Arrival of the Dutch

Before the Dutch arrived, the area where Jakarta is located at today already attracted regional and international trade. Sources describing the pre-colonial history of the area are limited. Based on archaeological findings, it is assumed that the mouth of the Ciliwung river was already populated around 4000 A.D. In this location, river mud claimed land from the sea and formed a coastal area which is characterized by low-laying swampland. There is also little available information on a kingdom called *Tarumanegara* which developed from the year 450 B.C. According to several sources, information about the location can be more thoroughly traced back to the 12th century when the West Javanese hindu kingdom of *Pajajaran* maintained a harbour town called *Sunda Kelapa* at the mouth of the *Ciliwung* river. The harbour town, with approximately 10,000 inhabitants, developed into an important regional trading port. As it was ideally located close to regional and international trading routes, the town became popular when the first European traders reached the archipelago in the 16th century. Because traders had to wait for the change of monsoon winds, the town appeared as an ideal place where ships could be repaired and where goods and supplies could be loaded. Attracted by the strategic location, the Portuguese started a cooperation with the kingdom in 1522 aiming to use *Sunda Kelapa* as a trading post in the international pepper trade. However, before the Portuguese could establish a trading base the *Sultanate of Banten* under the leadership of *Fatahillah* seized the city in 1527 and renamed the city to 'Jayakarta'¹⁸ (see Silver 2008, pp. 2 & 25, Somantri 2007, pp. 34-38, Grijns 2000, p. 212; Nas & Grijns 2000, p. 13; Wibawa 1997, pp. 34-35; Abeyasekere 1989, pp. 3-6).

Because of the high profit margins generated in international spice trade, several European colonial powers followed the Portuguese to explore Southeast Asia in the 16th century. The Dutch, for instance, established and maintained a trading base in the Moluccas which was close to the locations where spices had been grown. However, the Moluccas were located far away from the international trading routes which brought the Dutch ships back to Europe. Close to the Sunda and Mallaca straights, Jayakarta turned out to be a perfect location connecting trading routs to India in the West, China and Japan to the North and the spice islands to the East. Moreover, the harbour was suitable for bigger sailing vessels. Accordingly, Dutch ships continuously called at the port of Jayakarta in the period from 1596 to 1610. The Dutch were allowed to establish a stone house in the Chinese quarter and they relocated the regional headquarters of the Dutch East India Company, or Vereenigde Oost-Indische Compagnie (VOC), to Jayakarta. When the stone house was transformed into a kind of fortification, the town rulers and the English colonial representatives feared that the VOC could gain a dominant position and a conflict arose about the supremacy in the town (see Taylor 2009, p. 3; Evers & Korff 2003, p. 35; Ricklefs 2001, p. 34; Wibawa 1997, p. 36;

¹⁸ Jayakarta can be translated as 'perfect victory' (Heuken 1982, p. 12).

Abeyasekere 1989, pp. 8-9).

The VOC under the leadership of Governor-General Jan Pieterszoon Coen finally brought the conflict to an end by destroying the city in May 1619. At the same location he established Batavia as the main trading base in the region. With the founding of Batavia the VOC was less aiming at territorial expansion but primarily at establishing a trading base and headquarters in the region. This became obvious in the main orientation towards the sea whereas the hinterland was hardly accessible from the city¹⁹. Only in the nineteenth century Batavia transformed into a 'centre of territorial administration' (Evers & Korff 2003, p. 32). Over time, Batavia did then develop into a regional economic, political and military hub for VOC activities in Asia. On the one hand, Batavia connected trading activities between the Indian Ocean and the Chinese Seas and thus became an important harbour in the inner-Asian trading web with the harbours of Canton in China and Nagasaki in Japan. On the other hand, the VOC trade between Asian and the Netherlands did almost completely go through Batavia. Moreover, the fort did not only give the city Batavia its name, it also became the starting point for the development of the new city (see Winet 2010, pp. 13-15; Blussé 2008, pp. 4-6; Somantri 2007, pp. 38-39; Brug 2000, p. 45; Grijns 2000, p. 212; Bowo 1999, p. 36; Abeyasekere 1989, pp. 7-12; Heniger 1986, p. 11).

Old Batavia

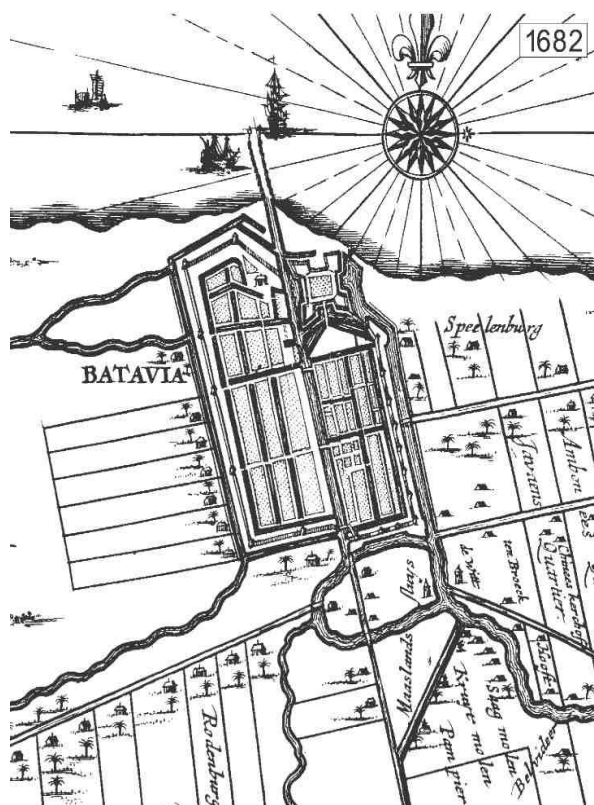
After razing the city, Batavia was developed following the Dutch (or European) model of a fortified city. The Dutch appearance of Batavia at that time is illustrated by Nas and Grijns (2000, p. 5) who state that:

The Dutch [...] made Batavia a carbon copy of their home towns in the Netherlands at that time, complete with canals, drawbridges, canal houses, stepped gables, a church, church bell-ringing, and streets paved with cobblestone. (Nas & Grijns 2000, p. 5)

Because of its European appearance, visitors experienced Batavia as a 'Holland in the tropics' (Blussé 2008, p. 39). However, the experience of Dutch visitors should not hide the fact that the social composition in early Batavia was complex. The Chinese community in Batavia had a strong position in commercial activities, particularly in trading activities with mainland China. This is one factor why the Dutch privileged the Chinese in trade and commerce over other groups. The Dutch also provided space for institutions of the Chinese community within and outside the city walls so that, according to Blussé (2008, p. 40), 'Batavia was as much a Chinese town as a Dutch colonial one' (Blussé 2008, pp. 38-40; Lohanda 1996, pp. 5-12).

19 Heniger's description about the activities of natural scientists in Batavia indicates that the Dutch did not explore more than three hours horse back riding from Batavia in the 17th century (Heniger 1986, p. 12).

Figure 4: Batavia in 1682



Source: Cribb 2010

Indeed, the complexity of ethnic groups and the different social statuses of city dwellers did not suggest an identical Dutch appearance. The city dwellers originated from different places, such as Eastern Indonesia, China, Europe, as well as other VOC bases, such as Malacca or India. It is important to note that Dutch men were allowed to marry local women. Accordingly, *mestizos* (Eurasians) did contribute to a significant part of the city population and were considered as Europeans. Besides ethnical affiliation, city dwellers were differentiated along the social status of freeman and non-freeman. While freeman followed occupations such as colonial officers, traders and soldiers, the majority of city dwellers were slaves. The heterogeneity of city dwellers was also reflected in the languages spoken in the city. Portuguese and Malay used to be the main languages but one did also find Dutch, Chinese and Javanese. Following the principle 'divide and rule', the VOC was aiming to maintain the plurality of ethnic and religious groups in Batavia. That way the Dutch were expecting to establish security and to prevent conspiracies (see Winet, 2010, pp. 41-42; Blussé 2008, p. 38; Nas & Grijns 2000; Lohanda 1996, pp. 1-5; Abeyasekere 1989, pp. 18-31 & 70).

In this context, it has to be mentioned that only Europeans, the Chinese community, *Mardijkers*²⁰ and domestic slaves were allowed to live within the walled part of the city. The

²⁰ *Mardijkers* were the second largest group after slaves in Batavia. *Mardijkers* were brought from formerly Portuguese locations in Asia. They were privileged by the Dutch since they spoke Portuguese and followed Christian belief (for more information see Abeyasekere 1989, pp. 28-29).

majority of the native population had to live in the environs of Batavia, the so-called *ommelanden* (Blussé 2008, p. 38; Grijns & Nas 2000, p. 7). *Ommelanden* was developed when Europeans and Chinese cleared the jungle in the environs and brought the land under cultivation. Because of the conflicts with the Sultanate of Banten and the Kingdom of Mataram, the Dutch did not tolerate Sundanese and Javanese to live within the city walls. As a consequence, Sundanese and Javanese were the first to settle in the *ommelanden*. In the second half of the 17th century, soldiers in the service of the VOC were granted land in the *ommelanden*. These soldiers mainly originated from other parts of the archipelago, such as Ambon or Bali. Over time freed slaves contributed to the majority of people residing in the *ommelanden*. The colonial administration was aiming to control these settlements in order to guarantee public safety on the one hand and to be able to recruit soldiers on the other. Accordingly, the colonial administration was planning to assign a specific location to each ethnic group. These settlements, called *kampung*, were placed under an officer who received the military rank of a captain. The social organisation in each *kampung* was based on self-organisation by each group. Since the headman was recruited from the ethnic group he represented, the VOC could establish indirect rule. *Kampungs* maintained this internal order until the end of the VOC (see Blussé 2008, p. 38; Nas & Grijns 2000; Niemeijer 2000, p. 77; Raben 2000; Abeyasekera 1989, p. 29; Milone 1966, p. 13-14).

Since the origins of Jakarta's *kampungs* go back to the 17th century, the *ommelanden* require some detailed description. Raben assumes that the general picture of the *ommelanden* provided by historical sources is biased since available information is scarce and one has to rely on the official VOC sources. Given the fact that *kampung* order was based on self-organisation and *kampungs* had been self-sufficient, he theorises that VOC control did not fully reach out to the settlements in the *ommelanden*. Accordingly, ethnic segregation could not be reinforced as stated in VOC policies. Raben further suggests that the social structure in the *ommelanden* was not based on ethnic classification but rather on personal relations and religious identities. Conflicts between Christian and Muslim Ambonese did, for example, indicate that *kampungs* based on ethnical identities could not always form. In addition to that, some *kampungs* showed a high rate of population turnover as soldiers did often not return and diseases minimised the *kampung* population. Thus newcomers were easily integrated into the *kampung* community. Consequently, he suggests that *kampungs* showed a very mixed ethnic composition (Raben 2000).

It can be assumed that although the colonial administration was aiming to establish ethnic segregation through the *kampung* system, the social reality was characterised by a multi ethnic composition within the different *kampungs*. Because of the discrepancy between official VOC policies and the social reality, Niemeijer states that more archival research has to be devoted to the social life in Batavia (Niemeijer 2000, pp. 77-78). As a consequence of the intermix of different ethnic groups in the *ommelanden*, *orang betawi* emerged as a new group representing the 'native' population of Batavia. Regardless whether ethnic segregation in the *ommelanden* could be implemented and enforced, or ethnic groups mingled from the beginning, it could be observed that in the beginning of the 19th century the different ethnic groups could be hardly distinguished. The descendants of the city dwellers who were born in

Batavia were now called *orang betawi*. The common characteristics of *Orang Betawi* were considered Islam as a common religion and an own form of the Malay language as a common language. However, ethnic plurality of *orang betawi*, Dutch (Europeans) and Chinese was still maintained (see Raben 2000, pp. 103-104; Lohanda 1996, pp. 26-27; Abeyasekere 1989, pp. 31 & 64-68).

In the second half of the 19th century, *orang betawi* contributed two-thirds of the city dwellers and inhabited *kampungs* all over the city area. These *kampungs* often emerged in locations that had been neglected by other city dwellers, such as swampy areas. Wood and bamboo were typically used as building material for dwellings. The quarters were often surrounded by gardens which provided food. The *kampungs* showed only rudimentary infrastructure, roads and paths had not been asphalted and the river system was used for sanitary purposes. At that time everyday life in the *kampung* resembled village life in rural areas. That way, the urban *kampung* still has a semi-rural connotation today (Abeyasekere 1989, pp. 66 & 70).

The city of Batavia had its golden age in the first half of the 18th century. In the second half, the East Indies in general and Batavia in particular faced an economic downturn that contributed to the bankruptcy of the VOC. The downturn was accompanied by extremely unhealthy living conditions in the city. John Joseph Stockdale experienced Batavia as a witness in the late 18th century and described the situation in the city. He notes that European settlers appeared pale and weak. He assumes that 50% of the newcomers from Europe would not survive their first year in Batavia. He argues that foul and pestilential vapour emitted by stagnant water in swamps as well as in the river and canal systems are the reason for disease and death in the city (Stockdale 2003). According to him, these living conditions made Batavia to 'one of the most unwholesome spots upon the face of the globe' (Stockdale 2003, p. 129). Another interesting account of the situation of Batavia in the 18th century is provided by Captain James Cook. The Endeavour was anchored in Batavia October through December 1770. When the Endeavour left Batavia he wrote in his journals²¹:

Batavia is certainly a place that Europeans need not covet to go to, but if necessity obliges them they will do well to make their stay as short a[s] possible otherwise they will soon feel the effects of the unwholesome air of Batavia which I firmly believe is the death of more Europeans than any other place upon the Globe of the same extent, such at least is my opinion of it which is founded on facts. We came in here with as healthy a ships company as need [go] to Sea and after a stay of not quite 3 Months left it in the condition of an Hospital Ship besides the loss of 7 Men and yet all the Dutch Captains I had an opportunity to convers with said that we had been very lucky and wondered that we had not lost half our people in that time. (quoted in Beaglehole 1968, pp. 443-444)

Stockdale related the unhealthy conditions in Batavia to the stagnant water in the river and canal system. His argument is comprehensible as excrements and household waste were dumped into the waterways. Even cadavers and human bodies could be found in the canal

21 The original journals could not be accessed. However, they have been published by Beaglehole (1968).

system. As the current in the canals and rivers was very slow, the water did hardly circulate. In addition to that, sedimentation led to congestion of the river mouth so that the water could not easily discharge into the sea (Nas & Grijns 2000, p. 9). Although the sewage system was a major challenge in colonial Batavia, current studies point out another reason for the high mortality rates among European newcomers. It is argued that Malaria might be the root cause of the unhealthy situation during that time. There is evidence that mortality rates increased sharply after the year 1733. It is argued that the introduction of salt water fish ponds in newly founded *kampungs* close to the sea had provided favourable breeding places for the 'anopheles sundaicus' mosquitoes. Since these species of mosquitoes can tolerate salt water, Malaria could have easily spread through the coastal fish ponds²² (Brug 2000; Nas & Grijns 2000, p. 7; Abeyasekere 1989, pp. 39-40). Brug assumes that the awful living conditions and the high mortality rates contributed to a certain degree to the downfall of the VOC in the late 18th century. Because of the high mortality rate the VOC had to allocate a higher budget for health care and it had to constantly replace personnel by recruiting sailors in Europe (Brug 2000, pp. 69-72).

The Expansion of the City in the 19th Century

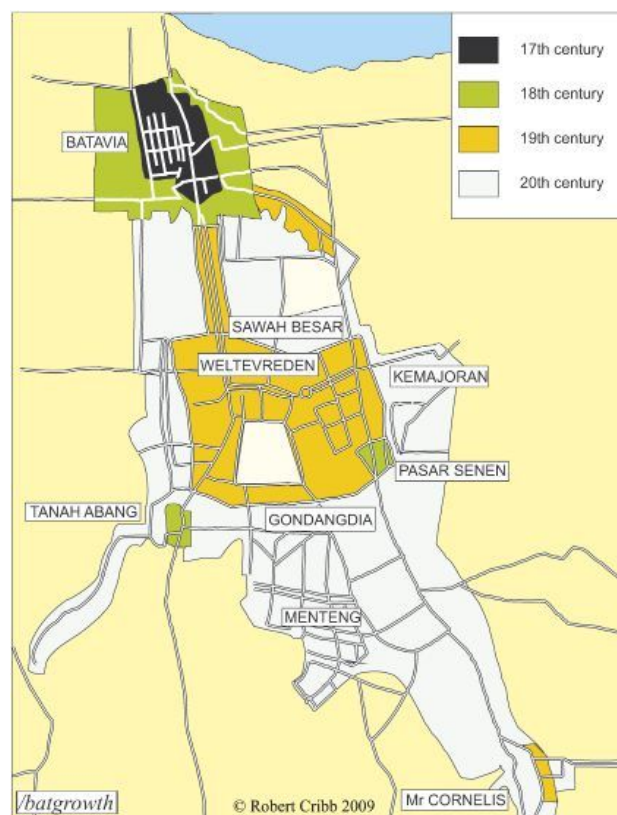
Because of the unhealthy living conditions in the 18th century, Batavia transformed from the 'Queen of the East', as it was often called by the Dutch, to the 'Cemetery of the East' (Blussé 2008, p. 43). Bad living conditions can also be seen as a dominant factor triggering transformation processes in Batavia in the 19th century. The health situation improved when Governor-General Daendels decided to demolish the fort in 1810 and to relocate the colonial administration further south to *Weltevreden* (see figure five) which is today the area around Gambir and Senen. Moreover, the opening of the Suez Canal and the replacement of sail boats by steam boats prompted the administration to establish a new deep port at Tanjung Priok. A tram system was then established to connect residential and commercial areas in different parts of the city. Thus people could move to the south and still work close to the harbour (Abeyasekere 1989, pp. 44, 48-58 & 71; Krausse 1975, p. 41). With the relocation of European residential areas away from the old city centre close to the sea, mortality rates dropped sharply and Batavia lost its image as 'graveyard for Europeans' (Abeyasekere 1989, p. 71). Finally the city transformed its appearance from a harbour town to the administrative centre of the Dutch colonies (Abeyasekere 1989, p. 44).

Milone claims that the Dutch concept of 'urban' did not include the *ommelanden* but mainly reflected European residential areas and commercial activities throughout the colonial period (Milone 1966, pp. 33-34). Because of discrimination and limited economic resources, the majority of the native population could hardly get access to colonial facilities and thus regarded the city only as an administrative unit but not as part of their everyday life. The living conditions in the *kampungs* almost remained unnoticed by the municipal administration until *kampung* areas had to be demolished for the relocation of the European residential areas and the development of the new city centre around *Weltevreden* (see figure five). One

²² Anopheles Sundaicus is one amongst few species of mosquitos that can tolerate higher concentration of salt water (see Curtis 2007, p. 76).

has to be aware that the description of the living condition in Batavia in the late 18th and early 19th century only illustrate the unfavourable living conditions of the European city dwellers. Most sources describing the living conditions in Batavia were European sources with a special interest in the situation of the European colonial society. Before the relocation, *kampungs* were not officially recognized as integral part of the city and were also neglected by the municipal administration. As I described before, *kampungs* were rather autonomous and self-governing *desas* (or villages) with their own government and traditional law (*adat*). Accordingly, there is little written information available on the everyday life situation in Batavia's *kampungs* before the 20th century (see Silver 2008, p. 61; Somantri 2007, pp. 45-46; Jellinek 1991, p. xxxiii & 105; Abeyasekere 1989, pp. 60, 90 & 158; Krause 1975, p. 35; Milone 1966, p. 30).

Figure 5: Urban Development in Batavia



Source: Cribb 2010

Everyday life in Batavia's *kampungs* only became of topical interest in the early 20th century when first *kampung* improvement plans had been developed. This was partly due to the fact that the colonial strategy introduced *Ethical Policy* with a focus on the living conditions of the native population. A more urgent reason to act resulted out of the relocation of European residential areas. With urban expansion, Europeans had to live close to *kampung* settlements and became consciously aware of the health and fire risks spreading from surrounding *kampungs*. As a result, *kampungs* lost their self-governing status and came under the authority of the municipal administration. Different activities had been planned to

improve living conditions in Batavia's *kampungs*, such as asphaltting roads, installing water pipes, providing sanitary facilities and carrying out immunization schedules. However, in contrast to other cities like Surabaya and Malang, *kampung* improvement in Batavia only started in 1938 and most of the planned programs were never implemented (see Silver 2008, pp. 56 & 61-62; Jellinek 1991, p. 106; Krause 1975, p. 35; Milone 1966, p. 30)

In the late Dutch colonial period from 1900 to 1942, a first wave of in-migration brought many people from rural areas in Java to Batavia. During that period, job opportunities attracted migrants and as a consequence Batavia's population tripled. Most of these migrants were absorbed by *kampung* settlements. Moreover, with the development of new residential areas *kampungs* were cleared and their dwellers had to relocate to remaining *kampungs*. Because of the population pressure, existing *kampungs* had to accommodate more people and started to lose their rural appearances (Silver 2008, pp. 60-61; Jellinek 1991, p. 4; Krause 1975, p. 90).

3.2.2 Japanese Occupation (1942-1945) and the Old Order (1949-1965)

Japanese Occupation and the Struggle for Independence

Although Japan occupied Indonesia for a short period from 1942 to 1945, they shaped the history of Indonesia. At their arrival, the Japanese were recognized as liberating the people from the colonial regime. However, the Japanese were at war and aimed at exploiting resources in order to support war efforts. Different to the Dutch, they tried to control the people by mobilising them. Accordingly, the Japanese supported nationalism by cooperating with the leaders of the nationalist movement in the late colonial period. Moreover, the Japanese were aiming to eliminate all Western influences. That is why writings in Dutch or English were banned, Dutch street names were renamed into Japanese and Batavia was renamed into Jakarta. In addition to that, administrative changes were implemented. The most significant change for the local level was the replication of the Japanese *tonarigumi* system in Indonesia. Several households were comprised into administrative units, the so called *Rukun Tetangga* (RT). Through these neighbourhood associations people on the local level could be controlled and mobilized. Particularly in rural villages, the Japanese used the system to recruit labor power and to collect rice below market prices. During the Japanese occupation rural-urban migration slowed down as travel was restricted. Jellinek (1991) claims that unlike in the villages, the situation in the urban *kampungs* of Jakarta remained relatively calm. Yet, *kampung* dwellers experienced a time of absolute poverty as basic goods including food were not available. Two days after the Japanese surrendered, Sukarno declared independence on 17. August 1945. Finally, the Japanese efforts to support nationalism, which included leading figures such as Sukarno and Hatta, had un-intendedly pushed the Indonesian revolution for independence. However, it took another four years until the Dutch officially transferred sovereignty in 1949 (see Somantri 2007, p. 47; Ricklefs 2001, pp. 255-260; Jellinek 1991, pp. 7-8, 106 & 176; Abeyasekere 1989, p. 133-142; Krause 1975, pp. 36-37, Milone 1966, p. 36).

Jakarta During Sukarno's Presidency (1949-1965): The Centre Stage of Nation Building

When the Dutch left, the political centre was relocated from Yogyakarta to Jakarta in 1949. Since the development of an administration in the new capital provided opportunities to civil servants, the city experienced massive in-migration. During the term of the first president Sukarno, Jakarta did not only become the political centre but also developed a strong national position in industry and trade. The new job opportunities, particularly the demand for civil servants as well as construction workers, attracted migrants. Consequently, a wave of in-migration was triggered so that the population of Jakarta increased by around 3 million people from 0.8 million in 1948 to 3.8 million inhabitants in 1965. Although the city boundaries had been redrawn to comprise a larger area, many people moved to the inner-city locations. The massive influx of people put the existing infrastructure and the housing situation under pressure. Although existing settlements absorbed a major part of the migrants, new illegal squatter settlements were founded in unused space (see Silver 2008, p. 61; Somantri 2007, pp. 48-49; Leisch 2000, p. 22; Abeyasekere 1989, pp. 5, 168-174; Krausse 1975, p. 89-92).

Jakarta became the centre stage of nation building in independent Indonesia. In the process of creating a national identity, Sukarno worked on the physical appearance of Jakarta so that it could serve as a national symbol for the new nation. Under the so-called 'lighthouse policy' different construction projects had been implemented, such as the first multi-story department store Sarinah or the up-scale Hotel Indonesia. However, the redevelopment of the city-centre became a sensitive topic since the transformation of urban space affected *kampung* dwellers living in the inner-city area. In the 1950s, the development of the arterial road Jalan Thamrin was one of the first large scale construction projects in independent Indonesia for which *kampung* settlements had to be cleared. Initially, compensation schemes for displaced *kampung* dwellers had been intensively discussed before large projects were implemented. For the realisation of following construction projects, such as the stadium for the Asian Games in 1962 or the opening up of space for the development of the local recreation site Ancol, the negotiation processes had to be shortened. Even martial law was declared in order to force squatters to relocate (see Silver 2008, pp. 94-102; Somantri 2007, pp. 50-51; Jellinek 1991, p. 107; Abeyasekere 1989, pp. 197-198; Krausse 1975, p. 49).

3.2.3 New Order and the Post-Suharto Era

Under the Suharto regime in the *New Order* (1965-1998), Jakarta transformed into a primate city. Although Sukarno developed Jakarta into the political centre, Surabaya was still the economic centre. This changed when Suharto introduced policies to integrate Indonesia into the global economy. Heintel and Spreitzhofer argue that during the period from 1967 to 1991 two thirds of foreign direct investment went to Jakarta (Heintel & Spreitzhofer 1998, p. 27). That way Jakarta increasingly gained in economic power and transformed into a primate city (Evers & Korff 2003, p. 37). As I mentioned before, globalisation dynamics and modernisation efforts could not only be observed in Indonesia. In several Southeast Asian cities modernisation processes resulted in the redevelopment of urban space and stipulated

the development of urban land markets. Particularly inner-city locations became attractive to investors. Hence, modernisation resulted in rising land prices. Because of the oftentimes unclear landownership situation, slums or squatter settlements came into the focus of land speculation. Since low-income households did often not hold a stake in the negotiation processes, they were in most cases forced to move to another place with or without compensation (Silver 2008, p. 33; Evers & Korff 2003, pp. 174, 181 & 228).

In Jakarta, these dynamics resulted in an ambivalent relationship between the municipal government and *kampung* dwellers. In order to attract foreign investors, the national and municipal government were aiming to modernise the city. Against this background, the relation of governor²³ Sadikin (1966-1977) with *kampung* dwellers can be described as Janus-faced. On the one hand, Jakarta's government realized that *kampung* dwellers constituted the major part of the urban population. For that reason, Sadikin introduced development programs to improve the situation in *kampungs* (Silver 2008, p. 128). On the other hand, the city government was aiming to prevent rural-urban migration by offering challenging living conditions. Sadikin's approach to in-migration is underlined by the following quote: 'I really want to show newcomers that life in Jakarta isn't pleasant, it's like hell' (Sadikin, quoted in Abeyasekere 1989, p. 230).

Under governor Sadikin, colonial *kampung* improvement plans had been revitalized with the vision of integrating *kampungs* into a modern city. In 1969, the first Kampung Improvement Program (KIP) was introduced in Jakarta. As I mentioned before, Sadikin realised that *kampung* dwellers comprised 70-80% of the total city population. Before the KIP was implemented, 90% of *kampung* dwellers in the city did not have access to tap water and 80% did neither have direct access to electricity nor toilet facilities. By developing *kampungs* he assumed that the settlements could be visually integrated into the concept of a modern city (see Silver 2008, p. 128; Spreitzhofer 2007, p. 279; Abeyasekere 1989, p. 223-225).

However, the KIP faced several challenges and finally failed to protect *kampungs* from demolition. It is argued that KIP funds were primarily allocated for lighthouse projects which had been visible to all. Accordingly, *kampungs* that were easily accessible for external visitors to Jakarta were targeted with priority. Moreover, the KIP was criticised for not responding to the demand of *kampung* dwellers. For instance, instead of providing access to water, the KIP improved roads in order to facilitate cars (Spreitzhofer 2007, p. 283; Abeyasekere 1989; p. 223-224). It has to be kept in mind that illegal settlements and squatter areas appeared to be a thorn in the flesh of the city government. Accordingly, squatter settlements, such as those along the rivers, had been ignored. Furthermore, the KIP did not prevent the city government to explicitly mention *kampung* clearance and demolition in the master plan (see Silver 2008, p. 128; Spreitzhofer 2007, p. 283; Abeyasekere 1989, p. 225). In the early 1980s the KIP was still continued; but with Sadikin going out of office it lost its most important advocate (Silver 2008, p. 137). In addition to that, the KIP did not solve the problem of insecure tenure. Therefore, land speculation and the following redevelopment of

23 Since 1959, Jakarta has the status of a special province (DKI, *Daerah Khusus Ibu Kota*, or special capital city district) so that the municipal government is headed by a governor (Silver 2008, p. 102).

inner-city locations claimed most of the *kampung* settlements in the city centre. The KIP was finally winding down in the 1990s since the disappearance of the *kampung*s disposed the KIP (Silver 2008, pp. 150 & 201).

Despite the efforts to up-grade *kampung* areas, traditional *kampung*s and the informal sector did not seem to fit in the picture of a modern city and thus had been targeted by the municipal government. One could state with Jellinek that *kampung*s, *kampung* dwellers and their occupations were perceived as 'eyesores' by city planners (Jellinek 1991, pp. 110 & 127-128). That way, modernisation and urban redevelopment did not only result in *kampung* demolition²⁴ but also in activities that were targeting the informal sector. Bicycle rickshaws (*becak*) were, for example, banned in the inner-city area and Jakarta was declared a 'closed city' for migrants (see Silver 2008, p. 198; Somantri 2007, pp. 96-97; Jellinek 1991, pp. 74-77, 109 & 127-128; Abeyasekere 1989, pp. 229-230). *Kampung* demolition took its peak in the 1980s and 1990s. Particularly in the inner-city area land transformation changed the face of the city. The city centre was now dominated by high rise buildings, such as multi-storey apartment and office buildings, shopping complexes as well as a web of arterial and toll roads. *Kampung* settlements had to give way to modernisation processes and particularly to the development of the 'Golden Triangle' (Silver 2008, p. 6; Somantri 2007, p. 57). In order to support modernization processes, several projects had been realized with the support of International Organisations. As part of an urban development project, the World Bank financed the construction of the relief road Jalan Casablanca. The road was planned through the middle of a *kampung*. Consequently, *kampung* dwellers in this areas had been forced to relocate (Somantri 2007, p. 168).

One also has to keep in mind that *kampung* demolition, whether with or without compensation schemes, did not go without resistance. In several cases, *kampung* dwellers succeeded in organising themselves and articulating their interests. This way, they could offer stiff resistance against *kampung* demolition. However, in most cases *kampung* dwellers were not aware of their civil rights and serious movements did not form. In many cases collective resistance that was organized within a neighbourhood already fell apart in the run-up to *kampung* demolition. While the neighbourhood as a whole rejected compensation schemes, some members of the community accepted payments and thus undermined collective strategies. Finally, *kampung* demolition dissolved collective structures of neighbourhood communities (Somantri 2007, pp. 28-30; Evers & Korff 2003, pp. 235-237; Jellinek 1991). Today, the redevelopment of the city centre has reached its limits and *kampung*s virtually disappeared from the inner-city areas (see Dorléans 2000, p. 257).

With the fall of Suharto in 1998, Indonesia entered an era of democratisation. The new political system triggered reforms that are still ongoing and result in far reaching changes on the local level in the *kampung*s. Spreitzhofer argues that in the democratic system of today marginalised groups do have more possibilities to articulate their interests (Spreitzhofer

24 For further reading on *kampung* demolition see Jellinek (1991). Her study on the inner-city *kampung* Kebun Kacang perfectly illustrates the full complexity and processes in the context of *kampung* demolition.

2007, p. 255). However, in the last decade not much has been written on how the democratic system is translated into local forms, such as the changes in urban *kampungs* in Jakarta. Accordingly, the empirical research I will present in chapter five and six will provide some starting points to understand the current developments on the local level.

3.3 Focus I: The Transformation Of *Kampungs* From Rural Villages To Urban Slums

Following the historical development of the city, it becomes evident that the physical appearance of *kampungs*, their role in the urban system and the meaning attached to them transformed from a rural type of settlement to illegal squatters or slums embedded in a megaurban region. In old Batavia the majority of people lived beyond the walled part of the city in the *ommelanden*. Although *kampungs* contributed to the majority of labor force, they had never been fully recognized as integral part of the city by the colonial administration. They were only loosely connected with the colonial administration and *kampung* order was based on self-organisation and traditional law. Moreover, *kampungs* had to be self-sufficient. The situation changed when the colonial centre was relocated from *Kota* to the area around *Weltevreden* in the late 19th century. The relocation not only came along with eviction, *kampung* dwellers found themselves in the centre of a growing city. Since that time, *kampungs* are directly exposed to urbanisation dynamics.

The urban transformation processes in the 20th century left their marks in the *kampungs*. On the one hand, *kampungs* became the gate to the city for rural-urban migrants. On the other hand, urban redevelopment resulted in large scale *kampung* clearance and eviction. Throughout the 20th century, a constant stream of rural-urban migrants came to the city. In-migration can be distinguished into three phases. The first wave of migrants came to Batavia when the city expanded in the late colonial period and provided new economic opportunities. After independence, a second stream of migrants came to Jakarta when the capital was relocated from Yogyakarta so that Jakarta became the political centre of independent Indonesia. The third wave of migration was attracted by opportunities provided by the integration of the urban economy into the world economy. International integration was initiated during the New Order and is still ongoing so that the city is expected to grow further. Since all waves of rural-urban migrants were primarily absorbed by *kampungs* settlements, the existing *kampungs* in Jakarta show relatively high population densities. Another factor contributing to the high population densities is the transformation of urban space. Urban development and modernisation always came along with *kampung* clearance and eviction. The first *kampung* eviction already took place in the late colonial period when the Dutch relocated the city centre further south. Although *kampung* demolition reached its peak in the late Suharto era, it is still of topical interest. For instance, the implementation of flood control plans often targets *kampungs* which are located along major waterways. The construction of the East Canal as well as the dredging project supported by the World Bank are recent examples which will result in *kampung* clearance (Kurniawati 2009, p. 8). The dimension of *kampung* clearance is illustrated by Bronger who claims that if all planned private and public construction projects are going to be realized, 1.6 Million people will have to be relocated (Bronger 2007a, p. 16).

But not only the visual appearance of *kampung*s changed with urban development. In the introduction to the city history, I presented that *kampung* dwellers constantly adjust their income generating activities to the changing urban environment. Jellinek describes the shifting economic activities of *kampung* dwellers. In Batavia's *ommelanden*, agricultural production contributed to a significant part to the income of *kampung* dwellers. During the Japanese occupation, the supply of goods and services was reduced. Accordingly, *kampung* dwellers started to engage in petty trade and in informal services, such as *becak* driving. They continued to do so during the Sukarno era. With the integration of the national economy into the global economy, the middle-class slowly changed consumption patterns. As a consequence, the demand for goods and services provided by the informal sector declined. Moreover, repressive actions against informal sector activities, such as petty trade and informal transportation services, forced *kampung* dwellers to find new ways of generating income. Thus, *kampung* dwellers did again shift their economic activities and increasingly find wage employment in the formal sector, such as security guards or office boys. Because of the numerous construction sites in the city, migrants also found jobs as day labourers in the construction sector (Jellinek 1991, pp. 58, 72 & 88-94).

The above indicates that modernisation and urban transformation resulted in constantly changing social, spatial and economic aspects of the urban *kampung*. Accordingly, it is not surprising that, as Silver remarks, different definitions and different connotations of the urban *kampung* do exist (Silver 2008, pp. 130-134). In old Batavia, a *kampung* was characterised by a rural appearance. At least in the concepts of the VOC, *kampung*s differed mainly along ethnic or racial lines (Krausse 1975, p. 33). Today, some names of city districts, such as Kampung Bali or Kampung Bandan, are still remnants of the planned segregation (Abeyasekere 1989, p. 31). Yet, *kampung*s are not characterized by a specific ethnicity or race anymore. They can be rather differentiated by their physical appearance, socio-economic factors or the legal status of land ownership (Somantri 2007, pp. 72-77). These factors imply a heterogeneity or hierarchy of *kampung*s.

Some scholars were aiming to classify different *kampung*s in the city. In his popular, yet unpublished, study Krausse classified *kampung*s according to categories of place based poverty into 'slum kampung', 'squatter kampung' and 'woodland kampung' (Krausse 1975). However, a classification of *kampung*s is challenging as it might provide a misleading differentiation. Different *kampung*s do not only show their own particularities, also within a *kampung* it becomes evident that the social composition is commonly heterogeneous²⁵ (Heintel & Spreitzhofer 1999, pp. 241-242; Krausse 1975, p. 1). While the vast majority of *kampung* dwellers belongs to the low-income group, it can be observed that income levels vary significantly. Moreover, informal sector employment can not be seen as an exclusive characteristic of *kampung* dwellers. As was already mentioned before, many *kampung* dwellers do today hold a job in the low-income segment of the formal sector (Somantri 2007, pp. 136-138).

25 Jellinek's in-depth analysis of *kampung* Kebun Kacang is one of the most comprehensive studies showing the heterogeneity in one *kampung* (Jellinek 1991, p. 176)

Wibawa criticizes typologies, such as the one introduced by Krausse, as *kampung*s are heterogenous and exposed to continuous change. He concludes that terms like slum or squatter settlement do not adequately describe what a *kampung* is. Rather, he identifies general characteristics of a *kampung*, such as dense settlement structures and unorganised settlement patterns. He also points out sub-standard housing and the absence of legal land ownership. In the context of social and cultural aspects, he remarks that high population densities contribute to strong social ties amongst the community members. These social ties stipulate, again, social organisation, such as self-organisation and collective action (Wibawa 1997, p. 48 & 61-69). Spreitzhofer affirms that the term 'slum' cannot be synonymously used to describe a *kampung*. Although *kampung*s and slums share similar characteristics, such as a sub-standard physical infrastructure, he suggests that a *kampung* is a 'cooperative unit' which shows a certain degree of solidarity. Consequently, the *kampung* is referring to diverse spatial as well as social aspects (Spreitzhofer 2007, pp. 276-278).

3.4 Focus II: Some Reflections On The Flood Situation

The history of the city provides the necessary background to understand the current flood situation in Jakarta. As I showed before, the risk of flooding has to be seen in the context of urban development. Since the founding of Batavia and the following urban transformation from a colonial city to a metropolis, flood management has always been part of urban planning. While it is well described how the municipal government developed and implemented flood control measures, information on Batavia's *kampung*s is rare. Therefore, we know little about how *kampung* dwellers adapted to and coped with flooding. I discussed before that over the last decades modernisation and in-migration increased the pressure on existing *kampung* settlement. In the inner-city area *kampung*s largely disappeared so that *kampung* dwellers had to relocate to alternative locations. That way, densely populated *kampung* settlements developed into hazardous locations, such as on river banks or along major canals. While the vulnerability of *kampung* dwellers will be discussed in chapter five and six, I will describe the flood situation in Jakarta in a more general historical perspective in the following.

Batavia was founded on a low-lying flood plain where several rivers carry massive amounts of water from the mountainous area to the sea. Because of the location it is not surprising that flooding in colonial Batavia had been a continuous challenge since the VOC established the city in 1619. Risk of flooding required the colonial government to continuously develop and improve flood control strategies. Based on the experience in Dutch cities, a system of canals was already established when Batavia was planned. The canal system was initially introduced to serve three major purposes: First, the canal system was used as a transport network. On the one hand, the canals connected the hinterland with the city so that goods could be transported downstream. On the other hand, the canal system connected the city with the sea. Big ships were unloaded in the harbour and smaller boats distributed the goods through the canal system to their destination in the city. Second, the canal system was established to function as a drainage system so that swampy area could be drained. The soil excavated was again used for land fills in order to level out the height difference to the sea.

Third, the canal system became an important flood control measure since the rivers could be diverted and the risk of flooding could be reduced (Grijns & Nas 2000, pp. 9 & 18; Abeyasekere 1989, pp. 15-17).

Although the canal system was well established, flooding remained a major challenge in Batavia. Because of the location on low-lying land, the city was regularly flooded either by spring tides from the sea or by monsoon rains. Extensive monsoon rain resulted in increasing water levels of rivers and canals. Because of the location below sea level the stream velocity of major waterways was so low that they could not easily discharge into the Java sea and instead overflowed. But also other factors contributed to flooding. For instance, cutting of trees in the up-stream areas as well as waste disposal by sugar mills through the river system contributed to flood risk. As a consequence, the municipal administration was continuously challenged to develop and improve adequate flood control measures. Water works, such as sluices and dams, had been installed to divert the rivers into a system of canals. Moreover, silting-up of the waterways was prevented by different forms of dredging. Dredging mills, dredging nets or manual labor had been used to increase the stream velocity (Caljouw, Nas & Pratiwo n.d.; Abeyasekere 1989, pp. 39 & 74).

