

# Urban planning in Banda Aceh: supporting local actors after the tsunami

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There is increasing awareness of the importance of humanitarian agencies supporting and collaborating with local actors in order to restore city functions following humanitarian crises. This research aimed to document learning from UN-Habitat's experiences of supporting communities and local government to undertake urban planning after the Indian Ocean earthquake and tsunami in Banda Aceh, Indonesia, in 2004. Despite the challenges of urban planning after a complex crisis, in areas devastated by the tsunami, UN-Habitat successfully supported communities and local government to develop village plans, a spatial plan for Meuraxa sub-district, and update the wider spatial plan for Banda Aceh City.

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# Acronyms

ADB	Asian Development Bank
ANSSP	Aceh Nias Settlements Support Programme
Bappeda	Regional Development Planning Agency
Bappenas	National Development Planning Agency
BNPB	National Disaster Management Agency
BPBD	Local Disaster Management Agency
BRR	Rehabilitation and Reconstruction Agency for Aceh and Nias
CAP	Community action plan
CLM	Community land mapping
DFID	Department for International Development, UK
DRR	Disaster risk reduction
FGD	Focus group discussion
GTZ	German Organisation for Technical Cooperation
GWP	Government work plan
JICA	Japan International Cooperation Agency
MDF	Multi Donor Fund for Aceh and Nias
NGOs	Non-governmental organisations
RALAS	Reconstruction of Aceh Land Administration System
RDTR	Detailed spatial plans
RPJMN	National medium-term development plan
RPJPN	National long-term development plan
RTRW	Regional spatial plans
SOP	Standard operating procedure
UNDP	United Nations Development Programme
UN-Habitat	United Nations Human Settlements Programme
UNJP	UN Joint Programming initiative
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNORC	United Nations Office of the Recovery Coordinator for Aceh and Nias
USAID	US Agency for International Development
YIPD	Centre for Local Government Innovation, Indonesia

# Glossary

<i>Bupati</i>	Head of rural district
<i>Camat</i>	Head of sub-district
<i>Gampong</i>	Ward or village in Aceh
<i>Gubernur</i>	Governor
<i>Imeum mukim</i>	Head of mukim
<i>Kabupaten</i>	Rural district
<i>Kecamatan</i>	Sub-district
<i>Kepala desa</i>	Head of village
<i>Kepala dusun</i>	Head of sub-village
<i>Keuchik</i>	Head of village in Aceh
<i>Kota</i>	City, urban district
<i>Mufakat</i>	Consensus
<i>Mukim</i>	A community encompassing a number of gampongs
<i>Musrenbang</i>	Community-based planning
<i>Propinsi</i>	Province
<i>Rumah susun</i>	Apartment
<i>Qanun</i>	Local regulation in Aceh
<i>Tata kota</i>	Office of town planning
<i>Walikota</i>	Mayor

## 1

# Introduction

## 1.1 Background

*Displacement, conflict and natural disasters are increasingly urban phenomena [...] generating a fundamental shift in the nature, scale and impact of humanitarian crises*

Global Alliance for Urban Crises (2016: 1)

The urbanisation of human risk presents a significant challenge for humanitarian agencies – both in the complexity of responding to urban disasters and in operating in an environment in which these agencies do not have significant experience and expertise (Parker and Maynard 2015). In responding to urban crises, experts recommend that humanitarian agencies ‘work in support of and in collaboration with municipal authorities’ (Global Alliance for Urban Crises (2016: 1) and ‘concentrate on restoring or bolstering existing city systems’ rather than creating parallel services of provision (ibid). However, while initiatives such as Making Cities Resilient<sup>1</sup> and 100 Resilient Cities<sup>2</sup> are working with municipal authorities in advance of humanitarian crises, there are few examples and little guidance on supporting local governments during response, recovery and reconstruction.

Urban planning is one of the key responsibilities of local government, particularly after humanitarian crises when there are both urgent needs and opportunities to reduce the risk of future disasters (Olshansky and Chang 2009; see also Box 1). Local government, however, typically ‘has the least resources, weakest governance and lowest capacity of all of the levels of government’ (King *et al.* 2013: 7). Crises are also infrequent, so ‘planners and decision makers are unlikely to be able to draw on personal experience and institutional memory’ (Olshansky and Chang 2009: 206). While interest in urban planning after crises is increasing, the literature has generally focused on the role of planning in disaster mitigation rather than recovery (ibid). Thus, there is ‘little guidance for planners

### BOX 1. WHAT IS URBAN PLANNING FOLLOWING HUMANITARIAN CRISES?

Urban planning is a political and technical process that can be defined as ‘decision-making [...] aimed at realizing economic, social, cultural and environmental goals through the development of spatial visions, strategies and plans and the application of a set of policy principles, tools, institutional and participatory mechanisms and regulatory procedures’ (UN-Habitat 2015). Urban planning can help local governments to create a framework for collaboration between stakeholders, build consensus and develop a collective vision, establish medium- and long-term objectives, and identify the resources needed to achieve them (ibid).

An Official Comprehensive Plan deals with the long-term future of the whole city. It addresses all aspects (such as housing, transportation, environment) and is officially adopted by local government (Yin 2012). Specialised plans may also be developed which focus in greater detail on specific areas of the city (such as informal settlements or the historic centre), thematic topics (for example, hazard mitigation) or timeframes (such as post-disaster recovery and reconstruction). A land-use plan defines the type of development in each area of the city while zoning regulations control how specific sites or properties can be developed (ibid).

Urban planning after humanitarian crises is ‘fast-paced [and] information-poor’ (Olshansky and Chang 2009: 206) while the ‘stakes are high, participants are under stress, and political tensions are amplified’ (ibid: 207). It is also ‘a microcosm of all the challenges of urban planning – developing land use and economic development strategies to improve lives, acting in the absence of sufficient information, making trade-offs between deliberation and expediency, navigating local politics, engaging the public, and identifying funding sources to supplement inadequate local resources’ (ibid: 201).

<sup>1</sup> See [www.unisdr.org/campaign/resilientcities](http://www.unisdr.org/campaign/resilientcities)

<sup>2</sup> See [www.100resilientcities.org](http://www.100resilientcities.org)



who suddenly find themselves with significant post-disaster responsibilities' (Olshansky and Chang 2009) or for humanitarian agencies trying to provide them with support (see Box 1).

## 1.2 Aims, objectives and research questions

This study aimed to identify, document and disseminate learning from the United Nations Human Settlements Programme's (UN-Habitat's) experience providing urban planning support to local communities and government in Meuraxa sub-district of Banda Aceh City after the Indian Ocean earthquake and tsunami in Indonesia, in 2004.<sup>3</sup> It was a collaborative research project, rather than an evaluation, with the intention of documenting lessons from this experience that may be applicable in other contexts.

The objectives of this research were to:

- Examine the process, outputs and effects of the collaboration between UN-Habitat and local actors with regard to urban planning.
- Discuss the advantages and disadvantages of this approach from the perspective of local actors and UN-Habitat.
- Identify what worked well and what was not as effective.
- Analyse the contextual factors which helped or hindered adoption and implementation of UN-Habitat's intervention.

It also investigated the following research questions<sup>4</sup>:

- How did short-term relief planning integrate with pre-crisis planning and longer-term planning?
- How were the views of affected communities and key stakeholder groups incorporated into the planning process?

Following this introduction, Section 2 describes the context to UN-Habitat's intervention. Section 3 describes the process, outputs and effects of the collaboration between UN-Habitat and local communities and government with regard to urban planning (the first objective). Section 4 discusses the advantages and

disadvantages of UN-Habitat's approach, what worked well and what was not as effective, and the contextual factors which helped or hindered implementation (objectives 2, 3 and 4). The research questions are also answered within boxes in Section 3. Section 5 summarises the findings from this study, describes the implications for future policy and practice, and makes suggestions for further research.

## 1.3 Methodology and limitations

The research followed a single exploratory case-study design (Yin 2014). Case-study research 'investigates a contemporary phenomenon (the 'case') in depth and within its real-world context' (Yin 2014: 16). This case-study methodology included triangulation of findings using multiple sources of evidence, establishing a clear chain of evidence linking data, analysis and findings, and having the draft case study reviewed by key informants (ibid: 47).

A research team consisted of a researcher accompanied by an assistant, both of whom were Indonesian local government planners. The team undertook data collection during a two-week period of fieldwork in August 2016. The research team was supported by two resource persons who assisted the researchers in identifying and contacting key stakeholders for interviews and workshops. Fieldwork included 29 key informant interviews,<sup>5</sup> two workshops<sup>6</sup> and direct observation.

The research team sought to engage key informants from a wide range of stakeholder groups to capture different perspectives, including representatives from the local government (seven representatives = GB1–GB7) and the private sector (three = BB1–BB3). There were also key informants from international NGOs (12), consisting of UN-Habitat staff (eight = HB1–HB5; HJ1–HJ2 and HF1) and others (four = NJ1–NJ3 and NB1), community representatives (six = VB1–VB6) and academics (four = RB1–RB3 and RJ1). These key informants were selected through snowball sampling and previous contacts. Data collected through direct observation included a guided tour by the resource persons to the city. Data was collected through digital recordings, comprehensive notes and photos.

<sup>3</sup> UN-Habitat is the United Nations programme working towards a 'better urban future'; its mission is to 'promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all' (UN-Habitat undated c). Mandated by the UN General Assembly in 1978 to address the issues of urban growth, for nearly 40 years UN-Habitat has been working in villages, towns and cities on a wide range of policy and technical urban issues. Since 1990, UN-Habitat has supported Indonesia's innovation and capacity building in urban policy reforms in the areas of human settlements. For the post-earthquake and tsunami 2004 responses in Aceh and Nias, it set up field offices in each affected district to facilitate its community-driven programmes (Asian Development Bank 2010). To address the New Urban Agenda and the targets of Sustainable Development Goal (SDG) 11, UN-Habitat works with national government, local governments and other stakeholders (UN-Habitat 2016).

<sup>4</sup> These research questions were derived from the recommendations for supporting governments made during the UK government's Department for International Development's (DFID's) series of expert consultations on humanitarian response to urban crises. For further details see DFID (2014).

<sup>5</sup> Later supplemented by three additional interviews via video-conferencing or telephone from September 2016 to January 2017. Therefore, in total there were 32 key informant interviews undertaken as part of this research, including three interviews in groups of two to three respondents.

<sup>6</sup> Two workshops were undertaken, one with six UN-Habitat staff and one with the community with 18 attendees. The community workshop included several *keuchik* (heads of villages) who actively served during the rehabilitation and reconstruction processes; this workshop aimed to identify additional potential key informants and to clarify individual key informant recollections of events aside from secondary documents. The community workshop was conducted at a former Forum Korrexa meeting venue.

