REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
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Email: afbsec@adaptation-fund.org

ADAPTATION FUND

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Regular
Country/Cities:	Mongolia/ Ulaanbaatar
Title of Project/Programme:	**Flood Resilience in Ulaanbaatar Ger Areas -** Climate Change Adaptation through community-driven small-scale protective and basic-services interventions
Type of Implementing Entity:	Multilateral Implementing Entity
Implementing Entity:	UN-Habitat
Executing Entity/ies:	Programme Execution Unit (PEU) UNOPS, with the Municipality of Ulaanbaatar (MUB) and the Governor's Office, District Governors and Ger-Communities within Songinokhairkhan, Bayanzurkh and Sukhbaatar Districts; INGOs and LNGOs; Ministry of Environment and Tourism (MoET).
Amount of Financing Requested:	US$ 4.5 million

1. Project Background and Context

Mongolia is a landlocked country located in Northeast Asia between Russia and China with a total land area of 1,564,116 square kilometres. It is surrounded by high mountains and is located on highlands at an average elevation of 1,500 meters above sea level.

Ulaanbaatar[1] (see picture below), the capital city, is the coldest capital city in the world. It is home to half of the national population and nearly all of its skilled human capital and financial resources.

The problem

From nomadic resilience to urban vulnerability

Although Mongolia is labelled as a stable economy with regard to its state of development, high rural-urban migration rates and uneven economic development remain major challenges in the country. Twenty percent of Mongolia's population have migrated to Ulaanbaatar over the past three decades. Weather patterns, called dzud, have forced many to leave their traditional way of life herding cattle and sheep and move to the capital. Dzud is an ultra-cold-weather phenomenon (with temperatures down to -50 degrees Celsius) believed to occur in five-yearly cycles, but has

[1]Ulaanbaatar will hereafter be referred to as UB city in this document.

been increasing in frequency, especially in the Gobi Desert region of Mongolia. Last year, one million animals died due to the deep freeze, often buried neck-deep in snowdrifts. In 2009 nearly eight million animals were wiped out in one of Mongolia's worst ever winters, destroying the herds many families. The dzuds ruin the farmers' livelihoods, and due to lack of social support systems, the only choice left is to move to Ulaanbaatar and find a job. This process of nomads moving to Ulaanbaatar has created a new class of 'urban poor,' that mostly reside in the fast expanding informal 'Ger' settlements (a Ger is a nomadic tent). This in turn has resulted in increased pressure on public services and the environment. During winter, these 'Ger' areas 'suffer' from the highest levels of air pollution in the world - caused by the burning of coal to keep warm in the Gers and the cities power plants. Besides that, increasing climate change related flood events especially affect these unplanned Ger areas because people reside in high risk areas such as next, or even in, gullies and rivers. Moreover, floods cause the overflow of latrines, resulting in contaminated water and soil, which in turn lead to health problems and water scarcity. Because the inhabitants of the Ger areas are often poor (i.e. 22 percent of the city's population lives in poverty) and the government does not have the resources and technical capacities to provide adequate and climate resilient basic utilities and services to the ever-growing urban poor population, people living in these 'Ger' areas are particularly vulnerable.

Should another catastrophic dzud take place, this would occur at a time of extreme economic hardship and poor levels of preparedness. It is likely that it is the informal urban 'Ger' settlements, where just over one quarter of the entire countries' population already resides, will be the most impacted within the capital. Another dzud would further increase the transient population of the city, increase urban density in the most 'at-risk' areas such as around gullies at the bottom of the hills in the city and in riverbeds. This 'forced' mass migration would contribute to the extreme levels of water, soil and air pollution as well as increased risk of flooding and social exclusion.

The combination of these factors and the exponential pace of in-migration have imposed huge pressures on the Government to address the challenges of rapid expansion of informal settlements and associated risks. However, the current economic challenged and the shifts in leadership have resulted in a macro-approach to addressing prevailing challenges and national development, of which some focus on sustainable urban growth, including in ger-areas. The government has shown to be just about able to create the appropriate policy and planning framework in face of rapid urban expansion but does not have the resources to also prepare and plan for climate change impacts, which are only set to deteriorate in future. Thus, the government requires support to address the issue of expanding communities as a consequence of climate change as well as provide immediate attention to these Ger-settlers who are left vulnerable to multiple risks upon arrival. Most urgently, support is needed to avoid future immigrants to reside in high risk areas (through land use planning). Besides that, support is required to reduce the impacts of floods and the consequently overflow of pit latrines, leading to health issues (through the provision of basic infrastructure and resilient latrines), all through the involvement and social cohesion building of communities.

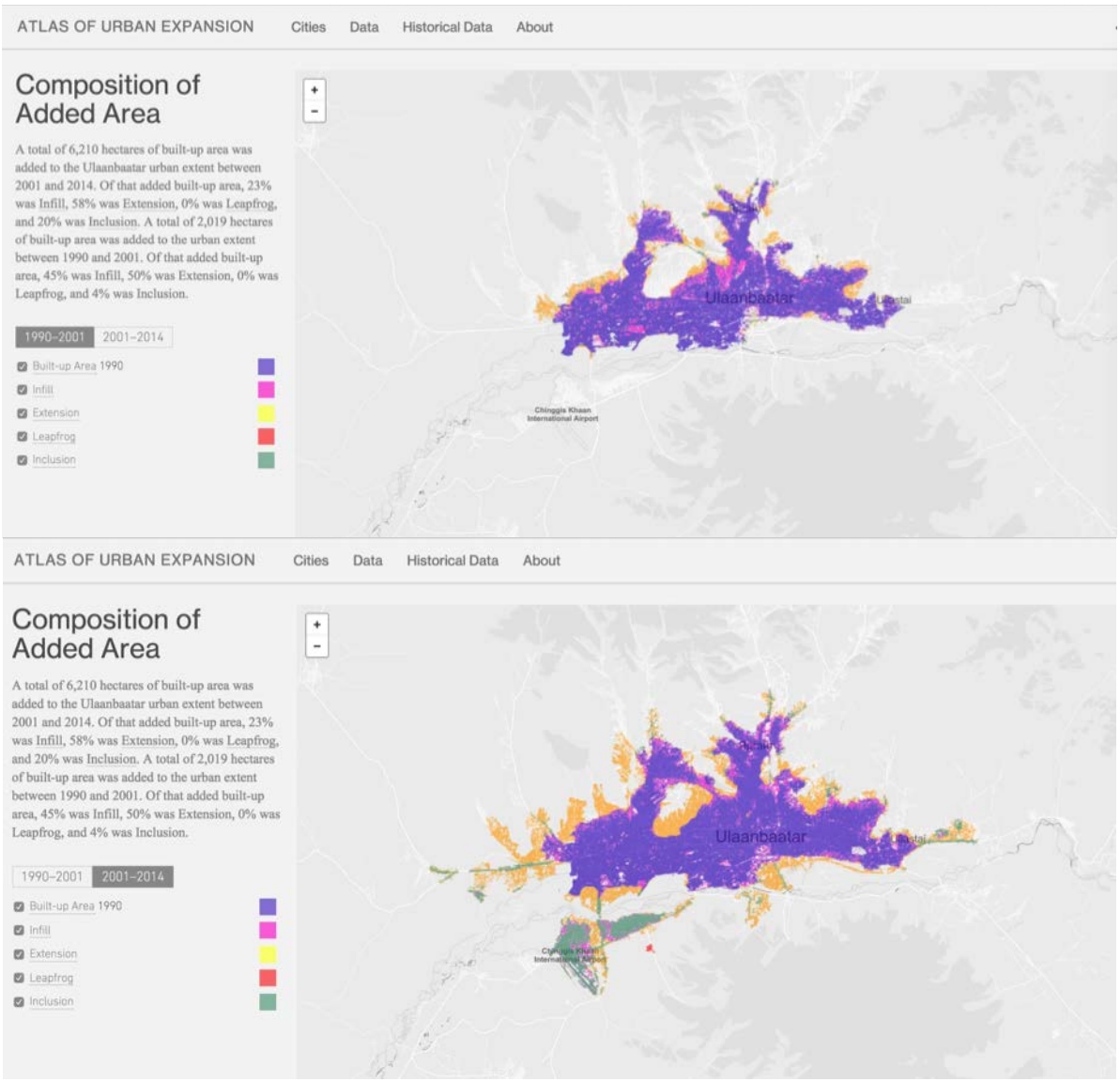


Figure 1: Shows the expansion of Ulaanbaatar's physical area between the period 1990-2001(top) and 2001-2014 (bottom): A total of 2,019 hectares of built-up area was added to the urban extent between 1990 and 2001; and a total of 6,210 hectares of built-up area was added to the Ulaanbaatar urban extent between 2001 and 2014.*Source: Atlas of Urban Expansion 2016, an initiative of UN-Habitat, NYU and the Lincoln Institute of Land Policy.*

Climate change projections

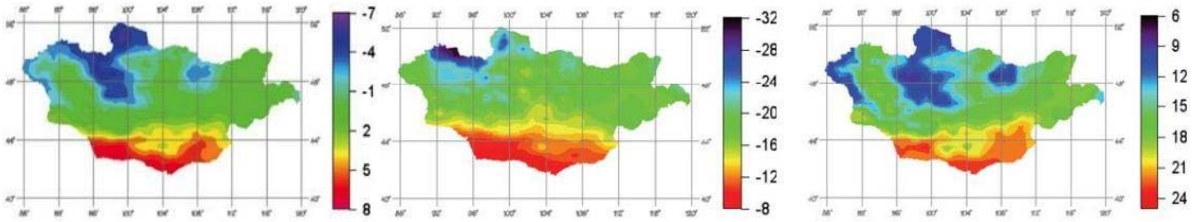


Figure 2: Annual mean air temperature (left), mean air temperature in winter (middle) and mean air temperature in summer (right). *Source: Assessment report on climate change 2009, pp. 36-37.*

Mongolia has four distinct seasons, large temperature fluctuations, and little precipitation. The climate varies widely from region to region, not only due to differences in altitude, but those in

latitude. The annual mean temperature is between -8ºC and 6ºC, and varies considerably among regions. Summer temperatures range between 10º and 26.7ºC and can reach a maximum of 45ºC, while winter temperature ranges between -15º and -30ºC, and can even dip below -50ºC (Figure 2).

In general, mean temperatures are highest in south Gobi (>6ºC) and decrease to the northern parts of the country, with mean a temperature of 0ºC in Mongolia's northern part of the Gobi Desert region. Extreme temperature shifts across seasons (Figure 2, summer and winter) and abrupt shifts within shorter time spans (i.e. Day/night, hour/hour/, day/day) are mainly due to the country's long distance from oceans, the high mountains which surround it and its high elevation of more than 1.5 kilometres above sea level. It should be noted that annual mean air temperature at the land surface has increased by 2.07ºC for the years from 1940 until 2013.[2]

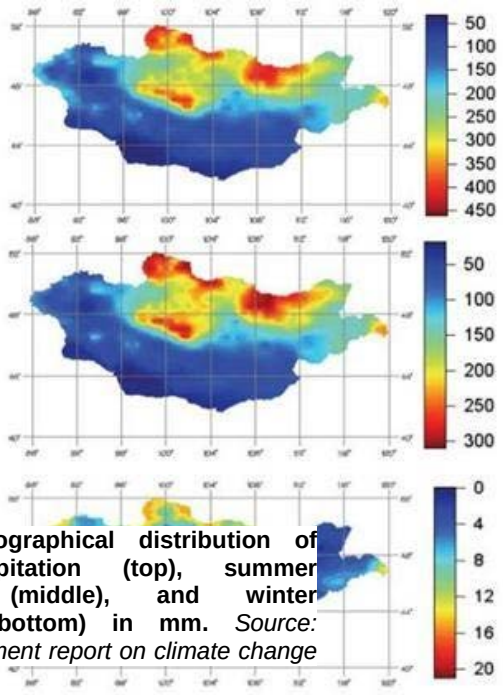


Figure 3: Geographical distribution of annual precipitation (top), summer precipitation (middle), and winter precipitation (bottom) in mm. *Source: Source: Assessment report on climate change*

Rainfall varies within the country and is strongly influenced by topography, increasing from south to north. Precipitation in Mongolia is generally low with annual averages of 300-400 mm in the northern mountain regions, 250-300 mm in the forest-steppe zones, 150-250 mm in the steppe zones, and 50-100 mm in the southern Gobi Desert (Figure 3, top). About 85 percent of the annual precipitation is recorded during the months from April to September, of which 50-60 percent falls in the summer months of July and August (Figure 3, middle). Although rainfall is generally low in Mongolia, its intensity is high. Records show intense rainstorms that receive 40-65 mm of rain in only one hour. Precipitation during the winter months from December to March is highest in the northern mountain areas with 20-30 mm of snow, around 10 mm in the desert region and 10-20 mm in the other regions (Figure 3, bottom).

Due to its location, fragile natural ecosystems, the lifestyle of the people and the economic situation, Mongolia's sensitivity to climate change makes this an important topic to be addressed by the Mongolian government. The impact of already observed climate change related events caused high damages not only to its livestock, but also to the country's ecology and socio-economic sectors. According to different scenario models, there will likely be an increase in temperature which intensity is expected to be higher during the summer seasons than the winter seasons. Similar, increased projections are calculated with regard to precipitation. However, projected precipitation for the summer months are less than 10 percent, with slight decreasing projections for the 2011-2030 (2-4 percent decrease) and the 2046-2065 (0-0.4 percent decrease) periods. At the end of this century, in winter, a high intensity pattern of temperature is projected by 5.5-7.50ºC in eastern and western regions of the country and by 5.0-5.50ºC in the western region in summer. Winter precipitation is projected to increase by 55-75 percent in the central, western and eastern regions, whereas summer precipitation is projected to decrease by 5-10 percent in western Mongolia (Figure 3, bottom).

Expected impacts

[2]Mongolia Second National Communication under the UNFCCC, p. 41.

Mongolia is set to be significantly impacted by the effects of climate change. Although milder climatic forecasts might bring some benefits to a country such as less harsh weather conditions, these are most likely to be outweighed by significant drawbacks for the country. As mean temperatures are to rise, secondary effects such as increases in extreme weather events become more likely.

Climate change will exacerbate existing natural resource concerns due to changes in permafrost, or decreases in total glacier areas, for example. As a result, not only will the country's main water resources (lakes or surface water, for example) be significantly diminished, Mongolia will experience more desertification. Desertification has become a national disaster, affecting more than 70 percent of Mongolia's grassland. Moreover, climate related hazards such as heavy rain and snowfall, strong winds, sand and snowstorms, hail, and floods have become more and more frequent in recent years and are likely to intensify in the future. **Zud** or **dzud** – extremely harsh winters – deprive livestock of grazing and is a specific phenomenon that takes its toll in winter and spring with a high number of livestock dying of starvation. "As of end of April 2010, or about 22 percent, of the country's entire livestock, around 8 million animals, were lost as a result of the 2009-2010 winter [dzud] disaster and consequently the livelihoods of over 200,000 rural herdsmen living in the affected regions were severely threatened"[3]. Between 2000 and 2010, droughts in Mongolia have also intensified and become increasingly frequent, inducing forest and steppe fires and causing dust and sand storms.

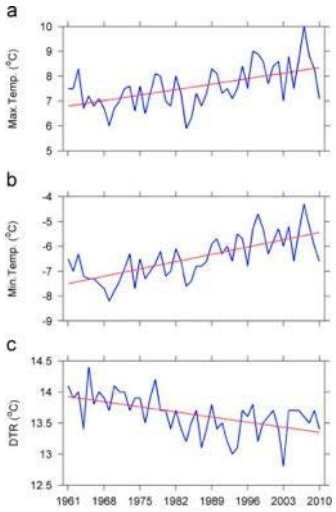


Figure 4: Climate Variability across Mongolia in Celcius. *Source: Assessment report on climate change 2009, p. 39.*

Ulaanbaatar is located at an elevation of 1350 meters above sea level in the Tuul valley, an arm of the Selenga river. The city is fed by downstream water supplies coming from the Upper Tuul ecosystem, which covers an area of over 5000 square kilometres. Ulaanbaatar's water supplies, therefore depend entirely on the Tuul River and recharging of the groundwater aquifers. Any changing ecological conditions in the upstream ecosystem directly impacts the availability and regularity and flow of water resources.

Increasing human influence and land use pressures in the Upper Tuul due to intensive grazing, tourism, logging and harvesting have continued to deteriorate the ecosystem, and contributed to increase run off and intensification of the maximum and minimum flows of the river and increased flooding particularly over the past 15 years[4].

The Flood Risk Assessment of Ulaanbaatar also indicated annual mean temperatures have increased by 1.56 C over the past 60 years, which has led to a decrease in both duration and depth of snow cover, altered timing and length of snowmelt period, impacting on downstream flooding regimes.[5] This provides evidence of climate induced temperature changes being a direct consequence of the increased flooding being experienced in Ulaanbaatar and in particular to the poorly prepared Ger-areas.

Flood risks and vulnerabilities in Ulaanbaatar

[3] Mongolia Second Assessment Report on Climate Change, 2014, p. 14.

[4] The Economic Value of the Upper Tuul Ecosystem in Mongolia, World Bank 2009, Page xiv

[5] Flood Risk Assessment and Management Strategy of Ulaanbaatar City 2015-Volume 1, World Bank, Page 52

As a consequence of increased warm summer days and nights in Central Mongolia, where Ulaanbaatar is located, there has been more frequent flooding in Ulaanbaatar City. As indicated by the recent the Flood Risk Assessment (FRA) study[6] that looked at 35 floods that occurred within the period of 1915-2013, 60 percent of these floods took place within the decade of 2000-2010. The study states that 50 percent of these floods were of 'alluvial' type, occurring due to water flow and run-off from mountain slopes and along dry riverbeds. Besides that, Ulaanbaatar suffers from flash floods and ground water flooding. The 2003 flash floods for instance, killed 15 people, made 30 families homeless and destroyed 93 houses.[7] The Ger area's are hit hardest by all types of floods.

Flood issues are likely to increase in poor, unplanned areas that expand fast, mostly at the north-side of the city. As mentioned above, Ulaanbaatar is located in the Tuul valley, an arm of the Selenga river. An arm of the Tuul, the Selbe streams down from the north and ends in the Tuul at the Southside of the city. Besides the Selbe, there are many other smaller rivers that pass through the city from the north to the south. The city is surrounded by hills and many Khoroos stretch into valleys, mainly to the north, which means that these Khoroos have hills on either side.

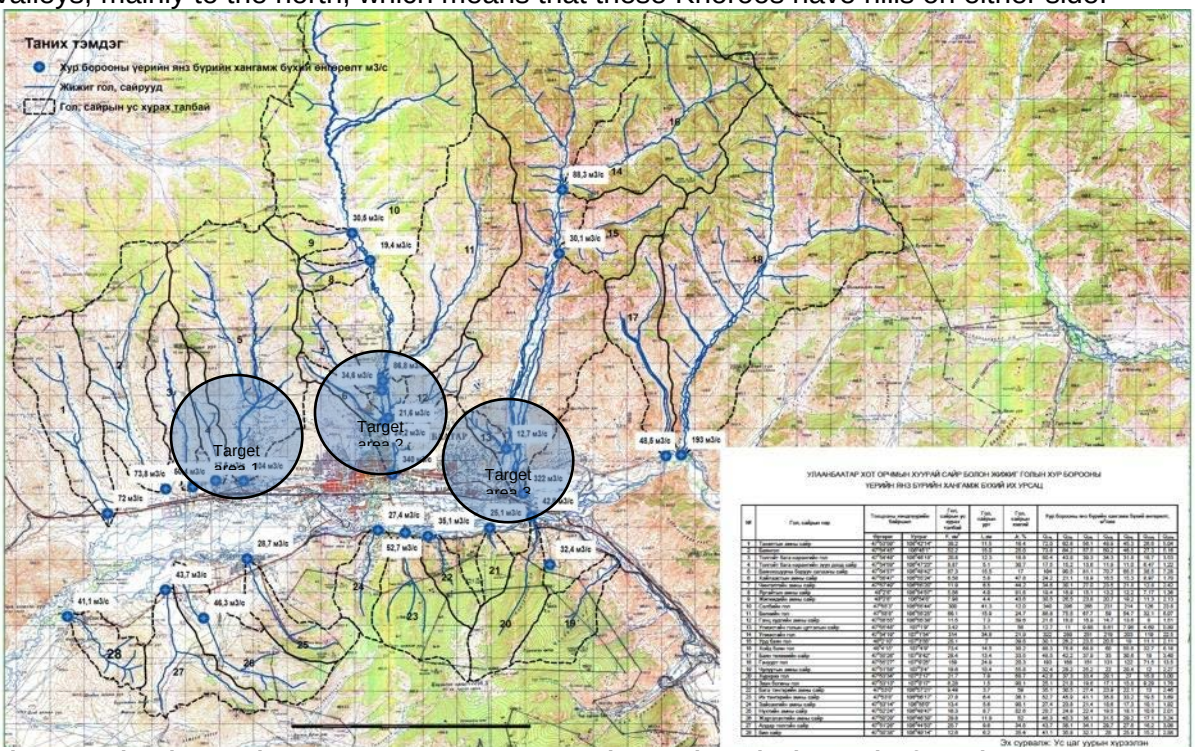


Figure 5: Ulaanbaatar river system. Target areas are along 3 rivers in the north of UB city.

Economic context

Mongolia was experiencing high levels of growth in 2011 due to its vast and rich natural resources, with the highest recorded growth figures of 17.5 percent globally, before the economic growth slowed down in 2012/2013 until only 0.1 percent in 2016. This was largely due to the fall in commodity prices and decrease in exports to China (95 percent of exports go to China) and a parallel decline in foreign investment that took place due to some policy changes which made international investment in the country more challenging. According to most recent statistics

[6] Flood Risk Assessment and Management Strategy of Ulaanbaatar City 2015-Volume 1, World Bank, Page 13

[7] OCHA Mongolia flash floods situation report, 2003. Online at http://reliefweb.int/report/mongolia/mongolia-flash floods-ocha-situation-report-no-1

published by the World Bank, Mongolia's Gross National Income (GNI) amounted to US$3,870 per capita, yielding economic growth of only 0.1 percent in 2016. This trend is projected to slightly increase with forecasted GDP growth rates of 2 to 3.7 percent for the years 2017 and 2019, respectively.[8]

Mongolia's economy is not very diversified and driven by two main sectors: Mineral industry and agriculture. While the country's economic base was fundamentally agricultural, its mining industry contributes to around 20.3 percent to the country's GDP, and accounts for more than 80 percent of its export and 40 percent of government revenues[9]. The agriculture sector, on the other hand, is failing to realize its growth potential due to fallen commodity prices and the impacts of climate change.[10]

Ulaanbaatar (UB City) is a key, if not the key economic region in Mongolia accounting for approximately 64 percent of Mongolia's GDP. However, UB City also experiences very high inequality with 22 percent of the city residents below the poverty line and living on 2$ a day; with these based primarily in the Ger areas. The on-going Ger area redevelopment programmes maintain a key focus on facilitating the growth of the informal sector, for strengthening micro-small-medium enterprise (MSME) sector and improving connectivity to the urban core, as potential drivers for improving the economic conditions of Ger Areas and UB city as a whole.