However, the colonial administration was reluctant to invest in large scale flood control projects. It is reported that major works on the flood control system were only conducted when severe floods happened. For instance, after a serious flood in 1870 an additional canal was constructed. In 1918, the colonial government initiated a large scale project with the construction of the West Flood Canal (*Banjir Kanal Barat*). In the city district of Manggarai, two flood gates were installed which divert the Ciliwung river into its original river bed to the North and into the West Flood Canal to the West (WHO 2007, p. 1; Caljouw, Nas & Pratiwo n.d.; Abeyasekere 1989, pp. 70-71 & 90).

After Indonesia's independence, Jakarta's urban planners presented the first master plan for the period of 1965-1985. In this master plan, flood management became an integral part of urban planning. Various technical solutions aiming to reduce flood risk were discussed, such as the construction of additional canals, dredging out sedimentation, installation of water pumps and even the resettlement of people (Silver 2008, pp. 111-112; Spreitzhofer 2007, p. 258; Caljouw, Nas & Pratiwo n.d.). Moreover, urban planners realised that planning has to be seen in a wider spatial context. As a consequence, urban planners began to focus their strategies on the Jakarta Metropolitan Area which initially included the cities of Jakarta, Bogor, Tangerang and Bekasi. With the focus on the Jakarta Metropolitan Area it was acknowledged that flood management cannot be limited to the city of Jakarta but has to be seen in a wider context (Caljouw, Nas & Pratiwo n.d.). I described before that Depok was recently added to the acronym Jabodetabek which refers to the metropolitan region. For 2010 it is expected that Jabodetabek comprises 25 million people. Accordingly, it is the largest urban agglomeration in Southeast Asia (Kurniawati 2009, p. 8; Spreitzhofer 2007, p. 253). Yet, spatial planning and the implementation of master plans could not keep up with the dynamic processes of modernisation and urban transformation in the 20th century. Caljouw, Nas and Pratiwo argue that in 2002 the existing system to control flood was still in line with the colonial flood control plans from 1920 (Caljouw, Nas & Pratiwo n.d.).

In the introduction I pointed out that urban planners realised that the implementation of large scale projects faces several challenges. That is why experts come to the conclusion that technical solution will never succeed in making Jakarta flood free. Accordingly the focus in flood management is now shifting from technical engineering to the so-called 'social engineering'. Following Pichel, social engineering is referring to non-technical solutions that require the involvement of civil society (Pichel 2004, p. 4-5). Instead of aiming to prevent flood, social engineering lays emphasis on coping strategies that enable people to live with flood. It is, for instance, suggested that people at risk participate in the development and implementation of early warning systems. Moreover, responsibility and funds for flood management should shift to the lowest hierarchy level of the city administration (Caljouw, Nas & Pratiwo n.d.; Pichel 2004).

Recently, the UNISDR (United Nations Secretariat of the International Strategy for Disaster Reduction) introduced a project to improve the early warning system for flooding in Jakarta. The core of the project is a 'true multi-stakeholder process' that involves national, provincial and local government agencies, affected people and NGOs alike (UNISDR 2010, pp. 21-26). However, the outline of the project indicates that technical aspects are still dominant. The early warning system is primarily based on a technical system. The social engineering aspect of the system is represented in the fact that standard operating procedures (SOP) of the system are socialised top-down. The discussion on social engineering thus reflects the domination of natural and engineering science in the disaster discourse I outlined in chapter two. Loster puts the prevailing top-down approaches in question and asks whether the different needs on the local level should serve as a starting point to develop an appropriate early warning system. He finally concludes that '[i]f we consider the people at risk to be in the "last mile", we will continue to be confronted with devastating images and tragedies in the very first mile' (Loster 2006, p. 45).

Loster's general conclusion on early warning systems can be transferred to flood management in Jakarta. The attitude towards the 'first mile' is often a hostile one. For instance, the recent World Bank project aiming to dredge major rivers will come along with *kampung* clearance. Ida Ayu Dharmapatni, a senior World Bank officer responsible for assisting the city in relocation, is quoted the following: 'The problem is, these people are not scared of floods. They see flooding as part of their lives' (quoted in Kurniawati 2009, p. 8). This quote obviously indicates that people exposed to flooding succeed to live with floods. One could now ask, how people succeed in adapting to flood risk and how people succeed in coping with flooding. Instead, these strategies are seen as a problem. Apparently, the first mile in Jakarta is generally not a point of departure for flood control projects. Yet, the previous statements suggest that *kampung* dwellers developed certain forms of resilience. Finally, it has to be added that flood is only one amongst many hazards *kampung* dwellers face. High population densities and the use of flammable building material do, for instance, contribute to a high exposure to fire in the *kampungs*. Previous experience with *kampung* fires showed that once a fire spreads it can hardly be stopped (Abeyasekere 1989, pp. 71 & 175).

3.5 Interim Conclusion: The Temporal Dimension Of Vulnerability In The *Kampung*

With the above I showed that the everyday life situation of *kampung* dwellers is closely connected to spatio-temporal dimensions. Over time, the dynamic spatial transformation processes had a constant impact on the urban *kampungs* as well as on the everyday life situation of its dwellers. When Batavia was founded in the early 17th century, *kampungs* emerged outside the city walls in the *ommelanden*. Although they were located outside the city walls, *kampungs* were home to the major part of Batavia's population. That way, they can be perceived as an integral part of the colonial city. However, *kampung* dwellers in the *ommelanden* had been only recognized by the colonial government as being part of the city when *kampungs* had to be demolished for the relocation of the European residential settlements. At the time the Dutch decided to give up the old colonial centre in *Kota* and move further South, the *kampungs* in the *ommelanden* found themselves located in the core of the growing city. From now on, *kampungs* became directly exposed to urbanisation dynamics and the related transformation of urban space. With the beginning of the Japanese occupation during World War II, the Dutch had to give up the colonial city Batavia and the city was renamed into Jakarta. After the official recognition of independence in 1949, Jakarta became the capital city of the newly formed nation state. The capital city also became a primate city, as Jakarta was – and still is – the economic and political centre of Indonesia. Starting in the 1970s, the urban economy of Jakarta was integrated into the global economy. Because of that, Jakarta saw dynamic urbanisation processes and finally the urban sprawl incorporated surrounding cities. Metropolitan Jakarta area, or Jabodetabek, is today the largest metropolitan region in Southeast Asia.

The situation of Jakarta's *kampungs* is directly linked to urban development. Over the last hundred years, *kampungs* gradually transformed from village like settlements of the native population into informal squatter settlements in a megaurban setting. These dynamics were connected to transformation of urban space and also left their marks in the *kampungs*. *Kampung* dwellers started to face serious challenges related to tenure and their income earning strategies. Because of urbanisation processes, space became a scarce resource in the city. Since *kampung* dwellers did not possess legal land titles and did not achieve significant political bargaining power, the perceived status and role of *kampungs* shifted from neighbourhoods of the native population to illegal squatter settlements. Accordingly, *kampung* demolition became a serious threat to a major part of Jakarta's population. Moreover, urban development came along with a massive influx of migrants. While the number of *kampungs* had been decimated, *kampungs* still absorbed the major part of immigration. As a consequence, the population density increased significantly and the physical appearance of *kampungs* changed.

Throughout the city history it can be observed that informal settlements and an informal economy did and still do not fit into the vision of a modern city. As part of modernisation efforts the city administration does therefore not only target squatter settlements, but also the informal economy. Although the city government recognizes that the majority of Jakarta's citizens and labor force live in *kampungs*, they had to face repressive action. Spreitzhofer states that the city government seems to be caught in between urban planning models that

outline a vision of a modern city, on the one hand. On the other hand, it realizes that the urban sprawl cannot be controlled or organised (Spreitzhofer 2007, p. 255). This discrepancy between urban planning models and the urban reality has also significantly contributed to the flood risk in the city. The development and implementation of master plans could not keep pace with uncontrolled urbanisation. Accordingly, the flood control system implemented today is based on flood plans written in colonial times. Although large engineering projects are planned, it has to be doubted whether they will be successfully implemented. The city government and urban planners realised that Jakarta will never be flood free and Jakartans have to live with floods. Thus, recent projects aim to participate citizens in the flood control projects.

I argued before that *kampung* dwellers might have already arranged to live with floods. However, little is known about how *kampung* dwellers adapt to and cope with floods in the 'first mile'. The fact that *kampung* dwellers are constantly exposed to urban development and modernisation indicates a high degree of social organisation in the *kampungs*. That way I would like to argue that resilience is manifested in the capacity of social agency. In the context of *kampung* clearance it became obvious that *kampung* dwellers did commonly not succeed in articulating their interests. Apparently, *kampung* dwellers failed to organise and to develop collective strategies. Given the fact that *kampung* demolition dissolved social ties, *kampung* clearance and eviction can be regarded as a hazard that led to a disaster for many city dwellers.

In the previous chapters I stated that the current discourse on global trends links disaster vulnerability with urban poverty in megacities. In general discussions the slum is thus seen as a spatial representative where global dynamics, such as urbanisation, population growth and disaster vulnerability, concentrate. In the historical perspective on Jakarta, I showed that the transformation of urban *kampungs* is directly connected to urban development and modernisation. Since the *kampung* can be regarded as a local manifestation of global trends, the concept of slum appears to sufficiently describe what a *kampung* is. However, in the discussion on vulnerability it is often forgotten that hazard exposure or limited access to financial resources are only two amongst many aspects giving rise to disasters. The capacity to adapt to and cope with stressors was generally subsumed under the concept of resilience. In the context of *kampung* clearance and eviction it became apparent that resilience of *kampung* dwellers is closely connected to forms of self-organisation and collective action. In the following, I will point out that these aspects of resilience also constitute a capacity for *kampung* dwellers to cope with other stressors, such as flood risk. Accordingly, we have to reconsider the application of the concept of slum for the urban *kampung*. In the following chapter I will thus introduce the general discussion on slums and show how global dynamics are translated into the local context. Having analysed the temporal dimension of vulnerability in this chapter, the following chapter will provide some aspects on the spatial dimension of vulnerability. Furthermore, I will present a methodological approach that will allow to connect space with the aspects of local organisation and collective action.

4 APPROACHING THE *KAMPUNG* AS SOCIAL SPACE

4.1 The Urban Future Was Always Informal

4.1.1 Informality: A Misleading Discourse

With McGee (1991, p. 341), I argue that urbanisation is not a process that follows a given path. The case of Jakarta indicates the importance of analysing urban development against the background of the historical context of the individual city. This is also true for other Southeast Asian cities, such as Manila or Bangkok. Although major cities are affected by globalisation in a similar way, historical aspects are crucial to understand a specific city. Evers and Korff argue that globalisation and modernisation should not be confused with homogenisation, such as the general discussions on 'Westernization' sometimes suggest. Rather, these similarities are 'similarities of diversity' (Evers & Korff 2003, p. 2) since the metropolis attracts people with different social and ethnic backgrounds. Moreover, in each city there are social groups which are not directly involved in the global economy. It can be observed that globalisation dynamics are rather translated into specific local forms. That way globalisation is always connected to localisation of the global (Evers & Korff 2003, pp. 1-5).

In the following I will show that the discourse on megacities generally applies dualistic concepts to explain the impact of global dynamics. In the current debate it is commonly assumed that some urban dwellers benefit from globalisation while the vast majority is excluded from modernisation and falls into poverty. The dialectic formal-informal is applied to explain the growth of informality in the form of, for instance, illegal squatter settlements or economic activities that are beyond the control of formal institutions. The slum thus became the spatial manifestation of urban poverty. However, the historic perspective on the urban *kampungs* in Jakarta indicates the problems of equating *kampungs* with slums. On the one hand, the *kampung* can be classified as illegal squatter settlement, on the other hand it is not only home to the 'native' Jakarta population, it is also home to a major share of Jakarta's population and labor power. This leads to the question of how the *kampung* can be conceptualised.

I will retrace the discourse on slums and informality in order to make both concepts accessible for the analysis of the empirical data on the two *kampungs* that is presented in the next chapter. I will show that over time the discourse assigned a rather negative connotation to informality in general and slums in particular. Therefore, the urban poor are stigmatised as passive victims of modernisation and globalisation. This view does, however, not reflect the role of low-income communities in megacities. I will argue that urban development is a result of everyday life practices of all city dwellers. In this perspective, low-income communities are as much part of the urban economy as multinational companies. Moreover, low-income communities developed institutions that can be translated into forms of social agency. In this respect, the discourse on institutions shows similarities with the concept of social capital. I will present and combine both as they form the basis of my argument why communities succeed - or fail - to develop the capacity to adapt to and cope

with hazards in particular as well as with everyday life challenges in general. Finally, I will introduce the discourse on social space as it provides alternative methodological concepts to approach space. In this context I will put a focus on the concept of locality as it will serve as the basis in analysing the field data and approaching the *kampung*.

I mentioned before that modernisation in Jakarta came along with the emergence of what is often called squatter settlements or slums. It is thus common practice to use the terms *kampung*, squatter or marginalised settlement and slum synonymously. Taking into account the specific history of Jakarta's *kampungs*, I conclude with Spreitzhofer that the terms slum or squatter settlement do not exactly describe what a *kampung* is (Spreitzhofer 2007, p. 276). Accordingly, it will be crucial to compare the different meanings of *kampung* with the general discussion on slums.

Initially, the term slum emerged in London in the 1820s. A slum was considered home to the poor or lower class engaged in 'marginal' activities, such as crime. Furthermore, it referred to a settlement with a poor infrastructure and low standard of housing. According to UN-Habitat, during that time a slum was generally considered 'a place apart from all that was decent and wholesome' (UN 2003, p. 9). In the 20th century, the slum became the visible manifestation of urban poverty in developing countries. Similar to its initial meaning in London, the term became connoted with rather negative attributes, such as informal housing or informal economic activities (UN 2003, p. 9). The term slum is generally referring to two aspects. On the one hand, it is linked to a settlement pattern characterised by sub-standard housing and lack of infrastructure. On the other hand, the slum is commonly perceived as the living place of people engaged in alternative economic activities. Stokes, for instance, argues that:

[t]he function of the slum at any moment in city development is to house those classes which do not participate directly in the economic and social life of the city in a similar direction. (Stokes 1962, p. 188)

Stokes points out that slums have the function of hosting those social classes that are not an integral part of the economic and social life in the city. Yet, the 'psychological attitude' and 'socio-economic handicaps' determine whether slum dwellers will show a certain kind of upward mobility. Accordingly, he differentiates between 'slums of hope' which are home to people who show an upward mobility, and 'slums of despair' which are home to the people who do not have the ability to climb-up the social ladder (Stokes 1962, pp. 188-190).

Todaro points in a similar direction. In his perspective, migrants move to the city because they are attracted by the rural-urban income differential. Slums develop because migrants initially gain a foothold in the 'urban traditional sector' before they are able to move on to the 'modern sector'. He describes migration as a 'two-stage phenomenon' with two complementary economic sectors (Todaro 1969, pp. 139 & 147). In this view, slums might only be considered a temporary phenomena since the urban traditional sector is preparing the urban poor for the advancement into the modern sector. The models of Stokes and Todaro have to be seen in the context of modernisation theories prominent in the 1960s. Its most famous representative, Walt Rostow, introduced a model of five linear stages of economic growth. With this model he suggests that every society will pass through five

stages of economic development and will finally reach the stage of Western societies. Although Rostow points at the limitations of his own model, particularly the sole focus on economic dimensions (Rostow 1971, pp. 1-3), his model had a major impact on the development discourse in the 1960s (Esteva 2005, p. 12).

However, Rostow's stage model was falsificated as poverty became a persistent challenge and poverty rates constantly increased (see Armstrong & McGee 1985, p. 19). Today slums are not discussed as temporary phenomenon but rather as a growing concern or challenge. UN Habitat claims that by 2020 around 889 million people will live in slums (UN 2003, p. VI). Mike Davis introduced the provocative title 'Planet of Slums' for his hypothesis that future population growth in megacities - which will transform into 'hypercities' of more than 20 million people (Davis 2007, p. 5) - will be largely absorbed by slums. He takes the discussion to extremes by criticising Stokes' assumption of an up-ward mobility of people engaged in the informal sector²⁶. He rather suggests a 'down staircase' which will lead into the black economy (Davis 2007, pp. 178-179). Finally, Davis formulates the question of whether the urban informal sector is a dead-end street resulting in revolt of the urban poor and whether the great slums are thus 'just a volcano waiting to erupt' (Davis 2007, p. 201). Davis' publication might be considered popular science. However, he is frequently quoted in scientific literature and discussions in some scientific disciplines are pointing in a similar direction. For instance, some urban geographers currently argue that the majority of people in the informal sector are excluded from the global economy. The rationale behind this argument is that slum dwellers are oftentimes unqualified workers who do not produce for the supra-local market. They are thus regarded as being neither relevant as producers nor as consumers in the urban economy (see Mertins & Kraas 2008, p. 7; Scholz 2003). This is why Scholz cynically refers to urban poor who are excluded from globalisation dynamics as 'redundant' population (Scholz 2003, p. 8)²⁷.

From these observations Mertins and Kraas conclude a spatial fragmentation of the city dwellers into the rich and the poor. This 'ghettoisation' is, again, seen as the reason for the growth of informality (Mertins & Kraas 2008, p. 7). By suggesting that the urban economy is divided or fragmented into the spheres of the rich and the sphere of the poor, Mertins and Kraas reject the idea of an up-ward mobility of the urban poor that was suggested by the modernisation theories in the 1960s. It can be furthermore observed that the dualism of a modern and a traditional economic sector is in the current debate replaced by the dualism of formal and informal. Yet, it has to be noted that the concept of informality was initially introduced as a direct response to the failure of modernisation theories. Instead of suggesting a vertical hierarchy between a traditional and a modern economic sector, the dichotomy informal-formal was aiming to point out the co-existence of two parallel sectors.

26 Mike Davis offers nine arguments to underline his critique on the view of the informal sector within modernisation theory (Davis 2007, pp. 178-185). Davis obviously does not differentiate between the terms 'traditional sector' and 'informal sector'. He rather uses both terms synonymously.

27 The expression 'redundant' is also used elsewhere. For instance, Stokes argues that the urban traditional sector is providing redundant jobs to migrants (Stokes 1962, p. 139).

The economy of 'developing countries' was already differentiated into two separate spheres before the modernisation theories introduced the dual concept of a modern and a traditional sector in the 1960s. In the context of Southeast Asia, two prominent concepts had been developed by Boeke and Geertz in order to describe two co-existing economic spheres. Based on his observation of dual colonial societies, Boeke introduced the concept of dual economies. He observed a co-existence of a centralised colonial economy on the one hand and a village economy of the native population on the other (Boeke 1980). Describing socio-economic change in two towns in Java and Bali in the 1960s, Clifford Geertz introduced two patterns of economic systems. While the 'bazaar-type' economy is based on 'person-to-person transactions', the 'firm-centred' economy is based on institutions that connect market actors in a more anonymous way so that personal relationships play a minor role (Geertz 1963, pp. 28-29). The dualistic concepts of Boeke and Geertz became the basis for concepts describing the urban economy. In response to modernisation theories, the development discourse picked up the dialectic in order to describe the co-existence of two economic spheres in fast growing cities in developing countries.

Keith Hart is regarded to be the founder of the discourse on the informal sector. In the early 1970s he observed a dualistic economic pattern in low-income neighbourhoods in Accra, Ghana. Hart realised that the poor, who were considered unemployed, did indeed work. They did not hold wage jobs but they were self-employed. He also found out that some families relied on multiple income sources, such as wage employment and different forms of self-employment. While he attributed wage employment to employment in the regulated economy, he subsumed the different legal and illegal forms of self-employment under the unregulated economic sphere. In order to respond to the dualistic economic pattern of regulated and unregulated economic activities, Hart thus introduced the dichotomy of formal and informal economy. In the following discourse the formal-informal dialectic received much attention and had a major impact on scientific research as well as on development policies targeting the urban poor²⁸ (Guha-Khasnobis, Kanbur & Ostrom 2006, p. 1; Hart 2006, p. 25).

Since earlier discussions on dualistic concepts of the economic sphere often had been attached with normative meanings, the International Labor Organisation (ILO) picked up the concept of the formal and informal sector as a neutral dichotomy. The formal and informal sector were treated equally as the informal sector was considered to have an important function in creating additional income sources, particularly for the urban poor. Furthermore, it was seen important in its role to absorb what was called the 'surplus population' (Sethuraman 1981a, p. 8). According to Sethuraman, the ILO saw the informal sector not as a manifestation of poverty but rather as a sphere contributing to poverty alleviation. The ILO was aware that the dichotomy formal-informal does not reflect the close interrelations between both sectors. But it decided to push the discussion in order to create awareness for the role of the informal sector in the urban economy. Moreover, the discussion was aiming to

28 Keith Hart claims that he presented the concept of 'informal sector' during a conference in Sussex in 1971. He published the paper in 1973. In the meantime the ILO picked up the idea and discussed the informal sector in a publication on Kenya in 1972 (Hart 2006, p. 25).

encourage policies positively affecting the informal sector and the interrelation with the formal sector (see Sethuraman 1981a; see also Guha-Khasnabis, Kanbur & Ostrom 2006, p. 1; Hart 2006, pp. 25-26; Evers 1997, pp. 1-3).

In the case of Indonesia, Evers shows that with high economic growth rates in the 1970s and early 1980s informal sector activities increased. This way, he claims that the growth of the informal sector is not an indicator of poverty or marginality (Evers 1993, p. 6), or in the words of Davis (2003) a 'dead-end street'. Rather he views the dynamics as an indicator for the income opportunities provided by the informal sector and the creativity of the people engaged in this sector (Evers 1997, p. 2). Sethuraman argues in a similar direction. He points out that informal sector employment does not necessarily imply poverty. Some people active in the informal sector earn more than in the low-income segment of the formal economic sphere. That way, he argues that it is not surprising that formal sector employment, or up-ward mobility, is not always aimed for. Rather, people show an up-ward mobility within the informal sector (Sethuraman 1981b, pp. 198-200).

Hart (2006) came to a similar conclusion. Because of high population growth rates in the 1970s economists modelled unemployment rates of up to 50% in developing countries. In contrast to these economic models, he points out that the social reality in the cities often provides a rather ambivalent impression:

[a]nyone who visited, not to mention lived, in these sprawling cities would get a rather different picture. Their streets were teeming with life, a constantly shifting crowd of hawkers, porters, taxi-drivers, beggars, pimps, pickpockets, hustlers—all of them getting by without the benefit of a real job. (Hart 2006, p. 24)

The informal sector discussion in the 1970s and 1980s indicates that the dialectic formal-informal was introduced in order to raise awareness of the role of the informal sector in the urban economy. Before the discussion was initiated by Keith Hart and the ILO, the unregulated sphere of the urban economy was often targeted by a 'hostile policy environment' (Sethuraman 1981a, p. 33). However, not all scientists and development organisations shared this view. Already in the 1970s, Lloyd remarked that the dichotomy formal-informal divides scholars into two attitudes towards the informal sector. On the one hand, the potential of the informal sector was recognized as an ever increasing wave of migrants was not able to access the formal economic sphere. On the other hand, the informal sector was seen as something 'parasitic' that is opposed to modernization. In the second perspective, policies were introduced with the aim to eliminate the informal sphere (see Lloyd 1979, pp. 29-30). Evers also states that while the ILO recognized the role of the informal sector, the World Bank and government planners disapproved the concept (Evers 1997, p. 1).

Consequently, the mainstream discourse did lose track of a balanced or ambivalent view on the informal sector. Over time the 'informal sector' became a reservoir of concepts which are in contrast to the regulated 'formal' part of the economy. Today, informal is thus synonymously used to describe aspects, such as unorganised, underdeveloped, irregular, unofficial or unrecorded (see Guha-Khasnabis, Kanbur & Ostrom 2006; Sindzingre 2006).

While positive aspects of the informal sector and its role in urban economies are widely ignored, informality is rather treated as a negative form of formal (Sindzingre 2006, p. 61). Hart disputes the current debate since the aspects attributed to the informal sphere can also be found in modern economic sectors. Practices, such as offshore banking (which is done to avoid paying taxes), political corruption and drug trafficking take place beyond state control in developed and less developed countries alike. Illegal, irregular, unregulated and unrecorded activities are consequently not a necessary condition for the informal sector, they also happen in the formal economic sphere (Hart 2006, pp. 23 & 30).

4.1.2 Informality as a Solution to Megaurban Challenges

Korff makes a point by stating that the concept of informality was broadened over time. It is currently not only referring to the economic sector but also to the political and social sphere (Korff 2009, pp. 3-5). UN-Habitat points out that the term informality is problematic as it 'suggests a different way from the norm, one which breaches formal conventions and is not acceptable in formal circles – one which is inferior, irregular and, at least somewhat, undesirable' (UN 2003, p. 100). The slum became a spatial representation of this informality, particularly in regards to informal economy and informal housing (UN 2003, p. 100). Since informal economic activities as well as informal housing do often not fit to the vision of a modern city, these spheres became targeted by hostile policies – and still are. As I showed in the last chapter, this general argument is also valid for the situation in Jakarta. The policies towards *kampung*s and the economic activities of *kampung* dwellers indicate that informality has been always seen as a problem to city planners in Jakarta. Considering the fact that the majority of city dwellers live in *kampung*s, the official attitude towards informality can be interpreted as an everyday life threat to the majority of Jakarta's population. Accordingly, the removal of *becaks* from the city centre in the late 1970s as well as the large scale *kampung* clearance activities in the 1980s and 1990s attracted much publicity. Up until today, eviction and clearance activities are an everyday life risk that *kampung* dwellers face.

The scientific discourse indirectly contributed, and still contributes, to the rather negative perception of aspects of everyday life that are connected to informality. UN-Habitat warns that in many cases urban settlements receive the label slum as a result of improper surveys or because one is following the unreflected popular usage of the term slum. Accordingly, the common perception of what a slum is does often not reflect the situation on the ground. The label slum can stigmatise a settlement as it reinforces prejudices and can provoke negative policies as well as repressive action, such as slum clearance (UN 2003, p. 10). Guha-Khasnobis, Kanbur and Ostrom point out the negative consequences of perceiving the informal sector as a sphere that is opposed to what is called the formal sector. They conclude that:

the tendency to associate 'informal' with 'unstructured' and 'chaotic' must end. Such an association is conceptually unsound, empirically weak, and has led to policy disasters, as the state reached to provide 'structures' where it was presumed that none existed before. (Guha-Khasnobis, Kanbur & Ostrom 2006, p. 16)

Because of the stigmatization, the important role of the informal sphere within the citysystem is ignored. Korff, for instance, applies the informal sector discussion to Southeast Asian cities and concludes that the formal and informal sector cannot be considered as opposed sectors but have to be seen in a complementary function. In his view, modernisation and the move towards a globalised economy does not only provide job opportunities for highly qualified experts and the middle class. But modernisation also trickles down to the informal sector. On the one hand, a growing number of high qualified experts and an emerging middle class will require more goods and services from the informal sector. Accordingly, the demand for low-income jobs, such as maids, gardeners, drivers, guards or cleaners will increase. On the other hand, the availability of cheap labor is perceived as a locational advantage that attracts investments (Korff 1996, p. 293).

This argument requires a rethinking of the relationship between the formal and informal sector. In Korff's perspective the role of the informal sector is not only discussed as an economic sphere that creates alternative or additional income for the urban poor as it was suggested by Hart and the ILO in the early 1970s. The fact that the informal sector provides goods and services to the formal sector at comparatively low costs rather underlines the view that both sectors are closely interlinked and interdependent (see also UN 2003, p. XXXI; Lloyd 1979, pp. 29-30). Furthermore, it is argued that the informal sector is primarily serving households and not enterprises. Therefore, people active in the informal sector prefer to live close to the residential areas of the middle and upper class which are often in inner-city locations. At the same time, employment in the informal sector does not generate sufficient income so that low-income households cannot afford to buy or rent an accommodation close to their place of work in the city centre. Moreover, relocation is not an option since commuting over long distances causes high transportation costs and is time consuming (Korff 1996, p. 293; Sethuraman 1981b, p. 186). We can conclude here that there is a demand for low-income labour. Yet, since space is a scarce resource in the city, land prices as well as rents are comparatively high. Berner and Korff describe this phenomenon - the demand for low-income labour, on the one hand, and the scarcity of land on the other - as 'metropolitan dilemma' (Berner & Korff 1995, pp. 209-211).

In the context of the metropolitan dilemma it might be useful to introduce the concept of 'urban subsistence production'. Evers argues that besides the formal and informal sector, the urban economy is characterised by a third sector: urban subsistence production. He argues that if low-income households earn too little to satisfy basic needs, one strategy is to reduce expenditures. Instead of spending money for goods or services, households can reduce costs by producing these goods and services on their own. Based on a survey in Jakarta, he suggests that the self-produced goods include agricultural production, housing and handicrafts. He finally argues that '[s]ubsistence production, by and large, "subsidizes" wage employment and informal sector work' (Evers 1979, pp. 7-8, 19-21 & 26). It can now be argued that low-income households make use of urban subsistence production in order to solve the metropolitan dilemma. For instance, in marginal locations housing is commonly self-produced by employing limited economic resources.

The emergence of informality and urban subsistence production in the inner-city areas can

thus be seen as a direct response to modernisation processes. Due to the 'metropolitan dilemma', one might further argue that the emergence of sub-standard housing and informal economic activities in urban centres are the local manifestation of global dynamics. In this perspective, slums are as much part of a globalised megaurban economy as central business districts, shopping centres and residential areas of the middle and upper class. Consequently, one might agree with Korff that 'the slum is not marginal to the city but part of it' (Korff 1986, p. 164).

With the concepts of the metropolitan dilemma and urban subsistence production, it becomes evident that informality is not only limited to economic aspects. Informal settlements emerge in inner-city locations as a direct response to the availability of low-income jobs on the one hand and comparatively high prices for land on the other. Barros and Sobreira reconfirm the important role of slums in the urban housing situation. Based on their findings from Latin American cities, they argue that slums have an important role in the city system as they cushion the housing deficit (Barros & Sobreira 2002). Barros and Sobreira generalise their findings and state that 'spontaneous settlements are fragments that keep the system away from what otherwise would be a breakdown of the already fragile and unstable equilibrium of Third World cities socio-spatial structure' (Barros & Sobreira 2002, p. 9)²⁹.

In addition to the economic sphere and the urban housing situation, it is often argued that slum dwellers contribute to a better environmental condition in the city. Due to the fact that many slum dwellers make a living on recycling waste, they compensate the lack of a comprehensive waste disposal system in most megacities (Korff & Rothfuß 2009, p. 360; Sethuraman 1981b, p. 181). Another interesting point is made by Barker who studied the slum Cicadas in Bandung, one of the major cities in Indonesia. He observed that informality does play an important role in everyday life. People do not only engage in informal economic activities, the neighbourhoods are also ruled by informal leaders. However, he rejects the 'Planet of Slums' hypothesis as slum dwellers are not left alone in informality. Instead of an unregulated informal sphere, Barker rather observed that close connections between state authorities and slum leaders are well established (Barker 2009, pp. 48-49 & 71-72). In this context he describes the informal leaders in Ciadas as 'pragmatic and entrepreneurial political operators who broker and mediate relations between the state and the slum' (Barker 2009, p. 72).

The above suggests that the urban poor are not left alone in informality. Informality is rather considered a sphere where people find creative solutions in order to cope with everyday life challenges. In this perspective, informality is seen as a sphere where formal regulation, for instance by the municipal administration, does not fully reach through (see also Woolcock n.d., pp. 11-12). The formal and the informal are two sides of the same coin as both spheres are interlinked and interdependent. In the context of Indonesia, Evers shows that the informal sector expanded in line with the high economic growth rates in the 1970s and 1980s. In the 1990s he observed a general shift from informal to formal sector employment as the number

29 The important role of spontaneous settlements in providing shelter is also described elsewhere (see Dwyer 1974b, p. 210).

of people receiving wages and salaries increased (Evers 1993). This argument is also supported by UN Habitat which states that slum dwellers are a heterogeneous group and not all slum dwellers are employed in the informal sector (UN 2003, p. XXVI). Therefore, it might be assumed here that *kampung* dwellers are engaged in the informal sector as well as in the low-income segment of the formal sector.

Yet, the application of the dialectic is problematic as it can turn into what Lipton calls a 'misplaced dualism' (Lipton 1984, pp. 196-197). The label informal is for instance attributed to the slum although formal aspects are as much part of the slum as informal practices can be found in the formal structure of governments and international companies. Accordingly, it has to be doubted whether the mainstream use of the concept reflects the everyday life situation of the majority of megacity dwellers. One might thus conclude with Evers and Korff that 'all attempts to use the concept of the "informal sector" not just in a descriptive way but as an analytical tool, by putting it within a theoretical context, have failed' (Evers & Korff 2003, p. 135). Guha-Khasnobis, Kanbur and Ostrom refer to Lipton's (1984) concept of misplaced dualism and remark that the formal-informal dialectic has to be rather seen as a continuum 'between relatively high and relatively low levels of the reach of official governance mechanisms' (Guha-Khasnobis, Kanbur & Ostrom 2006, p. 6). In order to understand the continuum in the specific context, Keith Hart proposes that we 'need to know how formal bureaucracy works in practice and, even more important, what social forms have emerged to organize the informal economy' (Hart 2006, p. 33).

4.2 Social Capital As An 'Informal Resource'

4.2.1 Institutionalised Informality in the Citysystem Perspective

In the megacity discussion it is often argued that cities of a certain size are characterized by complex dynamics that are beyond planability, beyond control and beyond governability (see Mertins & Kraas 2008, Helmholtz n.d.). As was described before, informality emerges in spheres where formal regulation and control does not reach the local level. While some scholars relate the inadequate response to megaurban challenges to poverty and the limited capacity of municipal administrators (Mertins & Kraas 2008, p. 8), others acknowledge the natural limits of formal regulation, control and urban planning in large cities (see Korff & Rothfuß 2009, pp. 355-356). Korff and Rothfuß, for instance, argue that only in few cases urban transformation follows the vision of urban planners. Instead, they perceive urban development as a result of everyday life practices of citizens. Accordingly, they claim that urban challenges cannot be solved by technocratic top-down approaches but rather by shifting the focus on the 'citizen perspective' (Korff & Rothfuß 2009, pp. 356-361). Brugmann follows the same argument by pointing out that the city is a 'historical product of trial-and-error by a community of users'. Since the 'citysystem' is a result of organic growth, he also points out the limits of technocratic urban planning (Brugmann 2010, p. 107).

The *citizen* as well as the *citysystem* perspective suggest that everyday life practices generally develop adequate solutions to megaurban challenges. This way it is evident why

informality can be particularly observed with the urban poor. In the absence of alternative solutions in resolving the metropolitan dilemma, slum dwellers apparently develop practical solutions to megaurban challenges, such as the lack of cheap housing and employment opportunities in the formal economic sector. Sethuraman states that slum dwellers succeed in getting access to water and electricity although they do not have direct access to most services. In this context he argues that slum dwellers are able to pay for these services although they are often far more expensive than for residential areas having access to the urban infrastructure (Sethuraman 1981b, p. 179). Lloyd points out the self-improvement activities in slums. Slum dwellers do often improve the standard of housing and roads on their own. This is often done without support of the government³⁰ (Lloyd 1979, p. 211). In addition to the self-improvement activities, Korff adds that security is often organised on a community level (Korff 2009, p. 6). These examples indicate that informality is partly the result of everyday practices of city dwellers.

Shifting to the local processes of social organisation points out the ambivalent role of urban informality. Informality can be a sphere of drugs, prostitution and other illegal and criminal activities. However, informality can also be a sphere in which people develop forms of what is often called self-help, self-improvement or self-regulation. These forms of social organisation allow communities to cope with everyday life challenges and are thus a response to the absence of formal institutions (see Woolcock n.d., pp. 11-12). If we follow the citysystem perspective and understand these forms of social organisation as the result of trial-and-error processes of citizens, we might have to draw our attention to the processes and structures that facilitate social agency. Korff argues that self-organisation is possible through institutions that facilitate collective action. Referring to Douglas (1996, pp. xii-xv), he suggests that institutions develop in a group of people with similar 'thought styles'³¹. In that sense, institutions do not have to be formalised rules or laws but rather refer to norms and rules that are considered meaningful by each member of a group or collective. Accordingly, thoughts get standardised through social institutions of a 'thought collective'. With Eisenstadt (2002) Korff theorises that people share these rules because keeping to them promises a better future. He further remarks that people who follow the rules are identified as a member of the group. Since institutions get their meaning within a group of people with similar thought styles, they are not universal but are closely linked to a collective. This way institutions make

30 Lloyd observed that the governments increasingly made use of the self-improvement capacities in slum areas (Lloyd 1979). As was presented before, the Kampung Improvement Program in Jakarta followed the same rationale. The self-improvement capacities of *kampung* dwellers was seen as an important resource that allows *kampung* improvement at relatively low costs.

31 With the concept of 'thought style' Douglas refers to a concept that was initially introduced by Fleck (1981). Fleck analysed the process of generating knowledge in medicine, particularly in the context of the 'Wassermann reaction' and 'syphilis', and pointed out that the process is influenced by a community of scientists, or a 'thought collective'. He defines 'thought collective' as 'a community of persons mutually exchanging ideas or maintaining intellectual interaction, we will find by implication that it also provides the special "carrier" for the historical development of any field of thought, as well as for the given stock of knowledge and level of culture. This we have designated thought style' (Fleck 1981, p. 39). He then defines 'thought style' as 'directed perception with corresponding mental and objective assimilation of what has been so perceived' (Fleck 1981, p. 99).

behaviour and action of other group members predictable (Korff 2009, pp. 4-5).

Ostrom summarizes these points in a short definition. According to her 'an institution is simply the set of rules actually used [...] by a set of individuals to organize repetitive activities that produce outcomes affecting those individuals and potentially affecting others' (Ostrom 2003, p. 251). Ostrom further argues that '[r]ules are useless unless the people they affect know of their existence, expect others to monitor behavior with respect to these rules, and anticipate sanctions for nonconformance' (Ostrom 2003, p. 252). She applies her concept of institutions to the management of irrigation systems which are implemented as part of development projects. Ostrom claims that irrigation projects often fail because the role of the operator is oftentimes underestimated. If the farmers do not know about the rules of operating the irrigation system, the operator might follow opportunistic behaviour that might not be monitored and sanctioned. Accordingly, Ostrom suggests that institutional arrangement is as much part of the irrigation project as the irrigation system itself. While she compares the irrigation system with physical capital, she describes the 'institutional capital' as social capital (Ostrom 2003, p. 251-271).

Bringing Ostrom's discussion on irrigation systems back to the urban context, one might argue that informality is closely related to the concept of institutions. Institutions allow a group of people to jointly develop social agency. The resulting forms of social organisation are based on the rules that are shared by people who identify with the collective, or in other words with those who show similar thought styles. Institutions are rules that do not necessarily have to comply with formalised rules, for instance the ones introduced by the government. This might be the core of the formal-informal continuum. The ambivalence of the concept of informality lies in the fact that these institutions are a resource to people. Korff and Rothfuß, for instance, argue that forms of self-organisation are developed by communities and are thus a resource, or social capital, that rest with a community (Korff & Rothfuß 2009, pp. 363).

Finally we might come to the conclusion that slum dwellers can draw on resources embedded in their social networks. These resources are institutionalised and thus become a - social or institutional - capital for the people. In this context, the concepts of institutions and social capital can be brought together. The institutionalised forms of social capital can be, again, translated into different forms of social organisation and collective action. That way I argue that informality is a result of self-organisation processes and reflects the creativity of the urban poor. Self-organised housing and self-organised income sources are in this perspective a direct response to the metropolitan dilemma and enable slum dwellers to participate in the urban economy. This conclusion stands in sharp contrast to the argument of Mertins and Kraas who state that slum dwellers lack different capitals, such as financial resources (financial capital), social capital (social networks) and personal ability (human capital) to climb up the social ladder (Mertins & Kraas 2008, p. 7). In order to open the concept of social capital for the field data, the discourse on social capital will be introduced in the following.