Table 1. Acehese governance structure

ADMINISTRATIVE AREA	NAME	REPRESENTATIVE
<i>Propinsi</i> (province)	<b>Aceh</b>	<i>Gubernur</i> (governor)
<i>5 kota</i> (urban districts)	<b>Banda Aceh</b> (the capital city of Aceh Province), Langsa, Lhokseumawe, Sabang, and Subulussalam	<i>Walikota</i> (mayor)
<i>18 kabupaten</i> (rural districts)	Aceh Barat, Aceh Barat Daya, Aceh Besar, Aceh Jaya, Aceh Selatan, Aceh Singkil, Aceh Tamiang, Aceh Tengah, Aceh Tenggara, Aceh Timur, Aceh Utara, Bener Meriah, Bireuen, Gayo Lues, Nagan Raya, Pidie, Pidie Jaya and Simeulue	<i>Bupati</i> (head of rural district)
<i>Kecamatan</i> (sub-district)	<b>Meuraxa</b> , Kutaraja, Jaya Baru, Baiturrahman, Kuta Alam, Syiah Kuala, Banda Raya, Lueng Bata, and Ulee Kareng	<i>Camat</i> (head of sub-district)
<i>Mukim</i> (a community encompassing a number of <i>gampongs</i> )	Meuraxa, and Tgk. Chik Lamjabat	<i>Imeum mukim</i> (head of mukim)
<i>Gampong</i> (urban or rural village in Aceh) ▪ <i>Kelurahan</i> (urban village) ▪ <i>Desa</i> (rural village)	16 <i>gampongs</i> in Meuraxa sub-district: Punge Jurong, Deah Glumpang, Lambung, Blang Oi, Gampong Pie, Ulee Lheue, Lampaseh Aceh, Alue Deah Tengoh, Deah Baro, Punge Ujong, Cot Lamkuweuh, Gampong Blang, and Aso Nanggroe, Surien, Lamjabat, Gampong Baro	<i>Kepala desa</i> (head of village) <i>Keuchik</i> (head of village in Aceh)
<i>Dusun</i> (sub-village)	4 <i>dusuns</i> per village (average)	<i>Kepala dusun</i> (head of sub-village)

This research applied the 10 Department for International Development (DFID) ethics principles for research and evaluation to the research approach (DFID 2011). All informants were provided with an information sheet prior to the interviews and requested to sign a consent form to indicate their understanding of the research and their permission.

The diverse perspectives of key informants on UN-Habitat's work were analysed using logic models<sup>7</sup> (Yin 2014) alongside textual descriptions, tabulation, grouping and clustering, and conceptual mapping (Popay *et al.* 2006). Each interview was given equal weight. In order to verify personal accounts, interview data was triangulated with direct observation and secondary documentation. Finally, eight of the key informants reviewed the draft case study to check the accuracy of the findings and to ensure that no key data was missing.

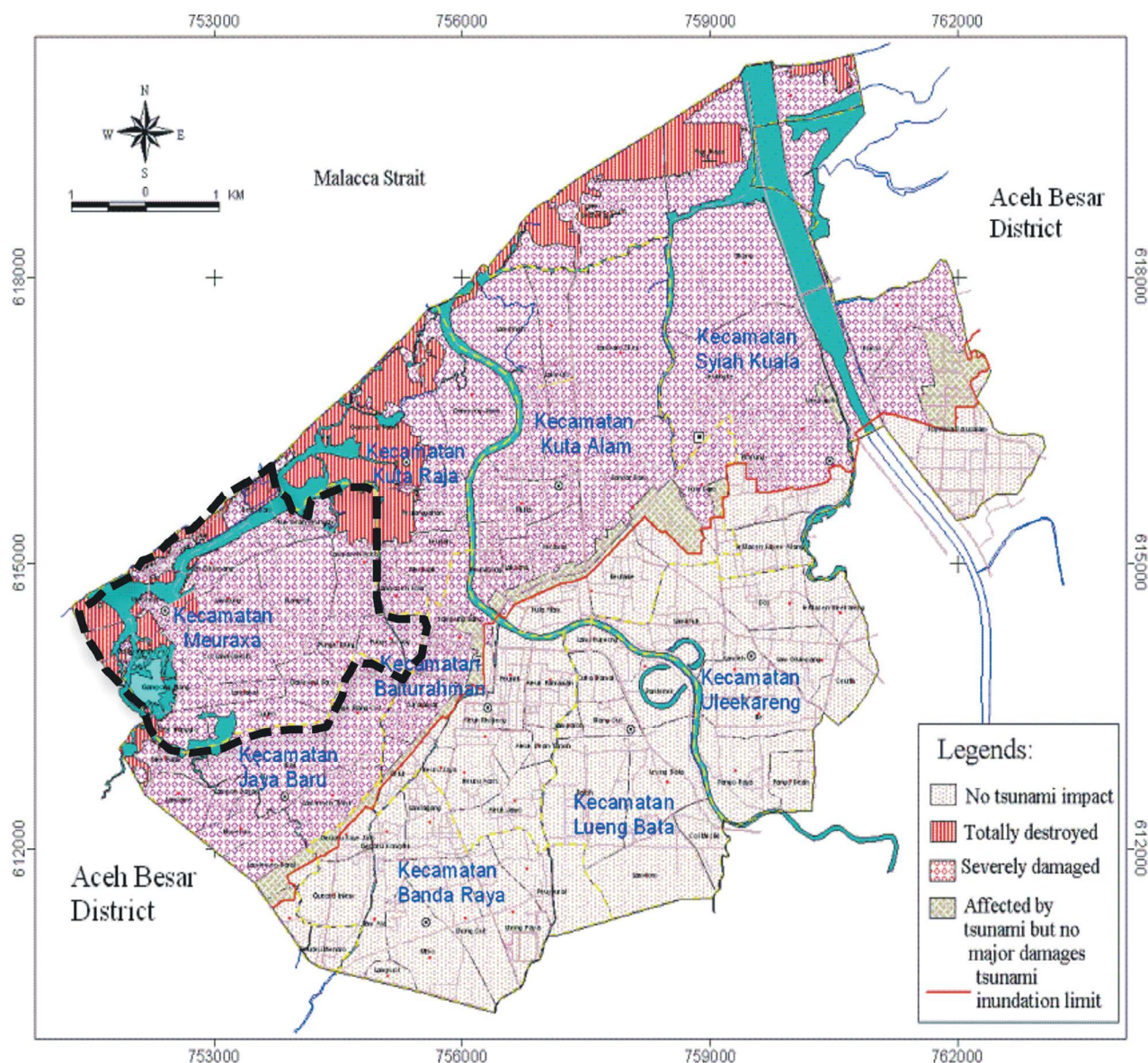
The research was undertaken almost 12 years following the 2004 Indian Ocean earthquake and tsunami. It was challenging to conduct interviews based on individual

recollections of events that happened more than a decade ago. Though many reports, documents and scholarly articles on recovery and reconstruction following the Indian Ocean earthquake and tsunami in Indonesia are available, there remains very limited documentation on urban and development planning. Wherever possible the statements of each interviewee have been triangulated with those of other interviewees and available secondary data. However, it has been a challenge to capture all the details and some gaps remain.

## 1.4 Case study

Banda Aceh is the administrative, economic and cultural centre of the province of Aceh (Takahashi *et al.* 2005). Prior to the crisis, the population of the city was 263,668 (54,751 households) with a population growth rate of 2.1 per cent. The main economic activities were commerce and fish cultivation (*ibid.*). The *kota* (city) consists of nine *kecamatan* (sub-districts) and 89 *gampongs* (wards or villages) (Nurdin 2006; see also Table 1 and Figure 1).

<sup>7</sup> See Section 3, Box 4 for the final version of the logic model developed as part of this research.

Figure 1. Map of Banda Aceh City including the tsunami impact and Meuraxa *Kecamatan*

Source: Syamsidik *et al.* (undated)

These include the historical city centre which is approximately 3km from the coast centred around the Baiturrahman Grand Mosque, the Krueng Aceh River and coastal areas including the port of Ulee Lheue in the *kecamatan* Meuraxa. The city's location and topography make it vulnerable to hazards such as earthquakes, floods, typhoons and tsunamis (Sari 2015). Almost 30 years of conflict in Aceh between the Indonesian government and the Gerakan Aceh Merdeka (the Free Aceh Movement – known as GAM) had claimed between 15,000 and 20,000 lives and isolated both Banda Aceh from rural areas and Aceh province from the rest of the country (Miller and Bunnell 2010).

On 26 December 2004 a 9.0 Mw earthquake struck off the coast of Aceh province, followed within 30 minutes by a tsunami (Takahashi *et al.* 2005). In Banda Aceh, waves approximately 10m high devastated an area between 2km and 4km wide along the coast and left large areas of land submerged (*ibid.*). More than 61,000 people lost

their lives in the city while 6,500 were reported missing (Nurdin 2006; Takahashi *et al.* 2007). More than 17,000 houses were 'totally damaged' while 4,193 were 'partially damaged' (Nurdin 2006). Water, drainage, electricity and communication networks as well as administrative buildings, health and educational facilities, roads, markets and ports were also heavily damaged or destroyed (Takahashi *et al.* 2005; Nurdin 2006). The *kecamatan* of Meuraxa was one of the most severely affected. Prior to the earthquake and tsunami, houses were closely packed, with poor road access and sanitation and drainage systems (Sendjaja 2007). This resulted from urbanisation and displacement from conflict-affected areas further inland (HF1 2017; Miller and Bunnell 2010). In Meuraxa alone, 19,702 people, or more than 63 per cent of the population, lost their lives (Mahdi 2007).

The national government appointed the National Disaster Management Agency (BNPB) to coordinate the



## BOX 2. HOUSING RECONSTRUCTION POLICIES AND ENTITLEMENTS

Immediately after the earthquake and tsunami, families found shelter with host families or were provided with tents or accommodation in 'barracks' (Wegelin 2006; Batchelor 2010). Around 140,000 houses needed to be repaired or rebuilt (Wegelin 2006). Bappenas's master plan indicated that households would be eligible for funds of up to US\$3,000 to rebuild completely destroyed houses or US\$1,000 for damaged houses in need of repair (*ibid*). In June 2005, BRR announced that families with completely damaged houses would be eligible for a permanent house of 36m<sup>3</sup> and issued pre-tsunami drawings and specifications of this design (Batchelor and da Silva 2010). Where possible, houses were to be rebuilt in-situ, after their legal entitlement for the land was confirmed, usually through the community land mapping (CLM) processes and the Reconstruction of Aceh Land Administration System (RALAS) project (MDF 2010).

Around 15,000 families had rented or 'squatted' on government land prior to the earthquake and tsunami<sup>8</sup> while a further 10,000 households were unable to

rebuild in-situ as their land had been submerged (Oxfam 2006). The needs of these landless households (almost 20 per cent of those in need of housing assistance) were overlooked in the first year of the response. Following advocacy by humanitarian agencies to address this landless issue, in June 2006 BRR introduced a policy of free land and a 36m<sup>3</sup> house for pre-tsunami landowners who had lost land, while renters and squatters who could not return home were to be provided with a cash grant (Fitzpatrick 2008).