The diversification of the economy toward a healthier local business environment - promoting self-sufficiency and reduction of inequalities- while moving away from extreme reliance on export commodities - is clearly the way forward to achieve more economic stability for the country.

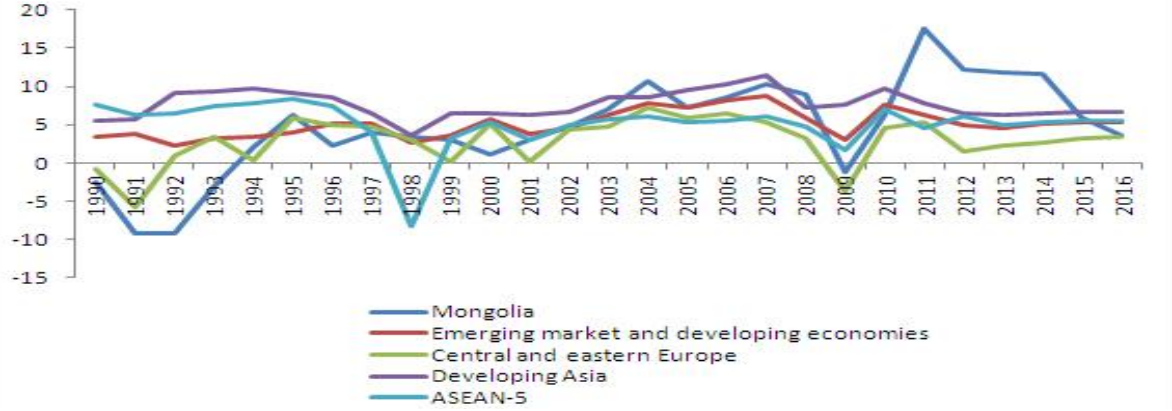


Figure 6: Comparative GDP growth.[11]

Social context

[8] The World Bank, 2017. Per capita GNI is displayed using the World Bank's Atlas method, which smoothens a country's GNI per capita by price variations and exchange rate fluctuations, taking into account the year of observation and the two previous years. It further adjusts the country's own and the international rate of inflation, with the international inflation rate being the euro area, the United Kingdom, the United States and Japan since 2001. Online at http://data.worldbank.org/country/mongolia

[9] UN-Habitat – Mongolia Country Profile.

[10] IMF Country Report No. 03/277, p. 2.

[11] https://www.asiapathways-adbi.org/2014/04/development-via-regional-integration-mongolias-chance-for-a-prosperous-future/

Mongolia has a population of 3.03 million, growing at a rate of 1.7 percent annually[12]. Almost half (47 percent) of the country's population is currently living in its capital city (1.38 million) and the share of the urban population has increased to 67 percent of the total population[13].

Since the 1990s, UB city has had limited formal extension of its core, which largely comprises apartment blocks with comprehensive utility services, including dedicated heating, water, and sanitation. However, successive waves of in-migration with Ger tents have reshaped the city's geography, with (i) little upgrading or extension of basic urban services; and (ii) government policy, since 2003, to grant each citizen about 700 square meters of land. A vast, low-density peri-urban area, commonly and collectively referred to as Ger areas, now extends around the city core- with three informal settlement tiers around the formal urban core area, the inner, middle, and fringe locations- these are characterized by unplanned settlements of low and medium income households with land ownership, un-serviced plots, unpaved roads and poor facilities. Settlement growth here is much faster than urban development and is projected to increase by another 40 percent by 2020.

Although poverty is more pronounced in rural areas, inequality, particularly in access to various services, is higher in urban areas[14] and especially in Ger areas where there are very low levels of public services available and very few households that are connected to the city's water distribution network.

The Ger area population is estimated at 800,000, representing 60 percent of Ulaanbaatar. Approximately 40,000-people migrate to UB city per year, of which most end up in Ger areas. Despite their size, Ger areas have until recently been considered temporary settlements. However, their official integration in the 2013 city master plan provides the necessary provision to plan the redevelopment of the Ger areas into a formal peri-urban area.

Lack of long-term planning, infrastructure investment, and land use regulation in Ger areas have resulted in haphazard development, limited availability of space for public facilities, poor access to socioeconomic services and insufficient livelihood opportunities. The lack of basic urban infrastructure is preventing people to move out of poverty.

The service gap between the city core and Ger areas means Ger residents are badly connected to the city core and poorly integrated in the urban economy, and this is one of the most urgent and difficult development challenges. While various government and development partner initiatives have significantly improved living conditions in Ger areas, approaches have generally focused on specific sectors, failing to design a sustainable vision and provide integrated solutions for the problems of peri-urban development.

[12]The World Bank, World Development Indicators, 2017.http://data.worldbank.org/indicator/SP.POP.GROW?locations=MN

[13]United Nations Statistics Division, 2017. Online at http://data.un.org/Data.aspx?q=mongolia+urban+&d=POP&f=tableCodepercent3a1percent3bcountryCodepercent3a496

[14]Government of Mongolia, UNDP and SIDA (2011, p87) Mongolia human development report

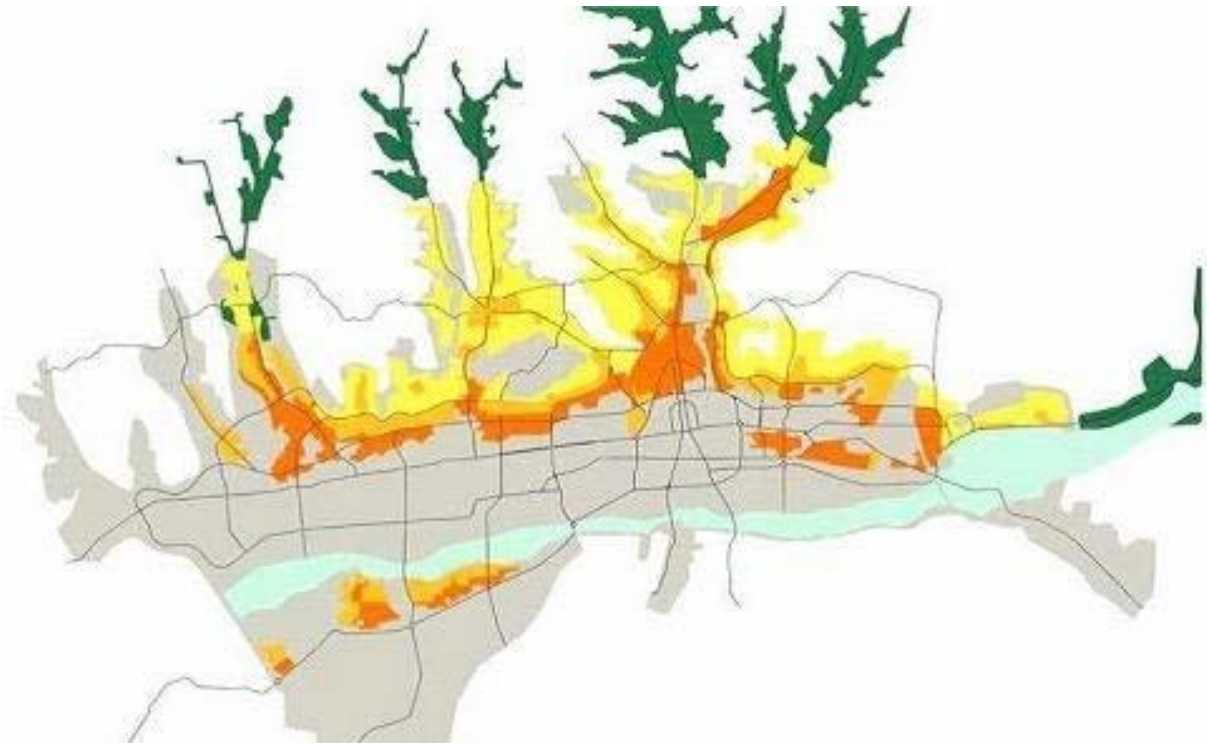


Figure 7: Ger district sections. Aqua blue-river basin, bright orange-central Ger areas, orange-middle Ger areas, yellow-peripheral Ger areas, grey-city area, green-green/camp zones. *Source: Ulaanbaatar City Development Strategy-2020 and Development trend until 2030.*

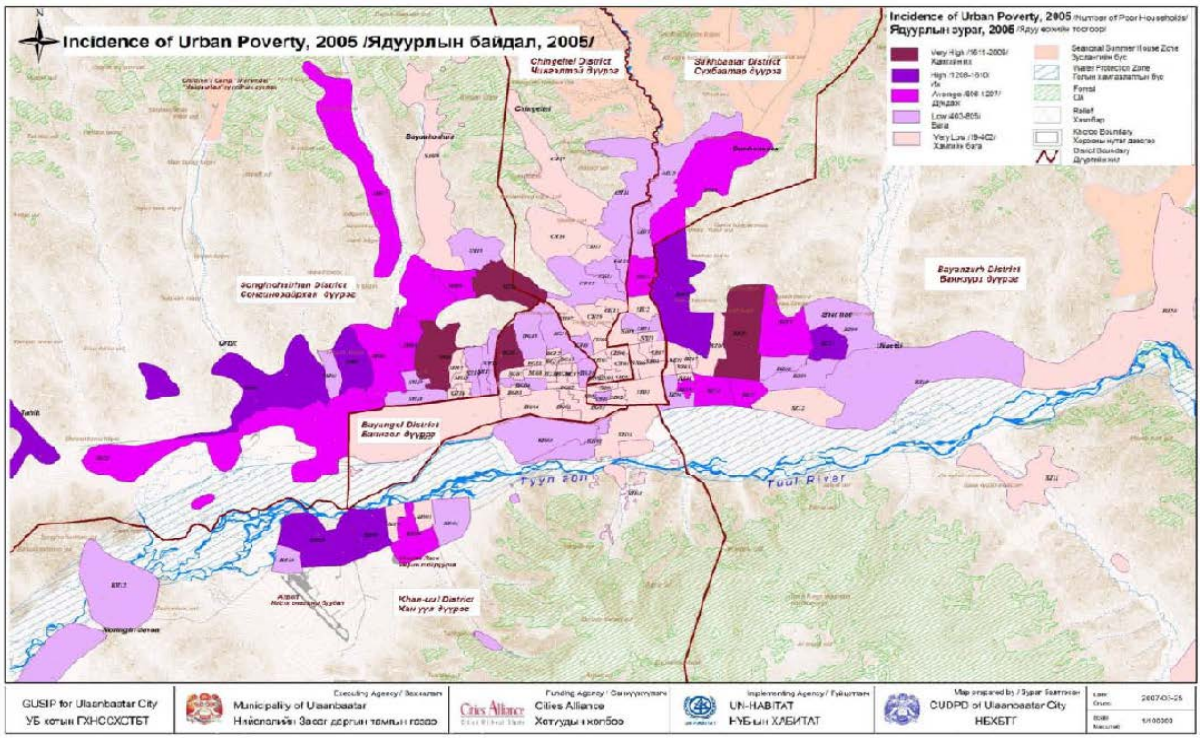
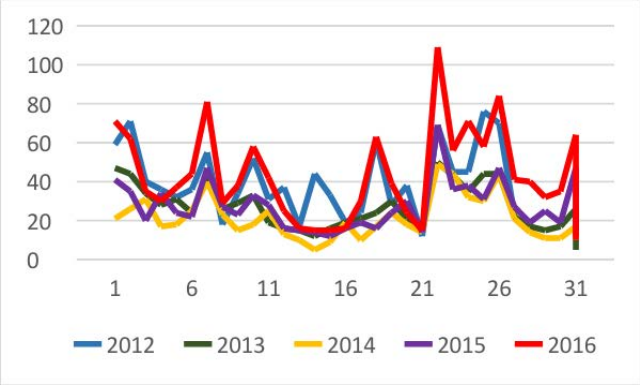


Figure 8: The Urban Poverty Profile – generated as part of the Citywide Pro-poor "Ger Upgrading Strategy and Investment Plan" (GUSIP) programme by Cities Alliance and UN-Habitat in collaboration with the Government provides a snapshot of Urban Poverty, especially in the Ger Areas of Ulaanbaatar City in 2005.

Environmental context

The Mongolian topography is characterized by a clear north-south divide. While the north is dominated by huge mountain ranges, deep forests and steppe, the southern parts of the country are of much lower elevation, and consist of mainly parched lands such as deserts and desert steppe. A significant area of the south is covered by the Gobi Desert, one of the largest desert regions in Asia that also covers parts of northern and north-western China. Mongolia is rich in mineral resources such as gold, silver, coal, precious stones, and gravel. Its mining sector is among the driving economic forces in the country, however these industrial activities are a major cause of parts of rivers becoming heavily polluted. Rivers, such as the Tuul River for example, are not only utilized for industrial purposes, but also for household and drinking water consumption. The Tuul River is among the most polluted fresh water sources in the country. It flows through the centre of Mongolia as well as UB City.

The negative environmental impacts of city growth are urban air pollution caused by increased energy consumption and use of coal, pressure on water resources, accumulation of solid wastes, impact on forests and protected areas nearby. The city core where jobs and services are concentrated has experienced unprecedented congestion, due to rapidly increasing private vehicle ownership and use, while the urban road and public transport networks have not kept pace with this rapid growth in traffic demand.



Living conditions in Ger areas are particularly inadequate. Poor sanitation—households almost exclusively rely on open pit latrines—and poor waste collection practices have created highly unsanitary living conditions. Related to this, Infectious diseases (especially dysentery and hand and mouth diseases) are increasingly becoming a problem in Ger areas where toilets often overflow, leading to water and soil pollution.

Figure 9: Infectious disease (hepatitis, dysentery, salmonella, food poisoning, etc.) incidents within 32 Khoroos in Songinohairkhan District during 2012-2016

Air pollution is among the worst in the world, particularly during winter because of inadequate household heating systems, traffic jams and dust from unpaved roads. Access to water, supplied by kiosks operated by the Ulaanbaatar Water Supply and Sewerage Authority (USUG), is limited. There is a significant in-equality in access to water between ger residents who have to pay a premium for the cost of water, above all other residents/industries/businesses/institutions – it was found that the total volume of water use/consumption by ger residents (who constitute 60% of the city population) was 1.7 m3 mill/year equating to 2.1% of the total consumption by the entire city; they however pay the highest water tariffs amongst local residents at 442 Tug/m3 – higher than piped water to metered apartments (40 tug/m3), piped water to households (95 tug/m3) and even higher than piped water to industries and businesses (200 tug/m3).

In the same vein, a pressing issue to note is the significant decline in groundwater tables in Ulaanbaatar over the past 50 years. Current annual demand for water is in excess of 77 million cubic metres (supplied by USUG). With the population forecasted to rise by another 400,000 over the next 5 years, the demand will also increase significantly. Furthermore, land management practices for industry, tourism and settlements expansion upstream in the Tuul ecosystem will also have an impact on the availability of clean, regular and sufficient river flow and groundwater resources for UB city.

Upstream ecological conditions in the Tuul ecosystem therefore have a direct relation the availability of groundwater and surface water downstream in Ulaanbaatar, where demand will continue to rise.

Project approach

With six out of every ten Mongolians living in urban areas, approaches for reducing vulnerability and increasing sustainability in urban areas will have a significant impact on national level development.

As Ulaanbaatar pursues its sustainability agenda by following the initiatives of wealthier nations through mass urbanisation, ambitious urban renewal projects and adapting the city to handle mobility issues around increasing traffic; it is at risk of ignoring the increased vulnerabilities to climate change related risks which then gradually reduces its own capacity for resilience. It is ironic that one of the historically most resilient and adaptive populations (through its nomadic heritage) is rapidly becoming one of the most at-risk and least prepared for climate change. For this process to be reversed, Mongolia's policy makers and urban planners should not only design the city as they believe it 'should be', based on archaic principles of projection-based top-down urban planning but also 'plan' the cities as a place for people -design it with the population at its core, using bottom-up community led approaches. UB City is faced with a limited, and urgent, window of opportunity to address increased vulnerabilities to climate change related risks and increase its own capacity for resilience.

At the basis of increasing urban resilience is to create incentives for the community to adapt by themselves, empowering the Ger-district communities to become the key stakeholders in their own resilience strategies. A key positive externality of such participative capacity building is the creation of a common social thread between the members of the community who have been removed from their tight-knit rural communities and find themselves living in an increasingly overcrowded environment. Stronger social ties amongst the urban poor reduces the threat of conflict and provides an essential support group post-disaster and at times of need. Without a strong and connected community at its foundation, strategies for improving their lives, including becoming more resilient to climate change, becomes very challenging. The creation of a sense of social harmony between the urban policy makers, the residents and the emergency responders allows for improved communication and the sharing of experiences which would ultimately lead to greater social resilience.

UN-Habitats' community development approach, the People's Process[15] lends itself to achieve this purpose very well, as successfully demonstrated by previous and ongoing projects implemented in Ger- communities on the areas of *water sanitation and infrastructure services* as

[15] See Annexes 5,6 People's Process brochure and Poster.

well as *urban health systems strengthening, urban planning* and *affordable housing,* primarily in partnership with the Municipality of Ulaanbaatar and other stakeholders.

Building on the policy directions and strategies of the Government of Mongolia on climate change and resilience and complemented by consultation with national government experts, the Governor's office, District level Governor's and khoroo authorities on (i) the priority climate adaptation need for flood resilience and (ii) identification of the most vulnerable locations which experience repetitive flooding; UN-Habitat has conducted Rapid Assessments and consultations in these Ger-Areas with most at risk communities and designed the project components based on the finding of this evidence within the framework of national policies and strategies.

Target Khoroos (communities)

The Flood Risk Assessment and Management Strategy of Ulaanbaatar City supported by the World Bank, specified the most vulnerable target settlements for hazard and risk mapping and the production and improvement of adaptive infrastructure, which were: (1) Tolgoit zuunsalaa, (2) Mon Laa (3) District III, IV flood control levee (4) Selbe river (5) Gorkhi and (6) Baatarkhairkhan Uliastai river. These are located on the territories of i) 12, 13, and 14th khoroos of Sukhbaatar district; ii) 21, 27, 8, 23rd khoroos of Bayanzurkh district; iii) 25, 7th khoroos of Songinokhairkhan district; and iv) 9th khoroo of Bayangol district[16].

Further consultation with Governor's and the three (3) district authorities of SonginoKhairkhan, Sukhbaatar and Bayanzurkh districts identified the below 7 khoroos (sub-districts) as the most vulnerable in terms of either being impacted by floods or areas from which run-off takes place on a frequent basis. These districts fall amongst the biggest in terms of population size and the fastest growing in Ulaanbaatar. The 7 Khoroos have a total population of 88,839.

In these areas, in summer, when ice melts and rain falls, water comes down from the northern hills, leading to floods around gully's and rivers. These floods affect houses, other assets and lead to overflow of latrines, heavily polluting water and soil, which in turn lead to increased incidents of disease often affecting children. Extreme flood incidents are also increasingly recorded in Ulaanbaatar, not only destroying houses and assets, but also causing death. This is especially relevant in Khoroo (i.e community) 24, where new informal settlers have started to move into the riverbed. In the downhill / lower-lying Khoroos, another problem besides floods is stagnant water build-up and rising groundwater. This stagnant water, which is polluted due to overflow of the latrines, often from upstream, can stay for months and impedes the mobility of residents and access to critical services, with cars, ambulances, fire trucks, etc. not being able to enter the Khoroo. After the summer, the stagnant and polluted water freezes to then melt again in summer.

From a technical perspective, the situation is aggravated by non-existent or not properly designed drainage systems and low-quality and basic design latrines that not take into account flood risks. Besides that, there is limited awareness of flood risk zones and health risk. As mentioned above, people build their houses in the middle of the river or in the path of gully's. Moreover, pit latrines are sometimes emptied on the street.

Overview of 3 target areas and localized climate change / flood impacts and resilient

[16]Flood Risk Assessment and Management Strategy of Ulaanbaatar City 2015-Volume 1, World Bank, Page 3

building needs

Area 1: Songino-khairkhan district (north-west) Khoroos 24, 25 and 7

Khoroo 24 and 25, which are located between hills in the west and east and above Khoroo 7, experiences floods gullies from the west and east and in the case of Khoroo 24, from the river coming from the north. The main issues here is new informal settlers moving into the river bed and sanitation issues due to floods. The polluted flood water going down then enters Khoroo 7, which also receives polluted flood water from 25 in the north-east. Besides that, stagnant water is considered a big problem as it causes health issues and limits access. Due to high population density and prevalence of above issues, this is considered the hotspot area of this project.