4.2.2 Excursus on Social Capital

Social capital became a vogue concept that is not only used across different scientific disciplines but it is also applied by practitioners and public actors (Bhuiyan & Evers 2005, p. 12). Because of its multiple uses, the discourse on social capital will need some clarification. In the following I will thus summarise the discourse. I will highlight the aspects that will be useful to understand how people cope with hazards and everyday life challenges in both *kampung*s. The idea of social capital gained broad recognition in the 1980s. In the current debate Pierre Bourdieu, James Coleman and Robert D. Putnam are regarded as the main contributors (see Euler 2006, p. 13; Field 2003, p. 13). Out of these three scholars, Bourdieu was the first to publish on the concept. He is defining social capital as the:

aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition-or in other words, to membership in a group¹¹- which provides each of its members with the backing of the collectivity-owned capital, a "credential" which entitles them to credit, in the various senses of the word. (Bourdieu 1986, pp. 248-249)

Bourdieu considers social capital as a resource that is connected to group membership. In his perspective it can also be translated into other forms of capital. In a Marxist tradition, Bourdieu developed and applied the concept in order to explain how class distinction is constructed, created and reproduced. According to him, social capital is the expression of unequal access to resources since social capital can only be accumulated by the privileged (see Baumgart 2008, p. 224; Bhuiyan & Evers 2005, p. 6; Field 2003, pp. 13, 20 & 28). Field criticizes Pierre Bourdieu since he presents social capital as a resource of the privileged and he assumes that the less privileged cannot develop social capital within their social networks (Field 2003, p. 20). This critique shows that although the discourse on social capital draws substantially on Bourdieu's concept of capital, the term capital is discussed ambivalently.

Based on the findings of his study on American neighbourhoods, Coleman concludes that social capital is a resource generally embedded in social relationships. Accordingly, it is not only available to the privileged but also the poor or marginalised can develop social capital. In the tradition of rational choice theory, Coleman applies the concept of social capital to explain that individualistic behaviour can result in collective action. In this perspective, social relationships of trust and reciprocity provide resources which can be applied by individual agents. However, Coleman points out that in contrast to other forms of capital, social capital is embedded in networks of several individuals and can thus never be the property of a single individual. This way, social capital is an intangible resource and has to be understood in a functional sense as it can facilitate action (Coleman 1994, pp. 300-304; see also Field 2003, pp. 20-21).

Robert D. Putnam points out that the term social capital was already used by Lyda Judson Hanifan in 1916³². Since then the term social capital reappeared several times in different disciplines (Putnam 2000, pp. 19-20). With his background as a political scientist, Putnam applied the concept of social capital to explain the role of civil society in the performance of policy actors in Italy (Putnam et al. 1993). He then received public attention for his publication 'Bowling Alone' in which he describes the decline of social capital in the USA (Putnam 1995, 2000). Putnam states that networks of civic engagement and social connectedness result in various phenomena that contribute to the quality of public life. Following the mainstream discourse, he refers to these phenomena as social capital and summarizes the discourse:

[f]or a variety of reasons, life is easier in a community blessed with a substantial stock of social capital. In the first place, networks of civic engagement foster sturdy norms of generalized reciprocity and encourage the emergence of social trust. Such networks facilitate coordination and communication, amplify reputations, and thus allow dilemmas of collective action to be resolved. When economic and political negotiation is embedded in dense networks of social interaction, incentives for opportunism are reduced. (Putnam 1995, p. 67)

The short introduction shows that the concept of social capital is applied by different disciplines and is also used in different contexts. At this point it might not be advisable to provide a comprehensive discussion on the social capital discourse. In the following I will rather discuss aspects of the concept that will allow me to develop and apply social capital as an analytical tool to approach social organisation in the *kampungs*. As I showed in the discussion on informality and social agency, a social network constitutes a resource for its network members. This resource is not tangible but is embedded in relationships between two or more individuals. The aspect of social networks is crucial as it can create value for network members in a way that people can achieve certain ends that would not be possible individually (Bhuiyan & Evers 2005, p. 8; Putnam 2000, p. 19; Putnam 1995, p. 66).

However, the quality of social networks can differ and the value generated from these resources can be of different forms. The quality of social networks is commonly determined by norms of reciprocity and trust. Hereby reciprocity relates to the relationships of exchange that happen within social networks. Reciprocity is institutionalised through formal and informal agreements that regulate the exchange and right to control over goods, information and other benefits (Kranton 1996, p. 830; Putnam et al. 1993, p. 171). Reciprocity is usually differentiated in specific (or balanced) and generalized (or diffuse) reciprocity. Specific forms of reciprocity refer to simultaneous exchange: I do this for you and expect something in return. Generalized reciprocity, in contrast, refers to forms of exchange where benefits are granted now and should be repaid in future: I do that for you and expect that someone will grant me a benefit in the future (see Komter 2005, pp. 108-110; Putnam 2000, p 20-21;

32 The origin of the term social capital is hard to track. While Hanifan (1916) is often mentioned as having introduced the term, other authors, such as Bhuiyan and Evers (2005, p. 5), mention that some scholars traced the concept back to the Aristotelian age and that Marshall and Hicks applied the term social capital already in 1890. However, for the purpose of this study the historical roots will not be further investigated in.

1993, p. 172; Sahlins 1974, pp. 193-195). The second type of reciprocity was initially discussed in the context of tribal societies. In his study on gift exchange in segmentary societies, Mauss (1954, pp. 11, 31, 55 & 58) concludes that gift exchange takes place within network bonds. For the donor, the gift is not lost but rather creates a moral tie between the giver and the receiver as the receiver is expected and obliged to repay the gift in the future. Accordingly, people are at the same time interested and obliged to give because social bonds are formed and reproduced through gift exchange (see Komter 2005, p. 43; Kranton 1996, p. 830).

Sahlins quotes a saying of the Eskimo - 'Gifts make slaves' - to point out the constraint connected to generosity. Generalised reciprocity, for example in the form of a gift, can put the recipients into debt (Sahlins 1974, p. 133). Gift exchange does obviously involve power relations between the giver and the receiver so that exchange is not always on an equal basis. Excessive gift giving, for instance, is a way to symbolize power and emphasize superiority. If the gift cannot be returned, the recipient might feel indebted and thus dependency is created. It is further realized that elements of gift exchange and reciprocity cannot only be found in segmentary or tribal societies but they are also crucial elements of reciprocal exchange in modern societies (Komter 2005, pp. 27-28 & 47; Mauss 1954, pp. 4-5).

Komter provides an interesting example for generalized reciprocity in modern societies. He argues that organ or blood donation is generally perceived as something that is given unselfishly. However, the 'altruistic' behaviour might also create an abstract expectation that other people are also willing to donate, if the donor himself needs blood or organs in the future (Komter 2005, p. 36). This example suggests that altruism and self-interest have to be discussed in the same context. Another example is friendship relations that often take the form of generalized reciprocity: I am willing to help my friend without asking something in return now. But if I will find myself in a similar situation in future, I expect that my friend will help me in a similar way. Accordingly, friendship relations are characterized by a combination of what Michael Taylor (1982³³ quoted in Putnam 2000, pp. 134-135) calls 'short-term altruism' and 'long-term self-interest'.

Since the generalized form of reciprocal exchange is based on obligations or expectations in the future, reciprocal exchange has to be embedded in an institutional framework so that individuals participating in reciprocal exchange do have an incentive not to behave in an opportunistic way. Accordingly, social networks usually foster trust by, for instance, introducing sanctions or punishments for individuals who cannot fulfil their obligation. If individuals in a network were not trustworthy, reciprocal exchange would not happen. Therefore, trust is often considered as a prerequisite for social and economic exchange. Yet, it is discussed whether trust is a component of social capital or an outcome as reciprocal exchange could work with a minimum of trust when norms are institutionalized (see Field 2003, pp. 63-65; Kranton 1996, p. 831). Frequent and intense social interactions are

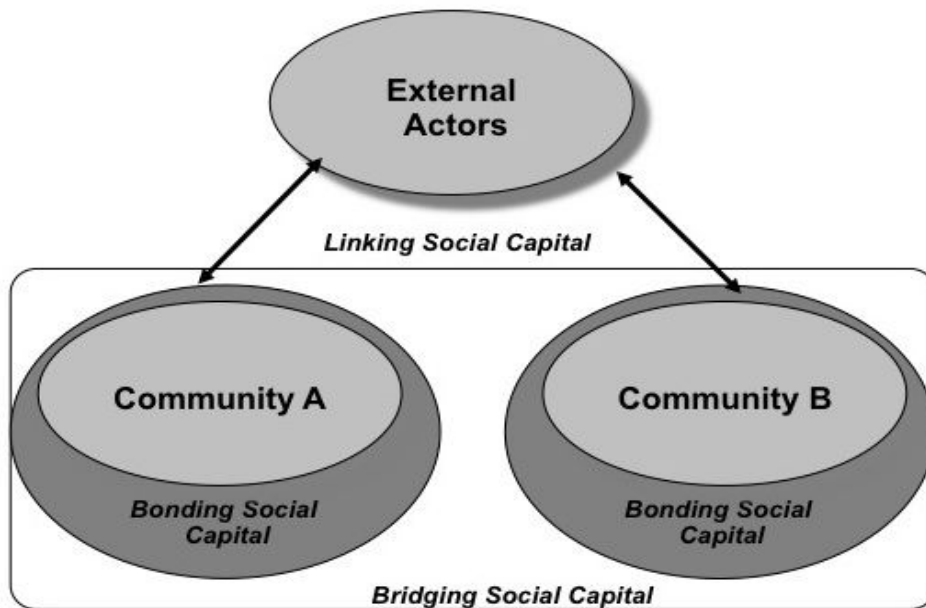
33 The original source could not be accessed.

regarded to have a positive impact on the level of trust. The family is often seen as the prototype of trust in social networks. The emergence of family businesses is, for example, explained by the so-called 'thick trust' that is embedded in kinship networks. In contrast to simultaneous exchange, generalized reciprocity requires a high degree of trust that can be most often found among family members. In contrast, Putnam stresses that 'thin trust' creates more value than 'thick trust' because social networks based on 'thin trust' may allow exchange with people we do not know personally. Hereby the network informs about the trustworthiness of other network members. As a consequence, social networks also create trust with people whom we only know indirectly (Putnam 2000, pp. 21 & 136; Putnam et al. 1993, pp. 73 & 169-175).

Putnam's conclusion on the relation between reciprocity and trust is pointing in the same direction as the frequently quoted differentiation into strong and weak social ties introduced by Granovetter (1973). He argues that 'weak ties', such as workmates or neighbourhoods, are of higher value than 'strong ties', such as close friendships or family ties. A common example is that information on job postings are more spread in networks characterized by weak ties as network members are more likely to move in different social circles (Günther J 2005, pp. 428-433; Putnam 2000, p. 23; Putnam et al. 1993, p. 175). The differentiation between strong and weak social ties stipulated the conceptualization of social capital. The resources embedded within strong ties are very similar to what Putnam called bonding social capital while resources embedded in weak ties are similar to bridging social capital (Woolcock n.d., p. 10; Putnam 2000; Gittel & Vidal 1999, p. 19).

Woolcock (n.d.) further developed this differentiation and introduced linking capital as another form of social capital. In sum, bonding social capital is related to network ties of people in similar situations, such as kinship or friendship. Bonding social capital is often described as a kind of 'glue' that holds a network together. In contrast, bridging social capital refers to ties that are loosely connected, such as distant workmates, friendships or neighbourhood ties. Linking social capital, again, refers to network ties between people who are unlike. These ties spread beyond communities and link people across economic and social strata (Woolcock n.d.; Euler 2006, p. 76; Field 2003, pp. 42 & 66; Putnam 2000, pp. 22-23 & 411). Network ties bringing together people with a similar social and economic status, or what Bourdieu would call social field, are described as horizontal networks. Bonding and bridging social capital are usually introduced as horizontal ties. Linking social capital, again, is regarded to be attached to vertical network ties as persons in asymmetric social relations are connected vertically (Woolcock n.d., pp. 10-12; Putnam et al. 1993, p. 173). In figure six, I visualized the different concepts of social capital.

Figure 6: Different Forms of Social Capital



Source: Author

Putnam (2000, p. 20) suggests that social capital has both private and public aspects because network members can make individual use of social networks. Coleman (1994, pp. 315-317) argues that although social capital is a resource that benefits individual persons, it is embedded within social networks and cannot be possessed by individual persons. Accordingly, social capital is not a private property but a public good. Any investment in social capital, such as setting up norms, is usually a benefit to all members of the network (Coleman 1994, pp. 315-317). Woolcock and Narayan relate the public good aspect of social capital to the discussion on poverty and vulnerability. They state that:

one of the most important examples of social capital at work in the absence of formal insurance mechanisms and financial instruments is the use by the poor of social connections to protect themselves against risk and vulnerability. (Woolcock & Narayan 2003, p. 434)

Accordingly, social capital can be interpreted as an important resource for the poor in order to reduce vulnerability. This resource, as pointed out by Ostrom and Ahn, is mainly expressed in different forms of collective action. In this rational, social capital creates trust which again facilitates collective action for the mutual benefit of the trustee and the trustor (Ostrom & Ahn 2003).

Before I discuss social capital and collective action in the context of vulnerability, I would also like to highlight the challenges connected to collective action and the public good aspect of social capital. Especially in game theory it is pointed out that under certain circumstances

collective action is irrational although it would benefit everyone³⁴ (see Ostrom & Ahn 2003; Putnam et al. 1993, pp. 163-164). Coleman further argues that social capital can facilitate action that can have external effects and create a 'public bad' (Coleman 2003, p. 143). Putnam points out that trust and reciprocity are aspects of social capital that can be good for people who are part of a network, but it can also have negative effects on people who are not in this network. According to him, networks that inherent external effects for society can have different forms, such as youth gangs. These networks develop, for instance, when kids are not integrated or do not participate in community associations and networks of kinship. He further provides the example of terrorist attacks which cannot be planned alone but require a close network of thick trust (Putnam 2000, pp. 21-22). Putnam is further referring to Sampson and Groves³⁵ who state that social disintegration from neighbourhood associations and activities is a much bigger contributing factor to crime than poverty and residential mobility (Putnam 2000, pp. 312-314 & 338). However, Field warns of a normative charge, such as the discussion on the 'dark side' of social capital implies. He further points out that only through (violent) gangs people divorced from community networks are integrated in social networks and find the characteristics of social capital such as trust and reciprocity (Field 2003, pp. 85-90). Consequently, I would like to conclude that social capital is ambivalent as it can facilitate action which might lead to conflicting results.

4.3 Leaving The Slum Behind: Entering Social Space

4.3.1 The Slum as a Simulacrum

After having discussed aspects of social organisation and social capital, I would like to come back to the initial discussion on slums and informality. With the concept of social capital, it can be argued that a certain level of social organisation in slums is crucial as it facilitates collective action and thus constitutes a resource to the urban poor. In this context, I recommend to read Robert Roberts book 'The Classical Slum' (1983). Roberts grew up in Salford, the slum in Manchester that was described by Friedrich Engels in the 19th century (see Engels 2009). Roberts provides an interesting account on the social life in Salford in the early 20th century. For instance, he describes the importance of social networks and the social heterogeneity in the slum. His family was apparently on the higher end of the hierarchy because they had 'connections' (Roberts 1983, p. 14). Roberts also describes what I introduced as general reciprocity:

[t]he poor certainly helped the poor. Many kindly families little better off than most came to the aid of neighbours in need without thought of reward, here or hereafter [...] Again, not all assistance sprang from the heart: in a hard world one would never know what blows fate would deal; a little generosity among the

34 I will not further explore the success of institutional performance. For further reading see Ostrom and Ahn who shortly describe the dilemmas of collective action, such as the 'prisoner's dilemma' or 'free rider' problematic (Ostrom & Ahn 2003; see also Putnam et al. 1993, pp. 163-164).

35 Unfortunately, Putnam does not provide a reference to the study of Sampson and Groves. Accordingly, I could not access the publication.

distressed now could act as a form of social insurance against the future.
(Roberts 1983, pp. 42-43)

I argue that aspects of social organisation mentioned by Roberts are generally not reflected in the concept of slum. Moreover, the concept does not denote the role of residential areas of low-income households in the urban hierarchy. I discussed before that low-income households are an integral part of an urban economy because they provide, for instance, cheap labor power and services to the formalised economic sphere. However, low-income households can reproduce their cheap labor power and services only by relying on urban subsistence production, such as self-developed housing. Their residential areas are in this respect a direct response to the metropolitan dilemma. Informality emerges in spheres where the municipality is not able or willing to provide formal regulation. Since government institutions are largely absent in the everyday life of low-income earners, people have to develop their own forms of collective action and self-organisation. I argued before that informality is not a necessary condition to describe residential areas of low-income communities. I pointed out that an increasing number of informal sector workers shift to low-income jobs provided by the formal economic sector.

Following this line of arguments it has to be questioned whether the concept of slum, perceived as a visible manifestation of urban poverty³⁶ and informality, is of analytical value. According to Bronger, living conditions and income levels can substantially differ within and in between squatter settlements. Therefore, general judgement about living conditions in slums are subject to personal interpretation and perception (Bronger 2007a, p. 7; Bronger 2007b, p. 126). In his research location Muban Pattana in Bangkok, Korff also found that existing definitions of the concept of slum do not reflect the complexity in the specific local case. Based on his research results he finally described the slum Muban Pattana as 'workers quarter' (Korff 1986, pp. 169-171 & 223-226). UN Habitat points in a similar direction by arguing that a universal definition of what a slum is cannot be established for several reasons (UN 2003, p. 11). The different definitions of slum show similar aspects, such as insecure tenure, poverty or high population density. But these aspects are not necessary conditions that allow a general definition of the slum. Accordingly, UN Habitats points out the difficulty to operationalise the concept of slum:

[t]hese general definitions meet the common perception of what a slum is; yet, as it stands, they are not associated with operational definitions that would enable one to ascertain whether or not a particular area is a slum. (UN 2003, p. 10)

Umberto Eco's (1987) essay on denotation and meaning³⁷ provides some interesting points to illustrate the dilemma attached to the discourse on slums. Originally referring to a specific

36 Defining and measuring poverty is a challenge of its own and will not be further discussed. For further readings on poverty in connection with slums see UN (2003) and Korff (1986).

37 Eco states that denotation can be interpreted with a quote of Peirce (I could not access the original source) as 'the direct reference of a symbol to its object' (Peirce, in Eco 1987, p. 551). However, if the object disappears, the symbol does not refer to an object but rather to an idea or image of the original object (Eco 1987).

situation in London in the early 19th century, the concept 'slum' became a symbol attached with mainly negative meaning, such as poor quality housing, lack of infrastructure, informal economic activities and so on. As a consequence, the concept of slum became detached from a specific place and does therefore not refer to a real situation. Since it is not possible to denote the concept, it cannot be applied to a specific context. UN Habitat shows that the particularities in different megacities are rather reflected in individual names, such as *gecekondur* in Turkey, *favela* in Brazil, *kampung* in Indonesia or *villa miseria* in Argentina (UN 2003, pp. 10-11). Furthermore, in the case of the urban *kampungs* in Jakarta, Indonesian scholars point at a possible 'western bias' in urban research³⁸. Wibawa as well as Budiarto note that *kampungs* might appear chaotic and unorganised from a Western point of view. However, a closer look at the local level suggests that living in a *kampung* has to be seen as an organic process in which planning is done bottom-up within the neighbourhood (Budiarto 2003, p. 79.16; Wibawa 1997, p. 50).

Finally, one could conclude that the concept of slum is obviously a 'simulacrum'³⁹ in the sense of Baudrillard (2010). Although the terms *kampung* and slum are often synonymously used, the slum is not of analytical value to approach the urban *kampungs* in Jakarta. While general aspects such as insecure tenure or poverty can be found in the *kampungs*, the concept of slum is reaching its limitations when the analysis aims to capture the processes of self-governing, self-organisation and self-reliance. Spreitzhofer is also challenging the perception of *kampungs* as squatter settlements or slums. As mentioned in the previous chapter, he argues that *kampungs* can be hardly described as slums or squatter settlements but have to be analysed by their spatial and social characteristics (Spreitzhofer 2007, p. 276). Accordingly, I conclude that the theoretical reflection on the concept of slum can be illustrated with the example of the urban *kampung* in Jakarta. But this also implies that alternative concepts are required to approach the local level in Jakarta.

4.3.2 The Kampung as a Locality

General Concepts of Social Space

The spatial and social characteristics of a *kampung* suggested by Spreitzhofer might be interpreted as the material and social aspects of space which are also the core aspects of concepts on social space. Löw and Sturm state that in the past most concepts of space could be assigned to one of two research traditions. In the first tradition, space is approached by its physical-material basis, analogous to Euclidian geometry. In these concepts space takes an absolute form. Space is, for instance, considered a container that is filled with people and material objects. Löw and Sturm provide nation states as an example for a container as a nation state defines the physical space that is filled with society, the national

38 The Western bias in urban research is also discussed in McGee (1991, pp. 339-341).

39 According to Baudrillard, a simulation, such as a map, is a model of the real. Although it is not necessarily referring to a real object, a simulation is often perceived as referring to a real situation. The simulation itself can thus become real or a 'simulacrum' (for further reading see Baudrillard 2010).

economy and so on. In the second tradition, space is described as a category that is socially constructed. In these more relativistic concepts space becomes a symbolic category reflecting social relations. Space is thus not necessarily referring to a material basis (Löw & Sturm 2005, p. 42; see also Kruse 2010, pp. 82-86; Sturm 2000; Läßle 1992).

According to Löw and Sturm, both traditions are currently synthesized in integrative concepts of space⁴⁰ (Löw & Sturm 2005, p. 42). Based on Läßle's concept of matrix-space⁴¹, Gabriele Sturm developed a dynamic methodological concept which assumes a double constitution of space: a material and a social one. In order to combine different dimensions of space, Sturm's model categorises space into four different facets (Sturm 2000, pp. 197-203; see also Kruse 2009, pp. 89-91)⁴²:

- (I) *Material constitution*: The material constitution of space is referring to all organic and inorganic elements in space. These elements can be naturally given or the result of social action. Applied to the urban context, the material constitution can refer to natural as well as man-made artefacts.
- (II) *Normative regulation*: Normative regulation is referring to all institutions, such as social norms or laws, which regulate space and affect the social use of space. In the urban context, regulation of space is not only manifested in master plans but also in social norms that regulate the use of space.
- (III) *Social action*: This aspect is referring to the appropriation, use and production of spatial elements. Social action of different actors such as individuals, communities or organisations have to be considered here.
- (IV) *Cultural expression*: The interplay of these aspects results not only in material elements but also in certain images of space. These signs and symbols are always cultural expressions of social action and regulation of space.

Sturm's concept is designed as a methodological tool which can be applied to the analysis of social events by their spatial and temporal dimensions. Since all four facets are interconnected and interdependent, it is recommended to analyse each material element in relation to the other facets. This way, the constitution of space can be approached by its full complexity. Finally, it is recognized that spatial images are not static but are a result of historical processes. The dynamic changes are reflected in the model by recognizing a

40 The discourse on these concepts of social space seems to be limited to social science in Germany since I could not find publications in the English language.

41 Läßle (1992) introduces a concept of a 'Matrix-Raum' (matrix space) that describes 'gesellschaftlicher Raum' (social space) by combining the concepts of 'Behälter-Raum' (space as a container) and 'relationaler Ordnungsraum' (space as a frame for social relations) (Läßle 1992, pp. 195-196). Läßle is criticised for mainly focusing on the social processes constructing space (Kruse 2009, pp. 88-89).

42 The methodological framework of social space developed by Sturm (2000) is not published in the English language yet. I translated the single elements of the concept for the application in my empirical study. I am aware of the risk that some aspects of the concept are not translated and reproduced properly.

temporal scale (Sturm 2000, pp. 197-203; see also Kruse 2009, pp. 89-91; Löw & Sturm 2005, pp. 42-44).

According to Löw and Sturm (2005, pp. 42-45), the model can also be applied to explain how people perceive space. They suggest that space is constructed by the process of linking material elements of space. Yet, people do not perceive material elements independently from their symbolic meaning. Space is therefore always socially constructed based on processes of perception, imagination and remembrance. As a consequence of this active construction of space, different social groups will experience space in a different way (Löw & Sturm 2005, pp. 42-45).

If applied to the concept of slum, I conclude that the slum has to be considered as a cultural expression, a synthesis of a particular experience of space. Sub-standard housing, lack of infrastructure and employment in the informal sector might be perceived as a symbolic representatives for urban poverty because of the specific spatial experience of middle or upper class households. This generalisation might then lead to a stigmatisation of low-income communities by attaching the label slum. However, the spatial experience of people living in these residential area might be different.

Locality: Conceptualizing the Kampung

In order to approach the *kampung* from another angle the methodological concept of social space serves as a good starting point. In contrast to the normative debate on slums, the different aspects of space given in the framework provide a tool which allows a differentiated analysis of the *kampung*. A concept that links the methodological framework of social space with forms of organisation in residential areas of low-income communities is the concept of 'locality'. The concept was applied by Berner and Korff (1995) to interpret their empirical findings in Manila and Bangkok. With the 'metropolitan dilemma' they described that not all city dwellers benefit from globalization in the same way. While the elite might profit from the new opportunities emerging in a globalised urban economy, other city dwellers might be forced out of the city centre. Yet, city dwellers working in the city centre have an interest in living close to their place of work. According to Berner and Korff, these city dwellers have to develop social agency and thus form their own group in order to be able to defend their interests in the struggle over space:

[i]t is the local context - the locality - that provides multiple relations and interdependencies that can be the basis of the run-down blocks of flats, slums and squatter areas.⁵ Local associations, in these places, can become an important means to achieve some bargaining power in conflicts about the use of urban space. (Berner & Korff 1995, p. 212)

In a later publication Korff further operationalised the concept. He argues that the term local can refer to different things such as social units, for example villagers, or territorial units, such as the village. He also suggests that neither social units nor territorial units are sufficient categories to describe the local. Instead, Korff suggests to think locality as social space because material space is meaningless without the relation to cultural and social aspects. Consequently he describes localities as 'local organisations that have the capacity

to define and maintain spatial boundaries' (Korff 2003, p. 7) . Furthermore, he argues that:

organisations are at the core of localities. They are required for integrating locality socially, for defining boundaries and for maintaining integration as well as boundaries and regulating the crossing of these boundaries. (Korff 2003, p. 10)

Organisations and space are, again, linked through similar 'thought styles'⁴³. Korff further theorises that the three aspects – i) space, ii) organisation and iii) thought styles – are interrelated and together constitute a locality (Korff 2003).

The three aspects of the concept of locality as well as the four facets of Sturm's methodological framework point into the same direction. In both concepts, space is neither perceived as a sole result of social production nor as a pure physical-material space. Rather, space is a result of social action facilitated by normative regulation or similar thought styles. In both concepts, the material-physical space is regarded relevant as well. The difference of both concepts lies in the different foci. The concept of locality is highlighting the forms of organisation that facilitate social action. The methodological framework, in contrast, is highlighting the role of social action in shaping space. As has been shown before, the processes of self-organisation, self-reliance and self-regulation are crucial for understanding the dynamics that allow people to cope with everyday life challenges in their residential areas. Accordingly, the concept of locality might be more suitable for structuring and analysing the empirical data I collected in two *kampung*s.

Yet, it might be useful to adjust the concept as it will be used for a different context. Against the background of the metropolitan dilemma, Berner and Korff initially developed the concept of locality in order to understand the aspects that are relevant for social organisation on the local level. In their studies on Manila and Bangkok, the concept is primarily applied to explain the emergence of resistance and urban social movements (Berner & Korff 1995, p. 212). Resistance against eviction does require a high degree of social cohesion as people have to act collectively. This way the capacity to develop forms of social organisation can be regarded as a resource that is embedded in localities (Evers & Korff 2003, p. 229).

I suggest that the understanding about forms of social organisation is not only relevant in the context of conflicts about the use of space. In various situations, a sense of community might be important to achieve bargaining power towards external parties. This might be particularly the case in times of disasters when communities have to mobilise external resources as part of their disaster coping activities. Moreover, social organisation also enables communities to mobilize resources within the community. Hintz, for instance, shows that low-income communities in Jakarta developed collective risk management strategies to cope with lifecycle issues, such as death (Hintz 2009, pp. 183-185). Social organisation is therefore an

43 Korff (2003) is referring to Mary Douglas who defines thought styles as 'the communicative genre for a social unit speaking to itself about itself, and so constituting itself' (Douglas 1996, p. xii). Consequently, communities are on the one hand separated by different thought styles. On the other hand, similar thought styles facilitate communication and mutual understanding within a community (Douglas 1996, pp. xi-xiii).

important resource which allows low-income communities to jointly cope with challenges that either affect single community members or the community as a whole. In the context of *kampungs*, social organisation will thus be understood in a broader sense and refer to the concept of social capital described before.

5 DATA FROM THE FIELD: TWO *KAMPUNGS* IN TOMANG AND MANGGARAI

5.1 Introduction To The Field Research

5.1.1 The Methodological Embedding

The historical perspective I described in chapter three highlighted the transforming perception of *kampungs* from being home to the native population in the colonial city to illegal squatter settlements of the poor in a megaurban setting. Particularly for the period of the New Order, these transformation processes are sufficiently documented. Several scholars have carried out research on Jakarta's *kampungs*. In a study contributing to urban social geography, Krausse (1975) studied the spatial patterns of *kampungs*. By differentiating *kampungs* by what he called 'people poverty' and 'place poverty', he developed a classification of *kampungs* in inner-city *kampung*, peripheral *kampung* and woodland *kampung*. Moreover, Papanek and Kuntjoro-Jakti (1978) conducted a quantitative survey on urban poverty in Jakarta. They found significant income differences amongst the poor and conclude that the poor are a heterogenous group.

Other scholars have conducted empirical research in individual *kampungs* based on ethnographic approaches. Jellinek (1991), for instance, spent several years in Jakarta and described the transformation of one specific *kampung*, Kampung Kacang, in the inner-city area. By focusing on the oral history of *kampung* dwellers she retraced the transformation of the *kampung* and its community starting from the late colonial years, over the Japanese occupation, the presidency of Sukarno and finally to the impact of modernisation efforts on the *kampung* community in the 1970s and 1980s. In a similar way, Murray (1991) studied what she calls the 'power of ideology' in the Indonesian society and how it relates to gender and sexuality. Murray also spent several years in a specific *kampung*, Kampung Manggarai. Somantri (2007), again, focused on the *kampung* as a base for migrants in the urban economy. He particularly points out the phenomenon of intra-city migration which can be directly linked to the integration of the city in the world economy. Lubis (2007) analyses disaster management on the grass root levels in Jakarta. He points out the important role of local institutions.

Each study highlights different aspects of *kampungs*. Yet, a recurring theme is the transformation of space in the city and the impact on *kampung* communities. From the 1970s to the late 1990s, modernisation and beautification of the city had a massive impact on *kampungs*. Large *kampung* settlements became subject to eviction and clearance so that *kampung* settlements widely disappeared from the city centre. In the post-Suharto era, only

few empirical studies on the urban *kampungs* have been published. However, urbanisation is still vibrant and the city is continuously transforming. Moreover, after the fall of Suharto we find a new political arena which provides more opportunities for local communities to organise and to take an active part in social change. My thesis has to be seen in the context of these dynamics.

In chapter two I reformulated my initial research question to: *What are aspects of resilience that allow urban poor to adapt and cope with hazards?* With Girtler, I aim to approach the research question by 'understanding' and 'explaining' the life-world of the urban poor. In this perspective, understanding implies that the everyday life reality of urban poor is interpreted in the same way the urban poor are interpreting their everyday life reality. In my role as an external researcher I can, of course, only approach the everyday life reality of the urban poor as good as possible. Girtler suggests to methodologically approach the field by participant observation which he calls the 'method of understanding' (Girtler 2001, pp. 37-43). Since I had no previous personal or research experience with urban *kampungs* in Jakarta and recent publications on everyday life in the urban *kampung* are limited, I did not feel confident to operationalise my research question before I entered the field. That way, I did not attempt to formulate a hypothesis which can be verified or validated. Instead, I decided to follow Girtler's suggestion to formulate and test hypotheses during the field research (Girtler 2001, pp. 50-53). My research design does therefore not allow quantitative methods. Rather, I decided to follow an explorative approach by applying qualitative methods, particularly participant observation and narrative (expert) interviews (see Atteslander 2010; Girtler 2001; Kromrey 2000).

For the field of observation I selected two *kampungs* which are highly exposed to flood risk. I was aiming to identify a research location where I could easily get access to the *kampung* community. Since I already established contacts with the *kampung* community in the *kelurahan* Manggarai during my assignment with GTZ and because of its high exposure to flood, I decided to select a community in Manggarai as the first research location. In order to increase the validity of my research findings I identified a second community which shows similar spatial and social characteristics compared to the situation in Manggarai. During a narrative interview with the Jakarta Flood Team, a group of water engineers supported by the Dutch government, I was invited to join a community meeting in the *kelurahan* Tomang. In the discussions with the representatives of the community, I realised that the situation in the *kampung* in Tomang is similar to the situation in Manggarai. Both *kampungs* are located in the greater inner-city area and show similar social and spatial characteristics. Moreover, both *kampungs* are highly exposed to flood risk and both locations had been affected by the 2007 floodings. Since I had the chance to built on the contacts of the Jakarta Flood Team, I decided to select Tomang as my second research location. In the discussion with scholars at the University of Indonesia, the selection of both *kampungs* was reconfirmed. I have to point out here that I was not advised to carry out research in *kelurahan* Kampung Melayu. Although this district is highly exposed to flood risk, it is the main target area for government activities, development projects and scientific research.

Figure 7: Research Locations



Source: Modified from Google-Maps

Figure 8: Research Location 1, RW 11-14 in Kelurahan Tomang



Source: Author

Figure 9: Research Location 2, RW 04 in Kelurahan Manggarai



Source: Author

For the process of empirical data collection I decided to spend three months in each research location. In both locations, I found accommodation in walking distance to the *kampung*. Accordingly, I started data collection in the morning until the evening but I did not stay over night. The data collection was primarily based on the method of participant observation as described by Girtler (2001). I structured the findings of my observations along the categories suggested by the methodological framework of social space that I presented in the previous chapter. Each day in the field I took notes and reserved one to two hours for the writing of a research diary which also became the prime source for the data analysis. I also took numerous pictures to document the personal experience during the field research.

In addition to participatory observation, I conducted qualitative expert interviews in order to get a general overview of the flood situation and disaster management in Jakarta. An expert interview is, to follow Gläser and Laudel, a method to reconstruct expert knowledge. It has to be designed as a qualitative and explorative interview in order to allow a flexible in-depth discussion with experts. Since the people I interviewed had different backgrounds and contributed to different aspects of my research, I did not intend to compare the different interviews. Rather I was aiming to identify additional information and to get some feedback on my personal observations in the field. Accordingly, I decided to apply personal narrative and open interviews which are not standardised (Gläser & Laudel 2004, pp. 9-11 & 37-41). For the expert interviews I established contacts and repeatedly interviewed key informants of the Jakarta Flood Team at the Department of Public Works (PU), different agencies of the provincial government (such as the provincial planning agency BAPPEDA and the crisis management unit SATKORLAK), NGOs (such as URDI and other organisations active in flood aid), scholars at the University of Indonesia, representatives of different general insurance companies and staff at the *kelurahan* offices. The process of data collection was completed by secondary data analysis of documents, such as local newspapers or reports on the flood situation.

During the process of data collection in both *kampungs* I encountered challenges that might have influenced my data and biased my findings. Girtler argues that the problem of 'going native' is only a pseudo problem as only through the process of 'going native' the researcher will be able to understand and interpret the life-world of the social unit (Girtler 2001, pp. 78-82). I actually did not face the challenge of losing objectivity because of my 'going native'. I rather faced the challenge to 'go native' in the *kampung* as such. Not the least because I have access to a social security system, I did not have to face the everyday life challenges *kampung* dwellers are facing. For instance, I never experienced on my own how it is to financially cope with lifecycle events, such as sickness. Moreover, it took time to establish close contacts and to create trust although I could establish contacts to both *kampungs* before I started the research. In contrast to Jellinek (1991) and Murray (1991) who spent several years in the *kampungs*, I only had several months of time for collecting my data. During the research process I thus had the feeling that more questions are raised than answered. In order to get in-depth data, I established close contacts to selected key informants in the *kampung*. As a consequence, I could often not approach random *kampung* dwellers without being accompanied by key informants. My findings might thus be biased

towards the selective perspective of community leaders (see Atteslander 2010, p. 102).

During the field research in Tomang a large fire happened in the *kampung*. In that situation I could not fulfil my role as an objective and neutral researcher since I was perceived as a potential source of aid and financial support. That way, I lost my neutrality and faced the dilemma of distance in field research (see Atteslander 2010, p. 103). Another aspect I found difficult to explore is the role of religion in the *kampung*. As a Christian, I did not have the chance to join important everyday life activities, such as the Friday prayer. While I come to the conclusion that the role of religion is rather limited in the *kampung*, I am also aware that religious institutions could play a major role in social organisation. Last but not least, I would like to mention language problems. Although I am fluent in Bahasa Indonesia, people in the *kampung* did often not use the standard Indonesian language. Due to the social heterogeneity and migrational background of *kampung* dwellers, a variety of local dialects is used.

Because of this, I assume that my research has a lot of blind spots. Due to my explorative approach and the challenges I faced during empirical data collection, I do not claim to provide a thick and comprehensive description of the situation in both *kampungs*. Instead, I would like to interpret my findings as a starting point for further research. Moreover, I would like to highlight the particularity of *kampungs* in inner-city locations. I am aware that the situation of *kampungs* in the inner-city locations differ widely from the ones at the urban fringe. Therefore, my research findings cannot be generalised for Jakarta's *kampungs* as such.

In the following, I will present the findings of my research. During the data collection I structured my observation along the categories introduced in Korff's concept of locality (see chapter four). In order to adjust the concept to my research question I decided to modify the categories for the descriptive presentation of the empirical data. I structured the data along the categories material space and social organisation to reflect the double constitution of space. Moreover, I included two additional categories. On the one hand, I included the social and economic patterns in the both *kampung* since it will help us to connect to the previous discussion regarding the formal-informal continuum. Furthermore, the social and economic patterns are closely connected to space and social organisation. On the other hand, I included adaption and coping strategies because this category will provide some answers to the research question. Since aspects of institutions or 'thought styles' bridge different dimensions of space I decided not to describe them in a separate category.

In this chapter my aim is to provide a comprehensive picture of the situation in both research locations. That way, it will be easier to follow the analysis and interpretation of my experience with the everyday life reality in both *kampungs*. I will present the empirical findings from Tomang and Manggarai in two separate sections. The descriptive introduction to the two research locations will orientate along the four categories I introduced before: i) spatial aspects ii) the formal-informal continuum iii) social organisation and iv) adaption and coping strategies. I decided to separate description and analysis since I realised that the different categories are interconnected and can hardly be discussed independently. From my point of

view, it will be easier to follow the interpretation of my experience with the everyday life reality in both *kampungs*, if the reader got a comprehensive picture of the situation in both research locations. Having described the situation in Tomang and Manggarai, I will then analyse and interpret my research findings in chapter six. I will particularly set my findings in the broader context of local organisation in post-Suharto Indonesia. The analysis will also provide a basis for the interpretation of adaption and coping strategies in both *kampungs* that will follow in chapter seven. Hereby, the findings will be linked to the vulnerability framework.

5.1.2 Excursus: The Integration Of *Kampungs* Into The Administrative System

Aspects of local organisation in Jakarta are closely connected to the administrative system. I will shortly present the administrative system here in order to make the description of *kampungs* more accessible to readers who are not familiar with the specific context of Jakarta. The short introduction to the history of Jakarta in chapter three indicated that forms of social organisation on the local level transformed over time. The social organisation of the *kampungs* has to be seen in relation to their integration into the municipal administrative structure. Krause claims that the colonial constitution from 1854 acknowledged *kampungs* as self-governing units and supported an internal order that was based on *adat* law (Krause 1975, pp. 35-37). Batavia's municipal administration controlled *kampungs* in the *ommelanden* through leaders originating from the neighbourhood. Yet, they did generally not interfere in *kampung* affairs. This changed with the relocation of the Dutch colonial centre from old Batavia to Weltevreden (see figure five) when *kampungs* had been physically drawn into the city centre. In 1920, the Dutch thus brought internal *kampung* affairs under municipal control.