Delays in implementation combined with inflation of 40 per cent meant the cash grant was not sufficient (Oxfam 2006). Frustration led to major demonstrations outside BRR's head office in September 2006 and in February 2007 BRR replaced the cash assistance programme with a policy of free land and housing for renters and squatters. Those who owned land would be provided with a house, those who had been promised a house by an NGO would be provided with land, and those without land or a housing commitment would be provided with both land and a 21m<sup>3</sup> house by BRR (Fitzpatrick 2008).

emergency relief effort (Batchelor and da Silva 2010) and Bappenas (National Development Planning Agency) to lead recovery and reconstruction planning in the first three months of the response (Wolfgang *et al.* 2005; see also Box 2). Both agencies handed over responsibility to the newly created Rehabilitation and Reconstruction Agency for Aceh and Nias (BRR) upon its establishment in April 2005. BRR had a four-year mandate and was responsible for the coordination and implementation of recovery activities following the Bappenas master plan for the rehabilitation and reconstruction of Aceh and Nias (known as the master plan) (Pardede and Munandar 2016).<sup>9</sup> The prolonged conflict meant that Acehese communities lacked trust in government and caused the Indonesian government to be extra cautious in responding to the tsunami (Miller and Bunnell 2010). Conflict continued in rural areas in Aceh until the signing of a peace agreement in August 2005 (*ibid*). This was followed by the Law on Governing Aceh in July 2006 (which devolved significant power and resources from national to provincial government) and the first democratic elections in December (Masyrafah and McKeon 2008: 27).

<sup>8</sup> Up to 25 per cent of households in Banda Aceh had rented prior to the earthquake and tsunami (Bappenas 2005).

<sup>9</sup> BRR's mandate included rehabilitation and reconstruction after both the Indian Ocean earthquake and tsunami on 26 December 2004 and a second Mw 8.7 earthquake on 28 March 2005 which killed a further 1,000 people and destroyed more than 20,000 houses on the island of Nias (Oxfam 2006, Wegelin 2006).

## 2

# UN-Habitat's work in Meuraxa sub-district, Banda Aceh City

From March 2005 to August 2010 UN-Habitat supported the urban planning process in Meuraxa, Banda Aceh, as part of the UN Joint Programming (UNJP) initiative<sup>10</sup> in this *kecamatan* (HB5 2016; HF1 2017; UNJP 2007). The organisation viewed the planning process as both an opportunity to strengthen local capacity and governance and link reconstruction with long-term development goals. UN-Habitat aimed 'to facilitate consensus building on such issues as basic spatial structure, major infrastructure reticulation and general visions and scenarios' (UN-Habitat 2009). 'Reconstruction in Meuraxa was meant to be a milestone of reconstruction efforts in Banda Aceh demonstrating how the development of disaster preparedness would lead to community and economic activities, and eventually facilitate future investment and development in the areas' (Government of Indonesia 2009a: 51).

UN-Habitat's urban planning intervention included supporting communities to undertake:

- Community land mapping (CLM)
- Community action planning (CAP)
- Village spatial planning

UN-Habitat undertook all of these activities in three

*gampongs* (Punge Jurong, Deah Glumpang and Lampaseh Aceh) where they were also supporting households to rebuild their houses as part of the organisation's Aceh Nias Settlements Support Programme (ANSSP) (Huda *et al.* 2007; UN-Habitat undated a).<sup>11</sup> UN-Habitat also supported the 14 other *gampongs* in Meuraxa to develop village plans and integrate these with the wider plans for Meuraxa. Some of these *gampongs* had already been provided with limited community mapping/ planning assistance from other agencies (see Table 3). The organisation also supported local government to:

- Integrate village plans into the Vision for Green Meuraxa strategic and spatial plan.
- Integrate the Meuraxa sub-district plan into the mid-term development plan and subsequent regional spatial plan (RTRW) for 2009–2029 for Banda Aceh City.
- Facilitate the Forum Korrexa and Decision-Makers' Working Group (known as urban forums, both had relatively different roles as further explained in Box 4).

UN-Habitat supported local government by providing training on planning and mapping. However, the planning works were undertaken by UN-Habitat on the behalf of local government.

<sup>10</sup> A UN Joint Programming initiative (UNJP) was established to coordinate all donors and implementing agencies working in Meuraxa sub-district to become more organised and planned and to reach the right beneficiaries (HJ1 2016).

<sup>11</sup> UN-Habitat's Aceh Nias Settlements Support Programme (ANSSP) began in January 2005 with the aim of supporting 3,450 affected families to rebuild their houses in four districts in Aceh (Banda Aceh, Aceh Besar, Pidie, Simeulue) and two districts in North Sumatra (Nias and Nias Selatan) (UN-Habitat 2006). Two *gampongs* in Meuraxa were included in the programme: Punge Jurong (208 houses) and Deah Glumpang (74 houses) (HB4 2016).

Table 2. Banda Aceh and Meuraxa – before and after the earthquake and tsunami

	BANDA ACEH	MEURAXA
<b>CONTEXT: PRE-CRISIS</b>		
Administration	9 <i>kecamatan</i> (90 <i>gampongs</i> )	1 <i>kecamatan</i> (16 <i>gampongs</i> )
Population	239,146 (2004)	31,218 (2004)
Population growth	8.37% (2002–2004)	10.35% (2002–2004)
Number of households	44,059 (2004)	–
Area	61.36 km <sup>2</sup>	7.76 km <sup>2</sup>
Density (people/km <sup>2</sup> )	3,897/km <sup>2</sup>	4,022/km <sup>2</sup>
<b>IMPACT: POST-CRISIS</b>		
Deaths	61,065	19,702
Missing persons	approximately 6,500	3,019
Totally damaged houses	17,219	5,786
Partially damaged houses	4,193	254
Submerged plots	–	21.10 ha (Ulee Lheue)

Sources: BPS Kota Banda Aceh (2006); Mahdi (2007); Takahashi *et al.* (2007); UNJP (2007); Ikhsan and Wali (2014); Ministry of Public Works (undated).

## 3

# The process, outputs and effects of UN-Habitat's work

## 3.1 Process: how was UN-Habitat's work taking place?

The whole process involved approximately 48 UN-Habitat staff, including field facilitators (two per *gampong*) as well as nine staff coordinating the two urban forums and additional technical specialists (HB5 2016; HF1 2017; UNJP 2007). UN-Habitat also partnered with local universities, NGOs and research centres for assessments, monitoring and technical expertise (RB3; RJ1 2016).

### 3.1.1 Step 1: Community land mapping (CLM)

UN-Habitat partnered with the Centre for Local Government Innovation (Yayasan Inovasi Pemerintahan Daerah or YIPD), a foundation established by the US Agency for International Development (USAID) in Indonesia in 2002, to undertake *pemetaan swadaya* or community land mapping (CLM) starting in March 2005. CLM aimed to identify land ownership boundaries and village boundaries because the tsunami had totally destroyed property boundaries (BRR 2006). CLM involved identification and negotiation of land rights and property boundaries with households and communities, including displaced families living in 'barracks'<sup>12</sup> (VB6; BB3 2016).

Usually, land boundaries were determined through consensus thus reducing the risk of conflict. The approach was piloted in three sub-districts: Meuraxa, Jaya Baru and Darussalam, and then rolled out to other sub-districts<sup>13</sup> affected by the tsunami in Banda Aceh and Aceh Besar (NJ2 2016). In Meuraxa, CLM in all 14 *gampongs* were collaboratively conducted by YIPD, UN-Habitat, USAID, Uplink, World Vision and Oxfam (see Table 3). In August 2005, the Indonesian government established the Reconstruction of Aceh Land Administration System (RALAS) programme that involved a process of 'community-driven adjudication' and land titling through the National Land Agency (BPN) (MDF 2010). RALAS utilised maps produced by CLM as the basis for registration and provision of land certification (VB6; BB1 2016; ANSSP 2006; UN-Habitat 2006).<sup>14</sup>

At the beginning it was very difficult to undertake CLM with communities, since the residents were scattered in many different places following the tsunami (Mahdi 2007; Syukrizal *et al.* 2009). In particular, it was very difficult to talk about planning and the long-term impact because many residents were displaced, for example living remotely in barracks or commuting to jobs in other cities (HJ2; NJ3; HF1; GB2 2016). However, 'an indirect result of these activities was that villagers who had been traumatized by the tsunami found a collective activity that helped revive their spirits and solidarity' (Government of

<sup>12</sup> Barracks were timber military-style buildings accommodating 12–20 families in 20m<sup>2</sup> rooms with a connecting porch area under which meals could be cooked (Batchelor 2010: 33).

<sup>13</sup> They included Baiturrahman, Kuta Alam and Syiah Kuala sub-districts in Banda Aceh and Lhoknga and Leupung villages in Aceh Besar district (YIPD 2005; Government of Indonesia 2009a).

<sup>14</sup> Land consolidation 'refers to a participatory process in which a group of neighbouring land owners and occupants combine their land together for unified planning and redevelopment in collaboration with the government or private developers' (Winarso *et al.* 2016: 2).

Table 3. Key actors in Meuraxa community land mapping, action planning and spatial planning

GAMPONG	COMMUNITY LAND MAPPING	COMMUNITY ACTION PLANNING	VILLAGE SPATIAL PLANNING
Punge Jurong	YIPD/UN-Habitat	UN-Habitat	UN-Habitat
Deah Glumpang	YIPD/UN-Habitat	UN-Habitat	UN-Habitat
Lampaseh Aceh	UN-Habitat/World Vision	UN-Habitat/World Vision	UN-Habitat
Lambung	YIPD	MDF/Rekompak	UN-Habitat
Blang Oi	YIPD/USAID	USAID	UN-Habitat
Gampong Pie	Uplink	Uplink	UN-Habitat
Ulee Lheue	Uplink	Uplink	UN-Habitat
Alue Deah Tengoh	YIPD	Oxfam	UN-Habitat
Deah Baro	Oxfam	Oxfam/Uplink	UN-Habitat
Punge Ujong	YIPD/USAID	USAID	UN-Habitat
Cot Lamkuweuh	Uplink	Uplink	UN-Habitat
Gampong Blang	USAID	USAID	UN-Habitat
Aso Nanggroe	USAID	USAID	UN-Habitat
Surien	YIPD	Uplink	UN-Habitat
Lamjabat	YIPD	Uplink	UN-Habitat
Gampong Baro	USAID	USAID	UN-Habitat

Source: Workshop (2016); VB1, VB3 and VB6 (2016); Huda *et al.* (2007); USAID (2008); Syukrizal *et al.* (2009); Affan *et al.* (2014).

Indonesia 2009a: 17). This was also emphasised by one respondent, a former official of YIPD (NJ2 2016) who recalled:

*This community involvement made them tired [but] then be able to sleep at night [...] other than do nothing and worrying about their horrible situation, loss of property and family members [and] feeling satisfied of helping other survivors while hoping that their lost family members will be helped as well.*

### 3.1.2 Step 2: Community action planning (CAP)

Community action planning (CAP) was promoted by the German Organisation for Technical Cooperation (GTZ) to involve residents in the reconstruction of their *gampongs*. CAP is a decision-making process leading to a list of priorities the community see as important to rebuild their *gampong*, which can then be incorporated into the development of spatial plans (Goethert 2005; Government of Indonesia 2009a). UN-Habitat already had 20 years' experience of implementing CAP at that time, especially in Asia. But the approach was untested after humanitarian crises (HF 2017).