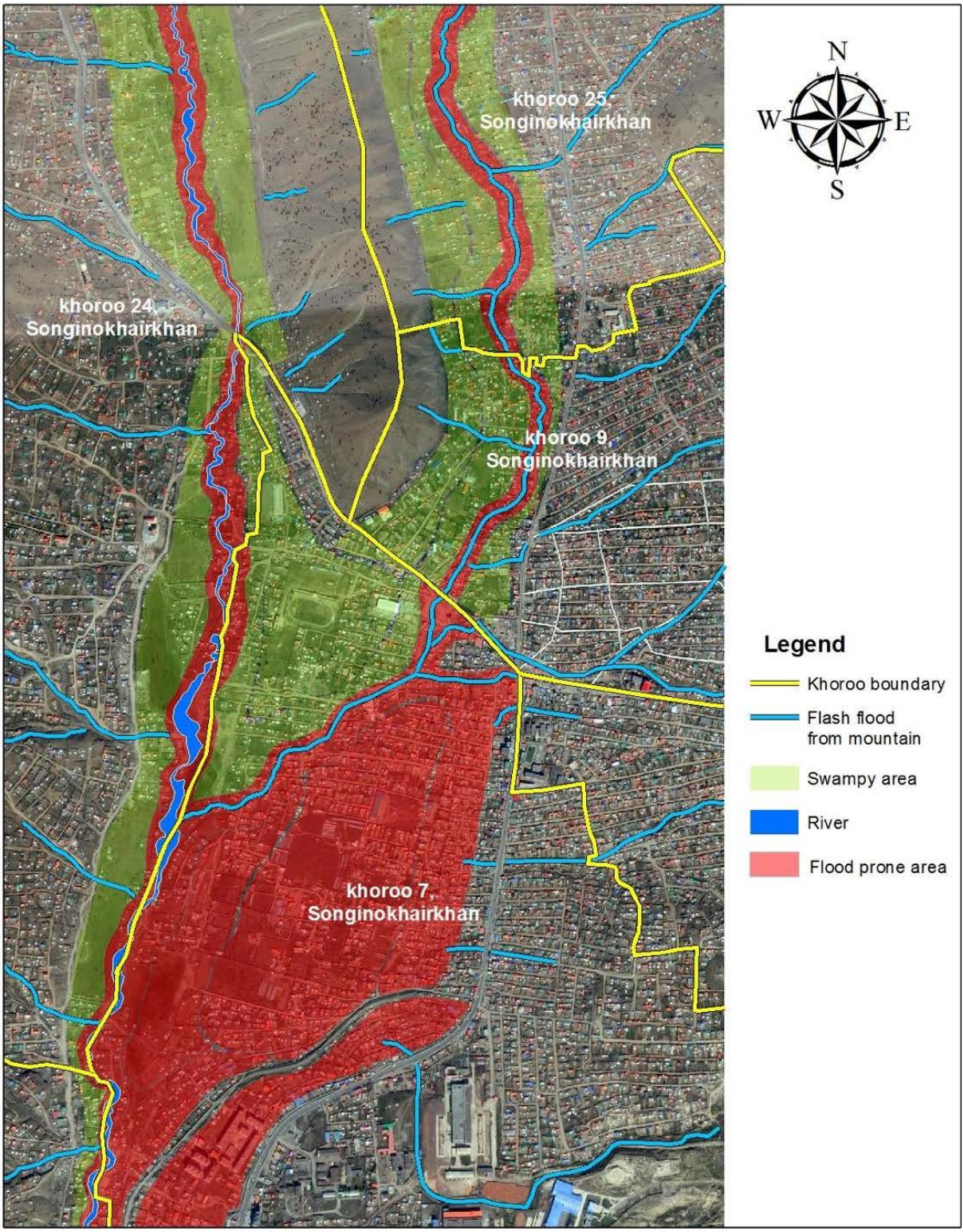


Figure 10: Area 1- Songino-khairkhan district (north-west) Khoroos 24, 25 and 7 localized climate change / flood impacts

Area 2: Sukhbaatar district (north-central) Khoroo 12, 13 and 16

Khoroo 12, 13 and 16 are located next to the main Selbe river. Khoroo 16, on the east side, experiences floods from the river and is muddy / wet, leading to extremely poor sanitation issues. The same muddy / wet situation continues in Khoroo 12 and 13 on the west side of the river. However, these two khoroos are protected from the river by walls on the east side and the water here, comes from flash floods from the hills to the west

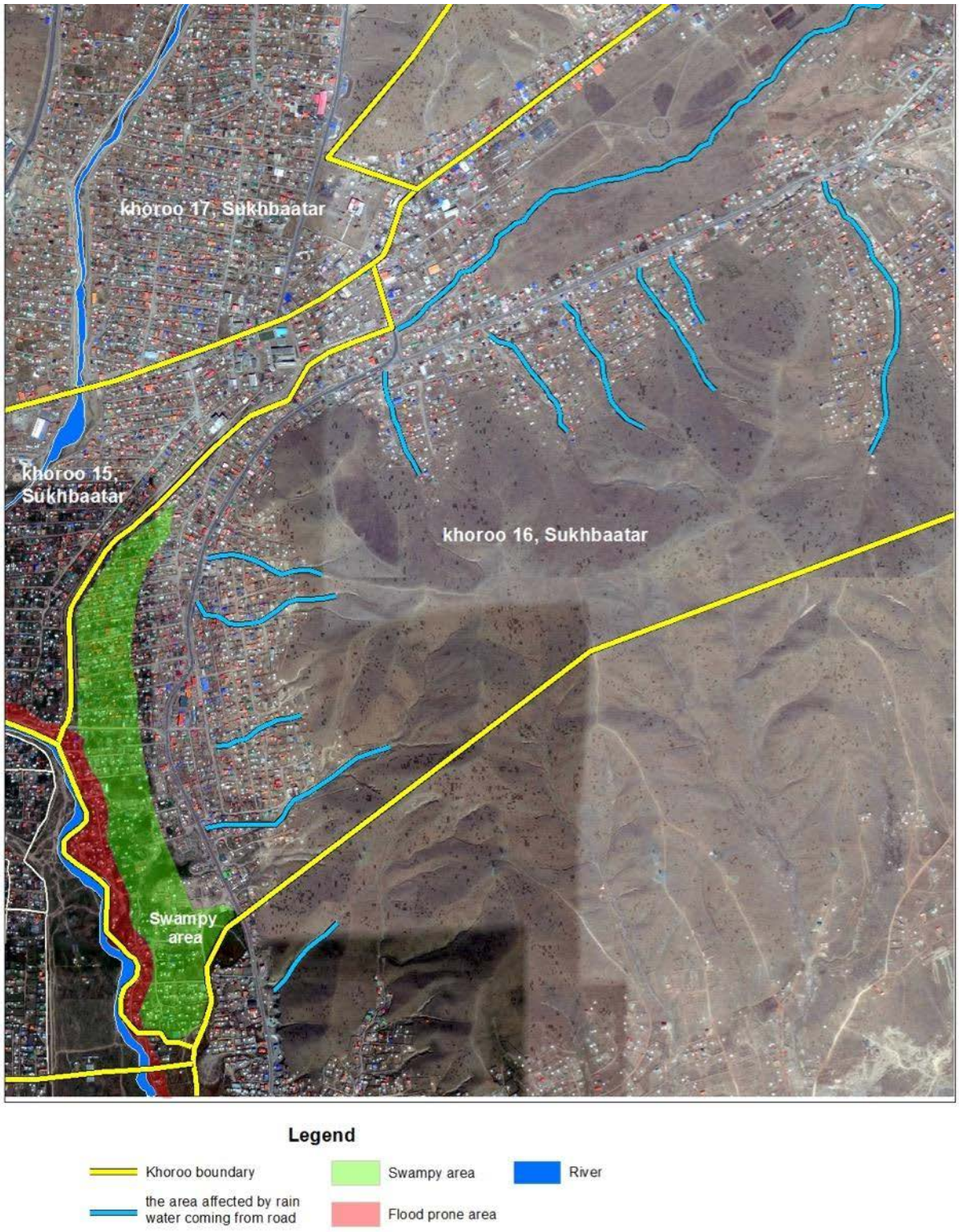


Figure 11: Area 2: Sukhbaatar district (north-central) Khoroo 16 localized climate change / flood impacts

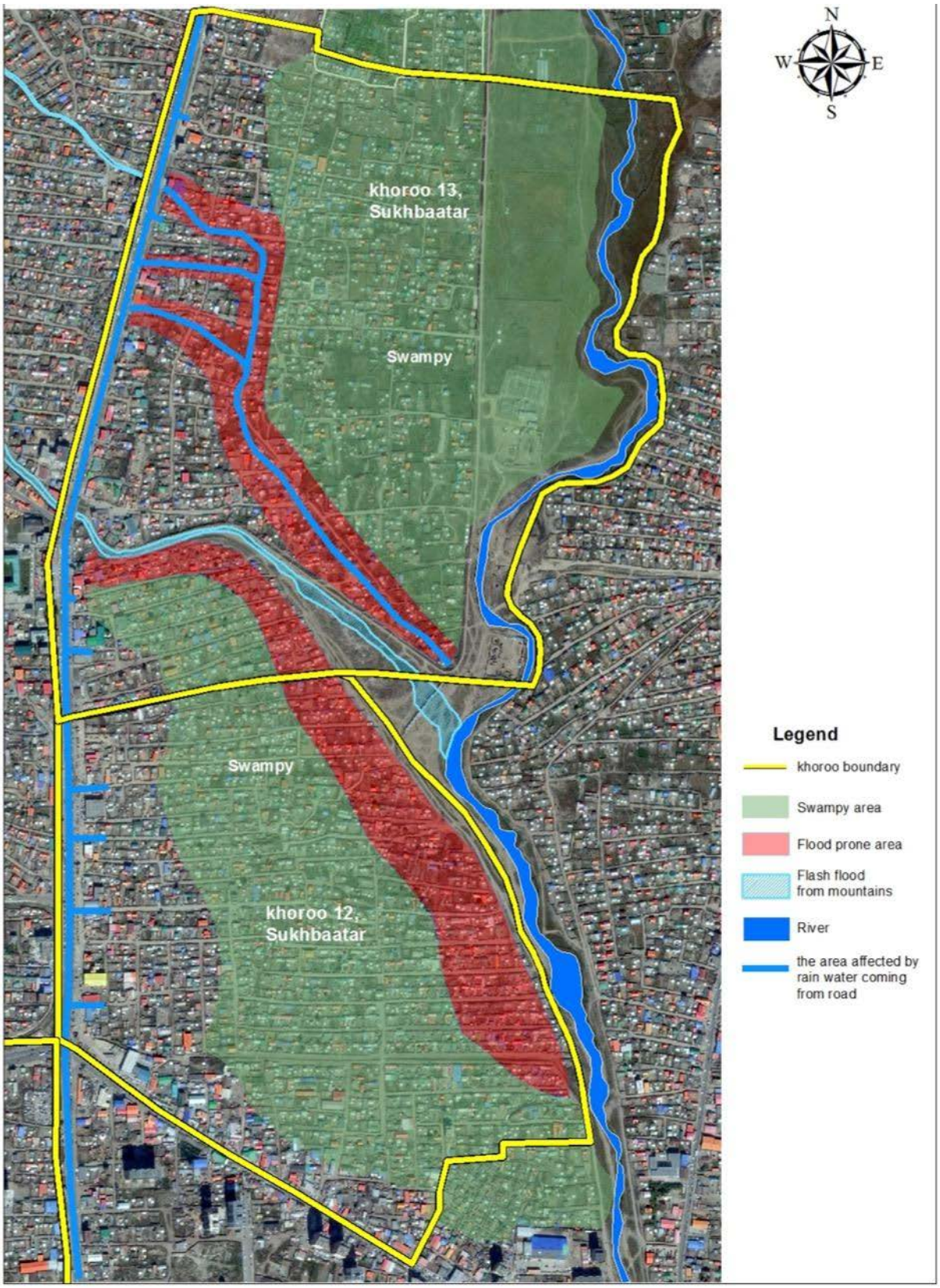


Figure 12: Area 2: Sukhbaatar district (north-central) Khoroo 12 and 13 localized climate change / flood impacts

Area 3: Bayanzurkh district (north-east). Khoroo 9

Khoroo 9, which is located next to a hill in the north and the main Uliastai river on the east experiences floods from both the hill and a secondary arm of the river. This water from the arm flows south into an informal area literally through house plots. In this area, there is also a problem of stagnant water and sanitation overflow. In the center of the Khoroo, a school and hospital and the south-eastern part are of risk of floods from gullies from the north-west. Khoroo 9, as can be seen by the prevalence of floods, as the second flood hotspot risk area.

Figure 13: Area 3: Bayanzurkh district (north-east). Khoroo 9 localized climate change / flood impacts

Table 1 below provides an overview of the target Khoroos with the localized climate change impacts and effects, vulnerabilities, barriers to adaptation and prioritized concrete resilience building interventions by the communities. It is clear that the main problems are river and flash floods, water and soil pollution due to overflow of pit latrines and muddy / swampy areas, caused by a combination of floods and groundwater coming to the surface. In summer, these muddy / swampy areas are not accessible to cars, ambulances, fire trucks, etc. and difficult to cross by foot. In winter, these areas are frozen.

When examining the disaggregated population data, it becomes clear that the demographic of these ger populations resembles that of a developing country with a high prevalence of youth /children* at more than 30%. The characteristics of such populations are high dependency ratio of younger population over the older/working population accompanied by a smaller percentage of older population who also have a shorter life expectancy of around 60 years.

*Moreover, youth by UN definition, falls within the 18-30 year age group and the under 18 age group are classified as children – so the proportion of children and youth amongst these Ger- populations are likely to be even higher and possible more than 50% prevalence.

The project proposal has considered taking an approach which prioritizes the involvement of youth in project activities even though earlier attempt to do so have shown little success. Women on the other hand are very active in the communities as well as the government. Therefore, the project will especially target women committees and particularly younger women/youth within the 18-30 age group. The project will also make efforts, through focus group discussions for instance, to identify barriers to youth involvement in project activities as well as identify opportunities and synergies for their involvement, during implementation of community led 'People's Process' activities.

Table 1: Target areas, local climate change impacts and effect, vulnerabilities, barriers to adapt and prioritized concrete resilience building interventions

Khoroo	Popu-lation / bene-ficiaries	Main climate change impacts / Hazards	Effects on communities	Underlying vulnerability	Ba
District: Songino-khairkhan (north-west)					
7	**20.128** Households: 5510 (3,7 per house) Women: 10.259 >65: 775 <18: 6241 Disabled: 254	- Floods from Khoroo 24 and 25 - Flash floods - Stagnant water - Harsh winter and air pollution	- Flood leading to damaged / destroyed assets and toilet overflow and water / soil pollution - Diarrhea and other infectious disease are caused by water / soil contamination - Muddy area in summer resulting in cars, ambulances, etc. not able to enter	- High poverty - Limited basic services - No secondary drainage system and waste from ceramic industry	- Limite Khoro contro - Lack empo - Lack organ - Lack syste and f
24	**13.689** Households: 4040 (3,4 per house) Women: 7145 >65: 706 <18: 2736 Disabled: 45	- Floods - Flash floods - Strong wind and storm - Harsh winter and air pollution	- Floods causing high risk of informal settlers in river bank. - Flood leading to damaged / destroyed assets and toilet overflow and water pollution - Diarrhea and other infectious disease are caused by water / soil contamination	- Informal settlers (immigrants) in riverbed - High poverty - Limited basic services	
25	**13.680** Households: 3488 (3,9 per house) Women: 7082 >65: 1536 <18: 4801 Disabled: 290		- Flood leading to damaged / destroyed assets and toilet overflow and water pollution - Diarrhea and other infectious disease are caused by water / soil contamination	- High poverty - Limited basic services	
District: Sukhbaatar (north-central)					
12	**7.162** Households: 2182 (3,3 per house) Women: 3585 >65: 416 <18: 2446 Disabled: 213	- Floods - Flash floods - Stagnant water - Harsh winter and air pollution	- Flood leading to damaged / destroyed assets and toilet overflow and water /soil pollution - Diarrhea and other infectious disease are caused by water / soil contamination - Muddy area in summer resulting in cars, ambulances, etc. not able to enter	- High poverty - Limited basic services - Poor or non-existent drainage system - Dam situated in the middle of the khoroo is highly polluted - Low elevation	- Limite Khoro contro - Lack empo - Lack organ - Lack syste and f - Police coope surve dispo
13	**9.136** Households: 2522 (3,6 per house) Women: 4617 >65: 281 <18: 2879 Disabled: 239				- See a - Resid lack p - 5 peo clean salary clean impor holida

16	**11.945** Households: 3127 (3,8 per house) Women: 6128 >65: 466 <18: 4329 Disabled: 288	- Flood from the main river Flash floods - Harsh winter and air pollution		- High poverty - Limited basic services - Poor or non-existent drainage system - Waste and burnt materials comes down waste recycle center	- Limite Khoro contr - Lack empo - Lack organ - Lack syste and f
District Bayanzurkh (north-east)					
9	**13.701** Households: 3785 (3,6 per house) Women: 6994 >65: 239 <18: 4980 Disabled: 537	- Floods - Flash floods - Heavy air pollution in winter -	- Flood leading to damaged / destroyed assets and toilet overflow and water / soil pollution - Diarrhea and other infectious disease are caused by water / soil contamination	- High poverty - Limited basic services - Poor or non-existent drainage system - Lack of toilets at last bus stop	- Limite Khoro contr - Lack empo - Lack organ - Lack syste and f

During the rapid assessment and consultations of these Khoroos by the UN-Habitat community mobilization team (see full assessments link in the consultation section), the areas on the maps below have been identified and confirmed by the communities as high-risk flood areas.

Flood impacts in target communities – in photos

Songino-khairkhan district 7th khoroo (Rain in 2017.06.20)

Flooding of main road sinkhole constructed by the Geodetic Water Facility Office of the Housing Authority *(UN-Habitat June 2017)*

Polluted *Photo (UN-Habitat June 2017)*


Basement of the 12th apartment of Khilchin hothon – flood water and ground-water penetrating from the walls and floors leading to power cut restriction of 670 households*Photo (UN-Habitat June 2017*



Flood due to lack of flood seweage and canal in households near 0119th military unit and1-4 streets Photo *(UN-Habitat June 2017)*

2. Project Objectives

Main objective

The main objective of the proposed project is to **enhance the climate change resilience of the seven most vulnerable Ger khoroo settlements focusing on flooding[17] in Ulaanbaatar City** by:

1. Improving the knowledge on flood hazard and risk exposure and vulnerability for these areas
2. Improving the resilience and adaptive capacity of the Ger settlements through a Community-Based approach (i.e. building social cohesion per Khoroo)
3. Increasing resilience Ger area physical infrastructure and services, supported by enhanced capacities of responsible district level and khoroo authorities.
4. Strengthened institutional capacity to reduce risks and capture and replicate lessons and good practices

The main component of the project will be the provision of flood resilient physical infrastructure and services, building on the priorities as communicated by the UB city authorities and Khoroo communities and evidence made available and supplemented with hazard and risk mapping and land use planning and delivered within the framework of enhanced capacities and awareness for resilience and risk reduction at Ger -district and community level.

[17] As identified in the Flood Risk Assessment and Management Strategy of Ulaanbaatar City supported by the World Bank

3. Project Components and Financing

Table 2: Project components and financing

Project Components	Expected Concrete Outputs	Expected Concrete Outcomes	Amount (US$)
Component 1 National/City Level Producing hazard and risk information / evidence for increasing resilience and developing land use plans to increase this resilience at UB City level.	**Output 1.1** **One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan,** with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2[18] **(includes the three (3) high risk target districts covering the seven (7) most vulnerable khoroos)*	**Outcome 1.1** Relevant threat, hazard information, evidence and recommendations (on land use and zoning) generated for increasing resilience at the city level (In line with AF outcome 1: reduced exposure at national level (which is also city level in Mongolia) to climate-related hazards and threats).	91,790
	Output 1.2. **Simulation model** for forecasting future impacts of climate change flooding **in UB city & Ger-areas** established[19]		60,000
	Output 1.3 **Seven (7) Detailed Ger-khoroo level Land Use Plans** with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people[20]		250,000
		Total	**401,790**

[18] In line with National priority: Nationally Determined Contribution: Relevant adaptation needs: to conduct disaster risk assessments at local and sub-national levels. Also in line with national priority: Green development policy 2014-2030: 6) Develop and implement a population settlement plan in accordance with climate change, while considering the availability of natural resources and the resilience of regions. Also in line with Ulaanbaatar municipality Flood Risk Assessment and Flood Risk Management Strategy (FRMS) of Ulaanbaatar City.

[19] In line with National priority: National Action Programme on Climate Change: 4) Enhance the national climate observation, research and monitoring network and strengthen employees' capacity

[20] In line with National priority: Green development policy 2014-2030: 6.2. Reduction of air, water and soil pollution by implementing improved plan for urban land use, construction zoning and infrastructure and creating appropriate legal framework on accountability

Component 2 Khoroo/Community level Participative planning and capacity development for flood resilience in Ger-areas at the district / khoroo and community level (including activities to operate and maintain - and mitigate any potential risks related to - the interventions under component 3).	**Output 2.1** **Seven (7) Khoroo-level floods resilience action plans** to implement the interventions under component 3**;** A series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of interventions under component 3.[21]	**Outcome 2.1.** Target community members are aware of resilience building and climate risk reduction processes and have ownership over proposed interventions at the District, Khoroo and community level (In line with AF outcome 3: strengthened awareness and ownership of adaptation and climate risk reduction processes at local level).	195,390
	Output 2.2 **Khoroo community level interventions operation & maintenance* and awareness** campaigns and trainings to support the sustainable implementation of interventions under component 3. An Estimated 20.nos. of trainings **(Awareness will also cover potential risks mitigation)*		212,956
	Output 2.3 **Technical studies – Engineering and hydrological** - required to implement the interventions under component 3.		50.000
		Total	**458,346**
Component 3 Enhance resilience of community level flood protection assets	**Output 3.1.** **Physical assets developed or strengthened in response to climate change related flood impacts** as prioritized (by Khoroos drainage[22] and sanitation[23]) – implemented through community contracting	**Outcome 3.1** Increased adaptive capacity within prioritized community assets (In line with AF outcome 4: increased adaptive capacity within relevant development and natural resource sectors).	2,225,904
	Output 3.2 **Management & operations; design & supervision of assets / physical infrastructure** – procured as consulting services		418,780
		Total	**2,644,684**

[21] In line with National priority: National Action Programme on Climate Chang: 5) Conduct public awareness campaigns and support citizen and community participation in actions against climate change

[22] In line with Ulaanbaatar municipality priority: Ulaanbaatar 2020 master plan and development approach for 2030: Storm water and flood management: Engineering flood protection measures will include managing infrequent spring floods, draining rainwater from roads and squares, securing groundwater, strengthening channels and reducing land degradation.

[23] In line with National priority: Green development policy 2014-2030: 2.9. Increase the capacity and productivity of water supply and sewerage facility, provide at least the 90percent of the population with drinking that meets hygiene standards, and provide access to improved sanitation to at least the 60 percent of the population.

Component 4 Awareness raising, knowledge management and communication	Output 4.1. **Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities,** civil society, and policy-makers in government appropriate mechanisms. **Output 4.2** **Workshops and trainings** will be organised targeting city- and district government officials with a focus on replication of processes, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans.[24]	Outcome 4.1. Institutional capacity strengthened to develop and replicate this approach (In line with AF outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses).	244,682
		Total	**244.682**
5. Total components			3,749,501
6. Project/Programme Execution cost			393,593
7. Total Project/Programme Cost			4,143,094
8. Project/Programme Cycle Management Fee charged by the Implementing Entity			356,130
Amount of Financing Requested			4,499,224

Projected Calendar:

Table 3: Projected Calendar

Milestones	Expected Dates
Start of Project/Programme Implementation	09-2018
Project/Programme Closing	09-2022
Terminal Evaluation	09-2022

[24] In line with national priority: National Action Programme on Climate Change: 1) Set the legal environment, structure, institutional and management frameworks for addressing on climate change.