When the Japanese came to Indonesia in 1942, they had a big interest in mobilising resources and controlling the local level. They intensified the administrative integration of the local level by establishing the RT system (*Rukun Tetangga*, or Neighbourhood Association) on a neighbourhood level. After independence, Jakarta's governor Sudiro reintroduced the RT system and comprised several RTs under *Rukun Kampung* (*kampung* association) or RK (Silver 2008, p. 94; Abeyasekere 1989, p. 203). According to Jellinek, Sudiro was not successful in reestablishing the system so that it was reorganized under Governor Sadikin in 1966. Sadikin replaced the RK with *Rukun Warga* (community association), or RW. Given the limited financial resources available to the municipal administration, Sadikin expected to generate community development by stipulating self-organisation and collective action through the RW/RT-system (Jellinek 1991, p. 109).

It has to be noted here that the RW/RT-system has a unique role in the urban administrative system. Jakarta officially received the status of province in 1959 and was renamed into a special region as a capital city (DKI) in 1964. Before 1959 Jakarta was headed by a mayor and afterwards by a governor (Silver 2008, pp. 93-102). The province consists of five municipalities (*wilaya kota*) which equates to *kabupaten* (district) in the rural context. The municipalities are further divided into *kecamatan* (sub-districts) and *kelurahan*. The *kelurahan* is headed by a *lurah* and is sometimes translated as 'urban village' (Barker 2009,

p. 50) as it equates to *desa* (villages) in the rural context (Somantri 2007, pp. 74-75; Surjadi 2007, p. 4; Nas & Grijns 2000, p. 18).

The RW/RT-system is an organisation directly linked to the *kelurahan*⁴⁴. Although the RW/RT-system was introduced to integrate the local level into the administrative system, it is not considered part of the formal administrative structure. While the *lurah* is a civil servant installed and paid by the government, the position of a RW and RT head is voluntary and unpaid⁴⁵. The head of a RT is appointed through a process of discussion during a community meeting (*musjawarah*) that ends with an unanimous agreement (*mufakat*). The RW, again, is elected by the respective RT heads⁴⁶ (Wibawa 1997, p. 82). Consequently, the heads of the RW/RT-system originate from the community and are elected by the community members while the *lurah* is appointed by the government. Since the *lurah* has to relocate to another *kelurahan* after two years in office, it is evident that he is rarely originating from the sub-district he is working at (Jellinek 1991, p. 115).

The respective RW/RT-heads have to fulfil a dual role. On the one hand, they coordinate the local community or neighbourhood level. On the other hand, they represent the community towards the *kelurahan*. The heads of the RW/RT-system are thus responsible for coordinating various activities, such as keeping community records, organising the community security system, supporting the *kelurahan* in official documentation, maintaining public facilities or disseminating government information. That way, the RW/RT-system became an organisation which enables the government to vertically integrate people on the local level into the administrative structure. In the past, the city administration could therefore reach out to the household and community level in an informal way. During the KIP, for instance, this system allowed the government to mobilise community resources (Wibawa 1997, pp. 82-86).

One has to be aware that during the New Order, the role of the RW/RT-system was rather ambivalent. Ismanto claims that although the RW/RT system was introduced to implement community development activities on a local level, it was in fact instrumentalised by the Suharto regime. According to him, the main purpose of the system was to control the people on the local level and to mobilize people in order to ensure the election victory of the state party (Ismanto 2003, pp. 198-204 & 209). Perkasa and Hendytio claim that the tight control suppressed any form of self-organisation as people feared to articulate and express their interests (Perkasa & Hendytio 2003, p. 162). In addition to making use of the RW/RT-system, the Suharto regime succeeded in controlling the local level by forming further mass organisations. Organisations, such as PKK (Family Welfare Movement), *Karang Taruna* (Youth Club) and *Posyandu* (Maternal and Child Health Post) were introduced with the aim to

44 According to official statistics of 2010, DKI Jakarta comprised 274 *kelurahans*. In the same year the *kelurahans* were further divided into 2,696 RWs and 30,235 RTs (Dinas Kependudukan 2010). This implies that each *kelurahan* consists of 10 RW and each RW of 11 RTs on average.

45 According to a provincial decree of 2003, the RW headmen receive a monthly operational incentive of IDR 200,000 and the RT headmen IDR 150,000 respectively (see Gubernur 2003).

46 For more information on the task and the appointment of the RW/RT heads see Gubernur (2001).

organise different social groups (Nugroho 2003, p. 215; Ufen 2002, p. 224). Nugroho claims that these organisations had been the 'long arms of government bureaucracy' so that they did not enjoy public confidence (Nugroho 2003, p. 216). As I will show in the following, many of these organisations survived in the post-Suharto era. Yet, the function of these organisations changed so that they do now provide the frame for processes of social organisation in the *kampung*. As I will present in the following, the RW/RT-system is still of central importance to social agency in the urban *kampung*.

5.2 Empirical Findings From Tomang

5.2.1 The Material Constitution of *Kampung* Space

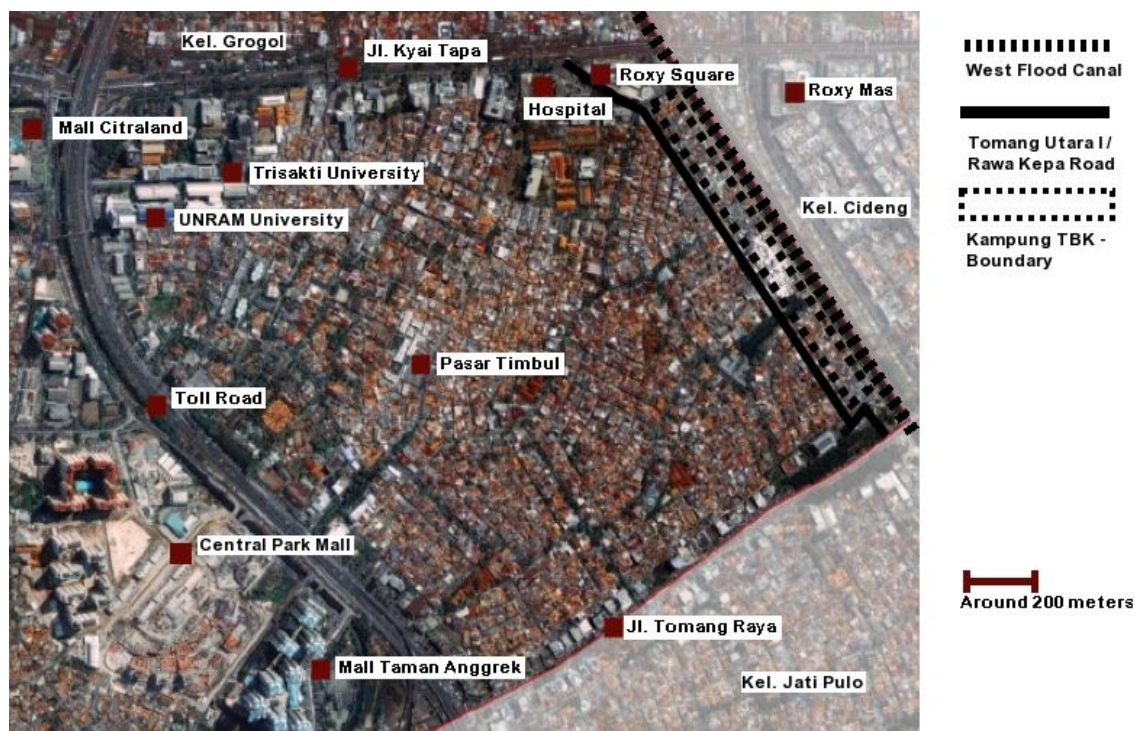
The first *kampung* of my empirical research is located in the *kelurahan* of Tomang in West Jakarta. Given the quality standard of the housing areas, Tomang can be classified as a middle class sub-district. Figure ten provides a general overview on the *kelurahan*. It is located North of the city centre in between the toll road connecting the airport with the city centre and the West Flood Canal. Several companies, such as PT Telekomunikasi Indonesia, have their offices along the toll road. As it is shown in figure ten, there are three big shopping malls⁴⁷ and several apartment buildings located across the toll road. Furthermore, there are two very popular department stores for handphones and accessories in the neighbouring area of the *kampung*. Roxy Square is adjacent to the *kampung* and Roxy Mas is located across the West Flood Canal in the *kelurahan* Cideng. Two universities, Trisakti University and Tarumanagara University (UNRAM), have their campus in Tomang. A major hospital, Rumah Sakit Sumber Waras, is located on the Kyai Tapa road. This road is also the Northern border to *kelurahan* Grogol. The Tomang Raya road is the Southern border separating Tomang from the *kelurahan* Jati Pulo.

The *kelurahan* comprises 16 community associations (RW) with a total population of 36,184 people in 2006 (BPSKJB 2007, p. 4). Four of these community associations, RW 11-14, constitute what I refer to as the *kampung* in Tomang⁴⁸. The boundaries of the *kampung* are therefore identical with the administrative boundaries of the four RWs. There is only one exception in RW 12 which also comprises two neighbourhood associations (RTs) belonging to the neighbouring residential area of the middle class. Although the *kampung* is formally included in the administrative structure, I will show that it is spatially separated from the rest of the *kelurahan*. One of the most important aspects connected to the spatial pattern of the *kampung* is land tenure. The four RWs are located on land legally owned by the state-owned power firm PT Perusahaan Listrik Negara which is operating an overhead powerline on the land. Accordingly, *kampung* dwellers do not hold legal land titles and the *kampung* is perceived as a squatter settlement.

47 The shopping mall Taman Anggrek is located in between apartment towers and attracts upper-class clients. Citraland, or Mal Ciputra, serves the middle and lower classes. Central Park Mall is located in between both malls. During the research it was still under construction.

48 Some *kampung* dwellers refer to the four RWs as *kampung* Tomang Banjir Kanal, or TBK.

Figure 10: Kelurahan Tomang



Source: Modified from a map of Dinas Tata Ruang Provinsi DKI Jakarta (2010a)

This perception stands in sharp contrast to the historical development of the *kampung*. Some of the dwellers who now form the *kampung* community in Tomang are long-time residents. People already settled in this location before the West Flood Canal was built by the Dutch in the late colonial period. Senior *kampung* dwellers still remember a Chinese cemetery and lakes in the surrounding areas⁴⁹. With rapid urbanisation the land was developed and transformed into residential area of the middle class. Ironically, the middle class home owners received legal land titles whereas the home owners in the *kampung* did not obtain legal rights to the land. In the past, insecure tenure had negative consequences for *kampung* dwellers as it resulted in several *kampung* clearance activities. For instance, as part of a bigger government project aiming to widen the flood canal, buildings close to the canal had been cleared. During the field research, land clearance also became an issue twice. The first incident happened directly following the *kampung* fire which I will describe below. The second situation was related to flood management control activities. The *kelurahan* office informed the RWs that makeshift shops and buildings erected on the small canal in the *kampung* or close to water catchment areas will be cleared in order to make the *kampung* more save to floods. Following the warning, the small shops had been cleared. But some days after the clearing activities the shop owner erected the shops again on the same spot.

Kampung dwellers are well aware of the possible consequences of insecure tenure. In the discussions with home owners in the *kampung*, eviction was always expressed as a major

49 The name of the Rawa Kepa road might refer to the lakes mentioned by the *kampung* dwellers. 'Rawa' can be translated as swamp.

threat to people. However, the attitude towards the clearing activities is ambivalent. The head of RW 14 referred to two formal laws in order to prove that he has a right to the land. According to him, the government cannot claim land that was inhabited by the people before 1977. The other law states that people receive land ownership, if they inhabit land for more than two years⁵⁰. In contrast to this opinion, it was interesting to learn that most people understand that they do not possess legal land titles and are considered to illegally occupying the land. Accordingly, protest against land clearance is limited and people rather search for other solutions.

Several home owners argued that they pay taxes on their houses. The rationale behind tax payments is that *kampung* dwellers want to contribute to the budget of the city and in return expect the municipality to be reluctant to clear the land. Moreover, by paying taxes, people receive official documents stating the address of the house. In a similar way, electricity bills are considered to be very important as they list the address of the house on an official document. Since people do not have any documents recognizing the ownership of their homes, tax documents and electricity bills are therefore the only official documents recognizing the existence of the home.

Figure 11: Kampung Tomang Banjir Kanal



Source: Dinas Tata Ruang Provinsi DKI Jakarta (2010a)

⁵⁰ In this context the head of RW 14 referred to law number 25 from 1977 (UU Nomor 25 tahun 1977). Yet, I could not identify the original source.

Another distinguishing feature of the *kampung* in Tomang is the spatial integration into the *kelurahan*. As it is shown in figure eleven, the West Flood Canal (Banjir Kanal Barat) is the Eastern border of the *kampung*, separating Tomang from *kelurahan* Cideng. The settlement is separated from the flood canal by a small road located on the dam, the Tomang Banjir Kanal road. To the West, the *kampung* borders on a small canal going through the *kampung*. On the other side of the small canal there are multi-story concrete houses of the middle classes. The facade of the houses facing the *kampung* does not have any windows and appears like a big concrete wall separating the *kampung* from the rest of the *kelurahan* (see annex 1, photo 1). This row of middle class houses is separated from the residential areas of the middle class by the Rawa Kepa Utama road (or the Tomang Utara I road in the Northern part). This is worth mentioning because the middle class residential area East of the Rawa Kepa Utama road appears as a gated community in a sense that big fences prevent the traffic from entering the public roads in the neighbourhoods (see annex 1, photo 2). To the North of the *kampung*, it is not possible to directly cross the Kyai Tapa road because of the bridge connecting both sides of the flood canal. Moreover, Roxy Square is located in between the Jalan Kyai Tapa and the *kampung*. To the South, the *kampung* borders on another arterial road, the Tomang Raya road. The Tomang Banjir Kanal road, the small road on the dam, connects Tomang with the neighbouring *kelurahan* Jati Pulo to the East.

The short description of the built environment points out that to all directions the *kampung* is bordered by spatial structures. Therefore, the *kampung* appears spatially isolated and is hardly visible from outside. The spatial structure is also the reason why the *kampung* is not easy to access. To the West there are only small paths in between the multi-story houses connecting the *kampung* with the Rawa Kepa Utama / Tomang Utara I road. From the North and South, the *kampung* can only be accessed through the Tomang Banjir Kanal road. Accordingly, the road is heavily frequented by motorcycles and few cars. The spatial isolation of the *kampung* might be indirectly related to the incidents that led to fall of Suharto in 1998. The student protests resulting in the downfall of Suharto started at the campus of Trisakti University. That way, Tomang came into the focus because the campus is located in the northwestern part of the *kelurahan*. According to *kampung* dwellers, the protests transformed into riots. During the riots the shopping complex Tomang Plaza was completely destroyed and was then rebuilt as Roxy Square. Following the riots, the middle class residents in Tomang did not feel secure and started to built up fences around the residential areas. As a result, most of the smaller public roads going through the *kelurahan* cannot be accessed although they are public roads.

Housing is another factor contributing to the spatial image of the *kampung*. Due to the continuous in-migration, the *kampung* is densely populated. I was not able to underpin this observation with statistics. For Tomang, only aggregated population data on the *kelurahan* level was accessible. Yet, RW 12 publishes its population numbers in the RW office. According to the public board, 1,522 people lived in 9 RTs in 2007. The resulting average of 169 people in one RT is far below the average of 280 people in Jakarta. The data has to be interpreted carefully. First, the population numbers do not reflect the spatial size of the respective RWs and RTs. Figure eleven shows that the four RWs in Tomang are located on a

relatively small space. Second, the published population numbers are based on formal registration and the related issuing of an identity card (KTP, or Kartu Tanda Penduduk) for Jakarta. It can be observed that many migrants do not apply for a KTP of Jakarta since the issuing process is related to costs. Inner-city migrants have an incentive to avoid these costs because they might have to relocate. Moreover, people who rent out rooms to migrants are not interested in registering inhabitants in order to avoid taxes.

While the official population data is not conclusive, figure eleven indicates that in-migration resulted in a high density of buildings. Over time, public space and green areas in the *kampung* had been transformed into a housing area. The map only shows one spot in the *kampung* that appears as free space. It is a water catchment that was built by the Dutch as part of a flood control system. A pumping station is connected to this catchment area. Other than the catchment area, buildings are closely connected to each other because of the high population pressure and the lack of space. Moreover, people start to build in vertical direction. Most of the houses are two-story buildings and even the small paths within the *kampung* are over-built. The buildings are mostly permanent structures. The first floor is usually made of a solid concrete structure while the second floor is made of bricks or wood (see annex 1, photos 3 & 4). Most of the homes have access to electricity and piped water. Households that do not have access to piped water purchase water from mobile vendors. Since there is no public sewage system available, the small canal in the *kampung* as well as the flood canal are used for waste water disposal. Public toilets are located in the West Flood Canal or are built on the small canal going through the *kampung*. In this context, it is interesting to note that people do not settle in the river bed. However, the river bed is used for gardening activities and fish ponds (see annex 1, photos 5-7).

People external to the *kampung* usually describe the quality of housing as sub-standard and the environment as dirty. When standing on the Tomang Banjir Kanal road, this image is reproduced since one can only see the wooden construction of the second floor of the houses (see annex 1, photo 8). Moreover, garbage is dumped into the West Flood Canal because *kampung* dwellers do not have access to a waste disposal system. Inside the *kampung* a different image can be drawn. The houses make a permanent impression and people keep their homes and the small paths clean and tidy. The headman of RT 3 in RW 11 explains the situation of the garbage in the river bed. He states that the *kampung* dwellers do not have access to the public waste disposal system as it would cost around IDR 2 million a month to get the garbage picked up by the government. Accordingly, canals are the only places where they can dispose garbage free of charge. There, the garbage is either burned or washed away by the water. The headman of RT 03 is not happy about the garbage in the canal bed since the community does, according to him, care about the cleanliness. But he states that the *kampung* dwellers organise regular activities, such as *kerja bakti*⁵¹, to keep at least the neighbourhood clean.

51 *Kerja bakti* can be translated as 'duty work' (Perkasa & Hendyio 2003, p. 130) or 'collective activity' (Lont 2005, p. 42). Lont argues that *kerja bakti*, and *gotong royong*, are instrumentalised institutions introduced in the New Order to control the local level (Lont 2005, p. 42).

5.2.2 The Formal-Informal Continuum in Tomang

In the previous section I described aspects of material space in the *kampung* in Tomang. The data suggests that the *kampung* is spatially isolated from other residential areas in Tomang and neighbouring *kelurahans*. However, in terms of income opportunities the *kampung* is strategically located and integrated into the urban economy. A school and a hospital are situated within walking distance from the *kampung*. Moreover, the proximity to shopping malls and departments stores as well as the location close to two arterial roads provide several income earning opportunities to people engaged in the formal and informal sector. Surprisingly, a high number of interviewed *kampung* dwellers earn their living in the formal sector. Formal employment is usually found in the low-income segment of the formal sector, such as sales assistants and guards in the shopping malls. The shopping complexes *Roxy Square* and *Roxy Mas* also create employment for many *kampung* dwellers. People either rent small shops where they sell handphones, their accessories and phone credits, or they work as sales assistants. In addition to that, particularly long-established families who have been living in the *kampung* for decades hold comparatively good positions within the government sector, such as police officers, civil servants or teachers.

In general, it can be observed that *kampung* dwellers succeed in getting access to low-income jobs in the formal sector. In each neighbourhood there are people who work in the formal sector in Tomang area or in more distant places. It can be assumed that *kampung* dwellers succeed in accessing information about job opportunities through social networks of friends and neighbours. Yet, it becomes apparent that the distance to the place of work is important, particularly for women. Herni, a young 'unemployed' women in RW 11, was introduced by a friend to a shop owner in Sarinah department store in the inner-city area. She started to work there as a sales assistant in a watch shop serving the middle and upper classes. Since she did not have the money to buy her own motorcycle, she had to take the public bus. After one week she quit the job because she was afraid to commute home by using public transportation in the dark. It was already the second job she quit. The first one was located in Tangerang, in the West of Jakarta, and she stopped working there for the same reason. Her example illustrates that not the availability of work is the main challenge but rather the distance to the place of work. Transportation costs to a distant work place, for instance, can be higher than the salary people earn. For this reason *kampung* dwellers prefer to own a motorcycle as they become more independent from public transportation.

Although *kampung* dwellers find jobs in the formal sector, it should not be forgotten that it is in most cases the low-income segment of the formal sector. Therefore, the income level of *kampung* dwellers working in the formal and informal sectors are often in a similar range. The informal sector thus plays an important role for *kampung* dwellers. For instance, the strategic location of the *kampung* offers opportunities in the transportation sector. Transportation services are mainly provided to bring people to the place of work or to transport shoppings. The most common form of transportation for short distances are *ojek* (motorcycle taxi) and *bajaj* (auto-rickshaw). *Ojek* drivers usually own the motorcycle but take out loans in order to be able to buy the motorcycle. In Tomang, the *ojek* drivers make around IDR 50,000 a day. According to a *ojek* driver, a family can live on IDR 30,000 and the rest is

saved to pay back the loan. *Bajajs* are usually not owned by the drivers but rather by people owning several ones. *Bajajs* are rented out to the drivers on a daily basis. In Tomang, the drivers rent the *bajajs* for around IDR 50,000 a day.

Trading and vending activities are another common source of income in the informal sector. The *kampung* is a strategic basis for street vendors and *warung* owners. Different products and services are offered to people travelling along the main road or to people visiting the shopping malls and department stores. The *warungs* are either mobile push carts (see annex 1, photo 15) or integrated in homes as well as semi-permanent buildings on public land, such as on the sidewalk. A *warung* is generally an informal business and its owner does not pay rent or taxes. However, for *warungs* located in the *kampung*, owners have to pay 'security' money to the RW office. This way they are also covered by the community security system *hansip*. Moreover, electricity and water is often accessed from neighbouring houses. A *warung* owner thus has to pay some compensation to the house owner. In Tomang, it was interesting to realize that several *kampung* dwellers operate semi-permanent *warungs*. Most street hawkers, in contrast, do not live in the *kampung* but enter the *kampung* from surrounding areas.

Other than these activities, people are very creative in generating income sources. Because of the variety of income strategies, some will be described here exemplary. Only few strategies focus on agricultural production. For instance, the bed of the flood canal is used for gardening activities. However, floods regularly destroy the areas under cultivation. According to the people operating these fields, only the roots of *singkong* (cassava) are flood resistant since they can survive floods and will sprout again. A position that is available in all RWs is that of the security guard *hansip*. In many cases, *hansip* also has a social function since oftentimes unemployed people in the community are selected for this position. Another form of informal income strategy is related to what is often called *premanism*⁵². *Premans* (thug) often make use of public space to generate income. A common form is *tukang parkir*, a kind of informal parking attendant, who assists people parking their cars on public roads or car parks and requests money in return. This activity is often related to mafia-style methods of controlling public space and is commonly tolerated by the city administration. Yet, *preman* activities are rarely carried out in the *kampung* but rather in other areas in Tomang. Accordingly, it can only be assumed that *kampung* dwellers are active in these kind of activities. In addition to that, various other income strategies can be found, such as ice sellers, agents for recycling material and services related to motorcycles, such as repair shops or washing places.

It can be observed that the strategic location of the *kampung* does provide its dwellers with access to job opportunities in the formal and informal sector. The strategic location of the *kampung* also has the contrary effect. The benefits of a life in the *kampung*, such as comparatively low costs of living and the proximity to the place of work, attract people who already work in the surrounding area. Home owners report that people, such as the sales

⁵² The concept of *premanism* is a complex phenomenon. Here, I use the general translation of *preman* as 'thug'. I will discuss this phenomenon in detail in the following chapter.

assistants in the nearby shopping malls, are actively looking for a cheap place to stay and decide to live in the *kampung*. The *kampung* apparently allows people to live in the broader inner-city area on a minimum wage. This observation indicates that the *kampung* does not only attract rural-urban migrants but also people migrating within the city. In-migration and the high turnover of people in the *kampung* is reflected in a tense housing situation. It is thus not surprising that a real estate market for *kampung* houses developed even though land titles are not available. In addition to this, a market for renting out rooms developed. Different qualities and prices for different target groups, such as formal sector workers, informal sector workers and students, are offered. I generally observed that rooms are offered in a price range of around IDR 150,000 to 400,000 per month. In order to cut the expenditure for accommodation, some people even share rooms so that the cost per person can be as little as IDR 75,000 per person per month. The turnover rate of people renting rooms is very high since contracts are made on a monthly basis and people regularly change the place in order to find a cheaper or a better place.

Frequent in- and out-migration has two consequences for the established *kampung* community. On the one hand, integration and social interaction is becoming more difficult. On the other hand, home owners in the *kampung* receive an additional income by renting out rooms. The additional income can be quite significant and does not only benefit home owners. Migrants also demand food and other services. Accordingly, food stalls and kiosks generate additional incomes. It is also mentioned that in-migration has a positive impact on the security situation. Some workers and employees, such as security guards in the shopping malls, come home late and gather in the small paths at night.

I introduced the *kampung* in Tomang as a strategic place that provides various job opportunities to its inhabitants. Yet, these positive aspects should not hide the fact that securing the economic basis is seen as the biggest challenge by many *kampung* dwellers. A single income does usually not generate sufficient funds to support a larger family. In most households, several family members are thus engaged in income generating activities. In addition to that, informal sector strategies create unstable incomes. Compared to formal sector employment, informal income is often generated on a daily basis and informal sector workers do not have access to social benefits that are attached to formal contracts. Community leaders also mention a high unemployment rate amongst youth. Particularly young people seem to face difficulties in finding an appropriate job. Unemployment is not necessarily related to the availability of jobs but rather to factors such as distance to the place of work or the appropriate qualification for the job. Accordingly, *cari uang* (to search money) and the economic situation in general is often mentioned as the biggest risk in the *kampung*.

5.2.3 Aspects of Social Organisation

In the previous section I suggested that the spatial pattern in Tomang has an influence on the perception of the *kampung* as a unit. As a consequence, the *kampung* appears spatially isolated in relation to other neighbourhoods in the *kelurahan*. The spatial image might be

reinforced by the attitude of the *kelurahan* office towards the *kampung*. According to some *kampung* dwellers, the *lurah* rarely visits them and he avoids to get involved in issues related to the *kampung*. The assumed lack of interest is supported by the fact that the *lurah* is appointed by the government and is generally not living in the *kelurahan*. He is appointed for a certain period of time and will then have to relocate to another *kelurahan*. Accordingly, his scope is rather temporary and it is therefore assumed that the *lurah* is not strongly committed to getting involved in *kampung* affairs. But not only the *lurah* is criticised, people repeatedly state that the city administration and the national government are generally not interested in the issues of the poor. Oftentimes people referred to the Suharto-era when poverty eradication was a major aim of the government.

As I pointed out before, Suharto introduced numerous mass organisations in order to control the local level during the New Order. It is interesting to see that in the post-Suharto era, some of the community organisations introduced by Suharto are still operating. The board listing public announcements in the RW offices displays at least three of these organisations. First, the RW/RT-system is still the central organisation regulating and coordinating the local level. Second, the family welfare program with its women organisation PKK (*Pendidikan Kesejahteraan Keluarga*); and third, the youth organisation *Karang Taruna*. Officially, all three organisations carry out regular activities such as *arisan*⁵³, *pengajian*⁵⁴ and *kerja bakti*. *Kerja bakti*, for instance, is a form of community work that was introduced under Suharto. It is still applied in most RTs as a weekly activity to clean-up the neighbourhood, to clear the small canal in the *kampung* from garbage or to clean public toilets. On RW level, the RW office organises regular activities with the respective RT headmen, such as *arisan*.

The women's organisation PKK reflects the hierarchical structure of the RW/RT-system. The RW headman's wife⁵⁵ is usually leading the PKK on RW level. Women from the different neighbourhoods join PKK and organise different activities in their respective neighbourhood. In RW 13, for instance, the PKK regularly organises *cumat cantik* (beautiful friday). As part of this activity, the PKK group visits the families living in the neighbourhood and identifies breeding places for mosquitos and creates awareness for dengue fever. PKK also organises *posyandu* which is an integrated health post on the local level that provides immunization, food supplements and information on family planning as well as child nutrition. Every six months three RTs in RW 13 organise *posyandu* together. In neighbourhoods where PKK is very active it organises further community events. For instance, in several RTs PKK members organize a public birthday calendar so that neighbours know about birthdays and can congratulate accordingly. Community activities of the RW office or PKK are either

53 *Arisan* is often translated as 'rotating savings club' (Brenner 1998, p. 32).

54 *Pengajian* can be translated as 'Muslim prayer meetings that usually include a sermon' (Brenner 1998, p. 223).

55 In Tomang all RW heads are men. Although the political sphere is dominated by men, it could be observed that in other areas also women take responsibility in the RW/RT-system. According to Perkasa and Hendityo, the involvement of the spouse of the respective RW/RT heads in PKK is a legacy of the New Order when the appointment was enforced by law. In post-Suharto anybody can be appointed as the head of PKK (Perkase & Hendityo 2003, pp. 159-160 & 182).

financed through contributions of the community members, or they are financed by government schemes, such as *posyandu*. When bigger budgets are required, it can also be observed that the RW headmen approach the *kelurahan* office or wealthier people to sponsor these activities.

Besides the RW/RT-system, there is also a range of structural organisations of the city administration as well as civic organisations, so-called ORMAS (*Organisasi Masyarakat*), and LSM (Lembaga Swadaya Masyarakat, or NGOs) operating on the local level. Some of the organisations had been established during the New Order while an increasing number seems to form in the post-Suharto era. Due to the high number of these organisations⁵⁶, one easily loses track of the organisations operating in Tomang. Amongst others, the following could be identified: *Citra Bhayangkara*, *Forum Kemitraan Polisi Masyarakat* (FKPM)⁵⁷, LINMAS, SATPOL PP, *Tenabang Bersatu* (Tebas), *Barisan Merah Putih* (BMP), *Mitra Jaya*, *Garda Bangsa*, *Forum Anak Betwai* (Forkabi), *Forum Betawi Remput* (FBR), *Front Pembela Islam* (FPI) and *Pemuda Pancasila*. While some organisations, such as FKPM, play a crucial role for the people in the *kampung*, the activities of others is less transparent. For some organisations, such as *Pemuda Pancasila*, plenty of literature exists. For others it is almost impossible to get primary or secondary information. An overview of the different organisations, their purpose and activities remains an interesting desideratum of research. As it will go beyond the scope of this study, only a short overview on some study-related organisations will be provided in the next chapter where I analyse the role of these organisations for social organisation on the local level.

Religion is another aspect that has an impact on the regulation of community life. There are several *mushollas* (praying rooms) and mosques located in the *kampung*. However, the *ulamas* (Islamic scholars) do not live in the *kampung* but come from outside. One exception is Pak Mubarock who lives in RW 12. He relocated to Tomang ten years ago because he married a woman living in the *kampung*. According to him, he spent several years in Saudi Arabia and speaks English and Arab. He is a member of FPI and is supporting the introduction of sharia law in Indonesia. He connects the fire and floods to the (ill-)behaviour of people and perceives these events as a punishment of god. In the discussion with his neighbours it turned out that Pak Mubarock is not well respected in the neighbourhood and the people do generally not support his religious views. Another interesting observation could be made in RW 11. People of five RTs collected around IDR 150 million in order to be able to build a mosque. The headman of RT 4 states that the mosque has a very important role for

56 According to Direktorat Jenderal Kesatuan Bangsa dan Politik (Kesbangpol) Kementerian Dalam Negeri (quoted in Cybersabili 2010), there are more than 100,000 of these organisations operating in Indonesia. However, only around 10% are registered. It can be concluded that it is not possible to get accurate secondary data on the situation of civic organisations and NGOs in Indonesia.

57 FKPM is a community organisation and is established in order to provide a forum that connects the community with the police. Representatives of the community and representatives of the police form FKPM. It is aiming to solve problems in the community and, if needed, involves the police. Therefore, FKPM can be considered as a part of the neighbourhood security system (*siskamling*) (see Ginting 2008). More information on community organisations and *siskamling* will be provided in chapter six.

the cohesion of the community as it is a place where people regularly meet. According to him, 80% of the women join the weekly *pengajian*. As I mentioned before, the public boards in the RW 13 show that *pengajian* is a religious institution that male community members are supposed to practice daily. Yet, the empirical findings suggest that the intensity of religious practices differs from neighbourhood to neighbourhood. While for some, such as in RW 13, religion is an important aspect of everyday life, in other neighbourhoods religion is less present in everyday life.

In the next chapter, I will argue that there is a general mistrust towards ORMAS and also towards the government. In contrast to the civil servants working at the *kelurahan* office, *kampung* dwellers generally trust the respective headman of the RW and RTs. The reason for this is mainly related to the selection processes of the RW and RT headmen. They are directly elected by the respective neighbourhood and originate from the neighbourhood. For that reason, it is not surprising that the headmen are generally socially respected people in the *kampung*. Oftentimes they are better educated and belong to the more affluent people in the neighbourhood. For instance, in Tomang the headman of RW 11 is a truck driver, RW 12 is staff at the *kelurahan* office, RW 13 is a contractor and RW 14 is a policeman. In addition to that, the RW/RT-system is seen as an important organisation linking the *kampung* dwellers with the municipality. This link works in both directions. On the one hand, government programs and activities are channeled to the local level through the RW/RT-system. The RW/RT-system is thus in charge of the formal administration on the local level. The duties involve administrative tasks, such as compiling of statistics, registration and issuing of documents. On the other hand, *kampung* dwellers can articulate and communicate their interests through the respective RW or RT. Therefore, the headmen of the RW/RT-system, particularly the RW head, represent the interests towards the *kelurahan* office and other external parties.

As mentioned before the formal municipal administration does not directly reach into the *kampung*. The *kelurahan* is the lowest level of the municipal administration with its own budget. Since the *lurah* does, at least in Tomang, rarely involve in *kampung* affairs, the community has to develop different forms of self-organisation. Although different organisations can be found on the local level, the RW/RT-system is the central organisation regulating and organising the *kampung* community in Tomang. Examples for that are manifold and forms of self-organisation can be found in different everyday life situations. For instance, security is a situation which requires the community to develop forms of collective action. Each RT operates its own neighbourhood security system⁵⁸ (*hansip* and *ronda*) since the police does not enter the *kampung* regularly. While *ronda* is based on collective action and requires the voluntary participation of each community member, the *hansip* is paid by monthly contributions of each household. Criminal cases, such as theft, are usually discussed within the community and often with the support of community organisations, such as FKPM (*Forum Kemitraan Polisi Masyarakat*). Only if the community requires external

58 In the next chapter I will provide some background on the historical roots of the neighbourhood security system.

support, the police gets involved.

In this context, it is interesting to learn that traditional law (*adat*) appears to play a minor role for regulation on the local level. The headman of RW 14 claimed that *adat* is not applied at all in his RW. A case in RW 11 might exemplify the limited role of *adat* law⁵⁹. A man made a promise of marriage to a woman who originated from West Java. He then broke the promise by marrying another woman. Community leaders, an *ulama* and a well respected Pak Hadji⁶⁰ discussed whether *adat* law should be applied. According to *adat* law in West Java, the suspect would have to be enchained and dragged through the *kampung*. However, the community concluded that there are different *adat* laws due to the different origins of the *kampung* dwellers and that exercising *adat* law might not be appropriate in an urban context. Finally they found another solution and called the man's employer and asked him to fire his employee.

Self-organization is also reaching into other fields that require collective solutions, such as the insecure tenure situation. I previously pointed out that a real estate market as well as a housing market exists although *kampung* dwellers do not own land titles. Accordingly, the settlement pattern does not appear chaotic but rather well organised. In the *kampung* people cannot just occupy free space. In fact, contracts are made between home owners and buyers. Since formalised contracts are not available, the respective RW and RTs sign the contract. That way, the RW/RT-system is able to regulate the 'informal' use of space.

However, the importance of the RW/RT-system cannot be generalized. The capacity to organize and regulate the community within this structure mainly depends on the capacity of the community leaders. Therefore, the RW/RT-system is highly personalised. It also became apparent that not all neighbourhood associations are satisfied with their respective RW headman. After having been selected, the RW headmen do in some cases favour the RTs which gave them the votes. RTs which gave their support to another candidate are sometimes treated differently. Consequently, it is not surprising to learn that the social interaction of people is often limited to the own RT or the neighbourhood respectively. *Kampung* dwellers repeatedly point out the strong sense of community within a neighbourhood association. In many cases, *kampung* dwellers have a very close relationship to their neighbours but do often only casually know the people living in the next RT or in other neighbourhoods in the RW.

The social cohesion within a neighbourhood community is reinforced by the dense settlement structure. Everything is seen and heard by the neighbours so that people cannot retain anonymity and are 'forced' to socially interact with their neighbours. Moreover, family members or people from the same home region tend to settle in the same neighbourhood. In some RTs it can be found that several neighbours belong to the same kinship group. In addition to that, people share the same everyday life problems and challenges, such as

59 The story was explained by Herni, the cheated bride.

60 'Pak Hadji' is a title for a man who completed the pilgrimage to Mecca. The common symbol of a Pak Hadji is a white cap. Usually, they are well respected persons in a community.

economic difficulties, disaster risk or insecure tenure. Because of these threats, people have the feeling that they have to help each other. The sense of community translates into institutionalized forms of mutual help, such as *sumbangan* (contribution). In case of lifecycle events, such as marriage, death, sickness or circumcision, the neighbourhood community usually collects money to enable the family to bear the expenditures. The solidarity is also expressed in the relationship between individual neighbourhood members. The headman of RT 3 in RW 11 does, for instance, financially support a widow with three children. Mutual help is also done in non-material forms. If a person gets sick, it can be often found that the neighbours take care of the person until she or he can work again. While social institutions such as *arisan* and *pengajian* are enforced on RW level, I found that these institutions play a minor role within the neighbourhood.

It has been mentioned before that spatial patterns are important for the development of a sense of community. While the dense settlement pattern increases social interaction, it can be observed that missing public space can have negative consequences for the reproduction of social ties. Public space is important for *kampung* dwellers as a place where they can spend leisure time and interact with other people. In the past, public space, such as a soccer field, had to give way to the widening of the canal. In the *kelurahan* and also in the *kampung* public space had to give way to housing projects. Due to the absence of public space where people can meet, *kampung* dwellers gather in front of their houses, on the small road on the dam or at *warungs*. For other social activities people have to spend money. In this context it is interesting to note that the fish ponds in the river are merely for recreation and not for fish farming (annex 1, photo 15). People pay a small fee and can fish while chatting with fellow fishers. For most other leisure activities, people must leave the *kampung*. A main attraction is Monas square and the car free day at the Thamrin road on the last Sunday of every month.

Kampung dwellers commonly complain that the solidarity amongst neighbours and collective activities is decreasing. According to several community leaders, in the 1980s people were motivated to join *kerja bakti* and other activities, such as sports clubs. This can, according to the community leaders, also be felt at Friday prayers that are less and less attended. Today, people do often need a personal invitation to join mutual activities. In-migration and the high turnover rate of people in a neighbourhood are given as the root causes. According to long established *kampung* dwellers, migrants are less willing to integrate into the community. Migrants often leave their families behind in rural areas and the main purpose to live in Jakarta is to earn money. An ice seller living in RW 11, for instance, mentioned that he is only working and sleeping in the *kampung*. Once he has saved enough money, he will visit his family in Central Java. He is saving money in order to build a house in the village. As a consequence, he does not have the time and interest to engage in community activities. If he gets sick, he will return to his village to recover there. This example suggests that migrants who leave their families in the village behind are less willing to fully participate in the community. Their point of social reference is often the village they are coming from and not the urban *kampung*.

Because of the challenges migration can impose on the community, integration of newcomers is seen as important. In some neighbourhoods people are even forced to join

community activities. In this respect it can be assumed that the different institutions, such as *arisan*, often have a social rather than a monetary function (see Perkasa & Hendyio 2003, p. 182). They allow newcomers to integrate and reproduce social ties. Obviously, migration puts pressure on the institutionalised forms of local organisation. Other than migration, people repeatedly mentioned that the exposure to the middle class housing puts a challenge on the sense of community. The exposure to luxury goods creates desires for possessions, such as a nice house or a car, and can thus create jealousy amongst *kampung* dwellers. Because of this, there is a general perception that people increasingly look after their own business and become more selfish and individual.

Regarding the sense of community, it is also interesting to compare the neighbourhoods in the *kampung* with low-income people living in middle class neighbourhoods. As can be seen from figure ten, the traditional market Pasar Timbul is located in a middle class neighbourhood in Tomang. The market creates income opportunities in the informal sector. People working at Pasar Timbul, such as *kulis* or traders, live close to the market. These people point out that the sense of community is weak since the socio-economic structure of the neighbourhoods is heterogeneous. Apparently the middle class faces other challenges than low-income people. Accordingly, forms of collective action do not develop and people have to follow individual strategies. It can be observed that in neighbourhoods where the sense of community is low, ORMAS are very present.