In Meuraxa, CAP was carried out by UN-Habitat, USAID, Uplink, Oxfam, World Vision and the Multi-Donor Fund for Aceh and Nias (MDF)/Rekompak (see Table 3). To support the community with the CAP process,

UN-Habitat provided each *gampong* with two field facilitators – a man and a woman – to accommodate gender sensitivity. In this community-driven programme, coordination started with social mobilisation, and resulted in ownership of coordination functions by the community itself. At the outset, it was the role of the facilitator to identify the institutions or social groups in the *gampong*, the number of *dusun*, and the names of important community figures, leaders and representatives. This facilitated formal as well as informal consultations with each beneficiary community (Asian Development Bank 2010).

Each *gampong* had a different approach to developing the CAP. In one *gampong*, a committee was established (including representatives from different *dusuns*) and most planning and management activities were done through this committee. In others, it was crucial that all community members attended meetings (not just the *dusun* representatives) because of the high potential for disagreement, especially in a post-conflict situation like Banda Aceh (HB2 2016). On average, CAP development took 2–6 months per *dusun* and was then integrated with other *dusun* CAPs to develop a village-level CAP (HB2 2016). Typically, there were four *dusuns* per *gampong* and the integration process took up to a year. From 2007 there were also efforts to integrate the lists of priorities identified through the CAP process into the newly established *musrenbang* community-based planning process.<sup>15</sup>

<sup>15</sup> *Musrenbang* is an annual process during which residents meet together to discuss the issues facing their communities and decide upon priorities for short-term improvements. Once a list of priorities is made, it is submitted to the local government planning department, Bappeda, which will then assign resources to each neighborhood depending upon the available funds and according to need [...]. This participatory budgeting process makes it possible for residents to articulate their needs to local government. There are also *musrenbang* processes at the district and city levels as well as at provincial and national levels.' (Sola Kota Kita undated).



### 3.1.3 Step 3: Village spatial planning

Indonesian law states that spatial planning should be undertaken from the top down<sup>16</sup> and a spatial plan for Banda Aceh was included in the Bappenas master plan for the entire response (Pardede and Munandar 2016). However, the master plan had little involvement of local stakeholders and was resisted by communities, local government and NGOs. They felt they had been excluded from the process, that the resulting plan was too macro and too difficult to implement, and they were opposed to the proposed 'buffer' (or no-building) zone extending 2km from the coast (Jayasuriya and McCawley 2010; Pardede and Munandar 2016). Conversely, from June 2005 BRR promoted village planning:<sup>17</sup> rapid, community-driven spatial planning at *gampong* level which was approved by community leaders (Pardede and Munandar 2016). Although many agencies involved in the rehabilitation and reconstruction process applied their own standards/guidelines, they typically used BRR guidelines as the minimum standard required.

UN-Habitat supported communities to undertake village spatial planning in all 16 *gampongs* of the Meuraxa *kecamatan*. In some *gampongs*, there had been previous efforts to develop village spatial plans, but these had not been successful and UN-Habitat offered assistance to support improvements (BRR 2006). For example in Deah Baro and Alue Deah Tengoh, village spatial plans had been developed by YIPD and the National Land Agency before the issuance of the BRR guidelines (Huda *et al.* 2007). Hence, they were developed with no or limited community participation since the consultants never visited the villages (VB6; HB2 2016). Also, in Punge Ujong and Blang Oi, the poor quality of initial village planning had been caused by a lack of 'spirit' and 'patience' of the community to participate in the planning processes. This had affected the quality of reconstruction in the villages (HJ1; VB6 2016).

In revising all 16 village spatial plans in Meuraxa, UN-Habitat employed four urban planners who conducted a series of meetings with the local communities. The meetings were initially done through door-to-door visits, followed by focus group discussions (FGDs) or weekly/bi-weekly meetings and workshops supported by maps. The meeting times were adjusted to suit the availability of the community, which was mostly in the late afternoons or weekend evenings. The urban planners were responsible for actively involving residents in the development of the village plan and encouraging landowners to make some of their land available for public facilities if required (NJ2; GB3; GB5 2016). The village spatial plan needed to be signed by the *keuchik* (head of *gampong*) and several community representatives confirming the community involvement in the development of the plans (NJ3 2016;

UN-Habitat undated b). Village spatial plans could also be used to avoid conflict among the community and avoid land certificates getting stolen as well as bogus proposals (HJ1 2016; Government of Indonesia 2009a).

### 3.1.4 Step 4: Integrating village plans into the Vision for a Green Meuraxa

The spatial planning concept for Meuraxa was introduced in June 2006, with the future vision of developing a Green Meuraxa (UNDP Indonesia 2008), as an environmentally friendly region with more spaces for road access, parks, drainage and other public infrastructure (HJ1; GB7; VB2 2016). Through the urban forums, the vision aimed 'to create a blueprint for a well-organized, purposeful municipal layout in Banda Aceh, to help ensure sustainable urban development in the province' (UNJP 2007; UNDP Indonesia 2008: 47). The old city plans and maps were used for reference along with the available village spatial plans (GB6; HJ1 2016). There were challenges with the integration of village maps and the development of the sub-district map because there were unmatched land parcels, un-aligned roads and unconnected drainage (HJ1; HJ2 2016).

UN-Habitat's planners held meetings in all 16 *gampongs* in Meuraxa to verify the village maps (developed in Step 3) along with the identification of all the proposed objects and development areas stated in the community action plans (developed in Step 2), such as where markets, stores, schools and other proposed public infrastructure would be built. Initially facilitated by UN-Habitat, the meetings were conducted one per village; further meetings were then held for villages that shared similar boundaries (HJ2 2016).

In order to support the integration of all the village-level plans, UN-Habitat also conducted several workshops that were attended by community representatives of the 16 *gampongs*, village and sub-district officials, government departments and NGO representatives (HJ1; HJ2 2016). Furthermore, UN-Habitat collaborated with YIPD to assess environmental management and planning issues (HJ1; HJ2; UNJP 2007). Coordination meetings with the Forum Korrexa and the Decision-Makers' Working Group (see Box 3) provided a platform for active participation of village officials, landowners and community representatives/leaders, including representatives of neighbouring villages (HB3; BB2 2016).

UN-Habitat also had frequent discussions with the town planning and public works departments of Banda Aceh city government as well as Bappeda (the National Planning Agency) in developing the sub-district plan. For example, it was necessary to coordinate the location of

<sup>16</sup> In other words, that provincial-level spatial plans should inform the development of spatial plans for cities/districts, *kecamatanans* and then finally *gampongs* (Pardede and Munandar 2016).

<sup>17</sup> Village planning was defined as 'a community-driven process whereby community residents and representatives work with planning and engineering professionals to develop [...] community plans that document past and future land ownership, land use, the location and general technical standards for community infrastructure, housing, workspaces, and social and religious facilities [...] The resulting plan will be considered final and official when signed by community representatives' (BRR 2006:1).

## BOX 3. COORDINATION: FORUM KORREXA AND THE DECISION-MAKERS' WORKING GROUP

The UNJP in Meuraxa included UN-Habitat, UNDP, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), United Nations Office of the Recovery Coordinator for Aceh and Nias (UNORC), Asian Development Bank (ADB) other donors and implementing agencies, 16 *keuchik* (heads of *gampongs*) and their secretaries and community representatives (such as *teungku imeum* and *imeum mukim*), as well as the *camat* (head of Meuraxa *Kecamatan*) and representatives from BRR. In order to coordinate this array of stakeholders, UN-Habitat established the Komite Rehabilitasi dan Rekonstruksi Meuraxa or 'Forum Korrexa' in June 2006. The role of Forum Korrexa was to support the local government (the *keuchik* and *camat*) to coordinate post-tsunami efforts (HJ1 2016).

The forum had a membership of around 55 people, of which nine were UN-Habitat staff, including teams of field facilitators for spatial planning providing advice and support (HJ1; HB5 2016; Government of Indonesia 2009a). Initially, the meetings were conducted in the evening and attended by around 20 people because the room could not accommodate additional people (VB3; VB4 2016). In September 2006, a community centre was built, in the same compound as the Meuraxa sub-district office; almost all the meetings were then conducted in this venue and attended by about 30–40 people (GB6; VB6; BB3 2016).

Additionally, UN-Habitat together with UNORC developed a working group to facilitate community issues and needs that could not be fully addressed in Forum Korrexa and needed the attention of the city government (UNJP 2007). The Decision-Makers' Working Group was a more formal urban forum conducted in the city hall of Banda Aceh city government that was attended by around 100 people, especially Meuraxa officials and sectoral government officials responsible for planning and infrastructure development facilitated by UNORC and UN-Habitat (GB3; GB4; HJ1 2016). The working group would be divided into several smaller groups according to the issues raised, mostly regarding facilities and utilities. They included government facilities of *gampongs* and sub-district offices, housing, education, worship, health, tourism and recreation, and livelihoods/economic facilities. Also, utilities included electricity, clean water, wastewater, drainage, landline telephones and transportation (UNJP 2007). Every Wednesday, the coordination meetings for Forum Korrexa were conducted. Meanwhile, every Saturday UN-Habitat, as the coordinator, conducted half-day internal coordination meetings. This included the coordination of the working group meetings, which were conducted not as often as the Forum Korrexa. This was to make sure that there were no significant overlaps and tensions between these urban forums (HJ1; HB1; HB5 2016).

public facilities (such as high schools and health centres) which needed to be shared between several *gampongs* or the entire sub-district (HJ2; BB2 2016). After six months, a draft of the Meuraxa plan was produced while the village maps of all 16 *gampongs* were officially registered at the sub-district office. The Vision for a Green Meuraxa was completed by UN-Habitat in late 2007, followed by the detailed spatial plans of Meuraxa sub-district for inclusion in the regional spatial plan (RTRW) of Banda Aceh City (HJ1 2016; ANSSP 2006; UNJP 2007). Nowadays, the sub-district is well known as the 'emerald of Banda Aceh' for successfully developing orderly built houses with more parks and other open spaces, better road access and drainage systems.