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Project components

The seven target Ger communities in Ulaanbaatar are characterized by a high exposure to multiple climate hazards ranging from wind and dust storms, air pollution and particularly by floods - found to be the main climate issue that required urgent addressing by the communities during the risk and needs assessment and consultations; prioritized as a key adaption issue by municipal government; as evidenced in city/national risk assessments and subsequently stated in city/national level climate strategies and plans .

Ulaanbaatar's climate sensitivity is underpinned by rapid urbanization driven by massive population growth; and is leading to people residing in high-risk unplanned areas, in unsanitary conditions, engaging in unhygienic behaviour, all of which exacerbates public health risks. Underlying vulnerabilities are poverty, limited social ties trust and cohesion, limited access to basic services and environmental degradation. Moreover, the adaptive capacities at household, community and governance level are barriers for change as there exists very limited knowledge and awareness of risks and their vulnerability.

To achieve the overall project objective, **"enhance the climate change resilience of the seven most vulnerable Ger khoroo settlements focusing on flooding[25] in Ulaanbaatar City"** the project will focus on soft and hard components: combining horizontally and vertically interrelated resilience strengthening of national and city institutions, local government and khoroo[26] communities; and resilience building measures for their physical, natural and social assets.

The project intends to promote and improve vertical inter-departmental collaboration particularly by facilitating engagement between the Ministry of Environment and Tourism and the Municipal authorities at all levels, as a key gap that has not yet been addressed in Mongolia is the rollout and implementation of national level climate policies and strategies at the urban level. Furthermore, capacities for resilience building within Districts and khoroos are weak, with pressing demands for urban services & development, in the face of rapid expansion, overburdening local authorities. Therefore, the level of collaboration around the issues of urban resilience and climate adaptation between local authorities at District and khoroo level as well as with communities, have been minimal to date. There is, however, significant emergency and disaster response capacity in rural and urban areas, through the National Emergency Management Agency (NEMA) - the project will thus work with the NEMA team under the Municipality, particularly harnessing existing capacities for the advocacy and training components for local authorities and communities and streamlining with on-going initiatives as necessary. Therefore, institutional capacities and information sharing will be strengthened and harmonized horizontally between different technical institutions responsible for climate resilience, environmental protection and risk reduction activities as well as local authorities within the Municipality, whilst also broadening the vertical outreach of these institutional and municipality to high-risk communities. This integrated approach will also allow for completion of feedback loop to inform and develop future urban climate policies,

[25] As identified in the Flood Risk Assessment and Management Strategy of Ulaanbaatar City supported by the World Bank

[26] Khoroo - sub-district

strategies and frameworks, building on the comprehensive adaptation measures to be implemented at city, district and khoroo community level.

By taking a comprehensive approach of national policy-level institutional capacity strengthening at city, district and khoroo level including support for community level actions for resilience building, that respond to current and future needs, all actions will benefit the inhabitants of the Ger settlements while aiming to sustain the identified concrete adaptation measures. This combination of soft and hard interventions, will contribute to sustainably strengthening local resilience particularly at the household, community and informal settlements level.

The core focus on concrete adaptation measures also lends 'voice' to the priorities of the high-risk communities and vulnerable Ger-residents demonstrating quick impact within the duration of the project. Through showcasing impact, the project intends to generate 'demand'; and supply the software, tools and methodologies necessary to urban authorities for replication of these best-practices and community led approach, to other high risk Ger communities.

The specific needs of women, recent migrants and youth (18-30 years) will be considered at all stages of the project. This is achieved through engaging representatives of these vulnerable groups in community and stakeholder consultations through the community-based approach (i.e. the people's process)[27] – where community primary groups are formed and sustained throughout all stages of the project and through which communities participate in project implementation: in planning, executing activities and monitoring. Given the predominance of youth and young population within the Ger demographic – a key focus will also be to target involvement of young women and men during the community level project consultations and planning, and identify opportunities for their engagement during implementation and monitoring; as well as in the knowledge dissemination and awareness building component.

Table 4 below provides an overview of proposed core interventions and activities and supporting activities required to operate and maintain (and mitigate potential risks) of these concrete interventions. Before this table, there a short description of the proposed concrete interventions in the target areas is provided.

Component 1: Producing hazard and risk information / evidence for increasing resilience and developing land use plans to increase this resilience at the city, District and Khoroo level.

In line with AF outcomes 1 and Mongolia and Ulaanbaatar Government priorities (see section D), this component will focus on reducing vulnerability to climate-related hazards and threats both at the city/town and community level by:

1.1. Developing **(1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan,** with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2 **(includes the three (3) high risk target districts covering the seven (7) most vulnerable khoroos)*

1.2. Developing a simulation model for forecasting future impacts of climate change flooding in UB city & Ger-areas

1.3. Developing seven (7) Detailed Ger-khoroo level Land Use Plans with specific focus on

[27] Please refer to Annex 5 for more details about UN-Habitat's community engagement approach – The People's Process

flood risk reduction and building resilience of the most vulnerable areas and people

The information generated and included in the land use plans and simulation model will allow the municipality, district authorities and khoroo communities to understand climate change related impacts and risks and to identify appropriate, community specific resilience interventions based on this information (this in addition to the concrete interventions that will be implemented under this project). This component is required because the current information on climate change impacts and risk (e.g. the World Bank flood risk assessment) is not detailed enough to identify appropriate risk reduction and resilience building interventions at the community level, including information that advocate for reduction/prevention of people moving into high risk areas. The plans will also include land re-adjustment and further planning options for plots, roads, assets, etc., by taking into account hazard risks, whilst also addressing other sector needs.

A northern Ger-Area Territorial Land Use Plan, including zoning and legal framework recommendations, is further required for a holistic planning approach of the Ger areas. It is important to note here that the vast majority of the urban sprawl and Ger-areas are concentrated in the north of UB city.

All information collected, and assessment reports, plans and strategies will be made available on a digital format in Mongolian and English and uploaded on the Municipality of Ulaanbaatar's web portal and spatial database. The simulation model will be launched online by the Ministry of Environment and Tourism and linked to the cities' environmental and geospatial databases.

Component 2: Participative planning and capacity development for flood resilience in Ger-areas at the district / khoroo and community level (including activities to operate and maintain - and mitigate any potential risks related to - the interventions under component 3).

In line with AF outcomes 3 and Mongolia and Ulaanbaatar government priorities (see section D), this component will focus on strengthening awareness and ownership of adaptation and climate risk reduction processes and capacity by:

2.1. Developing seven (7) Khoroo-level floods resilience action plans to implement the interventions under component 3; a series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of interventions under component 3. Developing seven (7) community-level High-risk Ger areas resilience action plans.

2.2. Khoroo-level interventions operation and maintenance (and potential risks mitigation) awareness campaigns and trainings to support the sustainable implementation of interventions under component 3. An estimated twenty (20) number of trainings will be conducted.

2.3. Technical studies – Engineering and hydrological - required to implement the interventions under component 3.

This component aims at fully involving communities in the planning and execution of the proposed interventions under component 3; to ensure the proper operation and maintenance (and implementation of potential risk mitigation measures) of these interventions through community involvement. Under component 3, Khoroos communities will be directly contracted to execute the

concrete interventions. The Khoroos communities will develop plans to execute these interventions, including management and maintenance arrangements. In parallel with these plans, technical engineering and hydrology studies will be conducted to ensure the assets are properly designed.

To ensure inhabitants are aware of the main issues and risks (including environmental and social risks of interventions) in their communities and to be able to respond to these issues and risks, awareness raising campaigns will be set-up and trainings conducted.

For the management and maintenance of flood resilient infrastructure, UN-Habitat proposes to build on the role and functions of the Community Development Councils (CDC's) that are formed as part of the People's Process for all projects and that are currently operational or have been operational - and will be strengthened by community nomination of members specifically to oversee the implementation, management and monitoring of community assets and infrastructure which help adapt to increased flooding management. These CDC's will also be the key recipients of community level trainings.

The Ministry of Environment and Tourism and other key stakeholders will be invited to participate/observe the implementation of People's Process at the urban level and provide technical advisory inputs.

Component 3: Enhance resilience of community level flood protection assets

In line with AF outcomes 4 and Mongolia and Ulaanbaatar government priorities (see section D), this component will focus on increasing the adaptive capacity of relevant development and natural resource sectors by:

3.1. Developing or strengthening physical assets in response to climate change related flood impacts as prioritized by Khoroos.

3.2. Management and operations design & supervision of assets / physical infrastructure – procured as consulting services.

During the rapid Khoroo-level vulnerability assessment, prioritization and vulnerable groups consultations, communities identified and confirmed two main concrete resilience building interventions: improved drainage systems to reduce floods and improved sanitation systems that won't overflow during floods and lead to health issues.

Thus, these interventions have been selected to respond to the most pressing Khoroo-specific climate change hazards.

As this would be the first time to implement the Peoples Process in some of the proposed Ger-areas it is critical that the local authorities and communities are exposed to the rigorous and complex combination of implementation and monitoring approaches and guidelines that will be put in place; from technical compliance and quality to management accountability, transparency and safe-guarding the rights-based approach of the People's Process. An international advisory technical team, familiar with the roll-out of the People's Process closely working with the national execution team to adapt the approach to suit the local context,– with all its' cultural, community, institutional and legal dynamics - will be critical to ensure the success of the implementation. .

Component 4: Awareness raising, knowledge management and communications.

In line with AF guidelines and outcome 2 and Mongolia and Ulaanbaatar government priorities (see section D), this component will strengthen urban-level institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses, especially related to floods and ensure the project implementation is fully transparent, all stakeholders are informed of products (tools, methodologies, approach) and results and have access to these for replication.

Furthermore, the People's Process approach will need to be championed by the members of the Project Advisory Board – in particular to facilitate the required legal and institutional mechanisms to make the Peoples Process and its tools – Community Implementation Agreements (CIA) - functional for the Mongolian context. Therefore, there will need to be a specific advocacy/training session to secure high-level buy in from PAC at the onset of the project

To this end:

4.1. Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities, civil society, and policy-makers in government through appropriate mechanisms.

Lessons learned on increasing the flood resilience of communities need to be captured; and municipal and district level government officials exposed to these principles and trained on lessons learned to ensure buy-in and the sustainability of this project for effective replication of best practices.

4.2 Workshops and trainings will be organised targeting city- and district government officials with a focus on replication of processes, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans.[28]

Trainings will be held for city- and district government officials from other potential high-risk areas on the project approach and knowledge generated for replication based on demand by the communities and local authorities. A specific component targeting advocacy to the Project Advisory Committee will be conducted at the onset of the project to ensure buy-in of high level policy and decision makers on the project approach and for application of results and knowledge to add value and improve existing policies, strategies and plans.

All knowledge products generated will be made available on a digital format in Mongolian and English and uploaded on the Municipality of Ulaanbaatar's web portal and spatial database. The simulation model will be maintained by the Ministry of Environment and Tourism and be an on-going data-sharing and risk analysis collaboration between the Municipality of Ulaanbaatar and the Ministry.

Proposed concrete interventions in target areas (component 2)

As a response to the Khoroo-specific climate change resilience building needs identified in Table 1, the project will concentrate on two main concrete interventions (to address flood risks and related water pollution and health risks due to flooded latrines: 1) Flood protection and drainage infrastructure and 2) flood resilient latrines. The interventions focus on impacts in the hot spot

[28] In line with national priority: National Action Programme on Climate Change: 1) Set the legal environment, structure, institutional and management frameworks for addressing on climate change.

areas of the target Khoroos, while maximizing (downstream) benefits. Importantly, to ensure effective operation and sustainability / maintenance of the project interventions, supporting activities have been identified.

The two main interventions are described in the table 4 below with the risk assessment sheets providing more detailed information. Table 4 below provides an overview of the three target areas and an overview of the resilience building rationale.

Overview of 3 target areas and proposed flood resilience building interventions
Area 1: Songino-khairkhan district (north-west) Khoroos 24, 25 and 7

In Khoroo 24, the project will focus on avoiding future development / settlement in the riverbed through land use planning. Besides that, the settlers that are already located in the riverbed, will be engaged in river training activities to protect their property and to sensitize them about the fact that they are living in a high-risk area. In Khoroo 7 the project will focus on developing the drainage channels that will benefit the most inhabitants. In the north-east section, the proposed drainage channel will capture all water coming from the north-east. As this drainage will be going through some plots, the drains will be covered to avoid flooding so that inhabitants don't need to move. In the southern section, the drainage channel will be diverted to avoid flooding of large apartment blocks and the build up of stagnant water in the western section of the Khoroo. In the remaining area of the Khoroos, including Khoroo 25, the project will focus on increasing the flood resilience of latrines, also benefitting downstream areas from run-off of polluted water.

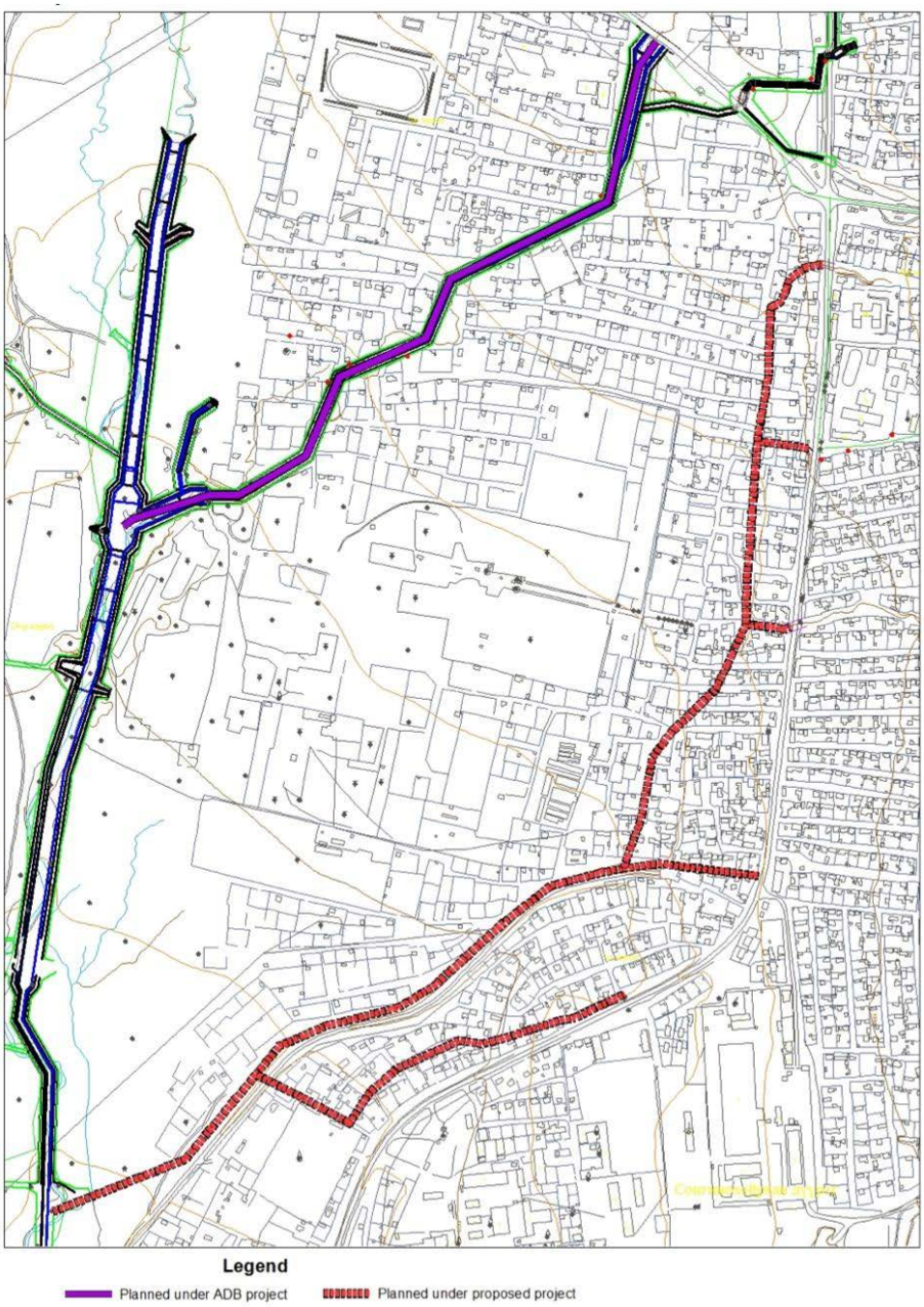


Figure 14: Area 1: Songino-khairkhan district (north-west) 7 proposed drainage interventions

Area 2: Sukhbaatar district (north-central) Khoroo 12, 13 and 16

In Khoroo 12, 13 and 16, the project will focus on increasing the flood resilience of latrines, also benefitting downstream areas. Although there are flood risks from the river to Khoroo 16, the construction of a dike is not feasible. In the case of Khoroo 12 and 13, the biggest flood impact is stagnant water, leading to latrine issues. Although some drainage interventions have been considered here, it is not feasible from a priority and cost-effective point of view.

Area 3: Bayanzurkh district (north-east) Khoroo 9

In Khoroo 9, the project will focus reducing flood impacts from the secondary arm of the river by placing a flood retention wall/dike at the top of the Khoroo, diverting the stream from entering the Khoroo. In the central-west part of the Khoroo, a drainage ditch/channel next to the road will ensure downstream areas are protected from flood waters coming from the north-west. These interventions will be complemented with flood resilience latrines provision, also benefitting downstream areas.

Figure 15: Area 3: Bayanzurkh district (north-east) Khoroo 9 proposed flood protection and drainage interventions.

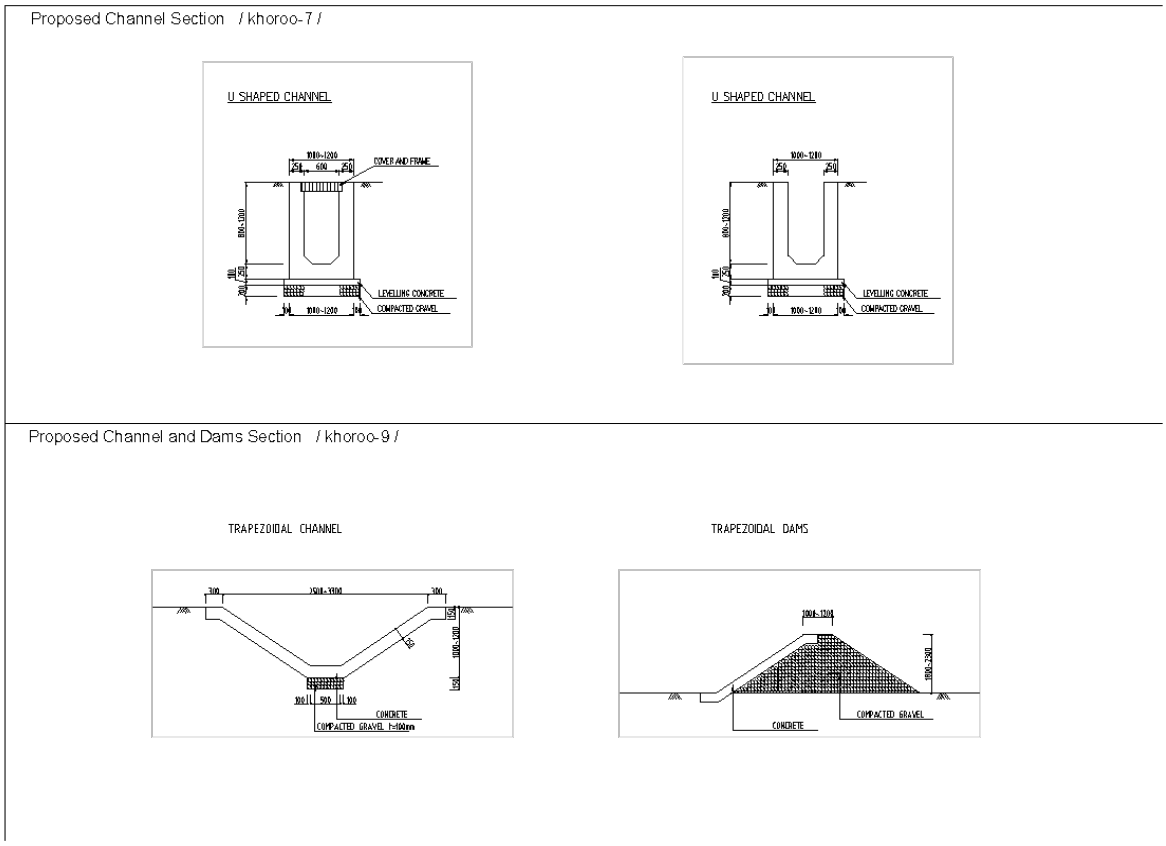
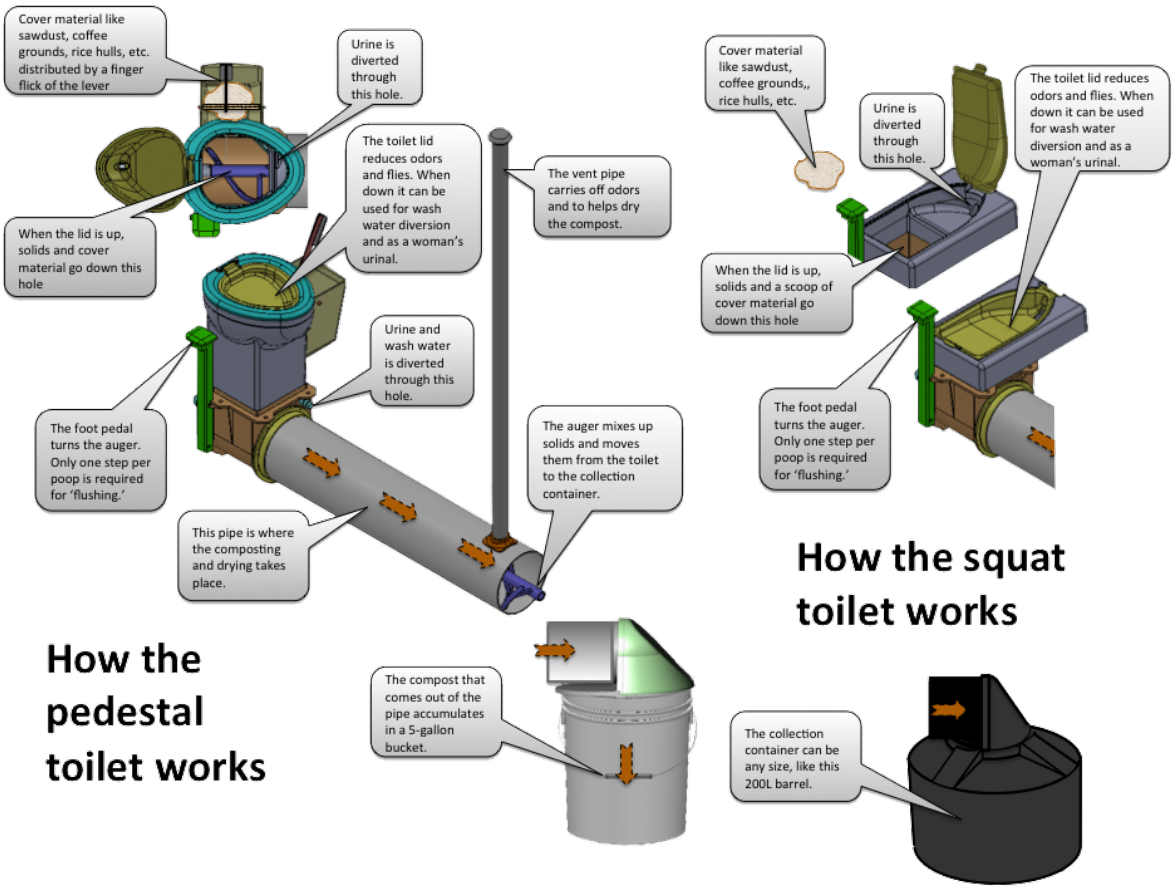
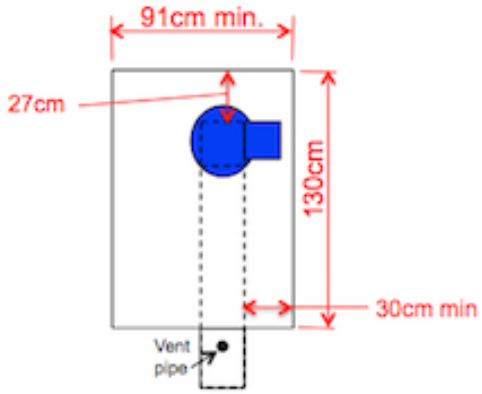


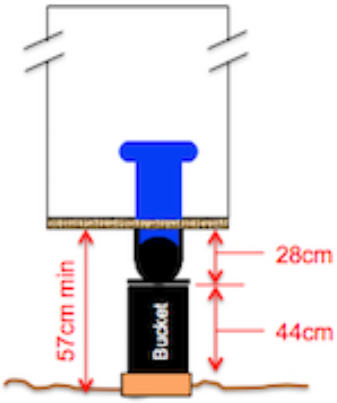
Figure 16: technical design of proposed interventions in Khoroo 7 and 9

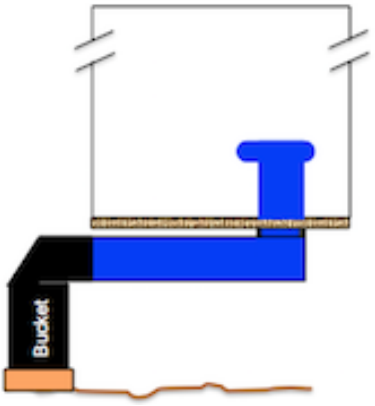


Note: Components are shown in different colors for illustration purposes.