5.2.4 Adaption and Coping Strategies with Fire and Flood

Local Fire Management Strategies

My empirical research is primarily aiming to describe the adaption and coping strategies of *kampung* dwellers in general and in the context of floods in particular. On 14th of January 2008, the second day of my empirical data collection in Tomang, a big fire broke out in the *kampung* (see annex 1, photo 27). This 'disaster' required me to adapt the research approach. Since *kampung* life was dominated by activities aiming to mitigate the impact, I shifted my focus from flood risk to the fire coping strategies. The fire was triggered by a man in RW 14 who fell asleep while smoking. The cigarette fell on the mattress he was sleeping on and caught fire. Within a short time the house was on fire and spread to neighbouring houses. Although fire workers entered the *kampung* shortly after, the fire could hardly be stopped. In total, around 370 houses had been destroyed and 2,700 people were affected (see annex 1, photo 28). It took several weeks until the *kampung* dwellers were able to return to normality. As a result, the research process was influenced and biased by the *kampung* fire and its consequences for the dwellers. The observed coping strategies showed great similarities with the institutionalised forms of flood management on the local level. Accordingly, my findings in the context of fire point out some important aspects that contribute to the overall research question. I will thus present my personal experience with the fire in the following.

After the fire was stopped by municipal fire fighters, a central coordination post (*posko induk*) was installed by the headman of RW 14 (see annex 1, photo 29). The *posko* had the main

function to coordinate clearing work and emergency aid. Therefore, all kind of assistance and support had to be registered at the *posko*. In order to make external support transparent, financial donations and material aid was registered and displayed on a big public board at the *posko*. The headman of RW 14 took a leading role in the coordination activities. He was supported by representatives of FKPM as well as LINMAS. In addition to the main coordination post run by the RW, other organisations opened further *poskos*. Pemuda Pancasila, for instance, opened a tent on the Tomang Banjir Kanal road where they collected donations.

Affected *kampung* dwellers became displaced as they could initially not return to their plot of land. In the first days, they had to stay in emergency shelters until the area was cleared from debris. The main emergency shelter was opened at the public school SMP Samaria. Displaced *kampung* dwellers could stay in the class rooms or in a big army tent that was erected on the schoolyard. Moreover, the praying rooms (*mushola*) were opened for evacuees. In order to supply food to the people staying at the emergency shelters several public kitchen were opened, for example by the Indonesian Red Cross or Dinas Bintal dan Kesos (municipal agency for social affairs). It was interesting to observe that migrants who rented rooms in the affected neighbourhood either returned to their home villages or relocated to other neighbourhoods.

In the days following the fire, the RW office organised *kerja bakti* in order to clear the location from debris (see annex 1, p. 30). The community gathered and was assisted by the police unit Satuan Polisi Pamong Praja (SATPOL PP) a group similar to LINMAS (see Human Rights Watch 2006, p. 14). It could be observed that even people from *kampungs* in neighbouring *kelurahans* joined. Pak Santo, a *kampung* dweller from *kelurahan* Jati Pulo, explained that he joined the duty work because he would also like other people to join, if a similar disaster happened in his neighbourhood. In addition to that, some civic organisations, such as Pemuda Pancasila, joined the duty work. After the debris had been cleared, the *kampung* dwellers moved back to their neighbourhoods. Whereas wooden structures were completely gone, some basic walls remained standing. Although most of these walls could not be used for new building structures, they were turned into temporary shelter. Tarns were put in between remaining walls to protect the people from rain and sun. In locations which had been completely destroyed people built up tents.

It was surprising that numerous external actors entered the *kampung* in order to support the fire victims. Basic goods, such as food or clothing, had been sufficiently supplied in the first weeks by donations. In addition to that, financial donations and aid in building material entered the community. Church based organisations, high ranking government officials and middle class residents in Tomang donated money and building materials either through the *posko* or directly to affected families. The public board at the *posko* listed more than IDR 100 million in financial aid. Moreover, political parties became an important source of aid. Parties, such as Partai Demokrat and PKS (Partai Keadilan Sejahtera), had been very active and demonstrated presence in the affected locations (see annex 1, photo 31). In the initial phase they provided food and drinks to the victims. In a later stage they also offered material support, such as bags of cement. People recognized from whom the aid was coming and

showed their sympathy with these parties. Most people interviewed stated that they are going to vote for the parties which showed their solidarity with the community. In addition to that, private sector companies showed their presence in the affected neighbourhoods by providing support. The presence of several companies and organisations became visible through the banners which were put up on the Tomang Banjir Kanal road. For instance, Kuku Bima, a company famous for its energy drink, delivered boxes of their products to the *posko*. The national phone telecommunication company sponsored a public phone which could be used for phone calls free of charge. In interviews it became apparent that people are well aware of the strategy that companies use the opportunity of disaster aid for marketing their products.

On 13th of February, one month after the fire, the RW 14 headman invited to a *hiburan* (recreation event). A stage was set up on the Tomang Banjir Kanal road and the inhabitants of RW 14 gathered in front of the stage. Four weeks after the fire, the symbolic date was used to express the community's gratitude to the different actors for their donations and to pass on the financial aid to the fire victims. After a short introduction of the RW 14 headman, representatives of FKPM stated that they had run the *posko* for one month and collected around IDR 200 million in cash. It was declared that 10% of the total amount will go to the budget of the RW office while the rest will be distributed to the fire victims. They further announced that people who are strongly affected will receive IDR 625,000 while people slightly affected will get IDR 100,000. After hearing the plans, people started to discuss angrily since they could not understand that 10% of the financial aid will go to the RW office. However, before the people could raise their voices a band started to play live music. In the meantime, PKK, headed by the wife of the RW headman, distributed snack boxes to everyone. Following the music, the RW 14 headman held a speech in which he expressed his gratitude to all people providing support to the affected neighbourhood. In his speech he particularly stressed the point that eviction is the most dangerous threat to the people in the *kampung*. He then related the fight against eviction to the struggle for independence. His speech ended with the symbolic hand-over of the financial aid to selected disaster victims. The event ended with *dangdut* music (Indonesian pop music) and dancing. Finally, people were happy about receiving the money and started to dance (see annex 1, photo 25).

In the first month, external support was necessary in order to cover the basic needs of the fire victims. After several weeks the external parties left the *kampung*. Emergency aid was not needed anymore since affected *kampung* dwellers installed temporary housing and returned to their everyday life activities. However, the financial and material support provided by external parties was often not sufficient to allow people to rebuild their homes. It could be observed that for reconstruction activities, people had to rely on individual strategies. Aiming to reconstruct their homes, *kampung* dwellers drew on their social networks in order to mobilise resources. As a consequence, I was perceived as a potential source for building material or money. This situation led to a bias in my research and I certainly did not get access to all information since people did not want to make their sources of support transparent. I got the impression that only few people could rely on their own savings. *Kampung* dwellers who had sufficient financial resources immediately started to rebuild their

homes. Most of the dwellers did, however, re-build their homes step by step. People with a job in the formal sector could often access support from employers who in many cases provided grants or loans. Moreover, people made use of their networks of friends, colleagues, family and rich people they randomly know. For instance, it could be observed that craftsmen from rural areas came to the *kampung* to assist relatives in the reconstruction activities. People also organised cheap recycling material, such as wooden boxes which could be used as building material for the construction of homes.

In the first time of reconstruction activities, the situation of the fire victims seemed to make no progress. Only few *kampung* dwellers could directly start with reconstruction. Yet, when I returned six months after the fire the situation had changed. Almost all homes had been reconstructed and people stayed again in solid houses. Often the building structures improved and had been adjusted to flood and fire. The door steps were lifted up so that flood could not enter the house and the construction appeared to be more solid. Small spaces in between the houses were removed by connecting the walls of neighbouring houses. That way, the building structures became stronger and rats could not enter the space in between the houses. Throughout the reconstruction process, people followed individual strategies and did not want to talk about the sources enabling reconstruction. Accordingly, I was not able to collect detailed information regarding the reconstruction activities on the household and neighbourhood (RT) level.

The role of the government in the reconstruction process was ambivalent. City authorities offered housing schemes that were based on loans. However, the *kampung* dwellers refused the offer as they feared that they will not be able to pay back the loans and will subsequently lose 'their' land. The fear was not without a reason. After the fire, rumours spread that the government will clear the land affected by the fire and fire victims have to relocate to other areas. Some of the rumours became true when the municipality made use of the opportunity and cleared some of the affected areas, such as public toilets built over the small canal in the *kampung*. The land clearance was assisted by the police and some community leaders since the city officials feared the reaction of the *kampung* dwellers. Surprisingly, the community leaders facilitated the clearance activities. Since people in the *kampung* do not hold legal land titles, they seem to be interested in keeping a good relationship with government officials. Accordingly, they supported the view that people should not block canals and roads with shops and toilets. Yet, clearance of housing appeared to be a different issue. The *kampung* dwellers and community leaders underlined that they will not give up their homes regardless of what will happen to them.

The fire management showed that the RW/RT-system is not only important for the regulation of everyday life in the *kampung*, it also takes a leading role in extreme events and disasters. The RW 14 headman, for instance, took up a central function in the fire management activities. On the one hand, he organised the *posko* and internally coordinated activities of the *kampung* dwellers. On the other hand, he was the first contact person for different government agencies as well as the *kelurahan* office. He also coordinated the aid coming from external parties. The *hiburan* event showed that the success of the RW/RT-system is personalized in the person of the headman. The capacities of respective RW and RT

headmen are directly related to the forms of social organisation and collective action that emerge on a community level. For instance, the headman of RW 14 used the *hiburan* event as a symbolic event to get media coverage and potentially more support coming in. He also invited the *walikota* (head of the municipality), the *camat* (head of the *kecamatan*, or sub-district) and the *lurah* but unfortunately none of them showed up. Accordingly, the interest of the media was limited and only two journalists from local newspapers joined the event. On the one hand, the headman of RW 14 succeeded in attracting external actors. On the other hand, he was criticised by some of the *kampung* dwellers in the aftermath of the *hiburan* event. Rumours spread that the total financial aid was actually much higher and that the headman did not make the financial aid transparent. Accordingly, they accused him for having corrupted some of the money.

It is furthermore interesting to note that the police became only marginally involved in the case of fire. The police interrogated some *kampung* dwellers but they did not follow up. Accordingly, community leaders jointly decided about how to handle the case and agreed that the person who caused the fire had to leave the community. According to *adat*, the house could not be rebuilt on the same spot where the fire was triggered. Over the last ten years, four fires happened in the *kampung* and the spots where the fires initially started are still empty spaces today.

I would like to conclude with the short description of the case of the *kampung* fire in Tomang by arguing that *kampung* dwellers succeed in mitigating and coping with disaster risk. However, particularly in the phase following the fire, it became apparent that most *kampung* dwellers might not be able to cope with the impact of fire on an individual basis but rather rely on collective strategies. In this context the RW/RT-system appeared to take a crucial role in disaster response activities. On the one hand, the headman of RW 14 succeeded in internally coordinating activities between the *kampung* dwellers. On the other hand, he became the link between the *kampung* dwellers and external parties. External support was at the same time necessary and sufficient to cover the basic needs during the immediate emergency phase. When people began with reconstruction activities, collective action on a community level ended and people had to rely on individual strategies.

Local Flood Management Strategies

On 1st February 2008, heavy rainfalls triggered flooding in Tomang (see annex 1, photos 33 & 34). The water level in the *kampung* rose to around one meter but it was not considered a serious flooding. Although I personally experienced some of the flood management strategies, I had to retrace major data on the adaption and coping strategies in retrospective. The information provided by the *kampung* dwellers indicates that the coping strategies with flood show similarities to the coping strategies observed in the context of the *kampung* fire. Due to the location close to the West Flood Canal, the *kampung* is highly exposed to flood risk. The flood canal is problematic in two ways. First, rising water levels in the canal can lead to an overflow over the dam. In order to reduce the risk of an overflow, the municipality initiated a project to increase the height of the dam by building a wall. However, the construction was not completed and stopped in the neighbouring *kelurahan* Jati Pulo.

Second, water in the small canal in the *kampung* as well as the water in the water catchment cannot discharge into the West Flood Canal. In order to pump the water into the canal, the colonial administration installed a pumping station which is still operating today. If the water level in the West Flood Canal is high, the pumping capacity is reduced. In this case, the small canals located in the *kampung* can overflow. This situation can cause flooding several times during the rainy season.

Kampung dwellers perceive floods as regular events and flood risk thus became part of everyday life. In all discussions, *kampung* dwellers expressed that they are well aware of flood risk and know about the root causes which are either heavy rainfall in the city or an increased water run-off coming from up-stream areas. While the causes of flooding are explained rationally, people relate the flood events as such to the wrong doing of politicians or blame the rich for urban transformation. Some people also relate floods to the Chinese New Year festivities since floods often happen during the same time. According to *kampung* dwellers, heavy rainfall on Chinese New Year symbolises luck for the upcoming year. In the interviews, it was repeatedly mentioned that flood is usually a temporary phenomena and does not interrupt everyday life activities.

According to the *kampung* dwellers, a flood can only become a serious problem, if it lasts for several days. In that case people have to stop working and, particularly people engaged in informal sector activities, will lose income while they still have to pay for regular living expenses. Moreover, people get easily sick during flooding, for example due to allergic reactions, and will thus face irregular costs. Yet, people also say that they always manage to handle the flood situation. *Kampung* dwellers commonly take precautionary measures when flood warnings are issued. Flood warnings are either received through formal communication channels with the municipal administration or through informal channels. For instance, *kampung* dwellers established communication networks with the civil servants at the flood gates as well as with friends and relatives living in up-stream areas. In addition to that, people regularly check the weather forecasts. Accordingly, people are usually warned about a possible flood in advance. This could be observed before the flood reached Tomang on the 1st of February 2008. Several hours before the flooding, people already received text messages and phone calls from people living in up-stream areas.

As I described earlier, the city administration assigned emergency funds directly to the *kelurahan* office so that the *lurah* could initiate emergency aid. According to the *lurah* in Tomang, the *kelurahan* facilitates evacuation by cooperating with SATGAS and fire fighters. For that a stock of tires is stored in the *kelurahan* office (see annex 1, photo 35). People also use rubber boats and oil barrels that are tied together to rescue people who are cut off. The *kelurahan* office provides emergency shelter, public kitchen and facilitates medical treatment. *Poskos* are then opened at the *kelurahan* level and one in each RW. However, for the reasons mentioned above *kampung* dwellers are very suspicious towards the activities at the *kelurahan* office. Some *kampung* dweller stated that during the 2007 floods money coming from the municipal administration was earmarked for each flood victim. Yet, the money disappeared in the *kelurahan* office. The low trust towards the *kelurahan* office is also reflected in the fact that *kampung* dwellers rather rely on an informal early warning system

than on the formal flood warning system established by the city administration.

Kampung dwellers respond to flood warnings by moving valuables to the second floor. Bigger assets, such as motorbikes, are brought to areas which are safe from flood. This could also be observed on 1st of February 2008. As a preventive measure, valuables and furniture were put away on higher grounds. Interestingly, people gathered on the dam and parked their motorbikes there since parts of the Tomang Banjir Canal road can hardly become flooded (see annex 1, photos 36 & 37). Although the water level in the *kampung* rose, people stayed at their homes. In the interviews, people repeatedly stated that in an emergency case evacuation processes are well rehearsed so that people know where they can go. Schools, praying rooms and public facilities, such as the *kelurahan* office, are assigned to displaced people. During the 2007 flood, even the car park of the nearby shopping complex Roxy Square was opened for flood victims. During this flood, *kampung* life came to a complete stop. *Kampung* dwellers reported that different external actors, similar to the ones who provided support during the fire, supplied food and clothing.

Compared to fire, flood only causes minor damages. Public toilets located in the West Flood Canal are usually washed away and the fields as well as the fish ponds in the canal bed are destroyed. After the flood recedes, people leave their evacuation shelters and return back to their homes. In most cases, they just have to clean-up and are relatively quickly back to everyday life. *Kampung* dwellers give the impression that flood management is already institutionalised as flooding regularly happens and people seem to be well prepared. Community leaders even claim that they are now better prepared for bigger floods than in the past since more actors get involved and flood management is becoming more professional.

5.3 Empirical Findings From Manggarai

5.3.1 The Material Constitution of *Kampung* Space

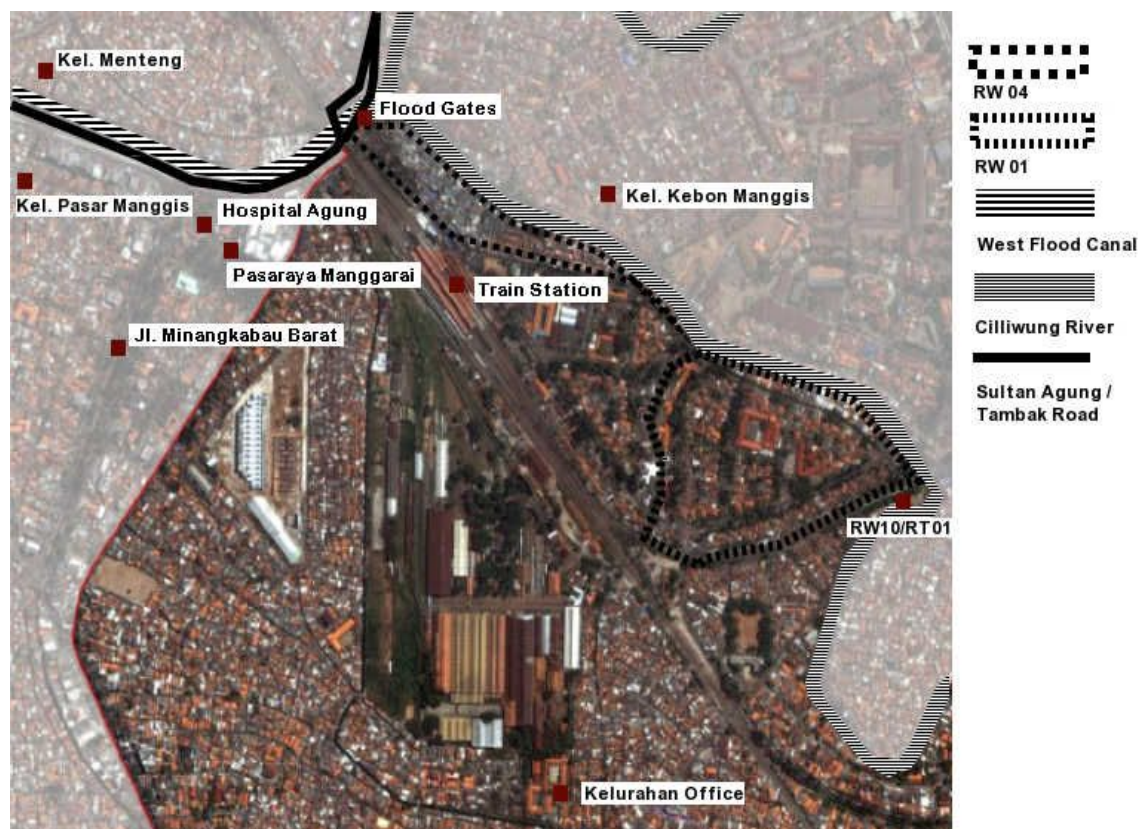
The second *kampung* is located in the *kelurahan* Manggarai in *kecamatan* Tebet/South Jakarta. According to *kelurahan* statistics (Kelurahan Manggarai 2008, p. 3), Manggarai comprises 12 RWs which are further divided into a total of 161 RTs. As of January 2008, 34,165 people were registered in Manggarai. On figure twelve it can be seen that much of the space in the *kelurahan* is devoted to a major railway station. Warehouses and a housing complex belonging to the state owned railway company are adjacent to the railway station. Manggarai is also known for its hospital Rumah Sakit Agung and the department store Pasaraya Manggarai. A major bus terminal, Terminal Manggarai, is located in front of the department store. Buses connecting East, South and Central Jakarta meet here. In addition to that, a lane of the Transjakarta Busway connects Central and East Jakarta and also stops at the bus terminal. Furthermore, Manggarai is well known for its two flood gates. The flood gates divert the Ciliwung river into its original river bed going to the North and into the West Flood Canal which carries most of the run-off water.

The Ciliwung river is also a natural border separating *kelurahan* Manggarai from *kelurahan* Kebon Manggis to the East. *Kelurahan* Manggarai Selatan is located to the South but it is not

separated by a spatial border. An arterial road, the Sultan Agung road, connects East Jakarta with the city centre. The road, as well as the West Flood Canal, are spatial borders that separate Manggarai from *kelurahan* Menteng to the North. The Sultang Agung road changes its name East of the flood gate into Tambak road. To the West, *kelurahan* Pasar Manggis is separated from Manggarai by the Minangkabau Barat road. Pasar Manggis is important for people active in the informal sector because the traditional market Pasar Rumput is located here.

The name Manggarai is a legacy of a *kampung* that formed in this area during colonial times. According to community leaders in RW 04, people started to settle in Manggarai when the Dutch developed the train station. During the construction, the Dutch required corvee of people originating from the *kabupaten* (regency) Manggarai on the island of Flores in Eastern Indonesia. Other sources, such as Somantri (1995, pp. 2-3) and Lohanda (1996, p. 4), see *kampung* Manggarai as an ethnic legacy of a *kampung* in Batavia's *ommelanden* that was drawn into the city when the colonial headquarters had been relocated to the South. Over time, the district transformed into a residential area of the middle class. As a consequence, *kampungs* can only be found along the railway tracks or on the river bank of Ciliwung river.

Figure 12: Kelurahan Manggarai

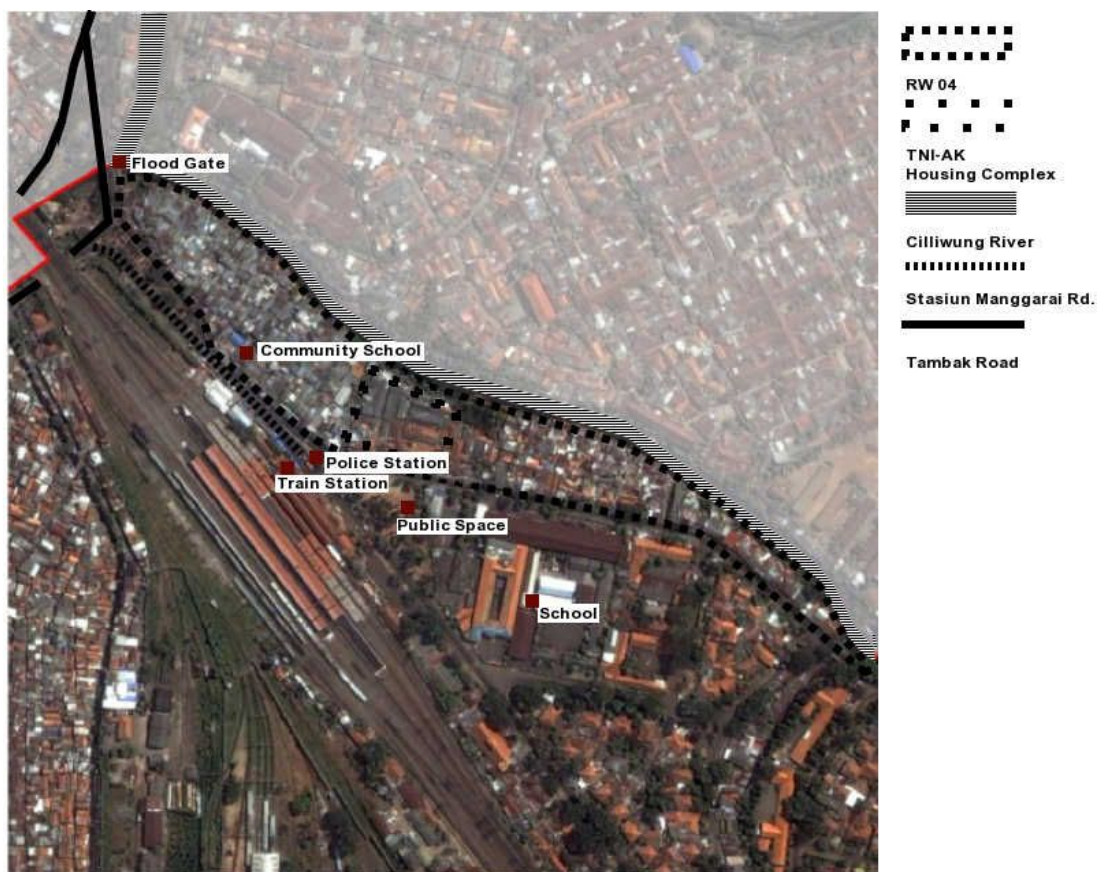


Source: Modified from Dinas Tata Ruang Provinsi DKI Jakarta (2010b)

The *kampung* I selected in Manggarai is identical with the administrative border of RW 04. I observed that administrative boundaries can define a community. The sense of community of

people living in RW 04 is limited to their own community association. This is remarkable as several neighbourhoods are located along the Ciliwung river South of RW 04. Although these RTs share similar socio-economic and spatial characteristics, they are not considered part of the community in RW 04. They are rather perceived as belonging to their respective neighbourhood association (RW 01 and RW 10). I furthermore realised that people do not refer to their community as a *kampung* but rather name it with respect to the administrative unit RW 04. Accordingly, the community that I describe in the following is identical with RW 04. The community association comprises 16 RTs and is home to around 2,794 people. The role of administrative borders for the sense of community is reinforced by the fact that two RTs in RW 04 belong to the middle class. The two neighbourhood associations RT 05 and RT 06 comprise a housing complex belonging to the Indonesian Navy (Tentara Nasional Indonesia Angkatan Laut, or TNI-AL). Although the housing complex is located in the middle of the RW and separates RT 01-04 from RT 07-16, people speak of RW 04 as one community.

Figure 13: Kampung RW 04 Manggarai



Source: Modified from Dinas Tata Ruang Provinsi DKI Jakarta (2010b)

Even though people have been living here for several decades, if not centuries, the *kampung* dwellers do not own legal land titles. With few exceptions, insecure tenure is a characteristic of all settlements and neighbourhoods located along the Ciliwung river. Due to insecure tenure, the risk of eviction is also present in RW 04. Before the Asian Crises, the

government finalized plans aiming to implement a big transportation project, known as the 'Manggarai Project'. These plans intended to transform the Manggarai station into a four story building including a shopping mall and apartments. The capacity of the train services should have been broadened to twenty two tracks and four underground lines. However, with the Asian Crisis the plans were cancelled (Silver 2008, pp. 193-194). The *kampung* dwellers are still aware of the project since the realisation of the project plans would have meant the end of RW 04. But even today the municipal administration constantly introduces plans that include land clearance of *kampung* areas. For instance, during the research the city administration was aiming to clear public toilets in the Ciliwung river (see annex 1, photo 9). Pak Adil, the RW headman's brother, claims that he protested against the plans and started to negotiate with the *kelurahan* office. He then successfully demanded the *kelurahan* office to put the eviction plans on hold until the people in RW 04 have alternative access to sanitary infrastructure.

In the past, *kampung* dwellers had not always been successful in negotiating with the government. RW 04 used to consist of 17 RTs. Yet, RT 17 was cleared in order to broaden the Tambak road. In a discussion with several *kampung* dwellers at a coffee shop, it was concluded that *kampung* clearance is perceived as an action that takes from the poor and gives to the rich. Pak Adil explains that if negotiations with the government are not successful, the atmosphere can become heated and can easily turn into violence. *Kampung* clearance activities did also leave their marks in other parts of the *kelurahan*. RT 01 in RW 10 (see annex 1, photo 10), for instance, was completely destroyed by the government in order to build a road along the river. Affected people received a compensation of IDR 600,000 per square meter. This amount of money was not sufficient to buy or build a house somewhere else. Up to now, the government did not clear the debris so that people passing by are confronted with the risk of eviction. However, as time goes by people start to relocate to this place. First makeshift buildings and a kiosk had been erected in between the debris. Still being aware of the possible consequences of the Manggarai Project, *kampung* dwellers seek for strategies to secure land tenure. In RT 09, for instance, the head is advising people to pay property taxes. The strategy is similar to the one I described for the situation in Tomang. By paying taxes, *kampung* dwellers assume that the government acknowledges the settlement and the *kampung* is thus getting a kind of semi-formal status. This way, home owners in the *kampung* believe that the government has no right to clear the area.

RW 04 is located East of the Manggarai train station. The flood gates are the Northern borders of RW 04. Due to its location close to the train station and the bus terminal, RW 04 is considered a strategic location. Buses and trains connect Manggarai with other parts of Jakarta in every direction. Moreover, there is a high frequency of people passing the community association either on the Sultan Agung / Tombak road or arriving at the train station. The traditional market Pasar Rumput in the neighbouring *kelurahan* Pasar Manggis as well as the department store Pasaraya Manggarai are within walking distance from RW 04. Although densely populated, the standard of housing in RW 04 differs widely. The houses along the Stasiun Manggarai road opposite the train station are solid concrete buildings with access to electricity and piped water. The first level is usually made of concrete while the

second floor is generally made of either wooden or brick structures (see annex 1, photo 11). The quality of houses decreases with the proximity to the river. The poorest quality of housing can be found in the river. Here makeshift huts are put on stilts in the river and river bed (see annex 1, photo 12). These small wooden huts lack any access to water or electricity. People living here have to use public toilets put on stilts in the river. Ironically, people call them 'helicopters' since its user feels like 'flying over the river'. People get their water from wells at different locations in the *kampung*. There are also public washing places where people can do their laundry.

As it can be seen from figure nine, the outside appearance of the *kampung* suggest a rather unorganised and run-down environment. Most people passing behold RW 04 from the riverside. Here, the visible homes are the makeshift wooden huts close to the river. One can also see the garbage that is dumped into the river. However, a completely different impression can be obtained inside the settlement. The paths are clean and some of the buildings colourfully painted and decorated with flowers (see annex 01, photo 13). The majority of houses have floor tiles and the homes are comparatively well equipped with, for instance, television sets. Major parts of the *kampung* appear everything but chaotic. There is also one mosque and four praying rooms as well as a community school located in the *kampung*. Although RW 04 is densely populated and the small paths are over-built, there are several small public spaces in the middle of the settlement (see annex 1, photo 14). These locations are used by people to gather in the evening or as parking spots for their motorbikes. Kampung dwellers feel very safe since people from outside can be easily lost in the labyrinth-like shaped paths. Opposite the settlement, there is a police station and a small public park. During daytime, the public park is used by people for taking a rest. It is also used for public gatherings, for example during elections. In contrast to the situation in Tomang, RW 04 in Manggarai is not spatially excluded from the rest of the *kelurahan* in a sense that bigger buildings isolate the community. Residential areas of the middle class are not fenced and the area also provides public space where people can gather or do sports, such as playing soccer. But not only the public park is used as a gathering place, there is also an open space along the Stasiun Manggarai road that can be used by people to gather and interact.

5.3.2 The Formal-Informal Continuum in Manggarai

In Manggarai a major part of the *kampung* dwellers is engaged in trading activities. Due to the location close to the traditional market Pasar Rumput⁶¹ (see annex 1, photo 16), many people living in RW 04 found work as traders or related work. But not only Pasar Rumput offers opportunities for traders. The Stasiun Manggarai road, the road in front of the

61 It has to be noted here that people call the markets run by the state owned company PD Pasar Jaya 'traditional markets'. Murray argues that the markets had been introduced in the 1970s or 1980s to replace and formalise the informal small scale markets in the *kampung*s (Murray 1991, p. 90). However, the modernisation of the city lead to the construction of countless supermarkets and shopping malls. These commercial retail stores replace open markets and the ones run by PD Pasar Jaya. In comparison to large supermarkets, people now call them 'traditional markets'.

kampung, is used as a location for a morning street market operating from 5 am to 10 am (see annex 1, photo 17). Almost all marketers working at the market live in RW 04. Other people operate kiosks in the *kampung* and there is also a number of street hawkers (*pedagang keliling*). Street hawkers usually buy large-packaged goods in wholesale markets and offer single items either to *kampung* dwellers in RW 04 or to people traveling on the main roads. Although this form of urban involution is critically discussed in the literature⁶², one street vendor offering his goods on the side walk states that it is a good income strategy. He claims that regardless of what is offered at the sidewalk everything is bought, due to the high frequency of people passing RW 04 (see annex 1, photo 18). But not only goods are offered, some of the dwellers specialised in preparing and offering food. Flying vendors (see annex 1, photo 19), for instance, prepare and sell food such as *somay* (Indonesian version of the Chinese dumpling) or *martabak* (Indonesian version of either an omelette or pancake) on the spot. The strategy for many hawkers is to sell food, drinks and other items that can be sold for only IDR 500 or IDR 1,000. Because of the low price, people expect to sell high quantities. A tea seller, for instance, reports that she charges IDR 500 for a cup of tea and usually she sells around 10 litres per day.

Other than trading, *kampung* dwellers are also engaged in transportation services. Since the *kampung* is located opposite the Manggarai train station, *ojek* drivers wait for their customers in front of the Stasiun Manggarai road (annex 1, photo 20). *Ojek* is also the main means of transportation to Pasar Rumput. An additional source of income for home owners is tapped through the renting out of rooms or buildings. In general, people are very creative in finding employment. The headman of RT 10, for instance, runs a small shop where he sells used and new tires for motorcycles (see annex 1, photo 21). Old tires are recycled by remoulding new profiles into the tires. In contrast to the situation in Tomang, only few people in RW 04 are employed in the formal sector and work in low-paid jobs, such as security guards at the Pasaraya Manggarai.

In general, the quality of housing reflects the occupation of the people. In the first row of houses facing the Stasiun Manggarai road some people run their own shops. The poorest people live close to the river in makeshift type of housing because the rent for this type of accommodation is low. Here, the majority of people are scavengers. Other than that one can also find street cleaners employed by the government, coolies, unemployed as well as elderly people in this area. Scavengers earn around IDR 15,000 to IDR 20,000 a day on average. On very good days, they can earn up to IDR 70,000 a day. A kilo of plastic sells, for instance, for IDR 7,500 while paper is sold for around IDR 1,500 per kilo. Since a big portion of the household waste in Jakarta is dumped into the waterways, Ciliwung is a good source for recycling material. Some people can be seen fishing plastic out of the Ciliwung by using dip nets. The flood gate also provides a good source of recycling material because garbage usually clogs the gate (annex 1, photo 22) and can be easily removed by scavengers. In RT 01 the majority of people work as scavengers. The head of the neighbourhood is a lady who

62 For further information on the discussion on 'urban involution' please see the discussion of Korff (1986, pp. 3-4).

is an agent for recycling material. She owns two trucks and buys the garbage from the collectors in her neighbourhood. The recycling material is then separated and brought to factories.

Even with a small income people can survive in the neighbourhood since cost of living is relatively low. People usually cook on their own. That is why only few food stalls can be found in the neighbourhood. In these places, it is possible to get a portion of rice with vegetables for only IDR 4,000. This is approximately 50% to 70% lower than the price at a food stall located on a public road in the inner city centre. While established dwellers usually own their home, migrants and the poorest people in the community rent their accommodation. Since the quality of housing is heterogenous, the cost for rent can differ significantly. For instance, a room with proper access to tap water and electricity will cost around IDR 400,000 while the average room is around IDR 200,000 a month. The cheapest makeshift home, again, could be rented for around IDR 50,000-100,000 a month. It can be often found that two or more people share a room or a home. Accordingly, the cost for accommodation can be further reduced.

With the case of Pak Bambang I would like to illustrate that the combination of comparatively low cost of living and the strategic location of low-income neighbourhoods in the wider inner-city areas is attractive for people. Pak Bambang used to live in RT 01 in RW 10 which was evicted. Following the eviction he relocated to Bekasi, a city adjacent to East Jakarta. He opened a kiosk but soon realized that his business in Bekasi was not as successful as the one in Manggarai. As a consequence, he moved back to RT 02 which is the neighbourhood association located next to his former home in Manggarai. Here he bought a house for around IDR 23 million and payed another IDR 47 million for the renovation and stocks of his kiosk. Because of insecure tenure, he is aware of the risk of eviction. Although the price for a building without legal documents appears to be high, he states that the price for the house including the kiosk is comparatively low. Moreover, he claims that his business runs much better in Manggarai then somewhere else. His daily turnover is around IDR 1 to 1.5 million. He calculates with a profit of around 10% of the turnover. According to him, he will need around IDR 50,000 daily to support his family. He is able to save the rest of the profit.

The interesting example of Pak Bambang should not hide the fact that the social composition of RW 04 is heterogenous and many people can be considered poor. The strategic location of the *kampung* provides very good opportunities but it appears that not every person gains a foothold in the urban economy. Education seems to be a key factor why some people have difficulties to find jobs. In RT 10 in RW 04 a construction worker lost his job when the construction project was finished. He used to earn IDR 30,000 a day. But now he is unemployed and has difficulties to find alternative employment. Pak Adil states that three decades ago, SD (Sekolah Dasar, or Primary School) was the average education of people living here. Nowadays, six years of schooling is the minimum requirement for people to find employment in the low-income segment of the formal sector. He further states that most people do only have access to job opportunities in the informal sector. Accordingly, families place a high priority on the education of their children. Today children usually graduate from SMP (Sekolah Menengah Pertama, or Junior High School) or even SMA (Sekolah Menengah

Atas, or High School). For the vast majority of students it is not possible to continue with studies at a university because of the comparatively high tuition fees. However, on the job market in the formal sector they have to compete with students holding a university degree. Accordingly, many male youth have difficulties finding a job in the formal sector and start their career with a job in the informal sector, such as *ojek* drivers. The *ojek* drivers I interviewed (see annex 1, photo 20) report that the income is sufficient to afford an ordinary life in RW 04 - but not more.

5.3.3 Aspects of Social Organisation

I argued before that the sense of community in Manggarai is identical with the administrative borders of the community organisation RW 04. This might be surprising, given the fact that the socio-economic composition in RW 04 is quite heterogenous. People from all over the archipelago can be found in the community. Apparently, the ethnic background seems to play a minor role. This might be explained by the fact that most of the dwellers have a migration background. The economic situations of people living in RW 04 also show big differences. In the same community there are people who are unemployed and others who earn IDR 5 million and more a month. As described before, the heterogenous economic situation of different dwellers is also reflected in the housing pattern. Therefore, it might be advisable to focus on what people in RW 04 have in common. Some of the similarities are related to the spatial patterns. All home owners in RW 04 share the problem of insecure land tenure and the related risk of eviction. In addition to this, people share similar everyday life challenges, for example insecure income in the informal sector or environmental threats.

The orientation of the community along the administrative structure is also reflected in the relation to the neighbouring community association. As I mentioned before, RT 11 in RW 01 is located next to RT 01 in RW 04. The situation in RT 11 is very similar in terms of insecure land tenure and informal sector employment. Yet, RT 11 is part of a community association that is dominated by the middle class. Accordingly, other neighbourhood associations in RW 01 are not confronted with the same challenges people in RT 11 face. Although RT 11 shares similar socio-economic and spatial characteristics with the neighbouring RTs in RW 04, there is a perceived dividing line along the administrative boundary separating community association RW 04 from RW 01. In contrast to RW 01, the different neighbourhoods in RW 04 face similar challenges which are shared on a community level. This situation might be reinforced by the the general perception of *kampung* dwellers that the *kelurahan* office and the *lurah* in person do not show a big interest in the problems of RW 04.

This situation might explain why RW 04 has strong charismatic community leaders, or *tokoh masyarakat*, who represent and act in favour of the community. In particular, Pak Adil, the brother of the RW headman, is very active in community affairs. He is *dewan kelurahan* (member of the *kelurahan* council) and thus represents the RW on *kelurahan* level. Accordingly, he holds the function of a mediator. On the one hand, he channels government activities and information from the municipal administration to the people. On the other hand, he articulates and communicates the interests of the community to the *kelurahan* office. I

described before that he entered negotiations with the *lurah* when it was ordered to demolish the public toilets built in the river. Another example is the beautification of the *kampung*. Opposite the *kampung* there is a long and high wall fencing the train station along the Stasiun Manggarai road. Since people in RW 04 did not like that the wall obstructed their view, Pak Adil negotiated with the *kelurahan* office in order to get paint. He also discussed with an art school and finally he succeeded in getting art students to paint pictures on the wall (see annex 1, photo 23).