### 3.1.5 Step 5: Integrating Meuraxa sub-district plan into Banda Aceh city planning

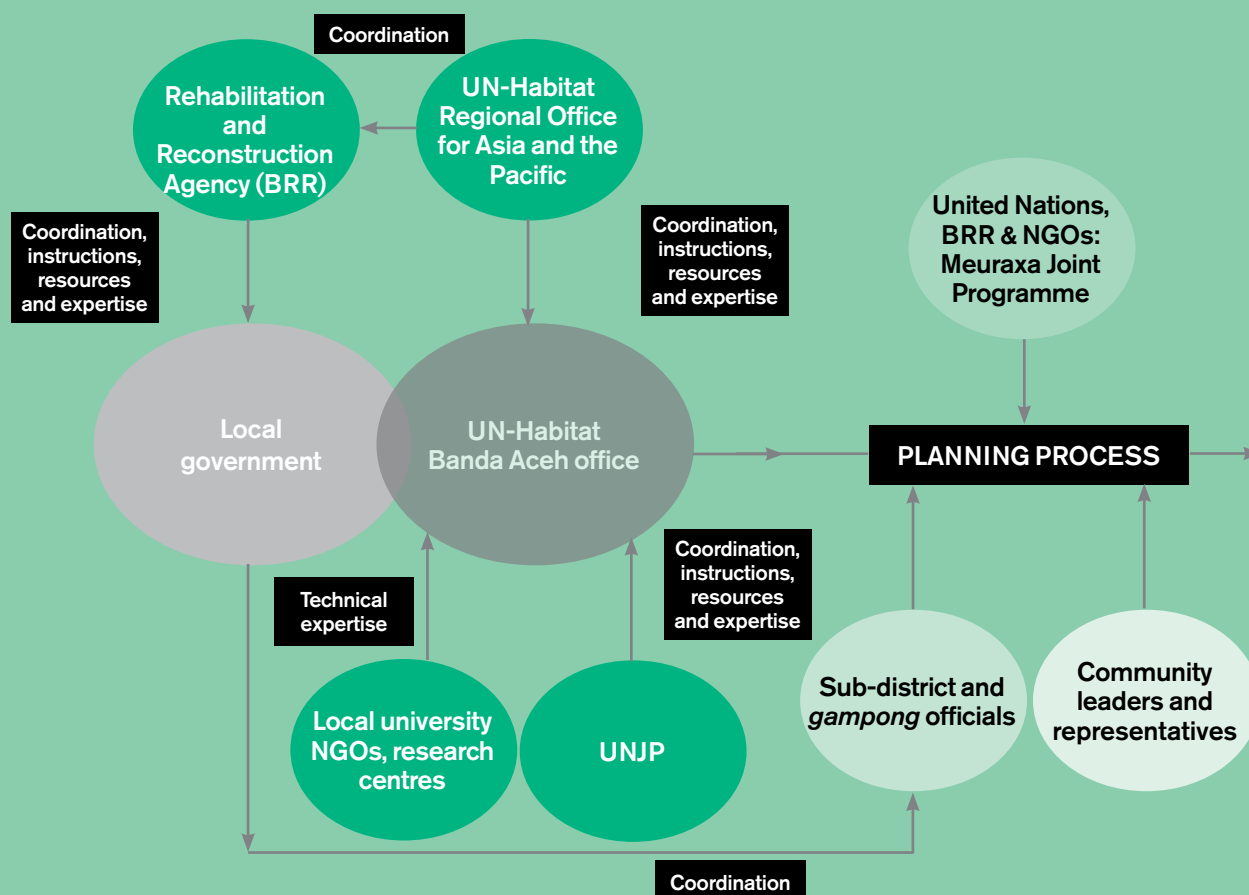
At sub-district level, UN-Habitat had focused their efforts in Meuraxa. Meanwhile, GTZ and BRR had undertaken

spatial planning in five other sub-districts of Banda Aceh City (Kuta Raja, Jaya Baru, Baiturrahman, Kuta Alam and Syiah Kuala) while the government of Banda Aceh City did the three remaining sub-district spatial plans (in Banda Raya, Lueng Bata and Ulee Kareng) as areas insignificantly affected by the tsunami (Government of Indonesia 2009a).<sup>18</sup>

It was then necessary to integrate these nine different sub-district plans into the mid-term development plan (2007–2012) and regional spatial plan (RTRW 2009–2029) for Banda Aceh City (UNJP 2007; Government of Indonesia 2009a). The final plan for Banda Aceh City was completed in late 2008. Coordinated by BRR, UNJP closely collaborated with UN-Habitat and GTZ to perform sectoral government discussions in charge of planning for vertical and horizontal coordination with the government of Banda Aceh City. They included Bappeda, town planning (*tata kota*), education, water resources and infrastructure, microfinance and cooperatives, and commerce and trade, in which UN-Habitat facilitated these coordination and consultation meetings (UNJP 2007).

<sup>18</sup> One key informant noted that the sub-district plans developed by GTZ and the government had adopted a less participatory approach (HF1 2017).

## BOX 4. INCORPORATING COMMUNITY AND KEY STAKEHOLDER GROUP VIEWS INTO THE PLANNING PROCESS



UN-Habitat's initial engagement with the residents was through meetings to collect data as part of the CLM process (Step 1). Once the CLM started to take shape in some *gampongs*, CAP was introduced (Step 2). The CAP process was more participatory because UN-Habitat encouraged the involvement of the entire community.

Later on, in mid-2006 UN-Habitat promoted community participation in developing village plans (Step 3) through door-to-door visits. This was followed by a series of community meetings and FGDs that led to the establishment of a community centre and urban and coordination forums to produce the Meuraxa sub-district spatial plan. Decisions were made based on *mufakat* or consensus among the community members at the *dusun* level and for the village level the decision made by their representatives, which included heads of *dusun*, customary/religious leaders, the elderly, and heads of youth and women's groups as well as respected members of the community (Mahdi 2012).

The results of all these meetings were disseminated through a bulletin published by UN-Habitat and distributed to the community as a Meuraxa newsletter so

that people who did not attend the meetings were also kept updated. Launched in June 2006, the four-page Korrexa Newsletter was published every Friday morning before Friday prayers and was placed at mosque doors (HB5; NJ1; BB2 2016). Information dissemination was also developed through a radio station that was operated by the community under the supervision of UN-Habitat along with telephone calls, text messages and by displaying draft versions of *gampong* and *Kecamatan* plans in the local government office (ibid).

In developing the Meuraxa Plan (Step 4) and its integration into city planning (Step 5), community involvement was limited only to informing and consultation (Arnstein 1969) with more involvement of representatives of donors and implementing agencies and government. This was because community attention was more focused on their more immediate needs and priorities and also the utilisation of land was decided mostly through consensus and based on the willingness of people in Meuraxa sub-district to voluntarily let go of part of their land or consolidate with other community members to be used for sewer systems, telephone network, and public and social facilities (NJ2; VB5 2016; Mahdi 2007).

Table 4. Integrating short-term relief with pre-crisis and longer-term planning in Banda Aceh

	PRE-TSUNAMI PLANS: 2004 DEVELOPMENT	POST-TSUNAMI: 2005–2007 RELIEF-RECOVERY	TRANSITION: 2008–2011	CURRENT PLANS & DEVELOPMENT: 2012 ONWARD
CITY/MEURAXA SUB-DISTRICT	District coordinating unit (SATLAK) for disaster management	Toward Green Meuraxa	Local action plan on DRR 2010–2012	Local action plan on DRR 2015–2019
		Forum Korrexa		
		Working groups		
		Meuraxa newsletter		
		CLM/CAP/village planning		
	Annual government work plan (GWP): 2005, 2006, 2007, 2008, 2009	UN Joint Programming (UNJP)	Completion and continuation of rehabilitation and reconstruction action plan (2010–2012)	Annual community-based planning ( <i>Musrenbang</i> )
		UN-Habitat's Aceh Nias Settlements Support Programme		
Local medium-term development plan (RPJMK) 2004–2009	Masterplan/blueprint of Banda Aceh City: 2005–2009	Annual government work plan (GWP): 2008, 2009, 2010, 2011, 2012	Annual government work plan (GWP): 2013, 2014, 2015, 2016, 2017	
		RPJMK 2007–2012	RPJMK 2012–2017	
		City long-term development plans (RPJPK) 2007–2029		
	JICA's spatial plans 2006	Spatial plans 2009–2029		
PROVINCE	Provincial coordinating unit for disaster management (SATAKORLAK) for disaster management	Masterplan/blueprint of Aceh Province: 2005–2009	Completion and continuation of rehabilitation and reconstruction action plan (2010–2012)	Standard operating procedure of major/frequent disasters: tsunami, flood, landslide, earthquake
		UN-Habitat's Aceh Nias Settlements Support Programme	Regional action plan on DRR 2010–2012	Regional action plan on DRR 2014–217
	Spatial plans 2000, never ratified	Spatial plans 2006 by BRR/JICA	Annual government work plan (GWP): 2008, 2009, 2010, 2011, 2012	Annual government work plan (GWP): 2013, 2014, 2015, 2016, 2017
	Annual government work plan (GWP): 2005, 2006, 2007, 2008, 2009		Aceh regional medium-term development plan (RPJMA) 2007–2012	Aceh regional medium-term development plan (RPJMA) 2012–2017
	Aceh regional medium-term development plan (RPJMA) 2004–2009		Aceh long-term development plan (RPJMA) 2012–2032	
		Regional spatial plans 2009-?/ Plan draft for spatial structure of Aceh Province 2010–2029		

Table 4. continued

	PRE-TSUNAMI PLANS: 2004 DEVELOPMENT	POST-TSUNAMI: 2005-2007 RELIEF-RECOVERY	TRANSITION: 2008-2011	CURRENT PLANS & DEVELOPMENT: 2012 ONWARD				
NATIONAL	Coordinating board for national disaster management & internally displaced people (Bakornas PBP)	Bakornas PBP replaced by BRR	National action plans for disaster management 2006-2009	Emergency fund/on call				
			Disaster Management Law No. 24/2007 Annual	Guideline for contingency planning in disaster mitigation				
				National action plans for disaster management 2015-2019				
	Annual government work plan (GWP): 2003, 2005, 2006, 2007, 2008/2009	National long-term development plan (RPJMN) 2005-2025	Annual government work plan (GWP): 2010, 2011, 2012, 2013, 2014	Annual government work plan (GWP): 2015, 2016, 2017, 2018, 2019				
	National medium-term development plan (RPJMN) 2004-2009		RPJMN 2010-2014	RPJMN 2015-2019				
	Spatial Plans Law No. 24/1992		Spatial plans 2008-2028					
	INTER-NATIONAL	Various humanitarian agency programmes & projects	<table border="1"> <tr> <td>key</td> <td>Policy/strategy &amp; implementation</td> </tr> <tr> <td></td> <td>Policy/strategy   Implementation</td> </tr> </table>			key	Policy/strategy & implementation	
key	Policy/strategy & implementation							
	Policy/strategy   Implementation							

Sources: Willitts-King (2009); BNPB (2016); Pardede and Munandar (2016).

Table 4 shows the integration of short-term relief with pre-crisis planning and longer-term planning in Banda Aceh City. The BNPB is responsible for coordinating disaster management (called '*satkorlak*' at provincial level and '*satlak*' at district/city level (Willitts-King 2009). The National Disaster Management Coordinating Board (Bakornas) was replaced by BRR during the tsunami responses. In 2007, to strengthen national disaster management capacity, the BNPB was established. There is a clear strategic integration of disaster-management plans with longer-term planning and pre-crisis plans. In 2014, BNPB published the *National Plan for Disaster Management (or Rencana Nasional Penanggulangan Bencana)* for disaster-risk assessment based on locations and disaster types. The plan is expected to feed into the five-year national medium-term development plan (RPJMN) 2015-2019 and as a reference for sectoral ministries and other government institutions in developing their own strategic plans and implementation with regard to disaster risk reduction (DRR) (BNPB 2014). BNPB's local counterparts, local disaster management agencies or

BPBDs, act as the lead agencies for DRR coordination at local, provincial and district levels.