Approximate dimensions for a single unit installation. Multiple units can be located adjacent to each other in a number of arrangements. Floor may either be elevated above the ground as shown, or holes may be dug to hold bucket. Template for hole in floor is shown in adjacent picture.





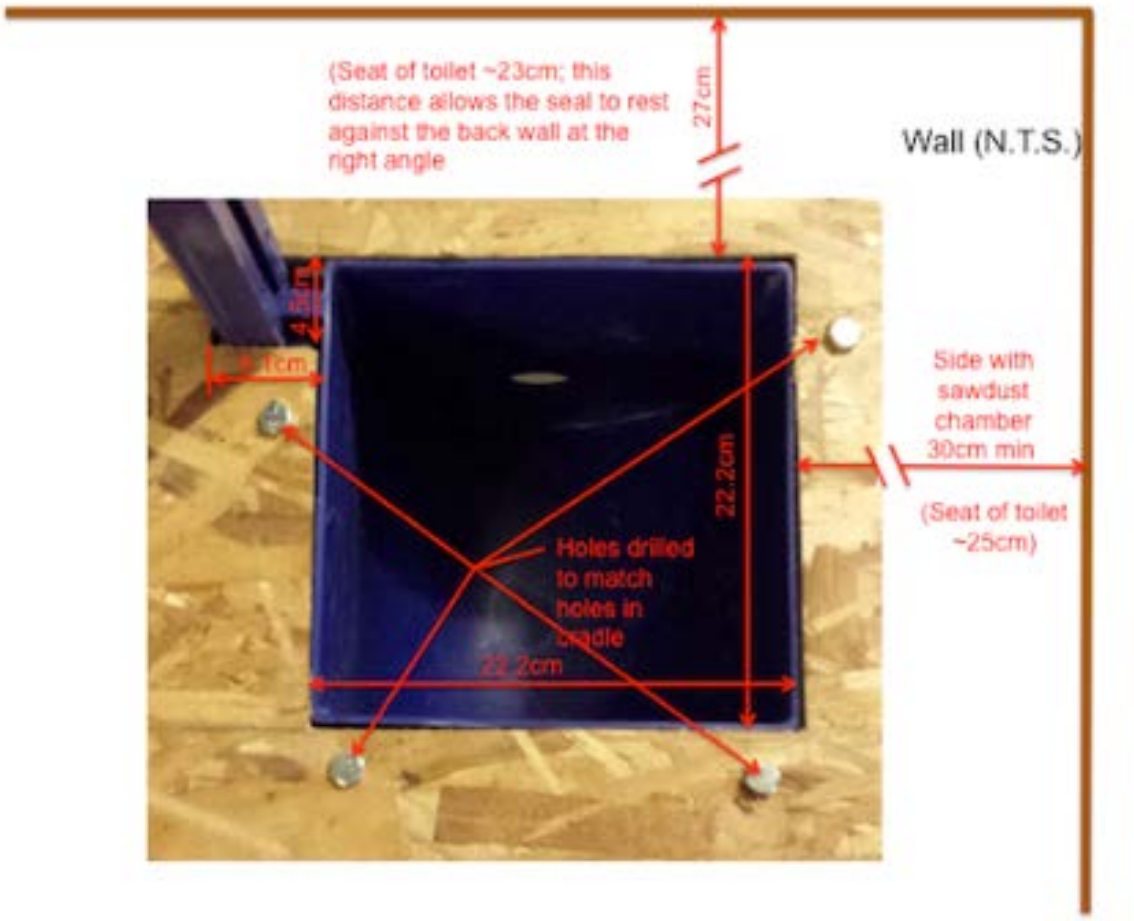


Figure 17: Technical design of proposed toilets improvements in target Khoroos

Table 4: Concrete interventions and supporting activities (corresponding to prioritized resilience building interventions in table 1 above)

Concrete interventions / activities		Target Khoroos	Estimated nr of beneficiaries	Estimated cost (US$) and cost-effectiveness of direct beneficiaries (area within the Khoroo)	Supporting interventio	
Priority investments	**Detailed activities (for more details see environmental and social risks screening sheets in annex 5)**				**Interventions required for appropriate use of the assets**	**Interventions req sustainable manag maintenanc**
Flood protection and drainage infrastructure	River training to protect assets / houses	24	Direct: 2.737 (750) informal household settlers in river bed)	50.000 = 18 pp	☐ Conduct detailed hydrology, soil and engineering studies and develop detailed technical plans ☐ Dredge the river along desired course and use the soil to protect assets in the riverbed ☐ Community organization and agreement on beneficiaries, including selection criteria for who can be involved in activities ☐ Need agreement of all settlers affected by drainage that will go through private plots	☐ Raise awareness community membe flood risk areas an reduce risks by: o Not dumping the drainage o Introducing options and ☐ Community groups formed for implem projects (involving Khoroo/District off to raise awareness disposal of sludge proper removal of throwing waste in ☐ Agreement betwee community groups officials about mai District Landscapi Common Services will be in charge o the flood protectio intervention. Howe community groups nearby to the flood conduct monitorin O&M of the facilitie of Kheseg Leader ☐ Involve Khoroo an officials during pro selection, impleme certification of tran funds installments etc.
	Construct a flood retention wall / dike	9	Direct: 3.000 Indirect: 22.449 (Rest Khoroo 9 + 17)	73.500 = 24 pp		
	Drainage channels	9	Direct: 4.000 Indirect: 21.449 (Rest Khoroo 9 + 17)	164.750 = 41 pp		
		7	Direct: 20128 Indirect: 7.772 (Khoroo 5)	1.124.890 = 55 pp		
Total				**1,413,140**		
	Construct suitable latrines	24	Direct: 1101 Indirect: 32.824	144.000 = 133 pp	☐ Select a design that	☐ Raise awareness

Flood resilient latrines	(for rocky or muddy underground)		(Rest Khoroo 24 + 7)		is appropriate for withstanding floods and very low temperatures ☐ Community organization and agreement on beneficiaries, including selection criteria for who will have the toilets	community membe risk of overflowed related health risks benefits of hand w ☐ 10% contribution f construction price ownership and to replication ☐ Community groups formed for implem projects (involving Khoroo/District off to raise awareness disposal of sludge proper removal of throwing waste in ☐ Formation of Prim and Community D Councils in areas toilets and drainag constructed in ord provide community and forum to discu related to impleme maintenance. ☐ Involve Khoroo an officials during pro selection, impleme certification of tran funds installments etc. ☐ A tripartite agreem signed between th HH and the latrine covering O&M role responsibilities
		25	Direct: 1.098 Indirect: 32.377 (Rest Khoroo 25 + 7)	123.750 = 115 pp		
		7	Direct: 222 Indirect: 27.699 (Rest Khoroo 7 + 5)	22.500 = 123 pp		
		9	Direct: 290 Indirect: 25.175 (Rest Khoroo 9 + 17	33.750 = 124 pp		
		12	Direct: 1074 Indirect: 20.050 + center (Rest Khoroo 12, + 10, 11 and center)	117.000 = 137 pp		
		13	Direct: 1377 Indirect: 28.890 + center (Rest Khoroo 13, + 10, 11, 12 and center	168.750= 124 pp		
		16	Direct: 955 Indirect: 15.089 + center (Rest Khoroo 16 + 2 and center	139.500 = 118 pp		
Total				**749,250**		

B. Economic, social and environmental benefits

The fundamental purpose of UN-Habitats' community development approach, The People's Process, is to achieve cohesive resilient communities working together to increase their social, economic, physical and environmental conditions, through participative capacity and trust building and decision making

Stronger social ties amongst the urban poor reduces the threat of conflict and provides an essential support group post-disaster and at times of need. Without a strong and connected community at its foundation, strategies for improving their lives, including becoming more resilient to climate change, becomes very challenging. The creation of a sense of social harmony between the urban policy makers, the residents and the emergency responders allows for improved communication and the sharing of experiences which would ultimately lead to greater social resilience.

By implementing a combination of institutional, community and assets risk and vulnerability reduction measures, especially in vulnerable/poor urban areas, this project is expected to lead to reductions in future climate related economic, household and livelihood losses, reductions in vulnerabilities of the elderly, women, immigrants, disabled and youth and finally reductions in environmental degradation.

Component 1 of the project will generate evidence and information which will allow the municipality, district authorities and khoroo communities to understand climate change related impacts and risks in the most vulnerable and high risk communities of Ulaanbaatar. The generation of a **City wide Ger-area Land Use Plan** will provide a model for how to balance economic gains and environmental impacts; and the development of a **simulation model** to forecast future impacts, will allow authorities to 'keep a handle' on worst case scenarios and to identify appropriate, resilience initiatives to address potential threats, in consultation with other government institutions & authorities – this will also contribute to institutional resilience and cooperation. The Detailed **Ger-khoroo level Land Use Plans** for the 3 most-at-risk Ger-areas, in addition to identifying risk reduction and resilience building interventions at the community level, will include land re-adjustment and urban planning options – which, when followed by authorities, will lead to economic resilience through protection of assets and reduction of future economic losses.

Component 2 of the project aims at fully involving communities in the planning and execution of the proposed interventions under component 3 through generation of Khoroo-level **floods resilience action plans.** The trainings conducted for **the management and maintenance of flood resilient infrastructure**, through community involvement via the Community Development Councils (CDC's) that are formed as part of the People's Process; and the awareness raising campaigns – will firstly instil the knowledge capacity of communities and supporting local authorities on current and future climate risks and secondly, generate the means for communities and local authorities to protect the physical assets from potential climate induced economic risks. The **technical engineering and hydrology studies** that will be conducted in parallel with these plans will ensure the assets are properly designed and maximize the impact and sustainability of economic benefits arising from the physical implementation of these concrete interventions. Furthermore, the technical data generated from these studies will be shared with relevant institutions so that institutional capacities for responding to such risks will be strengthened across multiple entities.

Component 3 is the main focus of the project, delivering the majority of the concrete adaptation measures with the rest of the components of the project designed to service and sustain the **Physical assets developed or strengthened in response to climate change related flood impacts**.

The design and implementation of this project focuses on maximizing the size of the 'concrete' interventions under component 3 (2/3) to directly benefit the most vulnerable populations through two main resilience building interventions: (1) improved drainage systems to reduce floods and (2) improved sanitation systems that won't overflow during floods and lead to health issues.. The total direct and indirect beneficiaries per concrete intervention are as follows (see also table 4: Concrete interventions and supporting activities above.

1. Flood protection and drainage infrastructure
   - Direct with interventions area: 29.865
   - Total target community: 33.829
   - Indirect cross-community: 26.221
2. Flood resilient latrines
   - Direct with interventions area: 6.064
   - Total target community: 88.839
   - Indirect cross-community: 104.710 + inhabitants

Given that communities, and especially vulnerable groups, will be involved throughout the project, they will have the opportunity to directly influence project activities and outcomes, thus influencing their direct project benefits. The design will be adapted to local impacts of floods and storms, but also exposure to air pollution. Moreover, local and durable materials will be used in an energy efficient manner promoting longer term environmental benefits. Increased awareness on health and environmental issues within communities will increase environmental and social resilience

The settlements' vulnerability assessments and planning processes to identify safe areas for development and for understanding the remaining future climate change threats to which the design should respond will also contribute to economic and environmental resilience.

In an environment where there is rapid influx of new migrants placing pressure on already overstretched and inadequate urban/community services the identification of a joint-purpose between host communities and new residents; and working towards a common goal becomes imperative; at the same time creating a common social thread between the members of the community who have been removed from their tight-knit rural communities and find themselves living in an increasingly overcrowded and 'foreign' environment. At the basis of increasing urban resilience is to create incentives for **all** of the Ger-community to adapt by themselves to recurrent and future challenges, empowering them to become the key stakeholders in their own resilience strategies.

As this would be the first time to implement the Peoples Process in some of the proposed Ger-areas it is critical that the local authorities and communities are exposed to the rigorous mechanisms of checks and balances put in place for the successful implementation. The **Management & operations; design & supervision of assets / physical infrastructure component will be driven by** an international advisory technical team, familiar with the roll-out of the People's Process closely working with the national execution team – this capacity and technology transfer will lead to improving the professional capability of national entities,

institutions, and teams to implement and replicate participatory mechanisms adapted to suit the local context – contributing to institutional, economic, environmental and social resilience.

Component 4 focuses on the generation, utilization and replication of knowledge on climate resilient urban development in Ulaanbatar. **Lessons learned and best practices regarding flood-resilient urban community development will be shared with District and khoroo communities,** policy-makers in government and civil society for full transparency.

In parallel, **workshops and trainings will be organised targeting city- and district government officials** with a focus on replication of processes, land use plans and interventions; while at policy level, consultations with the Project Advisory Committee will see how lessons can be integrated into existing strategies and plan and ensure buy-in and the sustainability of project approach for effective replication of best practices.

This component will strengthen urban-level institutional capacity to reduce risks associated with climate-induced socioe-conomic and environmental losses.

Table 5: Economic, Social and Environmental benefits

Type of benefit	Baseline	With/after project
Economic	Climate change is already leading to economic and livelihood losses, especially caused by floods, but also by droughts The risks and vulnerability will be assessed under the project and baselines will be set after the assessment before the proposed project interventions.	❑ Potential risks of assets loss will be reduced for households, businesses and public organizations ❑ Government budget and resources for disaster relief activities during and after a potential disaster will be reduced and saved ❑ Households and public investments to the land development will be increased, and financial security will be improved ❑ Community participation in infrastructure ❑ Projects will benefit the community through cash income as semi-skilled and skilled labour is to primarily be sourced from the community. ❑ Additional resilient technologies will be imparted and may provide future livelihood opportunities.
Social	Climate change is already leading to negative social impacts, especially caused by floods, but also by droughts and Dzuds, leading to rural – urban immigration and social tension and incoherent development.. The risks and vulnerability will be assessed under the project and baselines will be set after the assessment before the proposed project interventions.	❑ The climate induced poverty and fatality rates, diseases and food security and safety issues will be reduced ❑ The climate induced negative impacts on public mentality will be reduced and prevented ❑ Disaster induced negative impacts on people's access to education and health services will be reduced ❑ Social networks of the residents will be strengthened and improved. ❑ New climate resilient infrastructure and services will contribute to social well-being.
Environme	Climate change is already leading to negative	❑ Reduction in climate induced environmental degradation and losses and waste production

ntal	environmental impacts, especially differences in temperature and precipitation, leading to floods and droughts, which in turn leads to above and erosion, deforestation, etc. The risks and vulnerability will be assessed under the project and baselines will be set after the assessment before the proposed project interventions.	because of environmental/ecosystem protection, community-based waste reduction and recycling schemes. ❑ Natural water sources such as spring, river, underground water table and ground wells will be protected from disaster induced pollution ❑ Air and soil will be protected from potential pollution due to a disaster ❑ Climate induced exposure to the hazardous waste pollution will be prevented ❑ Reduction of environmental health and waste related issues due to the improved flood infrastructure

C. Cost effectiveness

As mentioned above, the design and implementation of the project focuses on maximizing the size of the 'concrete' interventions under component 3 (2/3) to directly benefit the most vulnerable populations; thus, limiting the 'soft' components to those activities required to supporting the appropriate implementation of the 'concrete' interventions (component), to further develop a framework to enhance climate resilience through land use planning (component 1) and to ensure sustainability of the whole project (component 4). Although the prioritization of concrete interventions has been done by the Khoroo communities, UN-Habitat analysed the interventions from a cost-perspective and total package point of (besides other selection criteria related to sustainability and risks) to maximize the beneficiaries. This selection has been approved by the Khoroo communities and specific issues and needs identified that further informed the implementation process and technical designs.

Cost-effective rational component 1: land use planning and zoning is considered to be one of the most cost-effective ways to understand and respond to climate change risks and vulnerability, especially to avoid future development in risk areas (and cost associated with this potential risk, such as destroyed houses and assets. This would also contribute bottom-up knowledge and evidence to feed into existing government led-reviews on land legislation being undertaken by the Government under the direction of Ministry of Construction and Urban Development (MCUD).

Cost-effective rational component 2: although the project aims to reduce cost of the construction of the selected concrete interventions by pursuing an economy of scale approach where possible, the proposed interventions have been scaled down to a size that they are manageable by communities (i.e. CDC's). This is required to enhance sustainability and mitigate potential social and environmental risks. Related to this, The People's Process, which has been used across multiple cities and sectoral contexts, was found to be the most cost effective compared to larger scale procurement, as it builds on community decision-making, local know-how and networks and facilitation, where the maximum value of each dollar is utilized to the maximum benefit of the community, in a transparent decision-making process.

Below tables provide an overview of the cost-effectiveness rationale of selected concrete interventions.

Table 6: Proposed interventions cost-effectiveness rationale

Concrete interventions / activities	Target	

Priority investments	Detailed activities	Khoroo	Alternative interventions and rationale why priority interventions/activities have been selected from a cost-effectiveness perspective
Drainage system	River training to reduce flood impacts by communities	24	Alternative is to construct a dike along the river, which is very costly and will lock-up informal settlers inside the riverbed / force them to leave. The river training is not comprehensive but will focus on protecting the households and increasing awareness where possible.
	Construct a flood retention wall / dike	9	Alternative is to construct drainage channels in the east-side of the Khoroo. However, this would cost more than the dam. This dam will reduce both direct flooding and stagnant water due to a small dam in the middle of the east part of the Khoroo. It has been considered to remove this dam, but it could result in negative flood impacts downstream.
	Drainage channels		There are limited alternative options besides a drainage channel in the central area of the Khoroo to protect downhill areas. It has been considered to have a longer drainage channel in this area, but this did not show to be cost effective (looking at the increase of beneficiaries).
		7	Alternative would be a larger drainage channel or a dike. However, this would be less cost-effective and less effective to reduce floods that the proposed small scale crucial drainage channels which maximize the beneficiaries. Although the total absolute cost for the drainage interventions is high compared to Khoroo 7, the large population / high density justifies it and makes the proposed intervention cost-effective, especially taking into account this is the hotspot area of the project, reducing both flood water and stagnant water, also benefitting downstream areas.
Flood resilient latrines (+ tree planting pilot in muddy / wet areas)	Construct suitable latrines (for rocky or muddy underground	All	The alternative would be to construct drainage channels in Khoroo 12, 13, 16, 24 and 25, which shows to be cost-effective in Khoroo 7 and 9. However, because of lower densities and other situations (i.e. uphill 24 and 25 Khoroos and swampy / wet, lower-lying Khoroos 12, 13 and 16 this would not be cost effective. Moreover, possible drainage channels considered would be less effective in addressing flood waters and swampy situations in these Khoroos. Another alternative is to construct a sewerage system, but this is both not in the scope of the project and too expensive. Moreover, with this approach, the most vulnerable / poor people will benefit. The interventions will also have significant benefits for downstream areas (indirect beneficiaries) where water pollution will be reduced. Because drainage interventions are already conducted in Khoroo 7 and 9 the percentage of target population will be lower in these Khoroos compared to Khoroos 24 and 25 and especially 12, 13 and 16.