It can be furthermore observed that community leaders do not only mediate in-between the municipal administration and the people. In Manggarai, the community leaders also succeed in cooperating with other external parties. Pak Adil did, for instance, negotiate with the telecommunication company PT Indosat in order to establish a community school ('Rumah Indosat' or 'Kampung Siaga' as it is officially called, see Indosat 2007) in RW 04. With the financial support of PT Indosat, a house on the Stasiun Manggarai road was converted into a school (see annex 1, photos 24 and 25). The school provides children living in RW 04 the opportunity to join extra-curricular courses. The community school also offers different education programs to adults. For instance, it is equipped with computers and sewing machines so that people have the opportunity to learn computer and sewing skills. In addition to that, the community school provides a playground for children which is located in a small green area in front of the school. Furthermore, Rumah Indosat serves as a community house and thus also fulfils a social function. For instance, couples who would like to marry but do not have sufficient funds to organise a large social event can use the community school as a venue for their marriage.

Rumah Indosat is part of a corporate social responsibility (CSR) program. The Indosat program is not the only CSR program targeting the community in RW 04. The RW heads also negotiated with SCTV, a national television station, in order to provide free health care to *kampung* dwellers. Once a month, SCTV finances a team of medical doctors which provides services free of charge in Rumah Indosat. In addition to the services offered through CSR programs or government schemes, the RW office also uses its budget for supporting the community. The office did, for instance, buy a set of dishes which can be rented by community members for social events, such as marriages. The RW office also organised loudspeakers which are installed at Rumah Indosat. This way the RW office can disseminate information, such as on flood warnings.

In the past, the capacity of the *tokoh masyarakat* (community leader) was also tested when the community was split into different rivalling groups. Manggarai used to be well known not only for riots between different groups within the community but also with neighbouring communities. According to the *kampung* dwellers, it was possible to unite the different groups, due to the activities of *tokoh masyarakat*. In this context, it has to be remarked that the RW 04 headman is cooperating with the police which is based at the police post opposite the *kampung*. As part of a joint activity, banners stating that people in RW 04 are peace loving were put at the flood gate. Yet, the community still has a bad reputation for violent behaviour. According to Pak Adil, in 2007 soccer fans went on a rampage in a neighbouring *kampung* and escaped through RW 04. The community in RW 04 was accused for the

rampage by the neighbouring *kampung*.

Although the role of the RW headman is crucial for organising and regulating affairs that concern the community as a whole, the scope of people in RW 04 focuses more on the level of the neighbourhood associations. Similar to the situation in Tomang, the RT is the first contact person for neighbourhood affairs. Given the importance of the RT headmen for the respective neighbourhoods on the one hand and the RW head for the community on the other, the relation between the community leaders on RW level and RT level is very important. One institution that supports the reproduction of ties within the RW/RT-system is *arisan*. In Manggarai, like in Tomang, the head of RW 04 and the respective RTs are connected through a regular *arisan* which all RTs participate in.

In Manggarai it can be observed that the close relationship between the leader of the neighbourhood association and the people in the neighbourhood is in some cases also represented in business relationships. In RT 01, for instance, the majority of people are scavengers while the neighbourhood leader is an agent for recycling material. The 'headwoman' of RT 01 appears to be better off since she owns her own truck and is always well dressed. Yet, she also lives within the neighbourhood. The relationship between the scavengers and the agent for recycling material resembles a principal agent relationship in which the economic and social activities between the people in the neighbourhood and the head of the RT are closely interlinked. The recycling agents do, for instance, depend on the supply of material delivered by the scavengers. The dependency also creates social obligations so that the agent has to support people in case of hardship. It was described before that the poorest people in the *kampung* are vulnerable to lifecycle risks, such as sickness. The daily earned income from collecting and selling recycling material is just sufficient to make a living. However, due to the precarious employment situation, any lifecycle event, such as sickness, can pose a serious problem on people as they will lose their income. In these cases it can be observed that forms of mutual support emerge and people contribute money to pay for bills or support the family.

Furthermore, it has to be acknowledged that the government provides schemes to support people in need. The poor have, for instance, access to the health care scheme JPKM-GAKIN (Jaminan Pemeliharaan Kesehatan Masyarakat - Keluarga Miskin) which is implemented on a provincial level. JPKM-GAKIN was established to provide health care free of charge. Yet, various administrative steps are required in order to be able to access the system, such as providing a letter from the respective RT head⁶³. These administrative procedures can be subject to unknown additional costs. I found that some neighbourhood headmen developed alternative solutions to improve the access to healthcare. For instance, in order to provide health care to the poor, the headman of RT 10 developed his own scheme for the neighbourhood. He established a cooperation with a medical doctor. If people from his neighbourhood show a health card that is signed by the head of RT 10, they get a medical treatment for a small administrative fee (see annex 1, photo 26).

63 For more information on the rather complex health care scheme please see Dinas Kesehatan (2011).

Similar to the situation in Tomang, it can be observed that a sense of community translates into different forms of collective action or mutual support. That way, the sense of community enables people to cope with lifecycle risks. How intense this sense of community can be institutionalised became apparent in RT 01. As was described before, the majority of people living here are scavengers. The neighbourhood is also home to an elderly couple which does not have any relatives to support them. The couple used to pay around IDR 40,000 a month for their makeshift shelter. When the husband, Pak Sawani, could not work as *becak* driver anymore they stopped paying the rent to the owner of the shelter. The municipal department of social affairs (Departemen Sosial, or DEPSOS) offered the elderly couple to move to a public home for old people. However, they refused because they feel integrated into the neighbourhood community. They have been living in the neighbourhood for years and are supported by the neighbours, for example with food. Accordingly, moving out of RT 01 seemed not to be appealing to them. The same situation is true for another elderly man, Pak Sanusi, who is living across the elderly couple. He is in a similar situation as he does not have any relatives he can rely on. Because of an injury, he is not able to work. He is also supported by his neighbours with food and a very basic accommodation free of charge.

It is interesting to learn that not only poorer people in RW 04 enjoy the sense of community in the *kampung*. It is reported that from time to time families in RW 04 succeed in improving their economic situation. These families are often aiming to move out of the settlement and to relocate to a middle class neighbourhood. Yet, it seems that also the families who show a social upward mobility acknowledge the sense of community in RW 04. Pak Adil argues that most of the families who move out of the neighbourhood return after a short time. On the one hand, they usually miss the strong social cohesion amongst the neighbours or dislike the anonymity in residential areas of the middle class respectively. On the other hand, they become aware of the relatively cheap cost of living in RW 04.

The forms of collective action in Manggarai are very similar to the ones that I observed in Tomang. The RT headmen organise regular activities, such as *kerja bakti* or *ronda*. People living in the neighbourhood are expected to participate in these activities. Some RTs even introduced sanctions in case people are not willing to join mutual activities. In RT 01, for instance, people have to pay around IDR 10,000 to the RT fund, if they do not join *ronda*. The head of RT 10 even states that people are excluded from the neighbourhood, if they are not willing to participate in these activities. Accordingly, it can be explained why migrants are well integrated into the community. In fact, it is difficult to differentiate between established *kampung* dwellers and recent migrants. A street vendor selling *martabak* reports that his family is living in rural Java. He migrated to Jakarta as the income from farming was too little to support his family. However, the income he generates in Jakarta is too little to bring the family to Manggarai. Although he has been working in Jakarta for 33 years, he regularly returns home to his village to see his family. In Manggarai he aims to live as cheap as possible since he wants to save money and build a house in his home village.

The capacity of a neighbourhood to integrate migrants appears to be a crucial factor in developing a sense of community. The neighbourhoods in RW 04 seem to succeed in integrating migrants into their community. In contrast, neighbourhoods in other RWs, such as

RT 02 in RW 10, failed to develop a strong sense of community. The RT 02 headman states that it is the only neighbourhood in RW 10 which does not belong to the middle class. Initially, people from outside started to settle in this location on the banks of the Ciliwung river because it was a location ideal situated for pulling out bamboo that was floated down from up-stream areas. The settlement further developed but the bamboo activities ceased to exist. Today, around half of the people living in RT 02 can be considered as temporary migrants. According to the RT 02 headman, television has a big influence on the in-migration of people from rural areas. Particularly young people come to Jakarta with the aim to earn money and pursue a lifestyle that is communicated by television.

Although living in Jakarta, for many migrants the point of social reference is still in rural areas. Therefore, RT 02 headman claims that these so called *orang musiman* (seasonal migrants) are primarily interested in earning money and less interested in socially integrating into the *kampung* community. It is therefore not surprising that these *orang musiman* try to escape collective activities. As a consequence, social interaction is often limited to small talks at the *warung* or after prayer at the praying rooms. He also points out that if *kerja bakti* is organised, migrants prefer to commute home to their villages. In the context of floods the same pattern could be observed. As a result, *kerja bakti* is only organised in RW 10, if ordered by the government. Following the arguments of the RT 02 headman one might conclude that the sense of community within neighbourhoods depends on the capacity of the people to integrate migrants. Apparently this capacity varies from community to community.

Moreover, *kampung* dwellers confirm that the dense settlement pattern in RW 04 has a direct influence on the social cohesion. The buildings are closely located next to each other so that one can hear and see everything in the surrounding homes. It is also common to enter the neighbours' homes without knocking on the door. The first floor is usually used for the kitchen and the living room. The second floor is more private since the bed rooms are located here. Within a neighbourhood, people gather at the small paths and exchange information and news. *Kampung* dwellers also meet in open spaces in the *kampung* and coffee shops (*warung kopi*) are popular places to gather. Accordingly, one can imagine that news spread easily and fast.

In contrast to Tomang, where the *kampung* is spatially isolated, dwellers of RW 04 have access to a small public park area at the Stasiun Manggarai road. The traffic on this road is moderate so that people are able to gather here. Moreover, *kampung* dwellers socially interact with strangers going to or leaving the train station. The most popular place for leisure activities outside RW 04 is Monas square which is easily accessible by train. For their shoppings, people do not only visit traditional markets but also supermarkets, such as the ones located in Pasaraya Manggarai. This is due to the fact that some products are cheaper in the supermarket than in the traditional markets. In addition to that, fast food restaurants in Pasaraya Manggarai are popular places where families can celebrate on special occasions. It is furthermore surprising that the children in RW 04 know different places all over Jakarta, such as the leisure parks Dunia Fantasi and Sea World in Ancol or Taman Mini and Ragunan Zoo in the South of Jakarta.

5.3.4 Adaption and Coping Strategies with Flood and Fire

As I described before, Manggarai is well known because of the two flood gates that are located in the *kelurahan*. The flood gates had been built in colonial times to divert the Ciliwung river into its original river bed and into the West Flood Canal. During the 2002 flood, the flood gates became a political issue. Soldiers had the order to protect the flood gate to prevent flooding of the presidential palace, the area around Thamrin road and the old city centre Kota. Since the flood gate diverting the Ciliwung river into its original river bed had been closed, the backwater caused flooding in up-stream areas. After protests, the soldiers were recalled, the flood gate was opened and as a result the presidential palace was flooded (Caljouw, Nas & Pratiwo 2005, p. 458). The flood gates are also of importance to the people living in RW 04 since they are directly exposed to a rise in water levels at the flood gate. If the flood gates do not function properly or are clogged by garbage, the water level of Ciliwung river can rise significantly. Since some of the makeshift homes are built on stilts in the river, they are the first to be affected. However, already regular rain fall can cause the water level to rise so that the small paths connecting the homes are under water (see annex 1, photo 38). In the rainy season, floods are thus a regular event. Accordingly, people are used to floods and repeatedly claim that they feel safe and do not see flood as a serious threat.

Another reason for the general perception of flood as a regular everyday life event might be born by the fact that flood management appears to be highly institutionalised. The different RT headmen report that they usually get flood warnings directly from the *kelurahan* office. Moreover, they learn about flood warnings from the news on television and through informal communication structures. For the RW 04 headman the close contact with the person at the flood gate is very important since he knows about the water levels in up-stream areas, such as in Depok or at the Kartu Lampa water catchment in Bogor. In addition to that, the RW 04 headman usually receives information from a NGO called Tulip⁶⁴. If warnings are issued, *kampung* dwellers have several hours for the preparation. They respond to the warning by moving valuables to the second floor of their two-story homes. If people do not have a second floor or they have larger items, the valuables are brought to the Stasiun Manggarai road.

As long as people can wade through the water and reach the surrounding area, they will not leave their homes. People only leave homes and evacuate, if water levels rise significantly so that they are cut off and trapped in their homes. In Manggarai, the evacuation process is well-rehearsed. Usually, schools are opened for displaced people and tents are put up on the Stasiun Manggarai road. The RW office operates a post in order to coordinate flood management activities. For instance, it plays a central role in organising the evacuation of people who are trapped in their homes. Particularly elderly people require assistance by others. Usually boats or rubber tubes are made available by the *kelurahan* office for evacuation activities. The coordination activities also include the operation of public kitchens

64 During the research I could not identify the NGO and discuss with representatives.

in order to supply evacuees with food. The flood management activities show that people can rely on resources provided by the *kelurahan* and RW office, such as rubber tubes, tents and public kitchens. According to Pak Adil, compared to a decade ago flood management has become more professional as an ever increasing number of external parties gets involved. In this context he mentioned that political parties, such as the PDI-P, get increasingly involved in disaster aid.

Flood management requires coordinated activities by the community to successfully organise evacuation as well as to supply shelter and food to displaced people. The success of flood management does therefore correlate with the personal capacities of community leaders. But the capacities of community leaders is not only crucial for the coordination of people within the community. They also have to coordinate the support coming from external parties. This is commonly made possible by opening coordinations posts, or *posko*. For all external parties, the *posko* is the first point of entry to the affected community. Accordingly, it is not surprising that the coordination post is increasingly professionalised. For instance, the organisation PKPU⁶⁵ (Pos Keadilan Peduli Umat, or National Humanitarian Foundation) specialised in disaster management coordination. It is already running a *posko* in the *kelurahan* Kampung Melayu. Due to its low location on the banks of the Ciliwung river, this sub-district is one of the worst flood-affected *kelurahans* in Jakarta. PKPU has also plans to install a *posko* in Manggarai in order to make disaster management more efficient.

The longer the duration of flooding, the more serious are the challenges for the dwellers of RW 04. While people with a home business have to stop working, street hawkers do still continue with their selling activities. Besides the loss of income, people claim that sickness is a major problem during a flood. Due to the poor quality of river water, people often get allergic reactions and diarrhoea. Yet, as I argued before, access to basic health care is generally available. Because of the regularity and the highly institutionalised flood management, *kampung* dwellers state that flood is not seen as a major problem. This might also be the case because material damage caused by flooding remains limited. When the water recedes people go back to their homes and clean up. *Kerja bakti* is organised by the community in order to clean up the neighbourhood and houses which are more affected. Just in few cases, the homes are completely destroyed or washed away. Semi-permanent housing, usually wooden constructions, are most vulnerable. Although costs for rebuilding semi-permanent houses can be up to IDR 10 million, it has to be kept in mind that the people inhabiting these kind of buildings do usually not own them but rent them.

People repeatedly point out that if the flood is gone, the flood problem is gone. This is different to urban fires which are considered a major threat. In the past, *kampung* fires also regularly occurred in Manggarai. Often, fires were triggered because people used to cook over an open fire inside their homes. To reduce fire risk, people are now advised to cook outside. The last bigger fire happened in 2002 and destroyed one third of RW 04. Pak Adil asserts that fire, in contrast to flooding, has the potential to severely destroy homes and

65 For more information on PKPU please see <http://csr.pkpu.or.id/>

valuables. Following a fire, people usually have to access financial resources in order to be able to rebuild homes. Only few people have access to banks and so that they save their money at home. Fire can thus also destroy the savings people accumulated. Realizing that fire is a serious threat, the RW office responded with a fire management plan. Four representatives of each RT have to attend a monthly meeting in which fire management activities are discussed. The RW office even bought a big fire extinguisher. It can be observed that some neighbourhoods follow-up on the monthly meetings. The RT 10 headman, for instance, bought a fire extinguisher for his neighbourhood (see annex 1, photo 39).

6 THE URBAN *KAMPUNG* IN POST-SUHARTO INDONESIA

In the previous chapter I presented my empirical findings in a descriptive way. Having introduced both *kampungs*, I would now like to reflect, analyse and interpret the empirical data in this chapter. Hereby, I will connect the research findings with the theoretical discussion on urbanism in chapter four. Moreover, I would like to compare my findings with earlier studies on Jakarta's *kampungs* and provide some background information on aspects that still appear confusing. Accordingly, I will first reflect on aspects of physical space and regulation of space for the sense of community in the *kampung*. Then, I will interpret how social order and local regulation is institutionalised. I will also present factors that might challenge the current order and require the community to respond. Based on the interpretation of the empirical findings, I will finally outline how the *kampung* can be conceptualised. My aim is to provide a comprehensive picture of the urban *kampung* and its current role in the urban hierarchy. The chapter should serve as a basis for the vulnerability assessment that will follow in chapter seven.

6.1 Aspects Of Material Space

Vulnerable Locations and Insecure Tenure

By approaching the *kampung* from the physical aspects of space, the empirical findings reconfirm the initial statements that the urban poor usually settle in hazardous locations. Already in the 1970s Krausse argued that the urban poor in Jakarta inhabit land that is not attractive for the formal urban land market, such as locations along railway lines or waterways (Krausse 1975, p. 45). My research findings support Krausse's argument. Over the last decades, (greater) inner-city locations increasingly became attractive for the urban land market so that urban transformation pushed *kampung* dwellers in both districts into vulnerable urban pockets. The transformation becomes obvious when we compare Murray's study in Manggarai published in 1991 with my own findings. She presents major parts of the residential areas in *kelurahan* Manggarai as *kampungs*. Interestingly, what she describes as *kampung* area is today mainly considered a middle class residential area. In addition to that, what Murray identified as the poorest neighbourhoods in the *kampung* is identical with the *kampung* settlement today, such as my research location RW 04 (Murray 1991, pp. 27-28).

Obviously, over the last twenty years large parts of the former *kampung* area had been transformed into residential areas of the middle class. Today, the term *kampung* is generally referring to settlements that are characterised by insecure tenure and land that is not traded on formal urban land markets. However, the location of the two *kampungs* in Tomang and Manggarai presents two major challenges to the communities. First, both *kampungs* are situated in hazardous locations close to major waterways with a high exposure to different risks, particularly flooding. Second, both *kampungs* are considered illegal squatter settlements since they are located on state owned land.

Due to the close location to the West Flood Canal and the Ciliwung river respectively, both communities are regularly affected by flooding. While smaller floods are common events in both *kampungs* during the rainy season, bigger floods occur every five years on average. I will show in the following that different spatial aspects significantly contribute to the vulnerability of *kampung* dwellers. The origins of the second challenge, insecure tenure, is hard to retrace. Human Rights Watch relates insecure tenure in Jakarta to a range of factors, such as poor administration and corruption. In a report it claims that 99% of the land in Indonesia is considered state-owned land. Although people have been living on their land for generations, land registration and certification requires lengthy and costly administrative procedures (Human Rights Watch 2006, p. 20). In her study on *kampung* Kebun Kacang, Jellinek suggests that land ownership became unclear when the Dutch had lost control during the struggle for independence in the late 1940s. In the 1950s and 1960s only long established *kampung* dwellers knew the official administrative procedures to acquire legal land titles. She further shows that beyond the formal land market, *kampung* land was transferred based on contracts which were signed by the *lurah*. However, according to Jellinek, these contracts were not officially recognized by the municipal government (Jellinek 1991, pp. 9 & 14-15).

In Tomang and Manggarai, *kampung* dwellers inhabit the area at least since the late colonial period. Yet, *kampung* dwellers do not possess legal rights to the land and their settlements are thus considered illegal squatters. But unregistered does not imply unregulated. Instead of finding an unorganised and chaotic settlement pattern, informal land markets are highly institutionalised and regulated. As a consequence, newcomers cannot just settle anywhere. Even the lowest quality of sub-standard shelter has a price tag attached to it. Usually, land is transferred based on contracts which are signed by the respective RW and RT headmen. The RW/RT-system is thus the central authority in regulating the informal land market. Although the headmen officially represent the municipal administration on a local level, the informal contracts are not acknowledged by the municipal government. Accordingly, *kampung* dwellers easily become victims of land clearance. Although the status of land ownership can be disputed, large scale social movements of resistance do and did generally not emerge (see Berner and Korff 1995).

Still, eviction is a threat that is faced by all home owners in the *kampung* and require people to develop collective strategies. In both *kampungs*, it can be observed that community leaders advice people to pay land taxes in order to receive official documents. By having official documents at hand which officially state the address, people hope that the

government will acknowledge the existence of their *kampung* home⁶⁶. Moreover, if parts of the *kampung* are earmarked for clearance, I observed that community leaders usually negotiate with the municipal administration. Consequently, insecure tenure is an aspect shared by all home owners in the *kampung* and thus requires collective forms of action. That way, I suggest that insecure tenure is contributing to social cohesion and a sense of community amongst the *kampung* dwellers.

The Role of Spatial and Administrative Boundaries

The empirical findings point out that the material aspects of space have an important role for the perception of the *kampung* as one entity. The spatial and built environment, such as roads, waterways, buildings or middle class residential areas, do demarcate the physical space of the *kampung* and can be understood as spatial boundaries. On the one hand, spatial boundaries can be interpreted as excluding and separating the *kampung* from other localities and neighbourhoods in the city. On the other hand, the spatial boundaries can be interpreted as having an including function. Spatial boundaries do in both locations demarcate the physical basis of the *kampung* so that everyone living within the spatial boundaries is perceived as belonging to the *kampung* community.

Interestingly, in both localities the spatial boundaries are largely identical with boundaries of administrative units. The empirical data suggest that the administrative units of the RW/RT-system are flexibly adjusted to spatial boundaries. While in Tomang the *kampung* comprises four RWs, in Manggarai it only comprises one RW. In both *kampung*s the administrative units constitute the frame of order and regulation within the community. Accordingly, if we understand the *kampung* as a locality, we will have to connect the spatial boundaries with the administrative units of the community associations (RW) and neighbourhood associations (RT). In the following sections, I will show that the overlaying spatial and administrative boundaries facilitate normative regulation and *kampung* order in the post-Suharto era.

Settlement Pattern

Simmel points out that due to the high population density in great cities, the physical contacts of city dwellers are close while the attitude of people towards each other tends to be formal and reserved. Simmel views this reserved attitude as a means to achieve personal freedom which is much needed in a great city where people are exposed to diverse stimuli (Simmel 1903, p. 199; see also Wirth 1938, p. 14). Wirth further develops Simmel's thoughts and states that:

[t]he reserve, the indifference, and the blasé outlook which urbanites manifest in their relationships may thus be regarded as devices for immunizing themselves against the personal claims and expectations of others. (Wirth 1938, p. 12)

66 However, this strategy has to be questioned since Human Rights Watch shows that in several cases *kampung* dwellers followed the same strategy but their settlements had been cleared anyway (Human Rights Watch 2006, p. 24).

According to Wirth, the 'urban way of life' is characterised by a declining role of kinship, family and neighbourhood. That way, the forms of social solidarity amongst urbanites are becoming less. Instead, people form interest groups to put through their interests (Wirth 1938, pp. 21-23). Both *kampung*s meet the requirements that suggest the emergence of an urban way of life described by Wirth, such as high population numbers, high density of buildings as well as social and ethnic heterogeneity (Wirth 1938, p. 18). Since space became a scarce resource in Jakarta, constant in-migration resulted in the redevelopment of public land for *kampung* homes. In Tomang and Manggarai both localities are characterized today by high population numbers and a dense settlement pattern. However, a generally reserved and formal attitude towards other *kampung* dwellers cannot be reconfirmed. Homes are built next to each other so that people can hardly maintain privacy. Moreover, people meet and discuss on the small paths in front of their homes. Accordingly, almost everything that happens in a neighbourhood is seen and heard by neighbours. Information spreads quickly so that *kampung* dwellers are usually well-informed about the latest news and gossip in the community. Consequently, everyday life in a *kampung* is characterised by close physical as well as social contacts on neighbourhood level.

Following my empirical findings, I suggest that the dense settlement structure contributes to the reproduction of social ties and the emergence of a sense of community. Jellinek argues the same way and claims that spatial proximity can even have a greater impact on the sense of community than kinship ties (Jellinek 1991, pp. 35-36). Berner and Korff made a similar observation in Manila and highlight physical closeness in the neighbourhood as an aspect of strong social ties (Berner & Korff 1995, pp. 214-215). However, the dense settlement pattern does not only have an impact on social ties but also on the vulnerability of *kampung* dwellers to hazards. Because of the high population pressure, *kampung* homes are attached to each other. The quality of housing is generally following a similar pattern. The first levels of the two-story homes are usually solid concrete structures. The second level is either made of bricks, wood or other recycled material. Only in Manggarai it could be observed that buildings close to the river are more of a makeshift type. Because of the dense settlement structure and the easily inflammable materials, *kampung* homes are highly exposed to fire risk. Once a fire is triggered, it can easily spread to other homes and can thus affect several hundreds of homes. Accordingly, the population density increases vulnerability to fire.

6.2 Social Organisation In The *Kampung*

6.2.1 Dynamic Local Organisation

Local Self-Organisation: Beyond Tradition and State Ideology

In the previous section I argued that different aspects related to the physical space contribute to the vulnerability of *kampung* dwellers. Insecure tenure and the high exposure to hazards translate, again, into a feeling of insecurity. My findings also suggest that economic activities in the informal sector do create insecurity on a household level. Since informal sector engagement is characterised by limited access to the formal social security system and

incomes are often generated on a daily basis, *kampung* dwellers point out the precarious economic situation as a major threat. Similar findings were also presented in earlier studies.

According to Jellinek, economic and social insecurity is an integral part of everyday life in a *kampung*. As a result, *kampung* dwellers develop strong social ties to be able to cooperate 'in times of natural crises, sickness or death' (Jellinek 1991, p. 51) and to cushion *kampung* dwellers 'against the vagaries of the outside world' (Jellinek 1991, p. 170). While she claims that social ties are important to 'ameliorate the poverty and insecurity', she generally observes that the 'whole kampung of 3500 people is too large for any formal organization or sense of unity'. Jellinek describes social organisation in the kampung as 'cooperative or individualistic depending upon which level of social organization one chooses to focus' (Jellinek 1991, p. 26). In her perspective the household forms the basic social unit while the community is defined through social ties amongst neighbours. Furthermore, she argues that neighbourhood ties develop because of spatial proximity or because of a similar social background, such as the same place of origin. Social ties amongst neighbours are then reproduced through forms of reciprocal exchange of goods and information (Jellinek 1991, pp. 26-27).

Although she observes that neighbourhood ties are important to cope with insecurity, she also points out that insecurity is the reason for the fragility of these neighbourhood ties. Since social ties are based on a balanced reciprocal exchange of giving and taking, their reproduction requires a sound economic household situation (Jellinek 1991, p. 53). Moreover, she observes that the rapid dynamics in the megaurban setting result in anomy and thus put social networks at test:

[n]ot only human relationships but also values were in flux. A constant tension existed between *kampung* dwellers' need to share their few resources and their need to stand apart to prevent the dissipation of their wealth. They were torn between the traditional values of sharing and reciprocity and modern values of cash ex-change. They were caught between two worlds, that of the community and that of the city. They were being pushed out of the community but had not yet gained access to the more formal institutions of the city. (Jellinek 1991, p. 177)

Following Jellinek's observation, one might conclude that the role of traditional norms and values to establish local order in the urban *kampung* is limited. At the same time, *kampung* dwellers do not succeed in developing alternative forms of community wide cooperation. *Kampung* order could thus not be established with the consequence that social ties do not develop beyond the neighbourhood. In her study on Manggarai, Murray arrives at a similar conclusion. She is warning of an idealised image of a harmonious *kampung* community by claiming that:

the urban kampung is not an extension of the village nor can it be idealized as a type of commune. The kampung is not an entity capable of devising a 'strategy' but a community of individuals adapting to their urban situation.⁶⁷ (Murray 1991, p. 61)

At this point it might be of interest to discuss the breakdown of traditional norms and values and the rise of anomy which is discussed by Jellinek and Murray. Antlöv argues that the founding fathers based the Indonesian nation on the concepts of 'family spirit' (*kekeluargaan*) and 'mutual assistance' (*gotong royong*) in order to unite the nation and to present the Republic of Indonesia 'as one large family' in which the family members cooperate for mutual benefits (Antlöv 1995, p. 116). The New Order government then used these metaphors to legitimize political intervention on a local level. I argued before that mass organisations had been established to control and mobilise the local level. For instance, the RW/RT-system was introduced to represent the solidarity and mutual assistance resting within communities. Yet, Antlöv warns of brushing aside these concepts as either idealised 'tradition' or 'state ideology'. The institutions in place, such as *arisan* or *slametan* (communal meal), still operate and are an aspect of everyday life on the local level. In his perspective, these institutions are attached with new meaning as they are constantly adapted to a changing environment (Antlöv 1995, pp. 115-119).

In a recent study, Hintz argues that 'low-asset' households apply collective arrangements, such as *arisan* or *slametan*, to overcome lifecycle events, such as sickness or death. Similar to Antlöv, he argues that these collective arrangements are aspects of embedded societies which are maintained and adapted to the changing environment of a spreading market economy. Accordingly, Hintz rejects the idea of a transformation towards a disembedded society in a strict sense. Rather, traditional elements, such as forms of reciprocal exchange, are reformulated and adapted to social change (Hintz 2009, pp. 187 & 240-241). Apparently, Hintz's findings suggest that 'low-asset' households succeeded in overcoming anomy by adapting traditional norms and values to the requirements imposed by a megaurban setting. The end of the Suharto regime might be considered a contributing factor that accelerated this transition. For instance, Spreitzhofer argues that in post-Suharto Indonesia public space is increasingly politicised and the poor can emancipate. Accordingly, chances for opposition and social organisation of *kampung* dwellers are today higher than they used to be in the past (Spreitzhofer 2007, p. 288).

The Transformation of the RW/RT-system

As I argued before, the political context during the New Order era did have a big impact on social organisation on the local level. Berner and Korff, for instance, observed weak local organisation in Jakarta, due to the tight administrative control of the central government. Accordingly, they state that administrative units are not significant for social organisation

67 This argument is also put forward by Lloyd. In his general statements about 'shanty towns' he claims that individual needs, such as a better infrastructure, are also shared by neighbours since access to basic services is more a territorial than an individual problem. Accordingly, collective action is envisaged for individual achievement (Lloyd, 1979, p. 190).

(Berner & Korff 1995, p. 213). Particularly the RW/RT-system became the extended arm of the government so that bottom-up processes of self-organisation were hardly possible. The tight top-down control of local communities might also explain the findings of Jellinek and Murray that social ties could only be established and maintained on the household and neighbourhood level. Yet, with the previous discussion I argue that forms of solidarity and mutual assistance which can be observed in the *kampung* today should neither be seen as idealised traditional aspects of a harmonious community, nor as state ideology. Rather, these concepts are reinterpreted by local communities and adapted to the rapid urban dynamics. The new political arena in post-Suharto Indonesia allows *kampung* dwellers to organise on a community level through established local organisations and institutions. Hereby, the RW/RT-system fulfils a central role.

Previous studies point out the importance of neighbourhood ties for social organisation. This might be still valid today as social ties are also strongest on the neighbourhood level in Tomang and Manggarai. Interestingly, the neighbourhood is generally identical with the administrative unit of the neighbourhood association RT. The RT headman is appointed by his neighbours and is the central authority for neighbourhood affairs. Basic forms of self-organisation, such as the neighbourhood security system *siskamling* or *kerja bakti*, are organised on this level. In some neighbourhoods, the RT also develops own forms of collective strategies, such as the ones I pointed out regarding access to health care or fire management in Manggarai. The sense of community among neighbours appears to be institutionalised with the neighbourhood association. That way, arrangements of mutual assistance are maintained and insecurity can be coped with collectively. The sense of community on the neighbourhood level can be such strong that even in rather poor neighbourhoods elderly people prefer neighbourhood solidarity to support offered by the government. Of course, the level of social cohesion and sense of community can differ by neighbourhood and generalisation is problematic. Yet, I observed a general tendency that social cohesion is higher on a neighbourhood than on a community or RW-level.

While the role of the neighbourhood appears to be similar with the one described in earlier studies, my findings suggest that the role of the community association (RW) seems to have significantly transformed in post-Suharto era. Challenges which are faced by the majority of *kampung* dwellers, such as the risk of *kampung* clearance and also hazard risk, require social organisation beyond the neighbourhood. Although people do usually not interfere in matters of other neighbourhoods, the neighbourhoods are horizontally integrated through the RW/RT-system. Or in other words, the RW/RT-system facilitates the integration of the different neighbourhoods since several RTs are comprised in a community association. The RW headman is, again, appointed by the different headmen of the respective RTs and thus represents the whole community. Through the horizontal integration, the RW is also vertically linking the community with the lowest formal unit of the municipal administration, the *kelurahan*. In this context I would like to remark that the vertical integration is not limited to the municipal administration. Through the RW *kampung* dwellers are integrated into a larger community that can reach a critical mass. That way *kampung* dwellers can achieve bargaining power which creates vertical linkages. Interests can thus be articulated and

communicated towards external actors. These vertical networks can be regarded as 'weak social ties' as they can be activated on special occasions. Accordingly, I argue with Korff that only through a certain degree of local organisation the interests of communities can be articulated and thus reach more powerful actors (Korff 1997, p. 7). Since access to external resources will be crucial in coping with disasters, I will further discuss the vertical integration of *kampung* dwellers in the following section.

The Triangular Concept of Law and Order Applied to the Urban Kampung

The interesting point in the vertical integration of the community is the generally limited interest of the *kelurahan* office in getting involved in everyday life affairs. That way, formal law and order do not fully reach out to the local level. Rather, the local order and regulation is institutionalised within the RW/RT-system. As I argued before, this is, for instance, evident in the existence of an informal land market. Rather than representing state law, the community and neighbourhood associations developed their own forms of regulating space. The RW/RT-system is thus located at the crossroad of formal and informal regulation in the *kampung*. On the one hand, it connects *kampung* dwellers with the formal municipal administration. On the other hand, it provides the frame for 'informal' order and regulation.

The social order in the *kampung* has to be also seen in the wider context of law and order in Indonesia. Based on his experience with the *Minangkabau* in West Sumatra, Benda-Beckmann discusses the concept of legal pluralism in the Indonesian context. He describes a triangular constellation of traditional *adat* law, islamic sharia law and state law (Benda-Beckmann 2008, pp. 58-59). This concept can also serve as a basis to interpret social order and legal regulation in the *kampung*. While the formal state law does not fully reach out to the local level, I found that customary or traditional law (*adat*) as well as religious law might be of limited importance for the internal order of the *kampung*. Traditional forms of *adat* are only applied to few occasions since *kampung* dwellers consider it not appropriate in the urban context. Traditional law is furthermore not institutionalised since *kampung* dwellers originate from all over Java and other areas. Each group of migrants brings its own *adat* system so that the individual forms of *adat* imported from the place of origin lose their validity in the urban *kampung*. This observation was already made by Krausse in the 1970s. He argues that *adat* plays a minor role. Like Jellinek and Murray, he argues that the formerly integrated rural *kampung* community is falling apart in the city (Krausse 1975, p. 53).

Religious practices, again, differ from neighbourhood to neighbourhood. I observed that religious leaders generally play a minor role for the order in the *kampung*. This observation might be due to a bias in my research as I could not fully participate in religious practices. Yet, my findings stand in sharp contrast to earlier studies. For instance, Jellinek claims that 'Islam provided the main focus for more formal social organization' in *kampung* Kebun Kacang (Jellinek 1991, p. 45). Hefner also argues that:

Muslim urbanites [...] typically respond to the anomie and hedonism of urban life with precise ethical prescriptions and calls for a deepening of faith. For them, Islam seems better suited to the challenges of urban existence than Javanist traditions. (Hefner 1997, p. 92)

Although Hefner points out that the advance of cultural Islam might be closely connected to a rising middle class in the urban context and that the movement of Muslim revival began on the campuses of state universities, he also describes that the movement has reached the urban poor (Hefner 1997, pp. 90-91). While Islam might indeed provide a moral order for urban *kampung* communities, my findings do not reconfirm the important role of religion for the social order in Tomang and Manggarai. Due to a possible bias in my research, future research might turn to the role of religion as a frame for social order on the local level. Yet, my findings points out the role of other organisations and institutions for the social order on a local level.

By assuming a limited role of religion, customary or traditional law as well as state law for the local social order, I suggest that the triangular concept has to be reinterpreted against the specific background of the urban *kampung*. Benda-Beckmann argues that pluralism of law and order is not a static concept, but is rather dynamic and constantly transforming. Moreover, for his research on the *Minangkabau* in West Sumatra he defines *adat* as a 'comprehensive category that is referring to the cultural, symbolic and legal universe of Minangkabau society'⁶⁸ (Benda-Beckmann 2008. p. 59). Previously, I introduced the concept of anomy described by Jellinek in which she claims that *kampung* dwellers are caught in between the 'world of the community' and the 'world of the city' (Jellinek 1991, p. 177). Apparently the customary or traditional law that used to be the established source of social order and legal regulation in rural areas turned out to be not applicable in the urban context.

Yet, assuming that the cultural, symbolic and legal universe is constantly transforming, I argue that the common translation of *adat* as 'customary' or 'traditional law' is misleading in the urban setting. *Adat*, understood as the 'local' order and legal regulation in place, is rather constantly exposed to external influences and requires a continuous adaption. I discussed before that the 'universe' of order and legal regulation in the urban *kampung* experiences dynamic changes in post-Suharto Indonesia. It is now largely institutionalised within the administrative units of the community and neighbourhood associations, or the RW/RT-system respectively. Apparently, *kampung* communities transform the organisations and institutions which had been introduced during the New Order into a frame that is now serving as a source of social order and regulation on a local level. Hereby, it is interesting to note that the RW/RT-structure can be considered a hybrid form (see Benda-Beckmann 2008, pp. 65-66). On the one hand, the RW/RT-structure is embedded in the formal municipal administration and thus represents state law. On the other hand, it allows communities to institutionalise their urban form of *adat*⁶⁹.

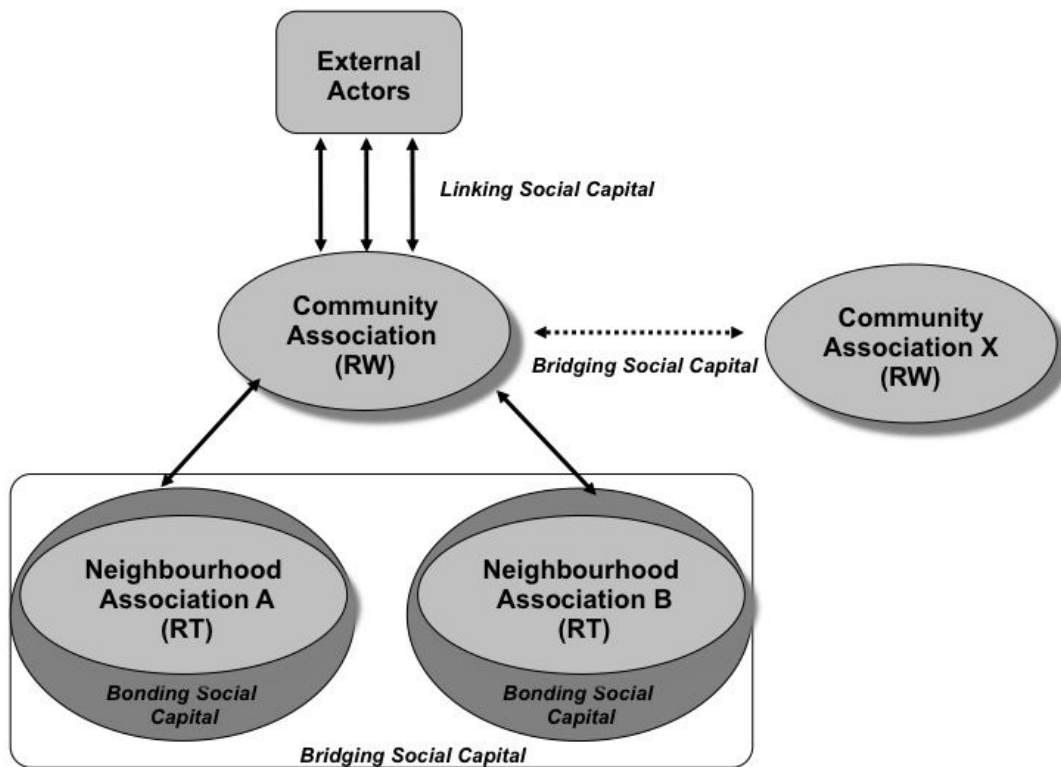
68 This is my own translation from the original paper: '*Adat* ist eine umfassende Kategorie, die das kulturelle, symbolische und rechtliche Universum der Minangkabau andeutet' (Benda-Beckmann 2008. p. 59).