The current key national long-term development plan (RPJPN) 2005-2025 that will guide the mid-term national development plan (RPJMN) 2015-2019 consists of a development policy, strategy and programme for the next five years and RPJMN will be subsequently elaborated in the annual government work plan (GWP). GWP will become a guideline for drafting the national budget (Zen 2013) including financing the programmes and activities stated in the national action plans for disaster management 2015-2019. Furthermore, among significant guidelines published by the BNPB to be followed by its local counterparts the BPBDs, are the needs-assessment guidelines for post-disaster and the guidelines for contingency planning in disaster mitigation. From the latter, standard operating procedures (SOP) of emergency situations for major/frequent disasters were produced by BPBDs according to their local situations and disaster types. Banda Aceh City has compiled its SOP for tsunamis. Starting from 2015,



Table 5. Summary of the spatial planning process in Meuraxa

YEAR	INPUTS/PROCESSES	INTERVENTIONS	ACTORS
2005–2006	<ul style="list-style-type: none"> <li>▪ Tsunami: early recovery</li> <li>▪ Bappenas master plan</li> </ul>	<p><b>Community land mapping</b></p> <ul style="list-style-type: none"> <li>▪ UN-Habitat: three <i>gampongs</i></li> <li>▪ Other agencies worked in <i>gampongs</i>, to a total 14 <i>gampongs</i> (including UN-H)</li> <li>▪ UN-Habitat locations: Punge Jurong, Deah Glumpang and Lampaseh Aceh</li> </ul> <p><b>Community action plan</b></p> <ul style="list-style-type: none"> <li>▪ UN-Habitat: three <i>gampongs</i></li> <li>▪ Other agencies worked in <i>gampongs</i>, to a total 10 <i>gampongs</i> (including UN-H)</li> <li>▪ UN-Habitat locations: Punge Jurong, Deah Glumpang and Lampaseh Aceh</li> </ul> <p><b>Village spatial planning</b></p> <p>UN-Habitat locations: all 16 <i>gampongs</i></p>	<ul style="list-style-type: none"> <li>▪ YIPD</li> <li>▪ UN-Habitat</li> <li>▪ AUSAID</li> <li>▪ Uplink</li> <li>▪ Oxfam</li> <li>▪ World Vision</li> </ul> <ul style="list-style-type: none"> <li>▪ UN-Habitat</li> <li>▪ USAID</li> <li>▪ Uplink</li> <li>▪ Oxfam</li> <li>▪ World Vision</li> <li>▪ MDF/Rekompak</li> </ul> <ul style="list-style-type: none"> <li>▪ UN-Habitat</li> <li>▪ USAID</li> <li>▪ JICA</li> <li>▪ Uplink</li> <li>▪ Oxfam</li> <li>▪ GTZ</li> <li>▪ BRR</li> </ul>
2006–2007	<ul style="list-style-type: none"> <li>▪ 4 spatial and urban planners</li> <li>▪ Banda Aceh spatial plans (2001–2010)</li> <li>▪ Banda Aceh blueprint</li> <li>▪ Banda Aceh spatial plans, JICA revision (2006)</li> <li>▪ Clarification of village plans</li> <li>▪ Per village and per 3 village FGDs that share:                             <ul style="list-style-type: none"> <li>o Borders</li> <li>o Public facilities: schools, health services, roads, drainage, waste, sanitation, environment</li> </ul> </li> <li>▪ Workshops with community representatives of 16 <i>gampongs</i></li> <li>▪ Coordination: Forum Korrexa and Decision-Makers' Working Group</li> </ul>	<p><b>Integrating village plans into the Vision for Green Meuraxa strategic and spatial plan</b></p>	<ul style="list-style-type: none"> <li>▪ Government of Banda Aceh City: Bappeda, town planning and public works department</li> <li>▪ Meuraxa joint programme:                             <ul style="list-style-type: none"> <li>o UN-Habitat</li> <li>o UNOCHA/UNORCH</li> <li>o UNDP</li> <li>o BRR</li> <li>o ADB</li> <li>o Other donors and implementing agencies</li> </ul> </li> <li>▪ Village officials: <i>keuchik</i>, secretary</li> <li>▪ Meuraxa sub-district officials</li> <li>▪ Community representatives</li> <li>▪ Landowners</li> </ul>
2007–2008	<ul style="list-style-type: none"> <li>▪ 8 other sub-district spatial plans:                             <ul style="list-style-type: none"> <li>o 5 developed by GTZ and BRR</li> <li>o 3 by Banda Aceh City Administration</li> </ul> </li> <li>▪ Sectoral government discussions in charge of planning and development:                             <ul style="list-style-type: none"> <li>o Vertical coordination</li> <li>o Horizontal coordination</li> </ul> </li> </ul>	<p><b>Integration of Meuraxa sub-district spatial plan into Banda Aceh city planning</b></p>	<ul style="list-style-type: none"> <li>▪ UN-Habitat</li> <li>▪ BRR</li> <li>▪ GTZ</li> <li>▪ Meuraxa Joint Programme</li> <li>▪ Sectoral government of Banda Aceh City, especially Bappeda, town planning (<i>tata kota</i>), education, water resources and infrastructure, microfinance and cooperatives, commerce and trade</li> </ul>

Sources: Authors; Huda *et al.* (2007); UNJP (2007); Government of Indonesia (2009a).

the Indonesian government allocated an on-call fund for its annual national budget (Jefriando 2016).

## 3.2 What were the outputs of UN-Habitat's process?

There were several outputs from UN-Habitat's planning support to communities and local government in Meuraxa. These included community land maps, community action plans, 16 village spatial plans and the Meuraxa sub-district spatial plan, as well as radio programmes and newsletters to disseminate information and raise awareness on disaster preparedness and environmental issues (see also Table 5).

The Meuraxa sub-district spatial plan proposed spatial development, a development agenda and a strategy for multi-functional use of space in the sub-district as a more environmentally friendly region with many green open spaces, better road access, sanitation and drainage systems. A UN-Habitat official affirmed that '[T]he result we are looking on today would not have been possible without the active support and participation of all stakeholders at all stages of the planning process' (UNJP 2007: xix).

## 3.3 Effects: what happened next?

Meuraxa sub-district is now known as the 'emerald of Banda Aceh' (GB3; GB6 2016). Due to the successful implementation of rehabilitation and reconstruction efforts, especially through the village and sub-district plans, most of the houses in Meuraxa sub-district were built in an orderly manner, influenced by the village spatial plans. It has 6–15m-wide roads with good drainage systems and rebuilt bridges hence it takes only 10 minutes to drive 6 kilometres from Ulee Lheue Boulevard to the ferry terminal via the Laguna Bridge (Government of Indonesia 2009b). Almost all of the developments proposed in the Vision for a Green Meuraxa have been realised and only a few low-priority items such as the tsunami heritage site have not been delivered (a direct observation made in 2016). Meuraxa also has an integrated school compound for its kindergarten to senior high schools, escape buildings<sup>19</sup> and escape roads (GB; VB5 2016). As proposed in the Meuraxa plan, the city government keeps upgrading the development of escape roads in the area while the existence of four evacuation centres (although receiving minimal care) have served as multi-purpose buildings for Meuraxa residents (HB5).<sup>20</sup>

The successful implementation of village planning and

the sub-district plan of Meuraxa is also shown by the high increase in land registration and certification in the region, in which 100 per cent of the land in Ulee Lheue and Lambung *gampongs* has been certified (Fitzpatrick 2012). However, while there were significant achievements in housing and other physical developments, less attention was given to social and economic development (Klouvas 2014; Oxfam 2014). Also, residents note there are still concerns about livelihoods opportunities, and especially the high level of youth unemployment (Workshop 2016).

Most of the survivors and their heirs as well as most of those who lost land to the tsunami in Meuraxa sub-district were able to rebuild their houses on their original land or by moving to a new location within the sub-district (VB1; VB3 2016). Up to 100 people in Ulee Lheue who lost their land, along with pre-tsunami renters and 'squatters', were relocated outside Meuraxa sub-district (VB6; HB5 2016). These key informants stated that some families moved to government-subsidised houses or *rumah susun* (apartments) in other parts of the city. Others moved to new-build relocation settlements such as the Indonesia-China Friendship Village (Vale *et al.* 2014) in the *gampong* of Neuheun, 20km from Meuraxa, and other relocation sites in the neighbouring districts of Banda Aceh City. These included the relocation of 24 families from two *dusuns* in *gampong* Ulee Lheue whose land was completely submerged by the tsunami and became a recreation area (HB5; VB6 2016). These households were some of the last to be relocated, after living in two barracks located on the shore of Ulee Lheue beach for 10 years and became among the most challenging tasks for the local government after BRR left (HB5 2016).

In late 2014, eight families were placed in rented flats in Peulanggahan *gampong* in the neighbouring *kecamatan* to Meuraxa (Acehkita 2014). The city government waived the rent for a year only and the families needed to pay for electricity and cleaning costs (*ibid.*). Meanwhile, the remaining 16 families were placed in government-subsidised houses spread over several places on the outskirts of Aceh Besar district, about 17–22 km from Meuraxa (HB5 2016; Acehkita 2014). The houses were provided by a housing project for poor families financed under the special autonomy fund scheme (HB5 2016).<sup>21</sup> This is because Aceh province has been granted with a special autonomous status for having greater power in local decision-making regarding local customs, education, religion and local development policy (Nasution 2016). The Aceh province will receive this autonomy fund for 20 years (2006–2027) from central government with an estimated US\$7.9 billion in total (World Bank 2009).

<sup>19</sup> 'An escape building is essentially a form of man-made high ground – a series of landings connected by a reinforced-concrete ramp designed for vertical evacuation of about 15 meters.' The buildings also serve as community centres (Vale *et al.* 2014).

<sup>20</sup> Communities in Meuraxa have used the escape buildings for indoor, social and sport activities since their rebuilt houses cannot accommodate more than 80 people (VB5).

<sup>21</sup> Aceh province receives extra transfer funds from central government called a special autonomy fund between 2006 and 2027 with an estimated US\$7.9 billion in total (World Bank 2009).

# 4

## Analysis

### 4.1 Strategy: what were the advantages and disadvantages?

According to the stakeholders interviewed as part of this research there were **three main advantages** of UN-Habitat's strategic approach.

#### 4.1.1 Improved government capacity

Through this UN-Habitat-supported process, government agencies – as stated by local government officials who participated in this study, especially those in Bappeda and public works – have improved their coordination and communication capacity (GB1; GB3; GB6; GB7 2016). These officials also add that such experiences have made government jobs easier in developing and facilitating the regular development planning of the city, such as the *musrenbang* and regional spatial plan. Moreover, the experience of working with many different international humanitarian and development agencies has enhanced the capacity of most government officers and communities, especially the ability to cooperate with other local governments domestically and internationally (GB6; GB7 2016).

#### 4.1.2 Enhancement of community capacity

Almost all community representatives participated in this study affirm that communities in Meuraxa used to have very limited capacity regarding planning and mapping because they had never done it before (VB4; VB6; NJ1; NJ2; GB5 2016). However, since being actively involved in the development of their village they are able to apply these skills to the *musrenbang* (VB4; BB1; GB7 2016).