Altogether, the project will be cost-effective by:

- ❑ Avoiding future costs associated with damage and loss due to climate change impacts (especially floods) and to ensure the interventions are sustainable;
- ❑ Efficient project operations because of 'in-house' technical support options and capacity building expertise and because of direct partnering with the municipality (thereby building their capacity as well as reducing costs);
- ❑ Community involvement with development / construction of concrete interventions and because of community capacity building
- ❑ Selected technical options based on cost-, feasibility and resilience/sustainability criteria

D. Consistency with national or sub-national strategies

Mongolia's National Development Strategy is strongly aligned with the SDGs and defines the country's policy up to the year 2021. It is intended to enhance Mongolia's capacity to adapt to climate change and to reduce negative effects on the environment and people. **The Nationally Determined Contribution** has identified a need to conduct disaster risk assessments at local and sub- national levels and to enhance human capacity to address local climate change impacts, to which this project responds. Further, the **National Action Programme on Climate Change (NAPCC)** focuses in five strategic objectives, of which 4 are relevant for this project. Mongolia has now entered Phase 2 of the NAPCC (2017-2021) which calls for implementation of concrete climate adaptation (and mitigation) measures which this project would begin addressing immediately. Besides this, the **Green Development Policy 2014-2030**, emphasizes the need of settlement plan in accordance with climate change and resilient sanitation, which this project also responds too.

2010 **National Programme on Water** was approved in 2010 with the overall objectives a) the protection of water resources from deterioration and pollution, b) the proper use of available resources, and c) the creation of conditions enabling the Mongolian people to live in a healthy and safe environment. The project will support achievement of the 2010 National Programme on Water Section 3.2.10 stating "Determine impacts of climate change and land use to the water ecosystem in large river basins, ecosystem biological indicators and monitor according to the international standards". The project will address this under the Component 1 and 2. The project will also address the achievement of Section 3.4 stating "Introduce advanced technologies for proper utilization and conservation of water resources and recycling and treatment of used water; **implementation of comprehensive flood prevention measurements**".

At the city level, all interventions fit under **the Ulaanbaatar Master Plan 2030**, specifically under Priority 1: Ulaanbaatar will be a safe, healthy and green city that is resilient to climate change and Priority 2: Ulaanbaatar will provide a liveable environment for its residents through appropriate land use planning, infrastructure and housing. Besides that, the plan emphasises the need for flood resilient and drainage infrastructure. UN-Habitat is already a partner working closely with the Municipality and ADB for the redevelopment of areas prioritized under the Master plan. Finally, this project will address some of the key strategic directions, recommendations and target areas within the **Flood Risk Management Strategy of Ulaanbaatar City,** including Reduce flood risk through resilient urban development, land use and waste management, protection of social

infrastructure and strengthened utility services.

In the components and financing table x above, references have been made between outputs and national and municipal priorities.

Table 7: Project alignment with National and Ulaanbaatar priorities

Policy / Document	Year submitted / ratified	Relevant priorities
Second National Communication to the UNFCCC	2010	Adaptation actions in the following areas: - Pastoral livestock - Arable farming - **Water resources** - **Human health** - Ecosystems adaptation - Forestry - **Barriers to adaptation** Given that Mongolia is more urbanised than many other countries in Asia-Pacific – around 65 percent live in urban areas – urban features heavily throughout various sector priorities, both in adaptation and mitigation
Nationally Determined Contribution	2015 (ratified the Paris Agreement 2016)	The NDC identifies the following adaptation priorities: - Animal husbandry - Arable farming - **Water resources sector** - Forest resources - **Natural disaster management** The mitigation component focuses on: Energy, transport, industry, and agriculture Relevant identified gaps and barriers: - **Weak management of disaster risks at local level** - **Insufficient human resources capacity and a lack of technical training on climate change and limited engagement of academic institutions.** Relevant adaptation needs: - **To conduct disaster risk assessments at local and sub-national levels**
National Action Programme on Climate Change	1st phase 2011-2016 2nd phase 2017-2021	Five strategic objectives established: **1) Set the legal environment, structure, institutional and management frameworks for addressing on climate change.** **2) Ensure environmental sustainability is maintained and reduce socio-economic vulnerabilities and risks through strengthening the national climate change adaptation capacity**

		3) Mitigate GHG emissions and establish a low carbon economy through the introduction of environmentally friendly technologies and improvement in energy efficiency **4) Enhance the national climate observation, research and monitoring network and strengthen employees' capacity** **5) Conduct public awareness campaigns and support citizen and community participation in actions against climate change** In the first phase (2011-2016), national mitigation and adaptation capacities will be strengthened, legal, structural and management systems will be set up and community and public participation will be improved. In the second phase (2017-2021), climate change adaptation measures will be implemented and start up greenhouse gas mitigation actions.
Green development policy 2014-2030	1st phase 2014-2020 2nd phase 2021-2030	Six strategic objectives established: 1) Promote a sustainable consumption and production pattern with efficient use of natural resources, low greenhouse gas emissions, and reduced waste generation **2) Sustain ecosystem's carrying capacity by enhancing environmental protection and restoration activities, and reducing environmental pollution and degradation** 3) Increase investment in natural capital, human development and clean technology by introducing financing, tax, lending and other incentives for supporting a green economy **4) Engrain a green lifestyle by reducing poverty and promoting green jobs** 5) Encourage education, science, and technology to serve as the catalyst for green development, and develop cultural values and livelihoods that are in harmony with nature **6) Develop and implement a population settlement plan in accordance with climate change, while considering the availability of natural resources and the resilience of regions** In the first phase (2014-2020), Lay the foundation for green development In the second phase (2021-2030), Transformation to green development Relevant proposed interventions: 2.3. Strengthen national capacity for the climate change negative impact mitigation and adaptation – *nr 4: Release adaptation measure versions by key economic and social sectors and develop a national adaptation strategy.*

		2.9. Increase the capacity and productivity of water supply and sewerage facility, provide at least the 90percent of the population with drinking that meets hygiene standards, and provide access to improved sanitation to at least the 60 percent of the population. 2.11. Support initiatives to use conserved water by harvesting rain, snow and storm water, projects to use surface water collection, and research and development on ground water restoration and increasing of the resource. 6.2. Reduction of air, water and soil pollution by implementing improved plan for urban land use, construction zoning and infrastructure and creating appropriate legal framework on accountability
National Programme on Water 2010-2021	2010	The National Programme on Water was approved in 2010. The implementation was scheduled in two phases – a first phase of intensive development from 2010 to 2015 and a second phase of stable development from 2016 to 2021. The overall objectives of the NPW are: **a) the protection of water resources from deterioration and pollution,** b) the proper use of available resources, and c) **the creation of conditions enabling the Mongolian people to live in a healthy and safe environment;** and they are to be implemented through the following strategic goals: 1. Protection of Mongolia's water resources, support of the formation of these, and conservation of their purity and natural replenishment; 2. Establishment of a comprehensive network for the monitoring of water resources and adoption of new management and information management technologies; 3. Creation of conditions necessary for an accumulation of water resources, provision of drinking water meeting health standards, and improvement of the agricultural and industrial water supply for a sustainable development; 4. Improvement of the use and management of water resources, development of the legislative and institutional environment so as to coordinate the multiple requirements for the use of water, and capacity building; **5. Fostering civil participation and the provision of the public with information on the protection and proper use of water resources using advanced technologies.**
National Programme on Environmental Pollution Reduction 2017	2017	Seven strategic objectives established: 1) Reduce negative impacts of air pollution to human health through air quality improvement **2) Improve water quality and safety and reduce impacts of soil pollution to human health** 3) Improve quality of environmental health survey and study **4) Build and strengthen the resilience for climate change induced potential hazards and risks to human health** 5) Improvement of solid waste management system for health organizations. 6) Improve occupational safety and hygiene 7) Survey and study impacts of chemical substances to human health The programme is to be implemented in 2017-2020.

Ulaanbaatar 2020 master plan and development approach for 2030	2014	**Priority 1: Ulaanbaatar will be a safe, healthy and green city that is resilient to climate change** **Priority 2: Ulaanbaatar will provide a liveable environment for its residents through appropriate land use planning, infrastructure and housing.** **Storm water and flood management:** Engineering flood protection measures will include managing infrequent spring floods, draining rainwater from roads and squares, securing groundwater, strengthening channels and reducing land degradation. **Protection:** The Master Plan plans 59.5km of channel (C1 – C24) is planned and C-1, C-2, C-3, C-11, C-13, C-14, C-20, C-21, and C-24 flood protection channel infrastructure to be built. C-3, C-14, C-15 will be built with flood protection dams. Further flood protection dams will be built at Dari-Ekh, Sharkhad, UrgakhNaran and Unurkhoroolol where there are deep ravines. **Storm water:** 82.5km of storm water infrastructure will be built to ensure rainwater run-off is directed out of Ulaanbaatar during periods of high rainfall. The Master Plan plans for category 1 and category 2 roads to have open and underground road storm water management systems. **Extreme (1percent probability) flood protection:** Some of Ulaanbaatar's developed areas are in low-lying areas and within the river floodplain. To address these issues, flood protection infrastructure will be built to protect the areas along the Tuul, Uliastai, Selbe and Tolgoit rivers. Proposed interventions to address flood risk is in the recently finalized FRMS referenced in the following document.
Flood Risk Assessment and Flood Risk Management Strategy (FRMS) of Ulaanbaatar City	2015	1. Reduce flood risk and protect the environmental assets through improving risk knowledge and rehabilitating ecosystem of river basins and watersheds; 2. Reduce flood risk through resilient urban development, land use and waste management, protection of social infrastructure and strengthened utility services; 3. Protect the social and economic assets from flood through provision of structural protection with multifunctional and high-quality engineering services; 4. Reduce vulnerability of people, households and communities through improving social and emergency services, and building capacity for resilience and sustainable livelihoods; 5. Implement good governance and effective flood risk management through mindset change and institutional transformation with advance of science and technology and through strengthening economy, improving cost effectiveness of flood investment, and developing multi-sourced risk financing

E. Compliance with relevant national technical standards

Table 8: Compliance with relevant notional technical standards

Expected concrete output/intervention	Relevant rules, regulations, standards and procedures (to comply to AF principle 1)	Compliance, procedure and authorizing of
Output 1.1. One (1) Ulaanbaatar northern Ger-Area (including the three (3) target districts) Territorial Land Use Plan and legal framework recommendations with specific focus on flood risk reduction - building on 1.2 **Output 1.2.** Simulation model for forecasting future impacts of climate change and flooding in UB city & Ger-areas established **Output 1.3.** Seven (7) Detailed Ger-khoroo level Land Use Plans with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people	Related Laws: ● Law on Land ● Law on Water ● Law on Urban Development ● Law on Capital City Entitlement ● Law on Cities and Townships Entitlement	● A land use plan proposal should be develope licensed company selected through a compe procurement process ● The proposal shall be integrated into respect district land use plan and submitted for appro City Council through District Council Authorizing offices: Urban Development and Master Plan Departmen Land Department of Ulaanbaatar City and Distric Ulaanbaatar City Councils
Output 2.1. Seven (7) Khoroo-level floods resilience action plans to implement the interventions under component 3; a series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of interventions under component 3. **Output 2.2.** Khoroo / Community level interventions operation and maintenance (and potential risks mitigation) awareness campaigns and trainings to support the	The Peoples Process 'Operational Manual' will be developed and contain all the necessary guidelines, procedures and forms for ensuring integrity and transparency for community-level action planning and implementation. The project stakeholders at municipal, district and khoroo levels will be trained on the essential procedures and requirements for implementation. See below	The project manual will be cleared by the Region of UN-Habitat, the Implementing entity and share the Project Advisory Committee. Endorsed by the Project Advisory Committee – th highest decision making body for the project. See below

sustainable implementation of interventions under component 3. **Output 2.3.** Technical studies – Engineering and hydrological - required to implement the interventions under component 3.	See below	See below
Output 3.1. Physical assets developed or strengthened in response to climate change related flood impacts as prioritized by Khoroos. - Flood retention wall and drainage infrastructure	Related laws: ● Law on Land ● Law on Water ● Urban Development Law ● Disaster Management Law ● Building Code Norms &Standards: ● Basic Procedure for Hydrotechnical Construction Design BND-33-01-03 ● River Hydrotechnical Construction BND-33-01-05 ● Hydrotechnical Construction Foundation BND-33-04-09 ● Capacity and Performance of Hydrotechnical Construction BND-33-05-09 ● Concrete and Ferroconcrete Structure for Hydrotechnical Construction BND-33-06-09 ● Norms and Regulations for Estimation of Hydrological Characteristics BND-201-14-86	Design Development 1. TORs to be issued by the Engineering Depar Ulaanbaatar Mayor's Office 2. Selection of a Design Company. Design Com shall accomplish the following under the desi budget: ● Contract with a Licensed Geodesy Compa the topographic base map of the area dev ● Contract with a Licensed Geology Compa the soil quality assessment for constructio ● Develop the detailed design ● Get the design approved by the Experts Committee under the MCUD ● Submit the design to the Client. Construction ● Selection of Construction company ● Contract with Design Company for Autho Supervision ● Contract with the city for Client Supervisi Authorizing offices: Mayor's office of Ulaanbaatar City Land Department of Ulaanbaatar City and respec Districts Urban Development and Master Plan Departmen Ulaanbaatar City Hydro-technical Construction Department Of Ulaanbaatar City
- Resilient sanitation delivery	Related Laws: ● Constitution of Mongolia ● Law on Hygiene ● Law on Urban Water Supply and Sanitation System ● Law on Cities and Townships Entitlement ● Law on Soil Protection and Prevention of Desertification Norms &Standards:	The stated norms and standards are advertised t applied and complied. But there is no any institut up for monitoring of compliance of standards and the household level.

Output 3.2 Management and operations design & supervision of assets / physical infrastructure – procured as consulting services.	• MNS 5924: 2015 Pit latrine and Sewage Pit, Technical requirements • MNS3342:82 Nature and Environmental protection. General requirements for protecting ground water and hydrosphere from pollution. • MNS 6055:2009 General environmental and space requirements for the disabled in the civil construction planning • MNS 6279:2011 Water supply and sanitation facilities. Terms, definitions glossary Not relevant	Not relevant
Output 4.1. Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities, civil society, and policy-makers in government appropriate mechanisms. **Output 4.2** Workshops and trainings are organised targeting city- and district government officials with a focus on replication of processes, land use plans and interventions and to discuss how lessons can be integrated into existing strate-gies and plans	Not relevant	Not relevant

F. Duplication with other funding sources

UN-Habitats has worked with Ger- communities in UB city on the sectors of Water Sanitation and infrastructure services as well as urban health systems strengthening, urban planning and affordable housing in partnership with the Municipality of Ulaanbaatar and other stakeholders. The agency also has regional level expertise on climate change in urban areas through its long running Cities and Climate Change Initiative (CCCI) which has been successfully implemented in multiple cities across 12 countries in Asia Pacific.

UN-Habitat is currently implementing community development projects, in some of the target Ger-areas Bayankhoshuu and Selbe sub-centres where the agency leads the key component of community mobilization and consultations for UB city and all partners for the ongoing Ulaanbaatar Urban Services and Ger Areas Development Investment Programme of ADB, through the establishment of Community Development Councils (CDC's) a key component of the agency's flagship People's Process. The agency also has prior experience implementing major WASH infrastructure projects in the other proposed locations of Songinokhairkhan District (SKhD).

Due to ongoing presence and good working relationships with stakeholders in these areas, the project setup and implementation of activities could begin quite smoothly with minimum delays.

Table 9: Duplication with other funding sources

Relevant projects/programme (incl. amount and impl agency)	Lessons learned	Complimentary potential
AF: UNDP (US$5,5 million grant for Ecosystem-based Adaptation to Maintaining Water Security in Critical Water Catchments in Mongolia)	Project to coordinate to integrate knowledge regarding EBA (Ecosystem Based Adaptation) and integrated climate change resilience while strengthening knowledge management of national institutions and disseminating of findings.	-document threats to ecosystem function and resilience to provide recommendations for avoiding and mitigating impacts. - land use and water resources monitoring and decision-making system in two eco-regions. -adaptation assessment and monitoring implemented in two target watersheds. - suite of physical measures to improve ecosystem resilience established in two target watersheds. -introduction of regulatory and financial management techniques - Institutional support for integrating climate change risks in land and water resource management planning.
GEF-SCCF: IFAD (US$1,5 million grant for Mongolia Livestock Sector Adaptation	Project is focused upon developing herder productivity, including concepts such as	-empowering poor rural population to achieve higher incomes through

Project)	fodder production and marketing.	sustainable improvements in their livelihoods through a) Market development; b) Pasture management and c) climate change adaptation. -focused on resource user side of climate change adaptation in market development, improved pasture management, establishment of an early warning system and disaster insurance schemes.
GCF, GCF Readiness: XacBank, GIZ, UNEP (US$60 million grant for business loan programme for GHG emissions reduction, US$300 thousand grant for support to the NDA, US$3 million grant for further readiness project (exact details unclear)	Promoting the use of energy efficient and renewable energy solutions in the Mongolian MSME market. The MSME program will mainstream energy efficiency and renewable energy investments in the Mongolian private sector. It will do so by developing market conditions conducive to RE and EE investment, allowing it to compete alongside the traditionally cheaper, conventional, high-emission alternatives.	-encourages national institutions to get direct access to the Fund, with the ultimate goal to enhance country ownership and to access and allocate the fund's resources effectively. -aims to develop the capabilities to nominate potential implementing entities and to establish the enabling environments that will promote submission of project proposals in consistency with strategic objectives of national development policies and counter climate change programs. - prepare the country to act quickly, and engage with the Fund efficiently in the future.
WB: ADB (Ulaanbaatar city water resources management project; Economic Value of the Upper Tuul Ecosystem in Mongolia)	-Upper Tuul area has a high economic value and contributes to the income and marketed products in many sectors. -conservation is necessary as ecosystem degradation and biodiversity loss will result to costly results. -conservation will result to more benefits in the future. -local land and resource users must bear through limiting their activities to ecologically sustainable levels.	-developed and applied ecosystem valuation method that generates information about the economic benefits of environment conservation
WB: UNDP (Improving Disaster Risk Management in Mongolia; Climate change adaptation project;)	Policy and regulatory frameworks enable clearer roles and responsibilities for improved disaster risk reduction and management.	-reduced risks and consequences of natural and man-made disasters at national and community levels -improved sustainability of natural resources management and

	Local-level disaster management mechanisms have procedures and competencies tailored for urban and rural vulnerabilities. Feasible local level mechanisms for disaster risk reduction and response further replicated	resilience of ecosystems and vulnerable populations to the changing climate -facilitated decentralized disaster management through sustainable prevention, response and coordination mechanisms, thus reducing vulnerabilities of urban and rural poor. - enhance disaster management capacities by clarifying roles and responsibilities, formalizing local-level disaster management mechanisms and applying tailored approaches for disaster prevention, preparedness and response in urban and rural settings.
Asia Foundation: Securing our future: Mongolia Watershed Monitoring Network component	This project generated materials related to community monitoring of water resources that will be utilized to enhance land and water resource monitoring/ planning, maintenance of ecosystem integrity and water security and to support ecosystem-based adaptation implementation.	-purpose of the project is to engage teachers and students, community groups, citizen and river movement advocates, and government officials in scientific data collection on river water conditions and share that information among members to improve the environment. -through the initiative, Mongolian teachers and citizens in target area were taught to conduct river quality monitoring.
Japan Fund for Poverty Reduction, managed by the Ministry of Environment and Tourism and the Asian Development Bank: Managing Soil Pollution in Ger Areas through Improved On-site Sanitation Project	The project will not only include sanitation facilities in Ger areas, it will include developing of regulations of wastewater management systems and wastewater treatment, which focus on small and medium sized enterprises and residents of Ger areas. They will work in areas of waste storage, collection, transportation, fertilizers, waste disposal and related controls. The project is commenced in 2017 and being implemented only for 6 months, so there are limited lessons learned.	The project will introduce improved sanitation facilities for households in Ger districts of Chingiltei Khoroo 12, 13 and Bayanzurkh Khoroo 27 khoroo. There is no geographical overlap. UN-Habitat has already established a communication with the project team and agreed to collaborate on identification of suitable designs or structures for the resilient household sanitation facility. In this regard, UN-Habitat intends to coordinate with the project to share information and approaches and lessons during the course of project implementation; and facilitate cooperation between municipal/district authorities and the Ministry of Environment and Tourism around the issue of floods and

		sanitation facilities to generate tools/methodologies to be applied consistently across Ger-Areas with a view to supporting the MoET develop an institutional framework for floods resilience in Ger Areas.
EBRD financed Ulaanbaatar Wastewater Expansion	The project has not started yet but this project will monitor the implementation and possible lessons learned.	There is no linkage nor duplication with the EBRD financed Ulaanbaatar Wastewater Expansion project. EBRD Ulaanbaatar Wastewater Expansion project is aiming to build two wastewater treatment plants as part of Emeelt Industrial Park Project, which is planned in an industrial area in outskirt of Ulaanbaatar city. The proposed project's target areas are located in the most vulnerable 6 residential areas in the urban center
UNDP/NEMA Strengthening local level capacities for disaster risk reduction, management and coordination in Mongolia (2013-2016) $1,860,000 (Project brief DRR)	Combination of policy and local level disaster management systems established: EWS enhanced including weather forecasting, and dissemination modes established National Disaster Management Plan and soum, khoroo level disaster preparedness plans, trainings conducted.	Output 1: Policy and regulatory frameworks enable clearer roles and responsibilities for improved disaster risk reduction and management. Output 2.Local-level disaster management mechanisms have procedures and competencies tailored for urban and rural vulnerabilities. Output 3: Feasible local level mechanisms for disaster risk reduction and response further replicated Lessons learned and best practices prepared; inputs provided to reformulate relevant policies and laws

G. Learning and knowledge management

A dedicated Component (4) addresses Awareness raising, knowledge management and communication. Whilst this provides the cornerstone for capturing and disseminating lessons learned, other project components directly contribute to knowledge management mechanisms and dissemination of lessons learned from local to national and to international levels (see table below).

Assessments at the municipal level combined with simulation modelling done and maintained with the Ministry (MoET) will foster information sharing, and allow for capacity transfer to municipal level authorities thus allowing local authorities to react strategically, with foresight, and make evidence and knowledge based decisions on climate adaptation measures and urban resilience issues.

At the local level, a participatory approach (involving communities and local authorities in planning and implementation activities) will lead to increased local knowledge on climate change adaptation, especially related to urban floods. Project demonstration sites will contribute, from the start and in an on-going way, to sharing lessons and training through local disseminators/community mobilizers. During the project implementation, Public information tools such as noticeboards, leaflets will be prepared and distributed to target communities and a complaints/issues redressal mechanism setup directly to UN-Habitat. The project will also maintain a gender and age disaggregated database of direct beneficiaries and stakeholders involved within the project.