69 My reinterpretation of *adat* in the urban setting draws on the input of Prof. Tilman Schiel and Prof. Bernhard Dahm.

The RW/RT-system and Institutionalised Social Capital

I would like to conceptualise the empirical findings and relate my findings on the RW/RT-system to the discussion on social capital. The strongest social ties, or bonding social capital, can be observed within the neighbourhood associations. The RW, again, facilitates horizontal linkages of several neighbourhoods (bridging social capital). In Tomang, I observed that the sense of community comprises four RWs although these horizontal linkages are not represented in an organisation. The RW does also connect *kampung* dwellers with external actors (linking social capital). In the context of vertical linkages, it is important to note that *kampung* dwellers can, through the community associations, reach a critical mass and thus achieve bargaining power towards different actors. Accordingly, I theorise that the horizontal and vertical integration of *kampung* dwellers into social networks is mainly institutionalised within the RW/RT-system. Therefore, the RW/RT-system can be regarded as a nodal organisation in the web of different actors.

Figure 14: The RW/RT-System and Social Capital



Source: Author

The RW/RT-system can thus be perceived as an organisation in which collective arrangements are institutionalised. This should not neglect that organisational performance can be personalised. Korff, for instance, points out the role of charismatic leader for the social order on a local level. According to him, loosely connected social networks are transformed into forms of social organisation because of the charisma involved (Korff 2009, p. 5). The experience from Manggarai and Tomang shows that charismatic leaders are often

heading the RW/RT-system since people often appoint well respected individuals or community leaders to be the respective RT and RW headmen. I also found that charismatic leaders operating within the RW/RT-system have an impact on the performance of social order and regulation. RWs and RTs which are guided by charismatic persons often succeed in developing strong social ties between neighbourhoods (bridging social capital) and they also succeed in articulating and communicating the interests of the community towards external actors (linking social capital). As I described before, in Manggarai community leaders were able to articulate the need of *kampung* dwellers towards external actors. Accordingly, the RW was able to attract an organisation which developed a community school. This example indicates that the role of charisma plays a crucial role in times *kampung* dwellers have to access resources external to the *kampung*. Therefore, charisma is closely connected to community resilience and will be further discussed in the following sections.

The RW/RT-system as a Frame for Social Agency

My findings suggest that the RW/RT-system is in both *kampung*s the main source of social order and local regulation. Accordingly, it is also the central organisation in which forms of social agency are institutionalised. Traditional institutions, such as *kerja bakti*, are still maintained and are applied, if collective action is required. Yet, they are adapted to the dynamic transformation processes in the urban setting and are thus attached with new meaning that goes beyond state ideology or long-established traditions. *Slametan*, *kerja bakti* or the local security system *siskamling* are, for instance, forms of collective arrangements that are still used to maintain the social order and to collectively cope with insecurity and everyday life challenges.

As I will show in the next sections, these collective arrangements of mutual assistance constitute one aspect contributing to the resilience of *kampung* communities. Based on my empirical findings, I also argue that other forms of mutual assistance and reciprocal exchange, such as *gotong royong* or *arisan*, only play a minor role. Although they are still listed as official activities of the RW/RT-system, *kampung* dwellers might not have found an appropriate use for these arrangements. Recent studies come to other conclusions. Hintz, for instance, observed lively *arisan* groups on a local level (Hintz 2009). I interpret these contradictory observations as an indicator for the individual appropriation of 'traditional' institutions⁷⁰. That way, I argue that findings from one research location cannot be generalised for all *kampung* communities in Jakarta. However, it draws the attention to the organisations and institutions that are maintained on the local level and the way they constitute a source for social order and regulation.

This conceptualisation of the *kampung* order and social organisation in Tomang and Manggarai points out the transformation in post-Suharto era. The RW/RT-system does integrate *kampung* dwellers horizontally and vertically. Since the *kampung* order is mainly

⁷⁰ In the context of *arisan* Perkasa and Hendityo point out that during the New Order people had to participate in *arisan*. Now, it is a voluntary group and people are free to join (Perkasa & Hendityo 2003, p. 182).

institutionalised within the RW/RT-system, I suggest that the function of the RW/RT-system in controlling and mobilising the local level top-down transformed into an organisation allowing *kampung* dwellers to organise the local level bottom-up. The RW/RT-system facilitates social agency so that *kampung* dwellers can achieve results they could not achieve individually. This way a sense of community could develop on a RW level. In Tomang, this sense of community even comprises four RWs.

Consequently, I argue here that social organisation in the *kampung* is institutionalised along administrative boundaries; a recent change that was unthinkable under the New Order government. Furthermore, the discourse on informality has to be connected to the findings on the social order in the *kampung*. If we understand 'informality' as the cultural, symbolic and legal universe (or *adat*) in the urban *kampung*, it becomes evident that 'informality' is important to overcome anomy and establish a social order. The RW/RT-system is reinterpreted in the new political arena in post-Suharto Indonesia and represents the social or institutional capital of the *kampung* community.

Yet, by putting the RW/RT-system at the centre stage of the local order, I do not claim that social organisation beyond the RW/RT-system or an alternative order does not exist. As I showed before, a variety of organisations active on the local level can be found in Jakarta. These organisations can be roughly grouped into (i) structural organisation of the municipality, (ii) civic organisations and (iii) NGOs. Some of these organisations complete the social organisation of the RW/RT-system. FKPM, for instance, connects the security system established on community level with the police. Other organisations fill a gap where the RW/RT-system fails to provide a frame of organisation on the local level. In the following, I will present alternative forms of local organisation. This will be discussed as the 'other side of social capital'.

6.2.2 The Other Side of Social Capital

In the discourse on social capital it is argued that members of gangs of thugs or neighbourhood crews also find trust and forms of reciprocal exchange in alternative kinds of social networks. Accordingly, these social networks have an important function for people falling out of kinship groups or neighbourhood communities. I found that this 'other side of social capital' is also a crucial dimension to understand social order on the local level in Jakarta. In all city districts various organizations operate on the local level, such as civic society organisations (ORMAS, or Organisasi Masyarakat) and NGOs. I argued before that there are around 100,000 of these organisations operating in Indonesia but only 10% are officially registered although they take formal forms (Cybersabili 2010). The activities of many organisations are not made transparent and some of these organisations are engaged in criminal activities as well as in controlling the informal sphere. These organisations certainly require some detailed analysis. However, comprehensive studies on the landscape of ORMAS in Indonesia do, to my knowledge, not exist. It remains a subject for which further research is desired. Not only by reviewing secondary sources but also at the end of my field research I was not able to arrive at a full picture of all organisations operating on the local

level. Therefore, I decided to exemplarily present two organisations, Pemuda Pancasila (PP) and FBR (Forum Betawi Remput), as they are the most prominent organisations in the districts of Tomang and Manggarai (see annex 1, photos 40 & 41). I would like to provide some background on both in order to show the 'other side of social capital'.

Already back in colonial times, it could be observed that local or territorial power was held by non-state actors such as charismatic leaders, criminals or gangs. These informal authorities were believed to hold magical power or special fighting skills. That is why they received special names such as *preman*⁷¹ today or *jegger*, *jawara* and *jago* in the past. While in some cases they are perceived as informal leaders or defenders of their community, they are most often engaged in criminal activities and offer formal or informal security services. What is interesting in the Indonesian case is that state actors cooperated and still cooperate with these informal authorities in many ways. They joined, for instance, the fightings against the Dutch in the struggle for independence and they were also mobilised by the military against the communist in the years 1965-1966 (Brown & Wilson 2007, pp. 7-8; Barker 2001, pp. 23-24).

However, in the past the state showed an ambivalent relationship with the informal security sector. The state did not only cooperate but state violence also targeted these informal authorities. According to Barker, in the early 1980s violent criminality was presented as a major threat by the media. The increase in criminality could be explained by the economic impact of the oil crisis and first signs of the weakening of the Suharto regime. *Gali-gali* (gangs of young people) and *jago*, particularly those who were engaged in different forms of security services, were seen as closely linked to the increasing crime. The New Order government feared that crime would be taken to a new organised level. Accordingly, the state was aiming to bring the de-territorialised security system under state control by introducing two initiatives: *siskamling* (*sistem keamanan lingkungan*, or environment security system) and *petrus* (*pembunuhan misterius*, or mysterious killings). Through *siskamling* the local security system was brought under police control and was divided into three types: *satpam* (*satuan pengamanan*) (see annex 1, photo 42) became the official term for security services provided to secure private and public objects; *hansip* (see annex 1, photo 43) was introduced to comprise uniformed guards involved in neighbourhood security; and *ronda* which is the community organized neighbourhood security. Through *petrus*, the government was aiming to identify criminals by means of secret lists. Criminals not willing to integrate, for example those who failed to report regularly or charismatic criminals, became subject to cleansing operations. As a consequence, starting in 1983 at least five thousand people were killed in major Indonesian cities (Barker 2001).

While *jago* had been eliminated with the introduction of *siskamling* and during *petrus*, *preman* emerged as a new term for representatives of the 'underworld' or the 'underclass'. It is generally perceived that *preman* do not have access to the formal labor market, so they are forced to engage in criminal activities (Ryter 2001, p. 128). Ryter argues that *preman* are

71 Human Rights Watch translate *preman* as 'thug' (Human Rights Watch 2006, p. 16).

not always individual petty criminals but also group and organise in urban gangs which often take the shape of large formal organisations, such as Pemuda Pancasila (PP, an Indonesian youth organisation). PP has a long tradition and has long been involved in *preman* style 'security services'. By being member of PP, *preman* became integrated into a formal organizational framework. As a return for their activities, PP members expect to participate financially in security services. According to Ryter, the linkages between state authority and informal authority became evident in the last years of the New Order government when both spheres were linked through family lines. For instance, Yapto the chair of PP belonged to the extended Suharto family. It became obvious that through PP the New Order government was able to mobilize a broad *jago / preman* base. PP supported, for instance, Golkar in the 1982 elections or the raid of the PDI (Partai Demokrat Indonesia) headquarters in 1996. Although PP and the New Order government were not formally linked, the government could control the informal sector through mobilizing PP (Ryter 2001).

With the end of the New Order, the state lost control over informal authorities and the spectrum of *preman* groups widened horizontally. Besides criminal youth groups seeking material benefit, *preman* groups also formed along religious or ethnic lines (see Schulze 2008, p. 108; Brown & Wilson 2007, p. 12; Ryter 2001, p. 154). One example of a group emerging in the post-Suharto era is the Forum Betawi Remput (FBR, or Betawi Brotherhood Forum). According to Brown and Wilson, FBR formed in 2001 in the context of ethnic conflicts between Betawi and Madurese in Jakarta. FBR represents *orang betawi* and is justifying violent behaviour by declaring to defend the Betawi homeland and to bring Betawi ahead in society. They further state that Betawi became disillusioned with the state:

as a perception that they were missing out on the urban development of Jakarta because of their marginalization from the main Javanese-focused patronage networks associated with the various arms of government; that there was an erosion of social cohesion at their local community level. (Brown & Wilson 2007, p. 12)

FBR mainly recruits its members from urban poor and unemployed which is underlined by the assumption that around 50% of the 80,000-100,000 FBR members in 2007 were unemployed. Moreover, the organisation of FBR resembles military elements, such as a network of security posts throughout the city and uniformed members (Brown & Wilson 2007, pp. 9-10). The linkages between state authority and informal authority, which was described in the context of Pemuda Pancasila, can also be observed in the case of FBR. Brown and Wilson argue that FBR supported Governor Sutiyoso for his reelection in the year 2002 and the 2004 election campaign of former president Megawati (Brown & Wilson 2007, pp. 23-24). Human Rights Watch further points out the role of 'urban gangs', such as FBR, in eviction. In order to avoid direct contact with communities, the government makes use of urban gangs to carry out eviction (Human Rights Watch 2006, pp. 16-18).

The examples of Pemuda Pancasila and FBR underline that state authorities and informal authorities are not antagonistic but interlinked. One reason why they cooperate is provided by the fact that political parties depend on these organisations to mobilize the grass root (Brown & Wilson 2007, p. 22; Ryter 2001, p. 154). While being disciplined in the New Order,

informal authority became important non-state actors in territorial power in the post Suharto era. Organisations such as Pemuda Pancasila or FBR are hierarchically structured by replicating the formal administrative system. The territorial organization of these groups is reflected by security posts which are spread all over the city area (Schulze 2008, pp. 114-116; Brown & Wilson 2007, pp. 10 & 25).

This background on the territorial power of non-state actors provides interesting aspects on the social organisation in Jakarta's *kampungs*. On a local level, organizations like Pemuda Pancasila or FBR are symbolizing their presence by setting up banners and installing security posts (*gardu*) in the neighbourhood (see annex 1, photo 41). In Tomang and Manggarai, *kampung* dwellers consider these organisations dubious. In the aftermaths of the fire in Tomang it was interesting to observe that Pemuda Pancasila expressed its solidarity by providing labor force during the joint clearance of debris. FBR, in contrast, established a road block with the reason to collect money for fire victims. However, they did not appear in the *kampung* and it has to be doubted whether they provided any assistance to the fire victims. I generally observed that informal authority in the form of *preman* organisations do not seem to play a crucial role for organisation and regulation in Tomang and Manggarai.

Accordingly, I suggest that these types of organizations cannot gain a foothold in communities where the RW/RT-system succeeds in regulating and organising the informal sphere and where *kampung* dwellers show a comparatively high degree of social cohesion and communal spirit. I pointed out before that Barker made a similar observation regarding the 'slum' Cicadas in Bandung. He could not confirm Mike Davis (2007) hypothesis that informal authority groups representing the marginalized urban poor will become a major political factor because state actors are widely absent⁷². Rather, slum dwellers and the state are closely interlinked as, on the one hand, the municipal government extends bureaucracy to the local level. On the other hand, the state actors 'cultivate' informal leaders in order to control the local level (Barker 2009, pp. 48 & 71).

With Barker's findings from Bandung and my own findings I conclude that gangs or dubious organisations might only gain foothold on a local level, if they succeed in reaching people who are socially disintegrated from community or neighbourhood associations. For instance, I described before that low-income earners who found employment in the informal sector live within a middle class community around the traditional market Pasar Timpul in Tomang. They are socially disintegrated as they are not represented in the RW/RT structure which is dominated by the middle class. Accordingly, these people are attracted to join social networks of *preman* organisations. In fact, the majority of people I have interviewed in the area of Pasar Timpul are members of organisations, such as FBR. Many of the people living here even hold several membership cards of different organisations. The presence of these organisations is also reflected in the number of *gardus* which can be found in the middle class neighbourhoods in the *kelurahan* while in the *kampung* FBR does not operate a post.

⁷² Barker (2009, p. 47) introduces the term '*voyoucracy*' to describe an organized form of the power of the street which is at the same time a counter-power to the state.

The findings support Brown and Wilson's (2007) thesis outlined before. Criminal organisations seem to fulfil an important function in organising city dwellers who miss out on urban development and who are not included in community or neighbourhood structures. With the discourse on social capital, I suggest that *kampung* dwellers have to be embedded in social networks in order to be able to access and mobilise resources. The RW/RT-system turns out to be an important frame allowing *kampung* dwellers to organise and regulate their community. In contrast, people divorced from community networks secure their livelihoods by joining alternative organisations which provide social ties and material support.

6.3 Challenges To Local Organisation

My previous discussion resulted in the conclusion that in both research locations the sense of community is strongest on a neighbourhood level. Several RTs are, again, integrated into the community association RW. This two-level organisational system facilitates social organisation within the community, on the one hand, and in relation to external actors on the other. I also showed that the performance of the RW/RT-system depends on several factors, such as the capacity of the respective headman. In this section I would like to point out some challenges the RW/RT-system is facing:

Insecure Tenure

An interesting phenomenon that I repeatedly discussed is *kampung* demolition. The past experience with *kampung* demolition shows that insecure tenure is one of the main causes for dissolving community ties. The situation during the New Order indicates that *kampung* dwellers did not succeed in stopping *kampung* demolition and clearance. In this context, Evers and Korff argue that *kampung* dwellers failed to develop bargaining power and forms of resistance. Apparently, they were not able to socially organise beyond close neighbourhood ties. They relate the failure to two root causes. First, tight state control during the New Order did limit the development of social organisation outside structural organisations on a local level. Second, *kampung* dwellers preferred not to enter a conflict with the government and rather accept compensation payments (Evers & Korff 2003, pp. 236-237). Linking the risks related to insecure tenure with the previous discussion on vulnerability, I suggest that large scale *kampung* clearance activities can be considered a disaster for a community. In terms of resilience, I argue that in the past *kampung* dwellers were not able to absorb this disturbance so that the social fabric in the *kampung* moved out of basin of attraction. Social organisation against *kampung* demolition did not emerge which, can be interpreted as a lack of resilience.

However, in post-Suharto Indonesia the situation on the grass-root level is changing. With the reinterpretation of the RW/RT-system new forms of local organisation are made possible. As a consequence, *kampung* dwellers have the chance to develop a 'bargaining power' and new forms of resistance. The field data suggests that *kampung* dwellers in Tomang and Manggarai are aware of the risks related to insecure tenure. Accordingly, they take measures to manage unclear land ownership. As I suggested before, the most common strategy of *kampung* dwellers is to regularly pay taxes and electricity bills. This way, the address of the

kampung home appears on official documents and *kampung* dwellers acquire a form of legitimacy (see also Humans Rights Watch 2006, p. 3). Yet, the neighbourhoods are constantly exposed to the risk of eviction, such as the situation after the fire in Tomang shows. I observed that *kampung* dwellers generally aim to negotiate with the government rather than to organise resistance. I described before that the realisation of several planned urban development projects would result in large scale *kampung* demolition. Insecure tenure will therefore remain a serious challenge. Moreover, my findings do not allow a general statement about the future resilience of *kampung* dwellers against clearance activities.

Lack of Open (Public) Space

Referring to Douglass et al. (2002)⁷³, Kürten points out the important role of public space, such as parks and squares, for social interaction and recreation. It is a sphere where people develop forms of social organisation since city dwellers can socially interact and communicate. Accordingly, public space 'provides an arena for [...] political activities' (Kürten 2008, p. 68). She further claims that public space in megacities is endangered since in many cases urban transformation and high population pressure result in the redevelopment and commercial use of space (Kürten 2008, pp. 67-68). The public space discussion obviously refers to the interaction of material and social aspects of space as it is space that enables a public sphere and social organisation.

As I pointed out before, over the last decades urban dynamics had a big impact on public space in Jakarta. For instance, in the 1970s around 40-50% of the city area was covered by green space. Until today, urban transformation reduced the proportion in the city area to approximately 9% (Silver 2008, pp. 199 & 207). But urban transformation did not only have an impact on green space. The situation in Tomang and Manggarai shows that *kampung* dwellers had to relocate to public space which is not traded on Jakarta's formalised real estate market. Because of the high population pressure in *kampung* settlements, public space has been transformed into living space. Public space thus became a tradable good on informal urban land markets. The high demand for living space becomes evident in Manggarai. Market traders report that in the past even market places located in the *kampung* had to give way to self-constructed homes. As a consequence, public space located in the *kampung* was transformed into housing. This way, open space enabling *kampung* dwellers to socially interact or to recreate became rare. Only few locations, such as the fish ponds in the river bed, are enjoyed by the people for recreational activities (fishing) and facilitate social interaction with other people.

People complain about this situation as they have to spend their leisure time either at home or they have to travel out of the *kampung*. If people stay at home, they generally mingle with their neighbours at the small paths in front of their houses but do rarely interact with people in other neighbourhoods. This observation might explain why *kampung* dwellers only randomly know people living in neighbouring RTs. Moreover, traveling out of the *kampung* is often not an option since people have to spend money for transportation, food and entrance

73 The original source could not be accessed.

fees. Accordingly, the lack of public space, or rather open space, reinforces close neighbourhood ties. Yet, it does not support social interaction beyond the neighbourhood.

I conclude that the role of open space in reproducing social cohesion and a sense of community on the community and neighbourhood level is important. In this sense, the availability of open space has a direct impact on the development of bridging social capital in the *kampung*. In the absence of public space, the RW/RT-system fulfils a crucial role as it provides a sphere where *kampung* dwellers can organise beyond the neighbourhood level. Moreover, the RW headmen can find ways to create a public sphere. In Manggarai the RW 04 headman found a solution to the challenge by developing a community school which also serves as community house for different social activities.

Migration

The growth of megacities is often explained by the dynamic processes of rural-urban migration. Yet, after having entered the city the movement of migrants can be hardly retraced. Somantri observed considerable migration streams within the city. People migrate within the city in order to improve their socio-economic conditions or because they have to relocate following *kampung* demolition (Somantri 2007, p. 161). Somantri introduces the example of construction workers to show processes of inner-city migration. In Jakarta, urban transformation came along with various construction projects. Day labourers required for these projects were often recruited amongst migrants who settled in the *kampung*s surrounding the construction sites. When the construction was accomplished, workers moved with the projects to the next construction site (Somantri 2007, pp. 24-26). With this example he illustrates that migrants are mobile and easily relocate within the city in order to find employment opportunities or to improve living conditions. Accordingly, one might conclude that many *kampung* dwellers are not bound to a specific place and show a high degree of mobility. This mobility is one aspect of the 'floating mass' of informal sector workers observed by Evers (Evers & Korff 2003, p. 21; Evers 1983, p. 16).

The challenges migration imposes on neighbourhood ties is summarized by Günther in the context of German cities. She argues that through geographical and temporal mobility social networks become increasingly unlinked from space. People often move only temporarily to places and might be thus less interested in engaging in neighbourhood activities. Accordingly, mobility can be seen as a root cause of dissolving neighbourhood ties and an increasing focus on the core family (Günther J 2005, p. 438). Against the background of globalisation, Albrow points in a similar direction. He argues that communities are not necessarily bound to a specific location. Individuals can live in one place but maintain a social network with other people in other places. That way, people living in the same place do not necessarily have to be connected through social ties. Each person could be embedded in different social networks. In times of globalisation and modernisation social ties thus require a rethinking of the categories of space and time. Albrow introduces the concept of 'socio-sphere' to express the emerging forms of coexisting social networks. He argues that because of globalisation the localised conflicts between different groups cannot be approached by the power struggle between 'established' and 'outsiders' as it was suggested

by Elias and Scotson (1990)⁷⁴. He rather suggests to highlight conflicts between the 'locally rooted' and 'cosmopolitans' (Albrow 1997).

In the megaurban context of Jakarta, where global dynamics are translated into a local context, similar conflicts can be observed in the *kampung*. Previous studies highlighted that rural-urban migrants commonly follow friends or families to the city and are thus initially supported with housing and employment (see Lloyd 1979, p. 23; Krausse 1975, p. 95). Moreover, *kampung* communities are heterogenous and usually not divided along ethnic, cultural or religious lines⁷⁵. Beyond the single household, the neighbourhood is the most important social unit on a local level. It could be generally observed that newcomers are easily integrated into neighbourhood communities as long as they participate in collective arrangements and activities. Some of the migrants are also interested in integrating into the social ties in the *kampung* as it allows them to better cope with insecurity.

However, migrants are highly mobile and often relocate in order to find better living conditions or better employment opportunities after gaining a foothold in the city. I observed that many migrants come to the city in order to make money while the family is still living in rural areas. As a consequence, the socio-sphere of some *kampung* dwellers is referring to the core family in the place of origin rather than to the *kampung* community. On the one hand, these 'cosmopolitans' try to minimize costs by renting the cheapest accommodation or sharing rooms with other people. Therefore, they often relocate to find cheaper lease. On the other hand, they try to maximise the working time and regularly travel home to their families. That way, they prefer to spend their time with generating income rather than engaging in collective arrangements and community activities. They can be described as 'cosmopolitans' since they do not have to fully rely on social ties in the *kampung* to cope with lifecycle events. In the case of flood or fire, I mentioned that 'cosmopolitans' cope with these events by temporarily moving back to their families in rural areas.

Because of the high turnover of people, neighbourhoods face the constant challenge to integrate migrants into their community. This is an even bigger challenge when newcomers are not willing to integrate and participate in collective arrangements and forms of mutual assistance. In some neighbourhoods people are forced to move out of the neighbourhood, if they do not join collective activities. In other neighbourhoods, people who do not join

74 Elias and Scotson describe the social figuration in a British village. They found out that the community is divided into the old families, or 'established', and newcomers, or 'outsiders'. The identity of the 'established' group was mainly based on the length of time families lived in the village. The 'established' could accumulate more power since they showed a higher degree of social cohesion and thus social organisation. 'Outsiders', in contrast, showed a lower level of social cohesion since they were not only strangers to the 'established' group, but also to other newcomers. Moreover, the 'established' could reproduce their power by tight social control and group stigmatisation that resulted in the exclusion of outsiders from important positions within the village community (Elias & Scotson 1990, pp. 7-56).

75 According to Jane Jacobs, it is generally argued that 'a cohesive ethnic base is required for a city neighbourhood that works as a social unit'. Based on her study of American cities she disagrees with this conclusion and points out that what is perceived as an ethnic community are often neighbourhoods with a 'fantastic ethnic variety' (Jacobs 1961, p. 138).

collective activities, such as the neighbourhood security system *ronda*, have to pay a certain amount of money. Therefore, I point at an ambivalent role of in-migration. On the one hand, migrants test the social fabric in neighbourhoods and the capacity to integrate 'cosmopolitans'. I argue here that different socio-spheres might constitute a bigger challenge to community ties in Jakarta than social and cultural heterogeneity (see also Korff & Rothfuß 2009, p. 359). On the other hand, one has to be aware that migrants support the informal economic sector in the *kampung*. Since they create demand for housing, *kampung* dwellers renting out rooms or selling food to migrants benefit from migration in economic terms.

The relation between migration and the social capital which is institutionalised in neighbourhood ties can be best summarised with Jane Jacobs. In a study on American cities, she states that:

[t]o be sure, a good city neighbourhood can absorb newcomers into itself, both newcomers by choice and immigrants settling by expediency, and it can protect a reasonable amount of transient population too. If self-government in the place is to work, underlying any float of population must be a continuity of people who have forged neighbourhood networks. These networks are a city's irreplaceable social capital. Whenever the capital is lost, from whatever cause, the income from it disappears, never to return until and unless new capital is slowly and chancily accumulated. (Jacobs 1961, pp. 137-138)

Existence and Awareness About a Social Gap

Another challenge for neighbourhood ties is imposed by the dynamic urbanisation and economic development that takes places in the city centre. I previously described the discussions on 'ghettoisation' or 'segregation' of city dwellers into settlements of the rich and settlements of the poor. The reflections on space in Tomang indicate a segregation of the *kampung* by spatial boundaries. Yet, with the formal-informal continuum I also showed that the view on segregation is problematic since the economic activities of *kampung* dwellers and the middle or upper classes are interconnected and interdependent. Accordingly, *kampung* dwellers live in close proximity to middle-class neighbourhoods or they work in places where they are in contact with other social groups. At the place of work, in residential areas of the middle and upper class or in office buildings, *kampung* dwellers experience 'better' living conditions. *Kampung* dwellers repeatedly mentioned that they are exposed to luxurious things which create a demand for consumer goods, such as motorbikes, handphones, cars and so on. At the same time, urban development did not improve the economic situation of *kampung* dwellers significantly. The social gap is expressed in a common saying: 'kaya makin kaya, miskin makin miskin', or in English 'the rich become richer while the poor become poorer'.

The awareness about the social gap and the demand for consumer goods puts many *kampung* dwellers under what they call 'stress'. *Kampung* dwellers express the fear that this stress will result in what Wirth called an 'urban way of life' (Wirth 1938). In this perspective, individualisation is expected to have a negative impact on community ties. Jellinek, for instance, describes that people will withdraw from collective arrangements, if they can opt for individual strategies (Jellinek 1991, pp. 53-54). Moreover, people expect criminality to

increase since it is for many people the only means to access additional resources. In the context of Jakarta, the process of individualisation is expressed in a common saying: 'lu lu, gue gue'⁷⁶.

Charismatic Leaders

My data suggests that the RW/RT-structure is the centre point of social organisation and collective action in the *kampung*. However, the capacity of horizontal and vertical integration of *kampung* dwellers into a community strongly correlates with the capacity of charismatic community leaders. That way, social capital or institutional capital is to a certain degree personalized. This observation points to a phenomena that Pelling calls a paradox:

to be representative and accountable, leadership must be deeply rooted in the local community; however, to gain resources to pursue a community's wishes leadership must have substantial linkages with external institutions. (Pelling 2003, p. 87)

This leads me to the conclusion that the RW/RT-system can only be successful if the headmen of the community have the capacity to develop social capital and transform this resource into forms of social organisation and collective action. Moreover, it can also be observed that not all RW headman treat all RTs equally. Since the RW headman is appointed by the headmen of the respective RTs, RTs who did not support the appointment of the RW are treated differently. After the fire, one RT complained that aid and donations are not distributed equally amongst the RTs. They related this issue to the fact that they did not support the appointment of the headman of their RW. Consequently, I argue that the performance of the RW/RT-system is to a high degree personalised in the position of the respective headmen.

6.4 Interim Conclusion: Slum, *Kampung* Or Locality?

A Janus-faced Location

In chapter four I introduced the concept of 'metropolitan dilemma' (Berner and Korff 1995, pp. 209-211) to describe the contradiction between the demand for low-income labor, on the one hand, and the scarcity of land on the other. In the previous sections I showed that urban transformation in Jakarta gave rise to lively urban land markets and land speculation. That way, land became a scarce resource in the city with far reaching consequences for *kampung* settlements. Insecure tenure results in *kampung* clearance and thus pushed *kampung* dwellers in marginal urban pockets. As a consequence, remaining settlements are highly exposed to various hazards, such as flooding. Moreover, dense settlement patterns emerged and thus increased the vulnerability of *kampung* dwellers to other risks, such as fire. The situation in Tomang and Manggarai indicates that floods and fire do regularly occur.

While *kampungs* can be perceived as marginal settlements which are characterised by insecure tenure with a high exposure to hazard risks, we should not forget the opportunities

⁷⁶ The literal translation of this saying in the Jakarta dialect means 'you you, I I'. It is a phrase that is widely used in Jakarta to describe that people do not mind the other people's business.

these settlements provide to their inhabitants. One has to be aware that these urban pockets are the only locations in the inner-city area where people engaged in low-income activities, either in the formal or informal sector, find an affordable place to live. Moreover, both *kampung*s are strategically located close to the city centre. Shopping malls, department stores, traditional markets and transportation hubs are all in close proximity to the *kampung*s. The proximity to the place of work does save costs for transportation and commuting time. *Kampung* dwellers also mention that the strategic location includes access to health care and education in the surrounding area. Both, health care and schools, are often not easily accessible in rural areas. In this context, Dwyer points in a similar direction by stating that megacities are not 'death traps' for the urban poor as the health status of urban poor is often closer to the level of developed countries than to rural areas in developing countries (Dwyer 1974a, p. 11). That way I would like to conclude that these locations do not only expose people to risks, they also create opportunities.

The river is an example to illustrate this ambivalence. Based on the field data, I suggest that viewing spatial proximity to the river as a vulnerability factor is only half the truth. The empirical data suggests that the river is not only a source of risks, it is also used as an important source of resources. Unregistered land on river banks provides, for instance, affordable living space to *kampung* dwellers in inner-city locations. As Evers and Korff (2003, pp. 162-163) showed in the context of urban subsistence production in Jakarta, the river is also a productive resource. To a minor degree river beds are used for aqua culture and gardening activities, such as growing vegetables. Waterways are also used for transportation services and some scavengers specialised in fishing recycling material out of the river. In addition to that, *kampung* dwellers also make use of the river as public space and it thus has a role in recreational activities. Furthermore, some *kampung* dwellers do their washing in the river and use the river for sanitary issues. The river also has a very important function for the disposal of waste since an affordable waste disposal system is generally not available (see also Wibawa 1997, p. 43). These points might sound ironic to some readers, but one has to be aware that the river offers solutions for major challenges the urban poor are facing.

The other aspect of the 'metropolitan dilemma', the demand for low-income labor, becomes evident when we apply the concept of the 'formal-informal continuum' to the *kampung*. The 'formal-informal continuum' was already observed by Krausse in the 1970s. He claims that a trading city like Jakarta strongly depends on cheap labor force, such as the labor needed for unloading and loading ships or trucks. Moreover, traditional markets are needed to provide goods and services at relatively low costs (Krausse 1975, pp. 102-103). Somantri describes a symbiotic relationship of both economic spheres in Jakarta. In his perspective, the informal sector does not only contribute to modernisation but modernisation also creates opportunities for *kampung* dwellers (Somantri 2007, pp. 80, 155 & 210). Krausse, for instance, claims that *kampung*s will always exist due to the favourable employment opportunities close to the city centre (Krausse 1975, p. 43). Yet, employment opportunities are not only limited to the informal economic sphere. Earlier studies pointed out the increasing opportunities in the formal sector (see Jellinek 1991, pp. 88-89; Krausse 1975, p. 50). As I stated before, Jellinek suggests that *kampung* dwellers continuously adapted their

economic strategies to urban dynamics. In colonial times, *kampung* dwellers were mainly involved in subsistence production. During the Japanese occupation the situation changed and they filled the demand gap by providing goods and services in the informal sector. Today, an increasing number of *kampung* dwellers is engaged in the low-income segment of the formal sector, such as employment in the shopping malls (Jellinek 1991). Evers adds that formal sector employment is not only stipulated by a globalising urban economy but is also a result of hostile policies towards the informal sector (Evers 1997, p. 2).

The income earning strategies I observed in both *kampungs* reconfirm earlier observations. Due to the strategic location in the city centre, *kampung* dwellers find a range of economic opportunities in the low-income segment of the formal sector and in the informal sector alike. In both *kampungs*, a number of people is employed by the state, such as teachers, police officers and other civil servants. Due to the different locations within the city, both *kampungs* show different socio-economic patterns. In Tomang, a high number of people is employed in the different shopping malls and department stores located in close proximity. Due to the location close to the train and bus station as well as the traditional market Pasar Rumput, *kampung* dwellers in Manggarai are more engaged in small-scale trading activities and transportation services. In contrast to earlier studies (see Evers & Korff 2003, pp. 136-138; Evers 1979, p. 21), I did not find substantial agricultural subsistence production neither in Tomang nor in Manggarai. I rather found that *kampung* dwellers generate additional income by converting public space and space of agricultural production into housing. Renting out rooms does obviously generate a higher income than agricultural activities. But subsistence production, in the form of unpaid household and community activities, does still play a role. For instance, housing is produced by *kampung* dwellers themselves and cost intensive services, such as waste disposal, is replaced by alternative solutions.

However, this is not to neglect that everyday life in the *kampung* is characterised by a high degree of insecurity. I argued before that *kampung* dwellers perceive the economic situation as a major threat. There are situations in which *kampung* dwellers can suddenly lose their jobs, such as construction workers who stop working because they fall sick or construction projects are finished. Moreover, it is reported that the unemployment of youth is relatively high. In the context of employment opportunities, education levels are pointed out as a major constraint to find a job. As I discussed earlier, one has to be aware that formal sector employment does not necessarily imply higher income. With Jellinek I argue that not all small-scale activities are low-income activities (Jellinek 1991, p. 57). There are some *kampung* dwellers, such as agents for recycling material, who live in the *kampung* and generate a comparatively high income. Yet, *kampung* dwellers following informal sector strategies are socially vulnerable in a sense that they depend on daily earned incomes. Expected lifecycle events, such as sickness, can thus result in the loss of household income. Moreover, access to the social security system is limited. The precarious economic situation does therefore also contribute to the vulnerability of *kampung* dwellers. Jellinek underlines this point by stating:

[f]rom the *kampung* dwellers' point of view, the constant feature of their lives was not so much low income or few possessions but insecurity. Everything seemed to be in a state of flux. They did not know for how long they would have their jobs, incomes, homes or possessions. (Jellinek 1991, p. 176)

Finally, I conclude that the *kampung* is a Janus-faced location. With the 'metropolitan dilemma' and the 'formal-informal continuum' I suggest that the *kampung* is as much a strategic location which provides opportunities to its dwellers as it contributes to the vulnerability of *kampung* dwellers. The ambivalence of everyday life in a *kampung* is also reflected in common sayings I came across in both research locations. On the one hand, *kampung* dwellers refer to the opportunities provided in Jakarta compared to the situation in rural areas by using the phrase: 'di mana ada gula ada semut', or in English: 'where there is sugar there are ants'. On the other hand, the insecurity of everyday life in Jakarta is expressed by the phrase: 'ibu kota lebih kejam dari ibu tiri', which can be literally translated as 'the capital city (mother city) is more cruel to you than your step mother'.

Localities in the Big Durian

Following the label 'Big Apple' for the city of New York, Jakarta is ironically called 'Big Durian'. The city is symbolically associated with the famous Asian fruit as both, Jakarta and the fruit durian, are smelly outside and inside they are 'tasty' and full of flavour. The urban *kampung* is one facet of this image and requires an analysis that goes beyond the surface. The public image of the *kampung* is strongly influenced by the outside appearance and thus reflects the misleading connotation attached to the term *kampung* and the ambivalent role of *kampung*s in the megaurban environment. Figure eight showing the *kampung* in Manggarai and figure nine showing the *kampung* in Tomang allow for the conclusion that the outside appearance results in the common perception of a *kampung* as a rather run down place characterised by semi-permanent building structures and an unhealthy environment. A stranger looking at the *kampung* from outside might thus reproduce the image of the *kampung* as a physical representation of urban poverty.

This image of the *kampung* is close to the concept of slum. UN-Habitat introduced seven aspects that generally appear in slum definitions. These seven aspects can be also found in both settlements: some homes lack basic infrastructure, many buildings can be characterized by substandard housing conditions, the settlements show a high density of people and buildings, both *kampung*s are located in a hazardous location and can be characterized by insecure tenure, many people can be considered poor and both settlements are of a certain size (UN 2003, p. 11). Yet, with the previous discussion on the ambivalence I observed in both research locations, this image has to be challenged. Many of these attributes do not apply to all homes and *kampung* dwellers. The inner-city *kampung* is rather characterised by spatial and social heterogeneity. Since positive aspects are widely ignored, the concept of slum does not reflect the megaurban ambivalence. Defining the *kampung* by the generalised aspects suggested by the concept of slum will thus only partially grasp the situation in Tomang and Manggarai. That way, the findings from Tomang and Manggarai reconfirm the limited analytical value of the concept of 'slum' to describe the urban *kampung*.

My previous discussion also shows that, similar to the concept of slum, the application of the term *kampung* is somehow problematic. The meaning of the term *kampung* is not reflecting the dynamic urban transformation that is continuously shaping and reshaping *kampung* settlements. Already in the 1970s, Krausse aimed to categorize different types of *kampungs* in Jakarta (1975). Krausse's approach underlines the fact that *kampungs* are heterogenous and general characteristics can be hardly identified. Tomang as well as Manggarai are both located in the (greater) inner-city area. I am well aware that *kampungs* in other urban areas, such as *kampung* settlements in North Jakarta close to the sea, offer less favourable opportunities. Moreover, in each of the districts of Tomang and Manggarai I also found other communities that fit into the image of a slum or *kampung*. I argue that even though the outside appearance of different *kampungs* is similar, the social life and order of local communities can be hardly compared. In the context of Tomang and Manggarai I argue that the communities respond to vulnerability and everyday life insecurity with a strong sense of community that, again, translates into diverse forms of social organisation. In neighbouring communities and neighbourhoods this sense of community is less pronounced.

Due to the spatial and social heterogeneity, I argue that the *kampung*, similar to the concept of slum, can hardly be denoted. According to my experience, the only aspect that can be generalised for all *kampung* settlements is insecure tenure. That way, the *kampung* might be best described as an illegal squatter settlement. Because of the historical development of urban *kampungs* I have personal difficulties to put *kampungs* on the same level as illegal squatter settlements. The *kampung* still remains a definitory challenge I am not able to solve with my empirical findings. While I found the concepts of slum and *kampung* of limited analytical value, the concept of locality turned out to be an applicable tool to approach the grass-root level in Jakarta. By analysing the material and social constitution of space, as well as the institutions bridging both aspects, a *kampung* community can be approached in a more comprehensive way.