#### 4.1.3 Wider influence

According to the research respondents and local government officials, in addition to being used by the city government to develop the area, the Meuraxa sub-district

plan has been used in research centres, universities and development agencies as an example of becoming a disaster-resistant area and community (RB1; RJ1; GB6; GB7 2016). The CLM and CAP processes have been documented in handbooks and adopted by various organisations carrying out similar activities in other disaster-affected areas in the provinces of Aceh and North Sumatra (USAID 2006; Steinberg 2007; Government of Indonesia 2009a; UN-Habitat 2009). They include:

- *Manual on community action planning (CAP) to support implementation of community-driven development for reconstruction in Aceh and Nias*, Support for Local Governance and Sustainable Reconstruction (SLGSR) Project (draft manuscript), Banda Aceh, GTZ, 2006.
- A CAP handbook developed by GTZ in 2006.
- *Villager agreement regarding land boundaries, land ownership and demarcation of land boundaries* – a manual developed under the collaboration of BRR and YIPD, 2006.

#### 4.1.4 Additional pressure on stakeholders

Stakeholders interviewed as part of this research identified one **disadvantage** of UN-Habitat's approach. The planning process placed extra time and resource pressures on local government and key stakeholders at a difficult time as they were required to do service delivery and planning simultaneously in a post-disaster and post-conflict situation (see factors that hindered, Section 4.3). However, and argued mostly by the local government officials themselves, their need to develop a plan outweighed this extra burden (GB3; GB5; VB4; NJ2 2016).

### 4.2 Programme: what worked well and what was not as effective?

Stakeholders interviewed as part of this research noted that the following aspects of UN-Habitat's intervention providing urban planning support to local actors in Banda Aceh City worked well.



### 4.2.1 Establishing Forum Korrexa and the Decision-Makers' Working Group

The two forums coordinated activities to directly support local government in the promotion and accommodation of community participation during the rehabilitation and reconstruction effort. Both local government officials and UN-Habitat staff argued that the forums became the platforms to accommodate and coordinate all information gatherings and meetings for post-tsunami efforts in Meuraxa (GB7; GB2; HJ1; HB5 2016) to promote good governance, knowledge sharing and participatory planning between all stakeholders (UNDP Indonesia 2008). As also emphasised by UN-Habitat officials, the achievement of Forum Korrexa in information dissemination and experience sharing prompted BRR to initiate the establishment of urban and community forums in all 23 districts of Aceh Province in late 2006 (HF1 2017; UN-Habitat 2009).

### 4.2.2 Using local knowledge and resources

The recruitment policy of UN-Habitat for managerial staff was 50 per cent Indonesian and 50 per cent international staff (HB1 2016). Mainly felt by NGOs, especially UN-Habitat staff, it was important that most field facilitators who worked directly with communities were Acehnese, even from families severely affected by the disaster (Asian Development Bank 2010), and thus very familiar with the local context and culture (HJ1; HJ2; NB1, 2016; Daly 2016). According to former facilitators of UN-Habitat, the potential for conflict was high in Meuraxa, a heterogeneous community near the centre of Banda Aceh (HB2; HB4 2016) including families displaced by the conflict inland. As also affirmed by mainly local government officials, UN-Habitat staff managed this risk by talking to residents about issues and collectively identifying their problems and needs (GB3; GB5; NJ2 2016). The facilitators also knew that the tsunami survivors could not be treated as 'victims' and sought to actively engage them in the post-tsunami planning efforts (NJ2; HB2 2016).

### 4.2.3 Employing specialists when needed

Former facilitators of UN-Habitat argued that during UN-Habitat's early engagement in Banda Aceh there were few staff with adequate understanding or experience of practical approaches for community participation, resulting in tension between field officers and management (HB1; HB2 2016). However, within six months this was addressed by hiring an anthropologist with expertise in *gampong* development and experience

in the development of village law (*ibid*). They also affirmed that the anthropologist was responsible for addressing the issues faced by the field facilitators and for enhancing participatory approaches adopted by UN-Habitat on the ground (*ibid*). Regarding monitoring and evaluation of its works on housing development, it was mainly the researchers who participated in this study who affirmed that UN-Habitat employed third-party institutions such as the Universitas Syiah Kuala based in Banda Aceh City and allocated grants to several local NGOs and research centres to conduct studies on housing and development in areas affected by the tsunami in Banda Aceh (RB3; RJ1; HB1 2016).

Stakeholders interviewed as part of this research identified the following aspects of UN-Habitat's work which **were not as effective**.

### 4.2.4 Lack of institutional capacity and guidelines

Most UN-Habitat representatives participating in this study believed that almost all UN-Habitat officers and field facilitators were young architects and urban planners, often recent graduates hence lacking experience (HJ2; HB1; HB2; HB5 2016; Vebry *et al.* 2007). UN-Habitat was also yet to establish an urban planning and design team in its head office while its *International guidelines on urban and territorial planning* were only published in 2015. As one key informant of UN-Habitat noted – if UN-Habitat's intervention in Banda Aceh would be undertaken in 2017 'it would [be] much easier for the agency to call in occasionally more experts' (HF1 2017).

### 4.2.5 Underestimating the challenges of urban planning after complex crises

In the absence of international guidance on planning after a complex disaster that needs to be more rapid, UN-Habitat simply decided to put the limited funds to maximum benefit: close to the people, bottom up. Planning, especially in post-conflict contexts, is a very slow process if participation and sustainability are to be achieved.<sup>22</sup> Planning and response needed to be more rapid given the context. Banda Aceh's case was ultimately a post-conflict process in a post-disaster setting although this was not fully understood at the time (HF1 2017).

### 4.2.6 Absence of exit strategy

As with many international organisations responding to the tsunami, UN-Habitat did not develop an exit strategy as part of its project design (HJ1; HB5 2016). An exit strategy aims to ensure the continuation of impacts and activities after the programme ends (Crum *et al.* 2011), for example the duplication of the development sub-district planning like the participatory approach adopted in Meuraxa.

<sup>22</sup> As a comparison, UN-Habitat's spatial project in Kosovo lasted seven years and spatial planning interventions in Somalia have been ongoing for 10 years (HF1 2017).

## 4.3 Context: what helped or hindered interventions?

Stakeholders interviewed as part of this research identified the following factors that **helped** UN-Habitat's intervention providing urban planning support to Banda Aceh City.

### 4.3.1 Supportive policy environment for community-based planning

From the outset of the response, Bappenas stated that the reconstruction of Aceh would be 'a people-centred and participative process' (World Bank 2005) – a principle which was later incorporated into the master plan, the RALAS land-titling programme and BRR's support for village planning: rapid, community-driven spatial planning at *gampong* level which was approved by community leaders (Pardede and Munandar 2016). Although many agencies involved in the rehabilitation and reconstruction process applied their own standards/guidelines, they typically used BRR guidelines as the minimum standard required.

### 4.3.2 The existence of BRR to provide coordination and leadership

The establishment of BRR in March 2005 brought with it public legitimacy and flexibility to coordinate responses and reconstruction with direct authority from the president (Scheper *et al.* 2006). This was imperative to make and deliver relatively fast and useful decisions. Although there were still challenges, mostly NGOs felt that BRR was important in providing coordination and leadership for the rehabilitation and reconstruction efforts (NJ2, HJ1; GB2 2016). BRR involved skilled and resourceful people in planning the development of Green Meuraxa (HB5 2016) and with its supervisory function it also had a planning division (Krauze 2012). For example, donors and implementing agencies, including UN-Habitat, would coordinate with this planning division regarding which *gampongs* needed to have spatial plans to be developed to avoid overlapping works (NJ3, 2016; Asian Development Bank 2010).

### 4.3.3 Practical support from local government

Most respondents argued that heads of villages and Meuraxa sub-district worked closely with UN-Habitat to encourage community participation and consensus building (HJ1; VB2; VB4; GB1; GB2; BB1; HB5; NJ1 2016; Scheper *et al.* 2006). Additionally, when local government agencies (such as Bappeda) were not yet recovered, key local leaders such as the newly appointed mayor of Banda Aceh and the governor of Aceh Province had significant involvement in the

recovery and rehabilitation efforts, especially during the implementation of the Decision-Makers' Working Group and other coordination and consultation meetings involving government sectors and institutions (NJ3; HJ1 2016; Steinberg 2007; Takahashi *et al.* 2007).<sup>23</sup>

There were, however, factors that hindered UN-Habitat's intervention providing urban planning support to Banda Aceh City.

### 4.3.4 Post-conflict contexts

The existence of the armed separatist rebellion in Aceh that started in 1976 and ended during the first period of the rehabilitation and the reconstruction effort created the conflict that not only led to isolation but also lack of trust of government and the community. Most NGOs believed that there was a peace agreement when the Meuraxa spatial plan was developed but it was still fragile (HJ1; HJ2 2016; HF1 2017). Planning, especially in post-conflict contexts, is a very slow process if participation and sustainability are to be achieved, which was exacerbated by the lack of guidance for planning in this post-conflict process in a post-disaster setting. It is only in the last 2–3 years that a growing consensus has emerged that there is scope for evidence-based learning for planning in humanitarian contexts, and for a need for planning after disasters (HF1 2017).

### 4.3.5 Lack of policy for renters and squatters

The renters alone comprised almost 25 per cent of residents in Banda Aceh (Bappenas 2005). The lack of and delayed BRR policy on renters and squatters meant that some families had to wait more than 10 years for housing assistance and had to be relocated outside Meuraxa (HB5; GB7 2016). In general, throughout the response the needs of renters and squatters were overlooked.

### 4.3.6 Local capacity and belief

The level of community capacity varied, as did resource availability and the aspiration to rebuild their *gampongs* (Syukrizal *et al.* 2009). Such variety resulted in 16 different approaches to rebuilding the *gampongs* in Meuraxa (NJ3; HB5 2016). In addition, most NGO respondents felt that the community perception was that if an NGO approached them, the NGO would offer direct assistance – such as building houses or cash support – rather than talking about planning issues (NJ3; HB2 2016; HF1 2017). Initially, many people had little faith that the plans developed by the government and development agencies would reflect their needs (Christoplos 2006); but over time the community accepted the importance of planning (RB1; NJ3; HB1; HB2 2016). However, this impacted on UN-Habitat's work because more time and resources were needed at the beginning for community mobilisation (Syukrizal *et al.* 2009).

<sup>23</sup> Over 5,000 public servants of Aceh and Nias died, among them the mayor of Banda Aceh City and his predecessor (Takahashi *et al.* 2007).

### 4.3.7 The death of many community leaders

In Meuraxa, only two out of 16 *keuchik* survived the tsunami (VB6 2016; Telford *et al.* 2006). This situation led to the loss of social structure because community members tended to become more focused on their individual needs because they no longer had the guidance of community leaders to bring them together (VB1; HB2, RB2 2016; Takahashi *et al.* 2007). It took time for new community leaders to gain the respect of their communities thus causing delays in the rehabilitation and reconstruction effort (HB2; RB3, GB7; VB3; VB6 2016).