As the national and local level disaster risk and emergency response capacities have been strengthened through establishment of disaster committees and Early warning systems, synergies will be explored with the NEMA committee within the municipality, for participation and delivery of trainings and awareness building around urban resilience issues and for transmission of key/urgent messages to other (non-target) Ger-communities during project implementation. Where relevant, any disaster committees already established at district and khoroo level, will be brought on board during the inception and planning phase of the project and for dissemination of public information. Lessons learned from disaster risk reduction projects will be reviewed and recommendations applied as appropriate.

Community level trainings will be held on identified needs such as climate/environmental risks, hygiene education, community leadership and management. The project will also use a participatory monitoring process, which will enable the beneficiary communities to work directly with the project's M&E and Public Information officers, to highlight issues in delivery and to strengthen adaptation benefits, including in replication and sustaining the project's gains. Opportunities for bringing on board and harnessing the potential of youth, for the implementation of awareness building, trainings, and knowledge products generation through the use of ICT and innovation, will be explored – particularly for the implementation of the social media component to disseminate 'live' progress and results of the project -which will be implemented by the M&E and Public Information officers for the project.

At the national level, the government will be able to draw from lessons learned through this project, including replication and scale-up of good practices. Information will be consolidated in reports and tools methodologies, guidelines and public information products. A direct linkage will be established, through the partnering departments of the various line ministries at the city/town level, with the ministries at the national level facilitating countrywide dissemination to other urban areas/cities/towns, informal settlements, policy-makers and civil society. All knowledge products generated will be made available on a digital format in Mongolian and English and uploaded on the Municipality of Ulaanbaatar's' web portal and spatial database: http://www.ubgeodata.mn/geocity. The simulation model will be maintained by the Ministry of Environment and Tourism and be an on-going data-sharing and risk analysis collaboration between the Municipality of Ulaanbaatar and the Ministry.

Lessons regarding increasing the flood resilience of communities as well as land-use planning mechanisms need to be captured and municipal and district level government officials trained on the best practices and knowledge products to ensure the sustainability of this project and effective replication of best practices.

At the regional level, the lessons, tools, methodologies and guidelines from the project will be consolidated and added to the regional knowledge database and shared with the Regional Climate Change focal point/team and other country offices through the Knowledge Management

focal point within the UN-Habitat Regional office for Asia Pacific.

At the international level, the lessons from the project will be shared with the UN-Habitat best practices unit within HQ through the Knowledge Management focal point for dissemination to all countries; and similarly through the Regional Climate Change focal point/team with the Climate Change Planning Unit within the Urban Planning and Design Branch for consolidation of all knowledge products related to Climate Change – this will complete the cycle in linking to UN-Habitat's regional Cities and Climate change Initiative (CCCI) for Asia and the Pacific.

Table 10: Learning and knowledge management

Expected Concrete Outputs	Learning objectives (lo) & indicators (i)	Knowledge products
Output 1.1 **One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan,** with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2 **(includes the three (3) high risk target districts covering the seven (7) most vulnerable khoroos)* **Output 1.2.** **Simulation model** for forecasting future impacts of climate change flooding **in UB city & Ger-areas** established **Output 1.3** **Seven (7) Detailed Ger-khoroo level Land Use Plans** with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people	(lo): First ever large scale **Territorial Land Use Plan** developed for Ulaanbaatar Ger area with comprehensive and detailed information on proposed areas – with buy in and ownership from stakeholders through in depth consultative process. (lo): First Simulation Model for forecasting future climate change flooding impacts – launched in collaboration between Ministry and Municipality and staff capacitated to populate and analyze data. (i) - Number of institutions and stakeholders involved -Number of consultations held -Number of risks identified -Number and types of vulnerability -Number of data types/sets	-**One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan** & Report -Seven (7)Detailed Ger-community level land use plans -Documentation of Stakeholder Analysis and Mapping -Collected data including the evidence bases -Simulation Model for forecasting future climate change flooding impacts – which could later be expanded to include other climate risks.
Output 2.1 **Seven (7) Khoroo-level floods resilience action plans** to implement the interventions under component 3**;** A series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of interventions under component 3	(lo): First ever Khoroo-level Floods Resilence Action Plans in high risk Ger area – with comprehensive and detailed information on proposed interventions – with buy in and ownership from stakeholders through in depth consultative process. i (i)	- **Seven (7) Khoroo-level floods resilience action plans**

<u>Output 2.2</u> **Khoroo -community level interventions operation & maintenance* and awareness** campaigns and trainings to support the sustainable implementation of interventions under component 3. An Estimated 20.nos. of trainings **(Awareness will also cover potential risks mitigation)* **<u>Output 2.3</u>** **Technical studies – Engineering and hydrological** - required to implement the interventions under component 3.	-Number of interventions/actions defined -Number of stakeholders involved -Number of Community resilience building actions defined -Number of consultations held l(o): Training on implementation modality and on People's Process Operational Manual for project (i) - Number and type of trainings conducted (lo): Engineering and Technical hydrological studies disseminated to technical focal points and stakeholders and inputs solicited. -Number of technical and hygrological studies	- A number of Engineering and Technical hydrological studies finalized with inputs from technical focal points and stakeholders -Documentation of consultations -Documentation of action planning processes -Documentation of training modules
<u>Output 3.1.</u> **Physical assets developed or strengthened in response to climate change related flood impacts** as prioritized (by Khoroos drainage and sanitation) – implemented through community contracting **<u>Output 3.2</u>** **Management & operations; design & supervision of assets / physical infrastructure** – procured as consulting services	(lo): Flood control facilities developed based on the comprehensive risk and vulnerability assessment and climate change impacts simulation (lo): Floods resilient sanitation facilities developed based on the comprehensive risk and vulnerability assessment and climate change impacts simulation (i) -Number and types of floodcontrol facilities -Number of sanitation facilities constructed -Number of direct beneficiaries -Number of indirect beneficiaires -Estimated capacity/impact of the constructed facilities to reduce climate risk for vulnerable communities (measured through future adverse floods)	-Beneficiary database of direct beneficiaries and stakeholders for the project – with gender/age disaggregated data. Operational manual – designed to suit Mongolian urban context - for the implementation of the Peoples Process for Floods Resilience Project - including all forms, templates and workflows for checks and balances.

	- Reduction in incidence of waterborne public health breakouts/disease	
Output 4.1. **Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities,** civil society, and policy-makers in government appropriate mechanisms. **Output 4.2.** **Workshops and trainings will be organised targeting city- and district government officials** with a focus on replication of processes, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans.	(lo): -Documentation of lessons learned and best practices regarding flood-resilient urban community development -Creation of project social media platform – using twitter, Instagram, facebook etc for increased awareness by stakeholders (i) - a database of lessons learned and best practices developed -number of awareness sessions/trainings conducted -number of existing strategies and plans that are updated as a result of the project -Number of local authorities/stakeholders expressing interest for replication.	-Documentations of lessons learned and good practices -Documentation of 'replication' package including Operations Manual and tools, for other Ger-areas -Documentation of training modules -Knowledge products uploaded digital format in Mongolian and English and easily accessible on

H. Consultative process

This design of the project has been informed by in-depth khoroo community level consultations and district level consultations with presiding Governor's, conducted as part of a rapid needs assessment on climate vulnerability in the three target areas (7 Khoroos).

Meetings were conducted with the designated khoroo representatives and consultations were made with the 7 Khoroos communities including the most vulnerable groups; disabled, elderly, informal people, indigenous people, and recent migrants.

Demographic and technical information were collected around the following categories (1) Beneficiary Information (2) Climate change impacts, barriers for adaptation, possible interventions (3) Strengthened Institutional capacity (4) Health issues around climate change (5) Urban development and housing (6) Physical infrastructure (7) Water resources and sanitation (8) Waste and waste infrastructure (9) Natural assets for protection, rehabilitation and (10) Improved policies regulations. (10) A community vulnerability and risk map was also developed as part of the consultation. The full details of the Rapid Settlements Needs Assessments are attached as Annex 1,2 to the concept proposal.

Preliminary discussions were held with city officials working in the areas of hydrology, meteorology and pollution, waste management to understand the urban climate context and supporting policy environment as well as most pressing adaptation needs; and with the head of the Mayor's office to understand recent initiatives of UB City on climate change, and their position on the greatest risks and most urgent needs, for which UN-Habitat support and expertise are needed.

UN-Habitat has been a longstanding partner for the Municipality of Ulaanbaatar and the agencies expertise in dealing with Ger communities and ability to implement upgrading and adaptation projects on a significant scale recognized and valued by all partners. A list of UN-Habitat projects interventions in Ger settlements in Ulaanbaatar, are included in Annex 4.

The relevant hazards (and adaptation measures) identified (especially floods) are related and will be acerbated by climate change. Sand and dust storms, air pollution and severe cold spells are either less directly related to climate change, the impacts are felt more long-term or addressing the impacts lies beyond the control of local government. However, for the full proposal, synergies for addressing the impacts of these hazards have been studied and measures proposed where possible. For instance, freezing of contaminated water (by waste) after floods has been identified during consultations as a health risk when water defreezes.

Climate change related hazards identified during the community consultations and potential measures to address the issues were discussed and validated in the meetings with Ulaanbaatar city Governor's Office, which will be the main partner during the project implementation. The City officials requested UN-Habitat to address the flood resilience building, as it is one of the top priority issues of the Ulaanbaatar city local government, which they were not able to address until today due to lack of funding and appropriate methodology. According to Ulaanbaatar city Governor's Office, the project demonstrated model can be replicated further by the local government in other areas as required. Therefore, flood resilience was selected to be addressed under the project. Other environmental hazards were discussed in the meetings but not included based on the needs of special adaptation policy at national level and bigger investment.

To identify special issues, impacts and needs of women, elderly, disabled, youth and children for the proposed project interventions, Focus Group Discussions (FGD) have been conducted in each target khoroo. Through the FGDs UN-Habitat team aimed to get vulnerable communities' confirmation on locations of main flood and stagnant water areas defined based on the results of previous community consultations, identification of their main concerns and needs regarding proposed drainage channels and toilet facilities and their ideas on post operation and maintenance arrangement.

Table 11: Consultations and Meetings with key stakeholders

Stakeholder, incl. role/function	Consultation objective	Outcome	Conclusion
Climate Change Research Department, Hydrology and Meteorology Institute, Ministry of Environment and Tourism (MoET)	Discuss the climate change adaptation and mitigation context for Mongolia and UB city	The focus so far was found to be on national level climate change adaptation. The need for urban policies on climate change and more information and data at city level A simulation model would	Agreed on the need for city level climate risk and impact assessment particular focus on Ger-areas necessary, including increasing Public Education and Awareness on climate

Dates: 19-25 Apr 2017		be extremely useful for forecasting risks and will be an entry point for MOET and local government cooperation for real-time data sharing and further replication of the initiative for other areas. City officials require capacity building. Public Education and Awareness on climate and resilience in Ger areas very low	and capacity building
Working group for Waste Management Law revision Ministry of Environment and Tourism (MoET) Dates: 19-25 April 2017	Discuss the climate change adaptation and mitigation context for Mongolia and UB city	Team briefed on the results of their assessment of country and UB city current situation of waste management and suggested some of sanitation and waste management issues as potential interventions under the scope of CC adaptation	Agreed to work further to discover more needs of CC adaptation in UB Ger areas and exchanged some of ideas and existing data.
Ulaanbaatar City Governor's office Dates: 4 May 2017 One of its responsibilities is UB city engineering preparedness for any disaster and operation and maintenance of engineering infrastructure including flood and drainage facilities	Explore their interest in the area of urban resilience and climate change adaptation for Ger Areas	Of the areas of air pollution, waste management, water resource management and flooding which are most impacted by Climate Change, the Mayor's office prioritized the issue of floods resilience as the key priority that requires international support. The UB city flood risk management strategy documents (FRMS) were shared and support was requested for adaptation on flood risks in Ger areas.	UN-Habitat agrees to focus on the thematic area of floods resilience in line with agencies prior work in the sectors and in Ger-areas, and building on the recent flood risk assessment and management strategy developed by the city government.
Songinokhairkhan District – 24, 25 and 7thKhoroo Governors, officials and Communities (6) Dates: 20-21 July 2017	Meetings with the Khoroo Governors in the Ger-areas designated as most at risk as per UB city FRMS to confirm their urgent needs and interest in partnering in	All Governors confirmed increased and frequent flooding and shared information on high risk areas. Governors provided their local authority teams to supply access and any information required by UN-Habitat team leader and community mobilizers.[29]	Consensus to be a target location for climate change adaptation and floods resilience

[29] An additional Governer from Khoroo 25 (a newly established settlement) was not ready to partner on the initiative as they cited they did not experience flood impacts. Khoroo 25 is located upstream and outfall flows down to other Khoroos from this location

	project		
Sukhbaatar District 12, 13 and 16th Khoroo Governors, Officials and Communities (see table below) Dates:24-25 July 2017	Meetings with representative and communities including the most vulnerable groups; disabled, elderly, informal people, indigenous people, and migrants	Communities were very responsive and participated in the UN-Habitat rapids needs assessments - See Annex 1,2 for the results from Rapid Settlements Needs Assessment	Target communities are highly vulnerable and require assets strengthening for adaptation to floods and management of water resources, as well as for air quality improvement, waste management, and water sanitation infrastructure.
Bayanzurkh District, 9th Khoroo Governor, Officials and Communities Dates: 25 July 2017	Meetings with representative and communities including the most vulnerable groups; disabled, elderly, informal people, indigenous people, and migrants	Communities were very responsive and participated in the UN-Habitat rapids needs assessments - See Annex 1, 2 for the results from Rapid Settlements Needs Assessment	Target communities are highly vulnerable and require assets strengthening for adaptation to floods and management of water resources, as well as for air quality improvement, waste management, and water sanitation infrastructure.
Community Consultations in Khoroo 7, 9, 12, 13, 16, 24, 25 –the identified high risk settlements for floods in Ger areas in north of Ulaanbaatar city. July - December 2017	Three rounds of community consultations (rapid risk and vulnerability assessment, prioritization and vulnerable groups consultations to identify specific issues and needs)	Social mobilizers provided an introduction to climate change globally and how it impacts Mongolia and took the voluntary participants through a series of consultations via the Peoples Process (1) Identification of issues relevant to climate change (2) Discussion and prioritization of key issues in groups. (3) Possible priority projects to address key issues (4) Depiction on map and presentation to the group.	Finalized priority interventions by communities documented Link to folders of three consolation reports with attendance sheets (annex will be too large) Include consultations related to technical feasibility (engineer)
Ministry of Construction and Urban Development Meeting with MCUD – Counterpart Ministry of UN-Habitat with 10 Year MOU for Cooperation on Human Settlements - 2010-2020 Attended by Mr.Gunbold Baatar, Director,	-Briefing on Asia Pacific Portfolio and regional strategy priorities, and 'Peoples Process' operational approaches; -Briefing on Adaptation Fund -	Ministry representatives have been briefed as per the objectives of the meeting. Had a discussion around Habitat III and Habitat III report for Mongolia (to be published by Ministry), NUA/SDGs, and the upcoming World Urban	Agreement to keep MCUD updated of progress on AF project securing and work together on the areas where MCUD needs technical assistance and support.

Department of Urban Development & Land Affairs policy Implementation and Coordination; and foreign affairs officer.	urban resilience work on climate change adaptation, being proposed by UN-Habitat team for Mongolia -Briefing by Ministry on status of launch of 'human settlements programme' in country - and request for support particularly around the areas of land tenure, zoning, regulations	Forum and municipal financing. Ministry working on a comprehensive review of land legislation and regulations for the country and requested specific technical assistance and support by UN-Habitat	
UN Resident Coordinator and UNDP Resident Representative Ms Beate Trunkmann; and climate change officer UNDP – Date: 11 December 2017	Discussion on Adaptation Fund proposal, and other topics.	Recommendations to check on work conducted by NEMA on disaster risk reduction as potential synergies Possibility of having UNDP on board as advisory capacity for stakeholder consultation	Agreement to keep agency updated of progress on AF project securing.
Meeting with Mr. Arnaud Heckman, ADB Senior Officer in charge of MFF and Urban Development Specialist. Date: 14 December 2017	-Update on status of Tranche 1 and 2; and Affordable housing programme loan to MUB, via GCF, as well as other Technical Assistance possibilities by ADB and timelines. -Update on Adaptation Fund proposal by UN-Habitat	Discussion around synergies with Tranche 2 human settlements upgrading in overlapping Ger areas and the 'levels' of investment/intervention of floods resilience measures proposed	Agreement that UN-Habitat proposed interventions would fully complement the last mile intervention at community level and the large scale resilience measures being planned by ADB for overlapping areas. Agreement hat ADB and UN-Habitat keep the other institution posted on the plans and concrete interventions
Mr. Avirmed Dangaa, Head of Programme Management Office (PMO) and City Coordinator, Municipality of Ulaanbaatar (MUB)	-Briefing on Briefing on ROAP Portfolio, regional programmes and normative and operational 'Peoples Process'	-Municipality appreciated UN-Habitat's ongoing support and community engagement expertise in project implementation in Ger areas.	Commitment to support the implementation of Adaptation Fund project

and Member Ulaanbaatar city Council. Date: 12 December 2017	approaches -Discussion ongoing Community Engagement and SME Development Project with MUB and ADB Affordable Housing project -Briefing on Adaptation Fund proposal	-Agreement on lack of capacity on urban resilience at all levels of the municipality particularly for climate change issues. -Municipality welcomes the support and welcomes UN-Habitat's community engagement expertise in project implementation in Ger areas.	
Official meeting with Ministry of Environment and Tourism; specifically with the Climate Change National Designated Official – with Dr. Batjargal Zamba, National Designated Official for all Climate Programmes; and Ms. Chuluunkhuu Baatar, Project Manager for the National communications to UNFCC, Climate Finance Specialist, Climate change Project Implementation Unit, Nature Conservation Fund Date: 12 December 2017	-Introduction to UN-Habitat and the regional programme -Briefing on status of Adaptation Fund proposal development and substance included	-Discussion around national climate change strategies and priorities and status. -Importance of inclusivity during project setup inception and implementation -Commitment of Ministry National Project Manager to accompany UN-Habitat team during community consultations around proposed interventions on floods resilience	-Agreement on importance of urban resilience for Mongolia -Welcomes the focus on concrete adaptation measures in line with NAPCC Phase II priority. -Secured commitment of MoET endorsement

The results of the three-rounds of in-depth community consultations and Focus Group Discussions can be accessed at following dropbox location:

https://www.dropbox.com/sh/wjt4c2etywcpkeu/AAA0XKXzO4ltAydYXZNF6nmYa?dl=0

I. Justification

The proposed project components, outcomes and outputs fully align with national and local government/institutional priorities and gaps identified, with identified community and vulnerable groups needs and with the Adaptation Fund outcomes as stated will be stated in the Adaptation Fund results framework at the full proposal stage. This alignment has resulted in the design of a comprehensive approach in which the different components strengthen each other and in which outputs and activities are expected to fill identified gaps of Mongolia's and Ulaanbaatar's current climate change response and corresponding institutional capacities. The project aims to maximizing the funding amount for the concrete adaptation component (component 3); funding allocation to the other (softer) components is required for complementarity/support for component 3 and sustainability and quality assurance of the project. The table below provides a justification

for funding requested, focusing on the full cost of adaptation reasoning, by showing the impact of AF funding compared to no funding (baseline) related to expected project outcomes.

Table 12: Overview of impact of AF funding compared to no funding (baseline) related to expected project outcomes

Outcomes/planned activities	Baseline (without AF)	Additional (with AF)	Comment and alternative adaptation scenario's
Outcome 1.1. Relevant threat and hazard information / evidence and recommendations for reducing vulnerability at the municipal and community level generated	Detailed/specific climate change threat and hazard information / evidence is not available for Ulaanbaatar, which means the government and communities can't plan for adaptation / resilience measures	The activities related to this outcome will allow the municipal government of Ulaanbaatar and communities to collect information to start planning for adaptation / resilience measures, especially related to floods, also besides and /or beyond the project	Without relevant threat and hazard information / evidence and recommendations for increasing resilience, especially at the community level, interventions will not be appropriate. The government lacks the capacity and financial resources to execute activities related to this outcome without support
Outcome 2.1. Target community members are aware of climate change impacts and participate in resilience action planning activities	Ulaanbaatar municipality and communities can't plan for adaptation / resilience measures without effective planning processes based on activities executed under outcome 1.1.	The activities related to this outcome will allow the municipal government of Ulaanbaatar and communities to plan for adaptation / resilience measures, especially related to floods.	The municipal government and communities lack the capacity to organize communities and plan effectively for adaptation / resilience. Without capacity development trainings and workshops planning for adaptation / resilience measures will risk inefficiency and the selection of interventions that are not appropriate
Outcome 3.1. Increased adaptive capacity within relevant development and natural resource sectors at the community level	Target communities have no options (capacity and financial resources) to protect their people and assets against climate change impacts, especially floods	The activities related to this outcome will allow target communities to protect inhabitants and assets against climate change impacts, especially floods	Large scale interventions have the risk of not being community driven and appropriate, which would lead to adaptation benefits for fewer people with the same project cost and a greater chance of negative

			social and environmental impacts. Alternative adaptation scenarios are resettlement or construction of more structural buildings (e.g. flats), which are both not in line with needs of the communities and are more costly.
Outcome 4.1. Project implementation is fully transparent. All stakeholders are informed of products and results and have access to these for replication	Communities and the municipal and national government have limited knowledge of resilient planning and protection of towns, communities and assets	Communities and the municipal and national government have increased knowledge of resilient planning and protection of towns, communities and assets	Communities and the municipal and national government need to develop their own capacity and knowledge products related to resilient urban development, especially in response to floods. Without activities related to outcome 4.1. there is a risk that interventions won't be replicated and sustained and demand for adopting similar approaches is not generated; and high level support and engagement for the proposed approach is not mobilized.

J. Sustainability

The project sees that the main way to sustain the achievement of the project in the long run is by linking the adaptation initiatives and lessons to the establishment of an institutional framework, which supports the community-led climate resilience building and its further replication.

By fully engaging settlement households in project activities, including assessments, the development of plans/ strategies and monitoring, the project aims to achieve building of communities' awareness and capacities and furthermore ownership and leadership in the area of disaster management and urban resilience at community level. The establishment of CDC's through the People's Process has also been a demonstrated success as a cornerstone for community governance which has continued to function long after the end of the project, for the maintenance and management of the strengthened social and physical infrastructure assets produced by this project, and in future, around the needs and priorities as defined by communities themselves.