Regarding the material or physical aspects of space I showed that the spatial patterns in both locations shape the spatial image of the *kampung*. In particular, I identified three aspects of space that are relevant for further discussions. First, several aspects of insecurity and vulnerability are closely linked to physical space. For instance, insecure land tenure and disaster risks can translate into challenges which shared by the vast majority of home owners in the *kampung*. Second, the housing and settlement pattern is a characteristic that visually separates the *kampung* from neighbouring residential areas of the middle class. The high population density and the general low quality of housing might reflect the socio-economic background of the community. In this perspective, insecure tenure has a direct impact on the settlement pattern. Because of the risk of demolition and *kampung* clearance, home owners are less eager to invest in housing, on the one hand. On the other hand, insecure tenure results in relatively low cost of living, such as cheap rents. I would like to remark here that the four community associations RW 11-14 in Tomang show a more heterogenous settlement pattern than RW 04 in Manggarai. In Manggarai the quality of housing ranges from solid houses along the Stasiun Manggarai road to makeshift huts in the river bed. Third, I identified spatial boundaries that separate the *kampung* from neighbouring

areas. More or less natural borders, such as rivers, canals and roads, define not only the community but also the administrative boundaries. In Tomang the natural borders are reinforced by the built environment. A department store and houses of the middle class separate the *kampung* so that it is spatially isolated from the rest of the *kelurahan*. I argue here that these three aspects of spatial patterns give rise to a sense of community in the *kampung*.

The aspects of social organisation clearly point out the central role of the RW/RT-system. The RW/RT-system is one of the mass organisations that had been introduced and instrumentalised by Suharto and now plays a crucial role regarding aspects of local organisation. Institutionalised forms of collective action, such as *kerja bakti* or *ronda*, largely rest within the RW/RT-system. The role of the RW/RT-system is reinforced by the sense of community which largely follows administrative boundaries. In Manggarai the importance of administrative boundaries for community ties is evident. Although neighbouring RTs in RW 01 show similar socio-economic characteristics, they are not perceived as part of the community which comprises the community association RW 04. In this context it is interesting to note that many people identify most with the neighbourhood (RT) they are part of while many issues are regulated on a community level (RW). That way, the sense of community is strongest on the neighbourhood level. In addition to that, I showed that the triangular concept of pluralism of law in Indonesia might be problematic. My findings point out that the 'thought style' of a community is institutionalised within the RW/RT-system as it provides an informal or semi-formal framework for law and order on a local level. This aspect is not included in the triangular concept of religious, traditional and state law. I rather observed that the latter play a minor role.

Although the RW/RT-system is the foundation of local organisation in both research locations, I do not want to overstate the general role of the RW/RT-system for local communities. I argue that other organisations, particularly civic organisations or ORMAS, can play a crucial role for people who are disintegrated from the RW/RT-system. In Indonesia, civic organisations have a long tradition in (informally) regulating the local level. Where the RW/RT-system does not succeed in integrating people, these organisations appear to be strong. In addition to that, I presented challenges to the institutionalised forms of social organisation embedded in the RW/RT-system. I identified insecure tenure, lack of public space, migration, the existence and the awareness of a social gap and the dependency on charismatic leaders as aspects that could negatively influence the performance of social organisation and regulation on a local level.

Finally, I conclude that the concept of locality is a valuable tool for approaching local communities. The application of the concept as a methodological tool for the empirical research on two *kampung* communities in Jakarta demonstrated its analytical value. Yet, the findings point out that the *kampung* is exposed to rapid urban dynamics so that a study on local communities has to be considered a snap shot at a precise moment. It is also important to mention that findings of one research location cannot be generalised. A different research location, or *kampung*, might show its own particularities. My research results do therefore not imply universal validity. Yet, the findings provide categories that can serve as a starting point

for further research on local communities. In addition to that, the empirical findings provide a basis for a vulnerability assessment. As I will show in the following, the organisations and institutions that are in place to provide an order and regulate everyday life also play a central role regarding vulnerability and community resilience.

7 APPROACHING COMMUNITY RESILIENCE

7.1 Vulnerability Assessment: Flood Risk

In chapter three, I presented the integrated vulnerability framework (Turner et. al 2003a) and reformulated my research question. The integrated vulnerability framework provided the categories relevant for the structure of this thesis as well as for the outline of the empirical research. Having described and analysed both *kampung* communities with the concept of locality, I will now address the general question of this thesis: *What are aspects of resilience that allow urban poor to adapt and cope with hazards?* In the following vulnerability assessment I will pick up the research results that are related to the hazard of flooding and structure the empirical findings according to the aspects suggested by the integrated vulnerability framework. Because of the complexity involved, the framework will also serve as a tool to visualise different aspects of vulnerability and their entanglement. By assessing the vulnerability of *kampung* dwellers to flooding, I will provide a differentiated analysis on the urban poor who are generally perceived as being particularly vulnerable to disasters. I argued before that institutionalised forms of social capital can constitute an important resource for local communities. In the context of flooding, it became obvious that these resources can also influence disaster vulnerability in a positive way. Since these resource allow low-income households to adapt and cope with hazards, they can be interpreted as aspects of resilience. In order to answer the research question, I will thus particularly focus my vulnerability assessment on the institutionalised forms of social capital that can be translated into dynamics of social agency, such as self-organisation and collective action.

The Reference Unit and the Hazard

As I described before, Voss argues that the practical application of the analytical framework always starts with the selection of a reference unit. In a next step, the hazard should be selected and the exposure to the hazard identified. Hereby, one has to be aware that the hazard cannot be fully defined as it can be the result of unexpected or unintended dynamics. Therefore, the term hazard has to consider both, calculable risks and unforeseeable 'dangers' (Voss 2008, pp. 111-113). For my empirical research in Jakarta, I initially decided to select two *kampung* communities which exemplarily represent the urban poor. As I showed in the previous chapter, my findings point out the challenges involved in defining the urban poor as a reference unit. The urban poor are a heterogenous group and neither the concept of slum nor the term *kampung* are of analytical value to approach them as a homogenous reference unit. As a consequence, generalised conclusions are hardly possible. This also implies that the findings of my vulnerability assessment cannot be generalised but reflect the

particular adaption and coping strategies of the two communities in Tomang and Manggarai. Yet, I assume that my findings point out general aspects which can be of relevance for further vulnerability assessments.

The following vulnerability assessment will thus refer to the two research locations presented before. The community and neighbourhood associations which are at the core of social order in both locations also play a key role when it comes to hazard management. Previously, I showed that hazards, such as floods and fire, require the community to act collectively and to self-organise the coping strategies. It became evident that the administrative units of RWs and RTs are at the core of social organisation in the *kampung*. The administrative units represent the sense of community which can, again, translate into forms of collective action. Yet, I also showed that the sense of community has further dimensions. In addition to the administrative boundaries, aspects of the spatial environment and social organisation have an important impact on the cooperative spirit. I argued before that the concept of locality reflects these aspects and that it is an appropriate analytical concept to define and approach the reference unit. Since the integrated vulnerability framework is a place based approach, the concept of locality can be easily integrated. Accordingly, I understand both localities, RW 11-14 in Tomang and RW 04 in Manggarai, as the reference units of my vulnerability assessment.

Regarding the selection of the hazard, I entered the research with a strong focus on flood risk. Yet, my research was biased by a large fire that happened in RW 14 in Tomang. The fire turned out to be an example of a disturbance that unveils the full complexity of social organisation in the *kampung*. Following Dombrowsky, the fire would be a 'negative seal of quality' (Dombrowsky 2004, p. 183) for social organisation, if the fire turned into a disaster. Accordingly, it would be a positive seal of quality, if people succeeded in coping with the impact of the fire adequately. Since *kampung* dwellers apparently succeeded in coping with the impact of this fire, the coping strategies unfolded the aspects of resilience that are relevant to answer my research question. In this respect, I assume that the strategies to cope with flooding and fire are not identical but they are based on the same aspects of resilience. In the following I will thus also refer to my experience with fire. In addition to that, I would like to point out that hazards do not only emerge from the 'natural' environment. Different stressors or perturbations can finally turn out to be a 'negative seal of quality' for social organisation on a local level. For instance, *kampung* dwellers perceive the precarious economic situation, that comes along with income earning strategies in the informal sector, as a hazard which can pressurize single households.

I showed before that flood risk is closely connected to urban transformation. That way, flood risk became part of the megaurban complexity in Jakarta. I thus argued in the introduction that flood risk in Jakarta cannot be reduced to monocausal explanations. The complexity is further increased, if we bring the ambivalence connected to flood-prone areas into mind. On the one hand, people living in hazardous locations are more vulnerable to flood risk. On the other hand, these locations provide a solution to the 'metropolitan dilemma' in a sense that they provide diverse opportunities, such as affordable living space. In order to reduce this complexity, I will highlight some aspects and bring together some of my findings in the

integrated vulnerability framework (see figure fifteen).

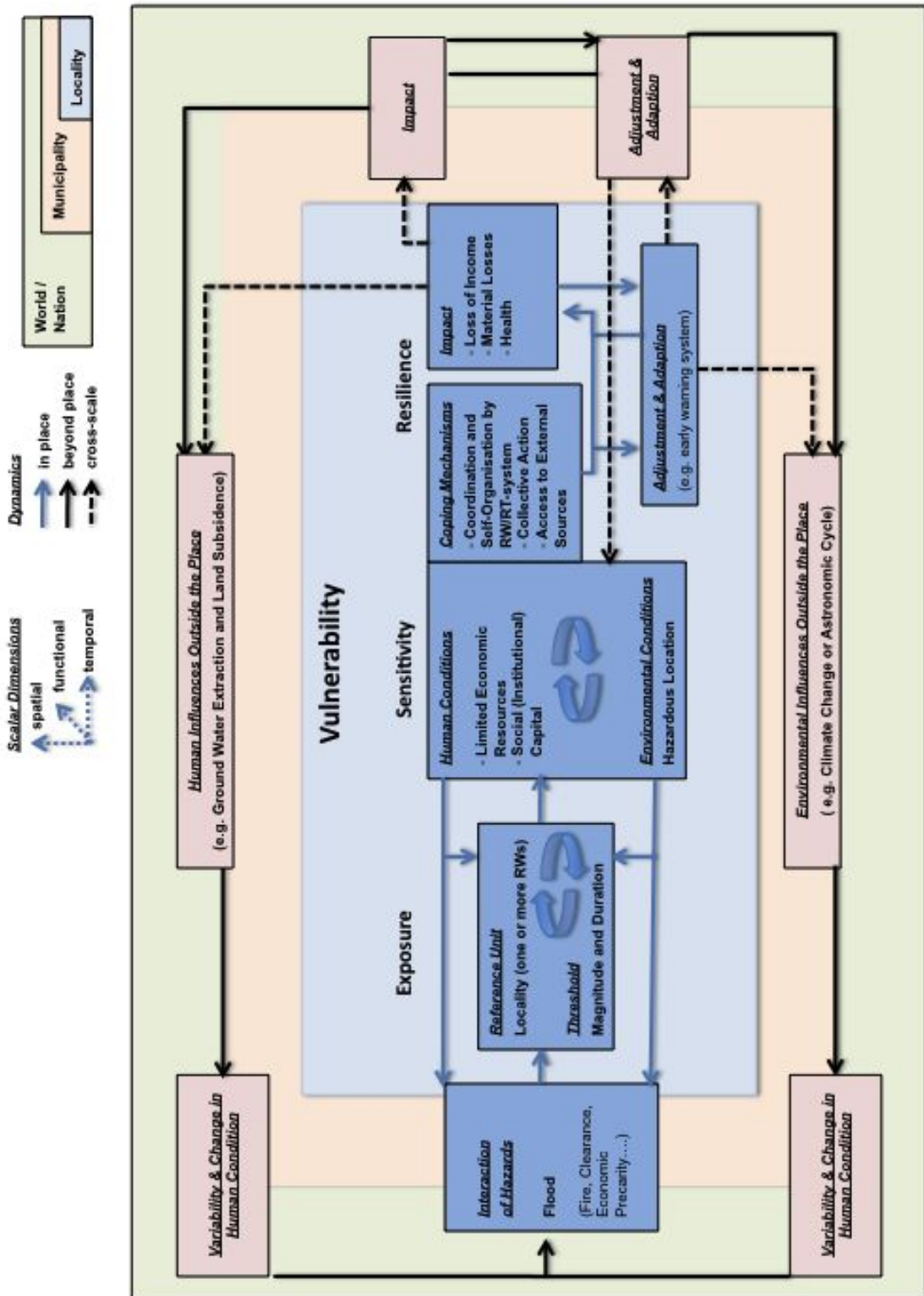
Spatial and Temporal Scales

In the introduction, I described that flooding poses a major threat to the city and its dwellers. The 2007 flood showed that flooding can have an impact on all strata of city dwellers. The fact that the airport was cut-off for several days points out the potential impact of flooding on the regional or even international level. Accordingly, the impact of the 2007 flood illustrates that flooding is a hazard that is not limited to a certain place. But not only the impact, also the root causes of the flood situation have to be analysed against different spatial scales. I showed before that flooding is a result of various contributing factors originating on the local, provincial and metropolitan level. If we assume that climate change will aggravate flood risk in Jakarta, we might even identify factors on a global scale. As a consequence, flood management does not only require local response but involves several actors on the community, provincial, national and even international level.

I pointed out that flood management was an integral part of urban planning when Batavia was founded in 1619. Figure four illustrates that Batavia resembled a Dutch town, including a canal system and all kind of water works. After independence, flood management was also integrated in the master plans concerning the urban development of Jakarta and it was later extended to the megaurban region of *Jabodetabek*. Consequently, flood management in Jakarta can look back on an almost 400 year tradition. Until recently, urban planners mainly discussed flood management in the context of urban master plans and large scale construction projects, such as the construction of major flood canals. Given the rapid urbanisation dynamics in the 20th century and the resulting megaurban complexity, this urban planning strategy turned out to be of limited success. Currently, urban planners seem to shift away from the vision of a flood free city towards a strategy that accepts flooding as part of the urban reality and that requires city dwellers to live with floods. Accordingly, cross scale dynamics become increasingly important. This is also reflected in the current activities of urban planners who are aiming to involve the grass-root level in flood management. For instance, the municipality recently developed a formal early warning system that connects all *kelurahan* offices in Jakarta with the municipal crisis management agency Satkorlak. Moreover, disaster management budgets are assigned to the *kelurahan* office in order to achieve quick crisis response on a local level.

The fact that the origin of flood risk in Jakarta can be traced back to the founding of the city in a flood prone location highlights the temporal dimension of the hazard. The confusing flood situation of today is deeply rooted in the city history and developed over time. If we go forward on the temporal scale, we will realise that not only climate change is discussed as a major concern for megacities in coastal zones. While in the case of Jakarta the significance of adverse affects of climate change can be disputed, rising water levels, due to the astronomic cycle and land subsidence, are a realistic future scenario.

Figure 15: Vulnerability Assessment in Jakarta



Source: Table Based on Turner et al. 2003a

Components of Vulnerability: i) Exposure

One has to be aware that I designed my research outline to conduct the vulnerability assessment on a community level. Therefore, my research findings point out aspects that correspond to the situation of the respective locality in Tomang or Manggarai. Since the reference units of the research are two localities, one has to be careful to arrive at conclusions referring to the adaptation and coping strategies of individuals, households or neighbourhoods. Regarding the threshold, I found that the magnitude and the duration are the most important characteristics of floods which are relevant for the community. Particularly in the rainy season, heavy rainfall regular causes the water levels of major waterways to rise. Minor flooding do thus happen regularly but do not significantly interrupt everyday life. As I will show in the following, people can live with minor floods since buildings are adapted to rising water levels. Usually, people are required to act when the water reaches levels that make it impossible to reach or leave homes. In that case, people have to evacuate to emergency shelters. Particularly those people involved in informal sector activities cannot follow their income earning strategies during the stay at an emergency shelter. Since many people depend on daily earned income, they have to rely on external support the longer they have to stay away from their homes. Accordingly, the magnitude and duration of flooding are relevant characteristic that define the 'threshold' of flood risk.

Components of Vulnerability: ii) Sensitivity

The sensitivity refers to the interaction of human and environmental conditions that shape the quality of a reference unit to the hazard. In the historical perspective, I argued that urban transformation caused many *kampung* dwellers to relocate to marginal urban pockets. These marginal urban areas are often located along major waterways, such as rivers or canals. Land in these locations is often not attractive to urban land markets since it is highly exposed to flood risk. These locations can be considered ambivalent or what I referred to as Janus-faced. Janus-faced because they provide opportunities, such as affordable living space, on the one hand. On the other hand, they are hazardous locations and increase the vulnerability of its inhabitants to flood risk. This ambivalence can be observed in both localities. The community associations RW 11-14 in Tomang are separated from the West Flood Canal by a dam. The locality is flooded when the West Flood Canal overflows or water from the small canal cannot be pumped into the West Flood Canal. The neighbourhood association RW 04 in Manggarai, again, is located along the Ciliwung river. Some of the homes are built on stilts in the river bed. Regular rainfall, either in the city or in up-stream areas, can cause the water levels in the river to rise and consequently results in flooding. Regarding the environmental conditions, the findings from Tomang and Manggarai do thus reconfirm the general perception that the urban poor are particularly vulnerable to hazards.

However, the environmental condition is only one aspect of sensitivity. Although the majority of people in both localities cannot rely on significant economic or financial assets, I found that the absence of these assets is compensated by a strong sense of community on the neighbourhood and community level. This sense of community is institutionalised in the RW/RT-system which regulates and organises the local level. The RW/RT-system also plays

an important role for the community response to flooding. As I will show in the next section, the RW/RT-system represents what I described as social or institutional capital. That way, the community is not only organised but it is also represented towards external actors. Accordingly, the social or institutional capital is an important aspect of the human condition in both localities. While in both locations the RW/RT-system is crucial for local self-regulation and self-organisation, I also found that it is difficult to generalise my research results. For reasons I presented before, a sense of community does not always develop on the local level. In that case other organisations on the local level, such as ORMAS, integrate people into a group.

Components of Vulnerability: iii) Resilience

- a) Impact: I pointed out before that the most serious impact of flooding is the loss of income when people have to stay in the emergency shelter. Since major floods only last several days, people do for a short period of time rely on external aid, particularly on food donations. Moreover, it is often reported that during flooding people show allergic reaction when the skin gets in contact with contaminated water. However, health issues are not considered a serious threat since health care is generally available to people in both localities. In addition to that, it is not reported that past flooding claimed casualties. Material losses are also limited and homes are usually not seriously damaged. For instance, valuable assets are often stored at higher grounds or at save places in other areas. When the water recedes, in most cases people only have to clean up their homes to get rid of the mud before they can move in again. Yet, it is reported that makeshift building structures can be washed away by flooding. In Manggarai it is interesting to observe that although the poor inhabit the makeshift huts built on stilts in the river bed, they usually do not own but rent the homes. Accordingly, they do not face significant material losses. The makeshift public toilets in the river are often destroyed by flooding and are then rebuilt in a joint effort by the community.
- b) Coping Mechanisms: As I presented in chapter two, the integrated vulnerability framework defines coping mechanisms as the direct actions and the policies that take effect in response to the impact. Following a flood warning, I found that these coping mechanisms are institutionalised so that the respective response activities are well-rehearsed. On an individual or household level, people shift valuables and household assets to higher grounds, which is usually the second floor of their homes. Larger items, such as motorbikes, are brought to safer places in the *kelurahan*, such as at the Tomang Banjir Kanal road in Tomang or at the Stasiun Manggarai road in Manggarai. It is also reported that children are brought to relatives or friends in other city areas. Moreover, people know where to go when they have to leave their homes. Evacuation shelters are often established at schools, praying houses or tents which are put up on public places.

On a community level, the respective RW and RT headmen fulfil a central role in the coordination of flood management. They organise the evacuation of people who are

trapped in their homes. Moreover, they organise the neighbourhood security system in order to prevent looting. In the emergency shelters, people share food.

If flooding lasts for several days, people often have to depend on external sources. The RW office usually organises a coordination post where external aid is collected and distributed. Although people often have a negative perception of the *kelurahan* office, it has to be remarked that the *kelurahan* provides material support, such as rubber tubes or tents. Moreover, the coordination efforts are assisted by structural organisations, such as FPKM. Various external actors enter the localities in case of more persistent floods. Rich city dwellers, political parties, churches, companies, NGOs and civic organisations are some of the external actors who provide food, drinks, clothes and health care to people in emergency shelters. I described before that flood management became more professional in the post-Suharto era, not the least because of the many actors involved. Political parties are, for instance, interested in showing their solidarity with people on the grass roots. In the search of garner votes, political parties can reach many people with 'disaster' aid. In this context, the RW/RT-system is, again, crucial as it represents the people as a bounded community and articulates their interests to external parties. In that way, one could speak of 'political capital' or a bargaining power local communities develop to push through their interests.

- c) Adjustment and Adaption: The empirical findings suggest that in both localities the communities are well adapted to flood risk. Both communities developed a kind of informal warning system by establishing informal communication structures with civil servants at the major flood gates and with friends or relatives living in up-stream areas. The informal warning system is completed by a formal one that is operated by the city administration. Moreover, buildings are generally adapted to flooding. The first floor is usually a concrete structure that can withstand persistent flooding and the door steps are elevated so that regular flooding does not enter the homes. That way, material losses are reduced to a minimum. When homes are newly constructed, adjustments are made to make the buildings more resistant to floods. For instance, when homes were reconstructed following the fire in Tomang, door steps were further elevated in order to prevent future flooding from entering the homes.

7.2 Aspects Of Community Resilience

The vulnerability assessment allows a differentiated conclusion on the vulnerability of local communities in Jakarta. On the one hand, the general assumptions that the urban poor in megacities are particularly vulnerable can be reconfirmed, if solely the general environmental and social conditions are considered. Both localities are hazardous locations highly exposed to flood risk. On the other hand, the human conditions show that people in both communities have limited access to economic resources. Yet, the research points out that the communities developed institutionalised forms of social capital, or institutional capital, and hereby compensate the limited access to economic resources. The RW/RT-system

represents these institutionalised forms of social capital, such as bonding, bridging and linking social capital.

As I described earlier, the RW/RT-system allows a sense of community or cooperative spirit which can be translated in forms of social agency, such as self-organisation and collective action on the neighbourhood as well as on the community level. Moreover, people living in a specific locality are perceived as a bounded community through the RW/RT-system. That way, single households and neighbourhoods are integrated into a community which can reach a critical size. What was previously called 'bargaining power' is crucial as it allows the community to articulate interests and push through these interests. For instance, political parties get increasingly involved in emergency aid because they can reach a comparatively high number of people with a reasonable amount of financial assistance. Accordingly, it can be observed that social capital can translate into forms of 'political' capital. The role of 'political' capital also plays a role in the relation between the municipality and local communities. For instance, some headmen seem to succeed in representing their community towards the municipal administration on the *kelurahan* level. The municipality, in contrast, seems to be increasingly interested in including local communities in flood management.

Consequently, I argue that social and political capital are important resources of a community as these forms of capital can be translated into successful coping strategies. On the one hand, coping strategies are based on the capacity of a community to self-regulate and self-organise 'disaster' response within the community, such as coordinating evacuation or maintaining security. On the other hand, external support can be coordinated and accessed through organisations which represent the sense of community. Although *kampung* dwellers are very sceptical about the *kelurahan* office, the municipal administration is a key actor in providing external support to the community. Communities are also supported by other external actors, such as political parties or private sector companies. Moreover, I showed that people developed successful adaption strategies. Based on the past experience with flooding, building structures are adjusted to flood risk and each household seems to be prepared. Given the successful adaption and coping strategies, it can be stated that both communities are resilient to flooding. This is underlined by the limited economic impact and the lack of casualties during previous floods. If the flood recedes, the flood problem is gone and people quickly return to normality of everyday life. That also explains why flooding is generally perceived as 'biasa' (ordinary).

I arrive at the conclusion that flooding became integral part of everyday life in the *kampung*. My findings suggest a general resilience or robustness of local communities to floods. However, it can be disputed whether my conclusion is valid in the face of future dynamics. I suggested that the duration of flooding is a characteristic or threshold that challenges existing coping strategies. I further argued that future dynamics might result in persistent floods which will be characterised by longer durations. Accordingly, the capacity of local communities to adapt and cope with future hazards, such as sea level rise due to climate change or the adverse impacts caused by the astronomic cycle, will largely depend on the ability to integrate new stressors and disturbances. Therefore, community resilience has to

be seen as a dynamic concept. With Holling's (1973) discussion on resilience, I conclude that communities will only be resilient, if they succeed in absorbing future disturbances and move into a new 'domain of attraction'.

The example of *kampung* clearance shows that local communities have not always been resilient. With Holling's (1973), I argue that *kampung* clearance moved the community out of the 'basin of attraction'. The disturbance could not be absorbed so that a 'regime shift' took place (see figure two). As a consequence, *kampung* communities turned out to be not resilient to the hazards resulting out of insecure tenure. The fact that single households accepted compensation payments undermined the sense of community. Apparently, *kampung* dwellers did not perform as a bounded community. That way, the communities did not succeed in forming social movements and in developing 'bargaining power' to resist eviction. The case of eviction demonstrates how fragile community resilience can be. That way, *kampung* clearance can be interpreted as a 'negative seal of quality' for social organisation, or a disaster.

Another interesting example is fire. My empirical findings show that the strategies to adapt and cope with fire are similar to flood management strategies. Yet, fire has a different impact as it can cause significant material losses. I argued that the social capital which is institutionalised in the RW/RT-system supports fire victims in the immediate emergency phase when people have to move to emergency shelters and need access to basic goods. However, in the rehabilitation phase, when homes have to be rebuilt, people can not rely on established collective strategies. Each household has to access financial resources individually in order to be able to rebuild homes. While I expected that some households are not able to secure sufficient financial resources and access building material, all homes had been rebuilt several months later. Apparently, the affected community turned out to be resilient to fire. However, I described before that due to some challenges I faced in the research process, I am not able to describe and analyse these dynamics. Although it is methodologically challenging, I thus recommend that further vulnerability assessments should particularly focus on the household level to explain the adaption and coping strategies of individual households.

8 Conclusion and Outlook

I would like to conclude my findings by resuming the initial discussion on global trends. I argued that three major global trends – dynamic urbanisation, population growth and increasing disaster impacts – will be mainly concentrated in developing countries, particularly the ones in Asia. Megacities are considered an expression of these trends on the regional and national level. Within megacities, slums are regarded as places where these concentrated global trends translate into local forms. Following this rationale, it can be understood that the urban poor are considered most vulnerable to disasters. It is suggested that they often settle in the most vulnerable locations and that they lack the economic means to adequately adapt to and cope with hazards. The theoretical discourse on disasters points in a similar direction. Yet, current discourses on vulnerability and resilience reject monocausal explanations and aim to approach the full complexity of disasters. For instance, the integrated vulnerability framework developed by Turner et al. (2003a) is an attempt to integrate the multi-scalar dimensions of vulnerability, such as temporal and spatial scales. Moreover, with the concept of resilience people are not perceived as passive victims but rather as active agents in the processes of adapting to and coping with hazards.

Flood risk in Jakarta serves as a perfect example to illustrate the complexity of vulnerability and the challenges involved in vulnerability assessment. If we analyse how global trends are translated into specific local forms, we run the risk of assessing vulnerability based on our interpretation of the everyday life reality on the local level. A historical approach to the history of Jakarta unveils two interesting points. First, flood risk can be traced back to the founding of Batavia by the Dutch in the early 17th century. The city was built on a flood plane since it was an ideal location for a town that served as a hub in maritime trade. Accordingly, city dwellers had to learn to adapt and to cope with floods for almost 400 years. Second, the settlements which are now identified as illegal squatter settlements, or slums, had been integral part of the colonial city. What is now termed as urban *kampung* initially referred to the village-like settlements providing living space to the 'native' population in Batavia. With processes of dynamic urbanisation that took their peak in the late 20th century, the meaning of the urban *kampung* transformed into a more general status of illegal squatter settlements, or slums, in the metropolitan area of Jakarta. For the majority of *kampung* dwellers, the changing status came along with insecure tenure and the respective consequences. I introduced risks related to insecure tenure, such as *kampung* clearance, as a major hazard which in the past regularly resulted in a disaster for *kampung* communities.

The above highlights the necessity of understanding the historical context and the temporal scale, if we aim to interpret the everyday life reality in a certain place. Although this might be common sense, the discourse on urbanism and informality indicate the ignorance in how informality is approached in the urban context. Instead of recognising that informality, such as the slums as 'informal' settlements or informal sector activities, is integral part of large cities, informality is often targeted by hostile policies. While it is recognised that informality is resulting out of the loss of control and governability in large city system, urban scholars

perceive informality as a problem that has to be eliminated. Yet, with the metropolitan dilemma I argued that informal housing and informal sector activities are as much part of modernisation as multi-story office and apartment buildings as well as an urban economy that is dominated by multi-national companies. Within the citysystem perspective, I also argued that informality emerges where the formalised regulation and control of the municipal administration does not reach out to the local level. Instead of perceiving informality as something negative per se, I shifted the view to the other end of the scale and presented informality as a solution to megaurban challenges.

That way, I also understand informality as resource to the urban poor. Where formalised regulation and control is absent, it can be observed that people develop their own forms of self-regulation, self-organisation and self-improvement. These forms of social agency are often based on collective action which, again, requires a sense of community or a communal spirit. I theorised that the capacity to act collectively is institutionalised in social networks. I connected this 'institutional capital' with the discussion on 'social capital'. In this perspective, I argued that the institutionalised forms of social organisation can be further divided into bonding, bridging and linking social capital. If we understand social capital as a resource that enables the urban poor to respond to everyday life challenges, we also have to reconsider the concepts of slum and vulnerability. The concept of slum does not denote the agency of the urban poor and is thus of limited analytical value to interpret the local context. Moreover, if we interpreted aspects of informality as social capital, we would have to reject the view of the poor as passive disaster victims. I approached the lifeworld of the two *kampung* communities with the concept of locality because it integrates the aspect of social organisation.

The findings of my empirical study in Jakarta indicate that people succeed in developing institutionalised forms of social agency, such as collective action. Different aspects, such as spatial boundaries, the built environment, high population densities, administrative boundaries, the precarious economic situation, insecure tenure and other collectively shared hazards lead to the emergence of a sense of community. Instead of finding an anonymous 'urban way of life' described by Wirth (1938), I found that people cooperate on a neighbourhood and community level. Collective strategies enable *kampung* dwellers to cope with lifecycle events affecting individuals or households, such as sickness, as well as hazards affecting the majority of people in a community, such as flooding or fire. Interestingly, these forms of social organisation are institutionalised within the administrative unit of the RW/RT-system and the associated collective arrangements. This is even more surprising as the RW/RT-system was introduced during the New Order to regulate and control the local level top-down. In post-Suharto Indonesia the role and function of the administrative system seems to be reversed and now serves local communities as an organisation to also regulate and organise bottom-up. The same might be said for institutions introduced under Suharto with the aim to mobilise the local level, such as *kerja bakti* or the neighbourhood security system. Consequently, the institutions that are commonly perceived as either state ideology or tradition are reinterpreted in the new political environment.

The RW/RT-system is also at the core of adaption and coping strategies. It connects people

on the neighbourhood level through the neighbourhood associations RT (bonding social capital). It integrates different neighbourhoods into a community on the level of the community association RW (bridging social capital) and it allows the community to articulate and communicate its interests towards external actors (linking social capital). My findings point out that *kampung* dwellers are well adapted to flooding, such as the informal early warning system indicates. Flooding is a continuous challenge and forces all city dwellers to develop adaptive strategies. During floods, processes are well-rehearsed and flooding is coped based on collective strategies. It seems that in post-Suharto Indonesia local communities better succeed in achieving a bargaining power as they now represent a significant mass of people. In the context of flooding, it can be observed that more and more external actors, such as political parties and private sector companies, get involved in supporting *kampung* dwellers.

Finally, I came to ambivalent results regarding the vulnerability of *kampung* dwellers. On the one hand, the initial assumptions can be reconfirmed. *Kampung* dwellers are indeed vulnerable to hazards, particularly to flooding, as their homes are located in hazardous locations and they have limited financial resources at hand. However, many *kampung* dwellers accept these risks in order to 'enjoy' the opportunities a *kampung* located in the greater inner-city area can provide. Moreover, in the absence of financial resources, institutionalised forms of social agency, which I introduced as social capital, constitute an important resource that allow *kampung* dwellers to adapt to and cope with hazards. That is why *kampung* dwellers repeatedly state that flooding is 'biasa', something ordinary. Therefore, it can be considered as a part of the everyday life reality in the urban *kampung*.

Yet, I do not want to be too optimistic about my findings. The research also shows that resilience is mainly based on the past experience with flood. It remains to be shown whether *kampung* dwellers succeed in developing adequate strategies to adapt and cope with future challenges, particularly the expected impact of the astronomic cycle or the potential adverse effects of climate change. The past experience also shows that *kampung* dwellers had not always been resilient to hazards. *Kampung* clearance, for instance, resulted in dissolving community ties. Apparently, the institutionalised forms of social capital are also vulnerable to certain disturbances. In the context of fire, I observed that collective strategies are important to cope with a hazard in the initial phase. However, when people have to reconstruct their destroyed homes, the role of collective strategies as well as urban subsistence production is limited as financial resources are required on an individual basis to access building material. The processes involved here are certainly a blind spot of my research. After a major fire in the *kampung* of Tomang, all houses had been reconstructed but the underlying dynamics could not be grasped by the research.

Last but not least, I would like to provide some input for further research. I borrowed the theoretical foundations for my empirical study from different scientific fields, such as urban studies, disaster research and Indonesian studies. With my empirical findings I would like to contribute to the creation of theory in these fields. I extensively discussed the ambivalent role of informality in the megaurban setting. While informality is commonly perceived as the negative form of formal (Sindzingre 2006, p. 61), I showed that the informal sphere is all but

unorganised and unregulated. Informality has to be rather seen as the local response to global dynamics. It is a sphere where people find solutions to cope with everyday life challenges. Given the importance of informality for establishing an order on a local level, I argue that the mainstream discourse on the concept of informality requires some rethinking. Consequently, the ambivalent role of informality should be acknowledged in urban studies.

I showed that informality gave rise to institutionalised forms of social capital. Social capital, again, is translated into a sense of community and different forms of social organisation. That way, social capital can constitute an important resource for local communities in order to adapt to and cope with hazards. These findings are in line with the latest discussions in disaster research. With the concept of resilience, the view of passive disaster victims is challenged and the role of social agency is recognised. The integrated vulnerability framework introduced by Turner et al. (2003a) is a perfect methodological tool to approach the complexity of vulnerability in the local context. The different components of the framework allow for a first approximation to the vulnerability of a specific reference unit. My findings reconfirm the importance of cross-scale dynamics as well as spatial and temporal scales in a vulnerability assessment. Moreover, the framework might be also suitable for interdisciplinary research.

The success of *kampung* communities in Jakarta to adapt to and cope with flood hazard is mainly related to aspects of social organisation on the neighbourhood and community level. I argued that the same organisations and institutions which had been instrumentalised by the New Order government to control people top-down do now facilitate social organisation bottom up. This had been made possible by the fall of Suharto in 1998 and the following democratisation processes. In the last decade much research effort has been devoted to analyse the processes of democratisation and decentralisation in post-Suharto Indonesia. Since these reforms were engineered top-down, most research takes a macro-perspective to analyse the performance of democratisation processes. My study points out the dynamic transformation of social organisation on the community level. While screening the literature, I did not come across a comprehensive study on these aspects. Accordingly, I identified a strong need for research on the local dynamics in post-Suharto Indonesia.

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Annex 1: Impressions From the Field Research

Photo 1



Spatial Border to Middle Class

Photo 2



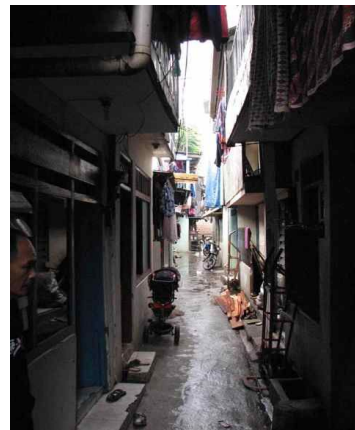
Fence Separating Middle Class

Photo 3



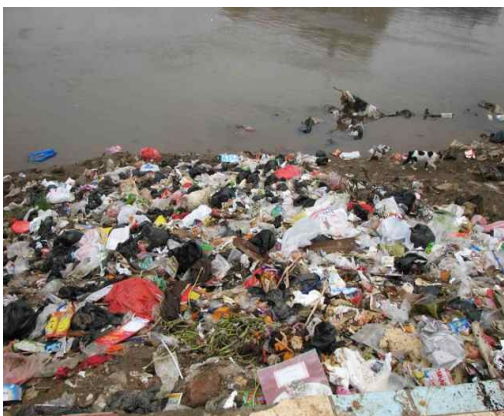
General Housing Standard in Tomang

Photo 4



Path within the Kampung

Photo 5



Garbage Disposal Through the Canal

Photo 6



Fish Ponds Built in the Canal

Photo 7



Gardening Activities in the Canal Bed

Photo 8



View on Mall Taman Angrek in the back

Photo 9



Public Toilets Built in Ciliwung River

Photo 10



RW 10 RT 01 After its Demolition

Photo 11



Homes Close to Stasiun Manggarai Road

Photo 12



Makeshift Homes Built in the River Bed

Photo 13



Inside RW 04 in Manggarai

Photo 14



Small Public Space in RW 04

Photo 15



Warung Selling Fried Rice and Noodles

Photo 16



Traditional Market "Pasar Rumput"

Photo 17



Morning Street Market in RW 04

Photo 18



Street Vendor at Tombak road

Photo 19



Flying Vendor in Manggarai

Photo 20



Ojek Service at Stasiun Manggarai road

Photo 21



Headman of RT 10 in Manggarai at Work

Photo 22



Clogged Flood Gate and Scavenger

Photo 23



Beautification Project in RW 04 Manggarai

Photo 25



Inside the Community School

Photo 24



Community School Kampung Indosat

Photo 26



Health Care Card for People in RT 10

Photo 27



Kampung Fire in Tomang

Photo 28



Impact of the Fire

Photo 29



Coordination Post for Fire Management

Photo 30



Kerja Bakti to Clear Debris

Photo 31



Aid Post run by the Political Party PKS

Photo 32



Recreation Event one Month After Fire

Photo 33



Regular Flooding During Rainy Season

Photo 34



Everyday Life Activities During Flooding

Photo 35



Evacuation Tubes in the Kelurahan Office

Photo 36



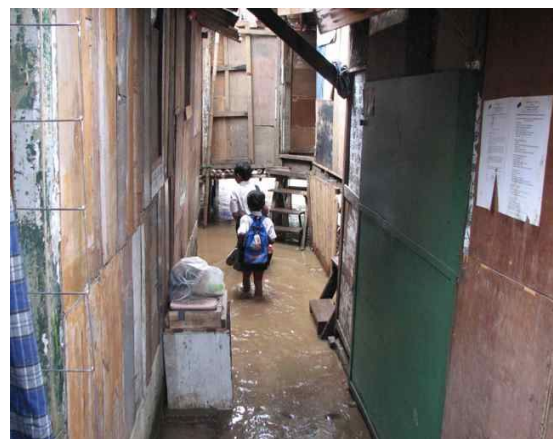
Preparing for Flooding

Photo 37



Moving Assets to Higher Grounds

Photo 38



Rising Water Levels in Ciliwung River

Photo 39



Fire Extinguisher in RT 10

Photo 40



Pemuda Pancasila in Tomang

Photo 41



FBR Post Located in Kelurahan Tomang

Photo 42



Satpam – Private Security Guard

Photo 43



Hansip for Neighborhood Security

Annex 2: Exchange Rate

As of 23 May 2011, the exchange rate Euro – Indonesian Rupiah was:

EUR 1 = IDR 12,033

From the beginning of the empirical research in 2007 until May 2011 the exchange rate moved in arrange of around IDR 11,000 – IDR 16,000.

Source: <http://www.onvista.de/devisen>

Versicherung gemäß § 6 Abs. 2 Buchst. g PromO:

Ich versichere hiermit,

- dass ich die Dissertation selbständig angefertigt habe, außer den im Schriftenverzeichnis sowie den Anmerkungen genannte Hilfsmitteln keine weiteren benützt und die Herkunft der Stellen, die wörtlich oder sinngemäß aus anderen Werken übernommen sind, bezeichnet habe,
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Mario Wilhelm