### 4.3.8 Residents relocated immediately after the tsunami

At the beginning it was very difficult to engage residents in the CLM and the CAP processes because many of the homeowners had either lost their lives, had moved inland to stay with their families (VB1; VB2; VB6; GB1 2016; Scheper *et al.* 2006) or were looking for jobs in other cities (HF1 2017; Mahdi 2007). Also, the grieving community members were also occupied with searching for their lost family members and survivors were reluctant to immediately return to their *gampongs* (HJ1; HB4 2016). Communities residing in coastal zones and staying in temporary barracks that had poor sanitation and water problems (Mahdi 2007) were less patient to wait for the finalisation of BRR's master plan required for the reconstruction of their houses (HB2; NJ2; GB5; GB6 2016). The development of village planning took at least one year or even up to a year and a half to finalise the land ownership/title clearance (GB6 2016), and did not start until June 2005 (BRR 2006). These factors slowed down the commencement of transition from the recovery phase to reconstruction efforts (Scheper *et al.* 2006).

## 5

# Conclusions and recommendations

## 5.1 Conclusions from this study

Urban planning – before and after humanitarian crises – is one of the key responsibilities of local government. However, municipal planning departments are likely to have limited resources and capacity, and urban planners are unlikely to have previous experience of humanitarian response. Experts recommend that humanitarian agencies ‘work in support of and in collaboration with municipal authorities’ (Global Alliance for Urban Crises 2016) when responding to urban humanitarian crises, but there are few examples and little guidance on how to put this into practice. This research aimed to identify and document learning from UN-Habitat’s experience providing urban planning support to local communities and government in Banda Aceh following the Indian Ocean earthquake and tsunami in 2004. Table 6 summarises UN-Habitat’s intervention.

### 5.1.1 Intervention: what did UN-Habitat do?

From March 2005 to August 2010 UN-Habitat supported the urban planning process in Meuraxa sub-district of Banda Aceh City. UN-Habitat’s urban planning intervention included supporting communities to undertake:

- Community land mapping (CLM)
- Community action planning (CAP)
- Village spatial planning

The organisation also supported local government to:

- Integrate village plans into the Vision for a Green Meuraxa strategic and spatial plan.

- Integrate the Meuraxa sub-district plan into the mid-term development plan and subsequent regional spatial plan (RTRW 2009–2029) for Banda Aceh City.

- Facilitate the Forum Korrexa and Decision-Makers’ Working Group.

The whole process involved approximately 48 UN-Habitat staff – including field facilitators (two per *gampong*) as well as nine staff coordinating the urban forum and additional technical specialists. UN-Habitat also partnered with local universities, NGOs and research centres for assessments, monitoring and technical expertise.

### 5.1.2 Effects: what happened next?

Meuraxa sub-district is now known as the ‘emerald of Banda Aceh’. Housing, roads, infrastructure, schools and escape buildings have been rebuilt following the Vision for a Green Meuraxa while only a few low-priority items have not been delivered. However, while there are significant achievements in terms of physical reconstruction, residents still express concerns about livelihood opportunities.

Additionally, while the majority of residents were able to rebuild on or nearby their pre-tsunami locations, a small number of renters, squatters and households made landless by the tsunami were relocated to apartments or new-build settlements outside the sub-district. Some of these families had to wait up to 10 years for housing assistance which met their needs.

### 5.1.3 Strategy: what were the advantages and disadvantages of UN-Habitat’s approach?

Stakeholders highlighted three key advantages of UN-Habitat’s programme. Local planning officials particularly appreciated the organisation’s effort for building the capacity of local government and increasing community

Table 6. UN-Habitat interventions under BRR in development and planning of Meuraxa district

INPUTS	ACTIVITIES (2004–2007)	OUTPUTS	OUTCOMES (2008–2009)	IMPACTS (2010–2016)
<ul style="list-style-type: none"> <li>▪ UN-Habitat and YIPD funded by USAID (started March 2005)</li> <li>▪ UN-Habitat and other NGOs = Meuraxa Joint Programme (started June 2005)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Community land mapping (CLM)</li> <li>▪ Community action plans (CAP)</li> <li>▪ Village spatial planning</li> <li>▪ Integrating village plans into Vision for Green Meuraxa</li> <li>▪ Verification of <i>gampongs</i> plans</li> <li>▪ Integration of 16 <i>gampongs</i> plans</li> <li>▪ Establishment of community centre</li> <li>▪ Urban forum known as Forum Korrexa</li> <li>▪ Decision-Makers' Working Group</li> <li>▪ Radio broadcasting</li> <li>▪ Publication of Korrexa newsletter</li> </ul>	<ul style="list-style-type: none"> <li>▪ Maps: legal documents showing landownership</li> <li>▪ Documents: community action plans</li> <li>▪ 16 village plans</li> <li>▪ Document: Vision for Green Meuraxa (draft detailed master plan)</li> <li>▪ Detailed spatial plans of Meuraxa</li> </ul>	<ul style="list-style-type: none"> <li>▪ Development of green paths, tourism areas, seaports, community and business centres, conservation areas, escape roads and buildings and other disaster-mitigation infrastructures</li> <li>▪ Inputs to development of <i>qanun</i> on RDTR or detailed spatial plans of Banda Aceh City</li> <li>▪ Inputs to annual development plans: <i>Musrenbang</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Integration of the sub-district plan into regional spatial plan (RTRW 2009–2029) and mid-term development plan (2007–2012) of Banda Aceh City in which tsunami structural mitigation has been adopted</li> </ul>

capacity. Meanwhile, for researchers the significant benefit was the documentation of UN-Habitat's process to influence the reconstruction effort. Only one disadvantage was identified – that the planning process placed an extra burden on local communities and government at a difficult time. However, this disadvantage was outweighed by the usefulness of the process.

### 5.1.4 Programme: what worked well and what was not as effective?

Stakeholders highlighted three aspects of UN-Habitat's intervention that worked particularly well. These were establishing Forum Korrexa and the Decision-Makers' Working Group to coordinate recovery activities; the utilisation of local knowledge and resources; and that UN-Habitat hired additional technical specialists as required. Conversely, three aspects of UN-Habitat's intervention were felt to be less effective. These were that the organisation lacked institutional capacity and guidelines regarding urban planning; underestimated the challenge posed by post-conflict planning; and that the programme lacked an exit strategy.

### 5.1.5 Context: what helped or hindered UN-Habitat's intervention?

Three contextual factors were identified by stakeholders interviewed as part of this research as helping UN-Habitat's intervention. These were the policy environment which supported community-based planning; the existence of BRR to provide coordination and leadership;

and the practical support from local government. Contextual factors which were identified as hindering UN-Habitat's work included the challenges of operating in post-conflict contexts; the lack of policy on housing assistance for renters and squatters; variations in local capacity and belief of local communities; the loss of community leaders; and the challenges of working with households while they were displaced.

In conclusion, with the hard work of its committed urban planners and field facilitators, UN-Habitat successfully supported communities and local government to develop village plans, a spatial plan for Meuraxa sub-district, and to integrate the plan for Meuraxa into the wider spatial plan for Banda Aceh City. Despite the challenges of urban planning after a complex crisis in areas devastated by the tsunami, communities and local government were highly engaged throughout the process – which was replicated in other parts of the response.

## 5.2 Implications for policy and practice

Land mapping, action planning and spatial planning after humanitarian crises can empower urban communities and governments to identify their needs and priorities and manage their own recovery process. However, they may lack the knowledge, experience, time, tools or technology needed to lead this challenging process – particularly given that their families, communities or workplaces are likely to have been affected by the crisis and that carrying



out immediate activities may leave them little capacity to plan for the future.

This research suggests that **organisations** – including government, humanitarian donors and implementing agencies – providing urban planning support to communities and governments following humanitarian crises should:

- Work closely with communities and local governments to ensure plans meet their needs, develop an exit strategy, and build their capacity to improve future development planning in the city. This can be done through household interviews followed by focus groups and community meetings. When working with government, it worked best when doing coordination and consultation meetings involving government sectors and institutions. This is likely to take time, however, given the potential loss of community leaders and government personnel, the need to work with families who are displaced, the variations in motivation and capacity between communities, and the numerous other demands on their time.
- Establish an urban forum or task force to coordinate recovery planning activities. The task force should include community representatives and leaders, donors and implementing agencies, as well as the government. The activities of the task force should be disseminated via bulletins, community radio, telephone and text messages.
- Document the urban planning process in one or more pilot locations so that it can inform government policy and be replicated in other areas.
- Hire local staff to work with communities and local governments as they will know the local culture and context.
- Provide guidelines and additional technical expertise to support local staff in incorporating international best practice approaches.
- Allow sufficient time and resources for the planning process – particularly after complex crises and to allow for the lengthy process of incorporating community-level planning into city-level development and spatial plans. For example, in developing a village-level community action plan (CAP) in Meuraxa sub-district derived from sub-village CAPs took up to a year for the development and integration process.
- Work closely with city, provincial and national governments to generate political, practical, and legislative support around key planning issues such as the recovery planning, funding and implementation process; and policies on community engagement, land titling, disaster risk reduction and resettlement.

It is also recommended that humanitarian **donors** provide long-term funding to support urban planning processes after humanitarian crises. Ideally, this would span from immediate action planning during the relief period until after the city has incorporated specialised plans developed in

response to the crisis into its mainstream development and spatial planning documents – this is likely to take a number of years.

Prior to humanitarian crises occurring, **city governments** should also:

- Develop a disaster management plan – including a draft recovery plan, such as Naga City's disaster mitigation plan in the Philippines developed more than a decade ago (ALNAP 2001) and the Brisbane city disaster management plan (Brisbane City Council 2016).
- Identify key members of a recovery planning task force.
- Ensure that crucial data for recovery planning (such as land-ownership records) will remain accessible after a crisis.

## 5.3 Suggestions for further research

Based on this research, the authors suggest that investigation of the following topics would be beneficial in developing the evidence base regarding urban planning processes after humanitarian crises:

- This study shows that the development of village planning and Meuraxa spatial plans inspired the entire city, hence follow-up studies could focus for example on whether Meuraxa scores higher on the relevant Sustainable Development Goals or the City Prosperity Index of UN-Habitat, compared to other disaster-affected districts.
- It also recommends reviewing documentation of the Yogyakarta post-earthquake urban planning response to provide an additional Indonesian perspective, as well as documentation of other international case studies of urban planning after humanitarian crises – particularly those where an international organisation provided support for communities and local government to take the lead.

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There is increasing awareness of the importance of humanitarian agencies supporting and collaborating with local actors in order to restore city functions following humanitarian crises. This research aimed to document learning from UN-Habitat's experiences of supporting communities and local government to undertake urban planning after the Indian Ocean earthquake and tsunami in Banda Aceh, Indonesia, in 2004. Despite the challenges of urban planning after a complex crisis, in areas devastated by the tsunami, UN-Habitat successfully supported communities and local government to develop village plans, a spatial plan for Meuraxa sub-district, and update the wider spatial plan for Banda Aceh City.

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