Investing in increasing the resilience of vulnerable physical, natural, and social assets and ecosystems is a sustainable economic approach. It will not only avoid future costs related to

climate change and disaster impacts but it will also enhance livelihood options, improve the health and security of the community.

The city and community level resilience, recovery and upgrading plans will also be considerate of the environment, including for instance the protection of ecosystems or the reduction of waste production to ensure environmental sustainability.

Component 1 of the project which aims to generate evidence and information to better understand climate change related impacts and risks in the most vulnerable and high risk communities of Ulaanbaatar. The generation of a **City wide Ger-area Land Use Plan** and the **Ger-khoroo level Land Use Plans** for the 3 most-at-risk Ger-areas, with in-depth stakeholder consultation will instil the municipality, district authorities and khoroo communities with the know-how and skills to replicate Land-use plan development at the level of their jurisdiction as well as consider the underlying risk factors that are vital for consideration during urban planning. Furthermore, the development of a **simulation model** maintained in partnership with the Ministry of Environment and the Municipality of Ulaanbaatar, will strengthen national-municipal links for sharing data for decision-making. Ownership by two separate government entities will enhance the sustainability of initiatives - the model will be designed for the city level with the possibility of scaling up the geographical coverage to include detailed assessments from other high risk areas in the city and beyond; as well as the potential to simulate other climate induced threats (such as water availability and issues also related to mitigation, air pollution – data collection and systems for which could be funded from other sources). – contributing to institutional cooperation and sustainability.

Component 2 is aimed at generation of Khoroo-level **floods resilience action plans,** fully involving communities in the planning and execution of the proposed interventions under Component 3. The trainings conducted for **the management and maintenance of flood resilient infrastructure** via the Community Development Councils (CDC's) that are formed as part of the People's Process will ensure the sustainability and longevity of infrastructure and adaptation measures through the generation of maintenance plans. Experience has shown from countries that involving the communities through their primary groups and CDCs not only ensures their participation during the planning and implementation of the activities but also facilitates in putting in place a plan for the maintenance of the infrastructure. Various approaches like creating savings schemes and establishing maintenance fund have been implemented elsewhere. These issues and approaches will be discussed during the meetings of the CDCs and appropriate and acceptable system will be implemented.

Where possible women and youth will be involved in the execution of maintenance plans. The awareness raising campaigns that accompany will target youth and children who are particularly quick to adapt healthy habits and behaviours as advocates for behaviour change – also towards their parents and elders, in hygiene campaigns. General trainings on current and future climate risks will generate the understanding of the need for, and the means for communities and local authorities to protect the physical assets from potential climate induced economic risks. The **technical engineering and hydrology studies** will ensure the assets are properly designed to a high quality and maximize the impact and sustainability of these concrete interventions. Furthermore, the technical data generated from these studies will be shared with relevant institutions so that institutional capacities for responding to such risks will be sustainably strengthened.

With Component 3 as the main focus of the project, (2/3 of project value) the sustainability of **Physical assets developed or strengthened in response to climate change related flood**

impacts will directly benefit the most vulnerable populations in the cites' Ger-areas through two main resilience building interventions: (1) improved drainage systems to reduce floods and (2) improved sanitation systems that won't overflow during floods and lead to health issues.

Community involvement throughout the project via the People's Process, and the opportunity to directly influence project activities and outcomes to best suit the community dynamics as a whole, will ensure buy-in and sustainability of the project interventions over and beyond the duration of the project. Communities working together towards common goals will build mutual trust and strengthen bonds between longer-term host residents and new in-migrant communities generating a positive community spirit and resilient and sustainable social fabric in Ger-areas. The use of local materials and designs and local capacities will ensure environmental benefits and economies of scale, allowing project funds to remain/circulate within the local communities who have a vested interest in their self-development. Accompanying awareness components on health and environmental issues within communities will increase adoption of hygienic behaviours and project management training will enhance the management, negotiation and cooperation capacities leading to environmental and social resilience of the communities.

The **Management & operations; design & supervision of assets / physical infrastructure component, driven by** the international advisory technical team, will ensure professional capacity building and technology transfer leading to improvement of the professional capability of national entities, institutions and national project teams to implement and replicate participatory mechanisms adapted to suit the local context – contributing to sustainable enhancement of national institutional, multi-level municipal and community capacities for implementing concrete adaptation project initiatives.

Component 4 on generation of knowledge, advocacy and dissemination, through **lessons learned and best practices; and workshops and trainings regarding climate (flood) resilient urban development and land use planning** will be targeted district and khoroo communities, policy-makers in government and civil society will allows transparency and city- and district government officials, respectively.

The inception workshop planned for the onset of the project which will bring all key stakeholders at national and local government level, communities, IFI's, donors and civil society with an interest and stakes in the sustainable development of the city, on board, to ensure their inputs and buy in – allowing for a wide ownership and sustainability of the project and ensuing results.

At the policy level, consultations with the Project Advisory Committee on enhancing existing policies, strategies and plan will also ensure sustainability through embedding the knowledge and technical data within binding legal and regulatory frameworks.

K. Environmental and social impacts and risks

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP). Further to Section II.E, above, outlined below is a summary of the findings of the preliminary screening and assessment process that has been carried out to evaluate environmental and social impacts and risks of proposed interventions and based on that, of the entire project. With this information, the entire project has been categorized, and risks and impacts screening sheets completed, including the identification of risks mitigation measures, where needed.

Part III, section C further describes the essence of the impacts and risks screening, the environmental and social management plan and the risk monitoring system, while annex 5 demonstrates in detail how this project will comply with the AF ESP, which is especially related to dealing with concrete interventions under component 3.

UN-Habitat conducted a project screening of environmental and social risks according to the 15 principles outlined in the AF's Environmental and Social Policy based on analyzing information made available at project design stage. Where potential risks have been identified, preventive or mitigation measures have been proposed appropriate for the significance of the risks. An overview is presented below.

Institutional strengthening, capacity development and knowledge management activities under Components 1, 2 and 4 have been categorized as low risk. Despite this, steps will be taken to ensure that no environmental or social impacts can occur (see also Section II.E and annex 5).

Activities under Components 3 are 'concrete' activities, and as such, some activities have the potential, without an environmental and social safeguarding system, including mitigation measures, to create negative environmental and social impacts. As such, some activities under this component fits into the medium (B) risk category and some into the low (C) risk category. This is because of the scope of the proposed activities, that are numerous, small scale and very localized, and proposed and managed by communities where possible, who have a stake in avoiding environmental and social impacts. This means that the potential for direct impacts is small and localized, that there can be few indirect impacts, and that transboundary impacts are highly unlikely. Given this, cumulative impacts are also unlikely.

Because of the nature of some activities under components 2, the entire project is regarded as a medium risk (Category B) project. Therefore, an ESMP has been developed, as included in annex 5

The project has been designed to generate positive economic, social and environmental impacts, using inputs from especially women and marginalized and vulnerable groups in target communities and by incorporating best practices from other projects. The adaptation measures proposed have been selected together by the communities and local authorities, making sure they are culturally appropriate and local.

Table 13: Overview of potential environmental and social impacts and risks measures to prevent or mitigate these.

Checklist of environmental and social principles	**Potential risks and significance** **(For details see the filled risk screening sheets for the concrete interventions**	**(Further) assessment procedure and preventive and mitigation measures (For details see annex x and the filled risk screening sheets for the concrete interventions**
1. Compliance with the Law	Insufficient alignment with laws and technical standards, especially related to implementation of concrete interventions under components 3. This principle always applies but the risk is not significant (i.e. low) (see part II.E).	Relevant national and local authorities were consulted during the project design phase to ensure compliance with all relevant laws and technical standards. It will be ensured that each person

	The project designed the interventions as such that EIA are not required by national law. This has been confirmed by government authorities	associated with the project is aware of domestic and international laws and compliance needs to technical standards requirements (see section E).
2. *Access and Equity*	Risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them risk of unequal distribution among target population / communities and households of project benefits. This principle has been triggered for both concrete interventions and supporting measures that include involvement of communities or government staff (see part II.E and annex 5) The significance of the risk is small (i.e. low). During consultations, it became clear that no specific group is treated differently. However, to ensure that informal settlers, poor people, etc. are involved in decisions that may affect them, a mitigation measure is proposed.	Consultations / a participative approach have and will continue to capture all needs of the target population / communities and households and interventions have been designed according to their 'access' needs and concerns Community organization where everyone can participate, but quotas will be used to ensure different groups are included. Also, criteria for beneficiaries' selection will be established in advance. Primary Groups membership will include all households benefitting from construction of drainage
3. *Marginalised and Vulnerable Groups*	Risk that some vulnerable affected groups may not participate in decisions making processes regarding design and planning of activities that may affect them This principle has been triggered for both concrete interventions and supporting measures that include involvement of communities or government staff (see part II.E and annex 5) The significance of the risk is small (i.e. low). During consultations, it became clear that no specific group is treated differently. However, to ensure that informal settlers, poor people, etc. are involved in decisions that may affect them, a mitigation measure is proposed.	
4. *Human Rights*	Risk that land and tenure arrangements and/or community based property rights are affected; failure to proactively protect the rights (i.e. international standards) of all stakeholders affected by the project This principle always applies but has been triggered for the flood protection and drainage system intervention in Khoroo 7 (see part II.E and annex 5) The significance of the risk is medium: In	Consultations have and will continue to capture issues related to human rights in target areas Community Development Councils will be formed with membership of all households benefitting from construction. The design of drainage sections will be managed in neighborhood sections which can be managed by these CDCs.

		Khoroo 7, there is 1 km of planned underground drainage. This drainage channel is underground because it will go through some private plots. Although people living in this area agreed with an open-close approach, a risk preventive measure is still proposed to ensure activities will only be executed when all inhabitants directly benefitting / being affected fully agree with the process and all activities. In the eastern part of Khoroo, where the beneficiaries of the planned flood protection wall is planned, land has been confirmed public (i.e. informal).	Have all possibly affected households sign that they agree with the intervention; include clause in all contract that contractor will comply to human rights markers. An alternative drainage plan will be developed (and has already been considered) if inhabitants don't agree. The UN-Habitat Human rights officers and PAC will check compliance.
5.	*Gender Equity and Women's Empowerment*	Women and men do not have equal opportunities to participate in the project and do not benefit equally from interventions This principle has not been triggered for concrete interventions but will be taken into account for supporting measures and to align with the AF gender policy (see part II.E and annex 5) Women are well represented at all level of government and in communities. Therefore, there is no reason to think women will have unequal opportunities to participate in the project and do not benefit equally from interventions.	Consultations / a participative approach have and will continue to capture all needs of the target population / communities and households and interventions have been designed according to their 'access' needs and concerns The project complies to the AF gender policy with gender targets, involvement of women committees at Khoroo level and women representatives at the ministerial level. Trainings only inviting women may be organized
6.	*Core Labour Rights*	Risk of employing underage people and to support underpayment and unsafe working conditions; executing entities for the project may not adhere to the ILO labour Standards and national labour laws. This principle always applies but has been triggered for the flood protection and drainage system intervention (see part II.E and annex 5) The significance of the risk is small (i.e. low): there is limited knowledge of safe work conditions. However, there is no reason people won't adhere to ILO standards.	The project will monitor that international and national labour laws and codes are respected, for any work that may be carried out in relation to the project. This includes the eight International Labour Organization Convention (ILO) core labour standards related to fundamental principles and rights of workers, as well as ILO Convention No. 169, which concerns rights of indigenous and tribal peoples. Contracts will be reviewed periodically to ensure compliance with these laws. This will be done by ensuring transparency and accountability and by including standard clauses requiring the compliance with ILO conventions and country level standard in MoUs, AoC and contracts.

		Ensure that ICSC international health and safety standards are clearly accessible and understood. e.g. by putting clearly visible signs detailing health and safety standards to be located at projects sites and by supplying protective equipment.
7. Indigenous Peoples	The principle has not been triggered for concrete interventions. During consultations, it became clear that, as a result of the communist time, different groups are not discriminated or treated differently	
8. Involuntary Resettlement	Risk of temporary or permanent and full or partial physical displacement (see also principle 4) This principle has been triggered for the flood protection and drainage system intervention (see part II.E and annex 5) The significance of the risk is medium: In Khoroo 7, there is 1 km of planned underground drainage. This drainage channel is underground because it will go through some private plots. Although people living in this area agreed with an open-close approach, a risk preventive measure is still proposed to ensure activities will only be executed when all inhabitants directly benefitting / being affected fully agree with the process and all activities.	Consultations have and will continue to capture issues related to human rights in target areas Community Development Councils will be formed with membership of all households benefitting from construction. The design of drainage sections will be managed in neighborhood sections which can be managed by these CDCs. Have all possibly affected households sign that they agree with the intervention; include clause in all contract that contractor will comply to human rights markers. An alternative drainage plan will be developed (and has already been considered) if inhabitants don't agree. The UN-Habitat Human rights officers and PAC will check compliance.
9. Protection of Natural Habitats *10. Conservation of Biological Diversity* *11. Climate Change*	These principles have not been triggered for concrete interventions. However, the project will ensure the principle will be taking into account when developing land use plans and technical studies, thus ensuring compliance to the AF ESP	Initial risk screening assessments have not identified potential risks related to these pronciples Including standard clauses requiring the compliance with the safeguard areas in AoC and contracts; screening the plans for consideration of the risk areas.
12. Pollution Prevention and Resource Efficiency	Risk that consumption of raw materials will have a negative effect (elsewhere) This principle has been triggered for the flood protection and drainage system	Discuss with companies and check source of material before purchase

	intervention (see part II.E and annex 5) The significance of the risk is small: the interventions will require cement, soil and rock. Although the practice is that these are purchased through Mongolian companies, a preventive measure is proposed to ensure soil and rocks are not mined from areas where it can have a negative effect, such as from the river.	
13. Public Health	Risk that elements of activity construction, operation, or decommissioning pose potential safety risks to local communities (see also principle 6) This principle has been triggered for both concrete interventions (see part II.E and annex 5) The significance of the risk is small (i.e. low): there is limited knowledge of safe work conditions. However, there is no reason companies and people won't adhere to ILO standards. To ensure they will, a mitigation measure is proposed.	The project will monitor that international and national labour laws and codes are respected, for any work that may be carried out in relation to the project. This includes the eight International Labour Organization Convention (ILO) core labour standards related to fundamental principles and rights of workers, as well as ILO Convention No. 169, which concerns rights of indigenous and tribal peoples. Contracts will be reviewed periodically to ensure compliance with these laws. This will be done by ensuring transparency and accountability and by including standard clauses requiring the compliance with ILO conventions and country level standard in MoUs, AoC and contracts. Ensure that ICSC international health and safety standards are clearly accessible and understood. e.g. by putting clearly visible signs detailing health and safety standards to be located at projects sites and by supplying protective equipment
14. Physical and Cultural Heritage	The principle has not been triggered for concrete interventions. However, the project will ensure the principle will be taking into account when developing land use plans and technical studies, thus ensuring compliance.	Initial risk screening assessments have not identified cultural sites that could be affected by interventions. Including standard clauses requiring the compliance with the safeguard areas in AoC and contracts; screening the plans for consideration of the risk areas.

15. Lands and Soil Conservation	The principle has not been triggered for concrete interventions. However, the project will ensure the principle will be taking into account when developing land use plans and technical studies, thus ensuring compliance. Also, the technical studies will include a soil analysis component as required by law.	Initial risk screening assessments have not identified any risk related to this principle Including standard clauses requiring the compliance with the safeguard areas in AoC and contracts; screening the plans for consideration of the risk areas.

1. PART III: IMPLEMENTATION ARRANGEMENTS

A. Arrangements for project management

KEY STAKEHOLDERS & IMPLEMENTATION ROLES

The project will be implemented by UN-Habitat as an integral part of the UN-Habitat Mongolia Country Programme with inputs from the UN-Habitat Climate Change in Cities Initiative via the Regional Office for Asia and the Pacific, through establishment of a ***Project Implementing Unit (PIU)***.

UN-Habitat will engage with **UNOPS** for the execution of the hardware components for climate adaptation in the Ger-areas, harnessing their operati**o**nal capacity to deliver technical infrastructure outputs as done in other countries in Asia Pacific through establishment of a ***Project Execution Unit (PEU)***.

The project will be implemented in close coordination with two key national partners, i.e. **the Municipality of Ulaanbaatar** and **the Ministry of Environment and Tourism**, who will be the main national executing entities. The day-to-day project implementation activities will be carried about by the Ulaanbaatar-based PIU, and PEU to be situated in the districts of Ulaanbaatar city where the proposed project sites are located.

The following section identifies the main stakeholders and their key functions, roles and responsibilities for the project. The project organogram which follows the management arrangement section, depicts the key stakeholders for the project and how they will coordinate with each other.

The Ministry of Environment and Tourism (MoET)

The Ministry is the key custodian of the Adaptation Project within the Government of Mongolia and will retain oversight and provide policy guidance through its role as co-chair of the Project Advisory Committee (PAC) – the main advisory board for the project

The Ministry will also be the National Level Executing Entity with joint-custodianship of all 'soft' knowledge products generated to support the resilience building of urban ger-areas along with the Municipality of Ulaanbaatar, and directly benefit from the component on forecasting future climate impacts via the climate simulator. The MoET as lynchpin for all national/city level strategies is a key stakeholder for many of the issues to be addressed by this project and as such the Ministry is well placed to coordinate and ensure stakeholder engagement, as well as mainstreaming project findings into policies

The Ministry will provide all necessary guidance, support and information for the successful implementation of the Project, including the following:

a) Support in all environment related administrative issues for the construction of flood facilities in the selected project sites in Ger areas

b) Assistance for the completion of administrative formalities related to environmental impact assessment, permission, approval, and related matters
c) Support for the organisation of policy dialogues and capacity development activities
d) Provision of staff time for Policy Advisory Committee (see section 3 below)

The Municipality of Ulaanbaatar (MUB) and Local Authorities

The Municipality will be the main city level Executing Entity with joint-custodianship of all 'soft' knowledge products generated to support the resilience building of urban ger-areas along with the MoET, and directly benefit from the component on forecasting future climate impacts via the creation and launch of the climate simulator.

Building on UN-Habitat's existing and ongoing relationship with the Municipality, UN-Habitat will work closely with the Mayor's office under the Mayor, the relevant District level Governors, the Khoroo Governors and ger-communities to capacitate them in implementing via the People's Process. The main recipients of the trainings to be conducted as part of the People's Process will be the Municipal, District and Khoroo level authorities identified as partners for the project areas; to also include the municipal level NEMA team working on disaster response – providing the link between city level disaster response and emergency preparedness and climate adaptation and response.

The Municipality will provide all necessary support and information for the successful implementation of the Project, including the following:
a) Establishment of the Project Coordination Unit.
b) Support in all administrative issues for the construction of flood facilities in the selected project sites in ger areas including the land issues
c) Assistance for the completion of administrative formalities related to construction design, permission, approval, and related matters
d) Support for the organisation of policy dialogues and capacity development activities
e) Identify synergies between the National Emergency Management Agency (NEMA) and the project goals; particularly through establishing direct linkage with the municipal level team, around the training and capacity building activities
f) Provision of staff time for Policy Advisory Committee and Project Coordination Unit (see section 3 below)

Project Coordination Unit (PCU)

This unit will be the main technical and operational wing of the Government for the project, maintained within the municipality for implementation oversight, technical and operational clearance of standards and procedures and ensuring compliance and consistency with national and city level strategies and plans. They will also facilitate day to day coordination and of the Peoples Process Approach adapted to the Ulaanbaatar context and remove institutional and legal delays and bottlenecks ensuring the project will be delivered in a timely manner.

The PCU will be run by a committee chaired by the General Manager under the Mayor's Office of UB City and co-chaired by the Implementing Entity Project Manager in the Mongolia Country Office, supported by the UN-Habitat Regional Office for Asia and the Pacific as necessary. Khoroo Governors, Project Field Engieers and Social Mobilizers will be key members of the PCU; and

Community Development Council (CDC) representatives will be invited to participate at all formal sessions.

The PCU will formally meet every four months (and every 2 months during the construction season) to review the following:
- review status of all planning aspects of the physical works in the area
- review status of all AOC signing, disbursement and implementation status
- review the financial statement / progress
- review the physical progress of the activities
- assist in solving issues at community level and at official level
- provide suggestions on managing the project

Project Implementing Unit (PIU)

This Unit will provide project management support and oversight, will serve as the secretariat to the Project Advisory Committee and will take the role of quality assurance within the project. UN-Habitat has been a longstanding partner for the Municipality of Ulaanbaatar and the agencies expertise in dealing with ger communities and ability to implement upgrading and adaptation projects on a significant scale is recognized and valued by all partners (see list of projects interventions in ger settlements in Ulaanbaatar included in Annex 4).

(i) PIU will ensure:
   a) efficient and effective implementation of project activities;
   b) efficient coordination with project partners;
   c) efficient coordination with ROAP-Fukuoka for necessary supervision and support to the project implementation;
   d) identify bottlenecks and potential impediments to project execution and raise with the project advisory committee to ensure decisions and action are taken
   e) identify synergies with potential project partners to add value to project and facilitate cooperation as necessary and
   f) any other activities, as necessary.

(ii) PIU will consist of:
   a) UN-Habitat ROAP: Human Settlements Officer -Team Leader (International 1); Programme Management Team
   b) UN-Habitat Mongolia Office: Project Manager (National 1), Coordination/ Communications Specialist (National 1), Monitoring and Reporting Officer (National 1)

The PIU will work consistently with the PCU and all executing entities to ensure the project will be implemented in a timely manner, in view of the critical time window available for construction in Mongolia. With the project focusing on 2/3 of the project funds on the implementation of concrete adaptation measures, and the construction season being very short, any delays would significantly hinder the smooth implementation of the physical measures. The proposed Management Arrangements are designed with this critical issue in mind, particularly the Project Execution Unit within UNOPS, which will be designed for quick delivery of hard infrastructure complemented by the equally important quality checks and community consultation compliance by the Peoples Process execution team to be carried out by an executing INGO.

The PIU will also raise potential issues with the Adaptation Funds designated focal point/team and solicit advice and views for any proposed changes to the project design and or delays to the project execution

Project Execution Unit (PEU)

The management, design, and operational setup of administration and logistics for all of the components will be done via a Project Execution Unit setup with executing entities UNOPS and INGO. Due to the complex setup and nature of the project UN-Habitat will be involved in the selection of international advisory team for both executing entities, who will have a strong background in complex community development projects and institutional strengthening. All international advisors and direct project execution team will be part of the technical management and substantive monitoring consultancy services signed between UN-Habitat, UNOPS and INGO

UN-Habitat decided to engage with another UN agency and an INGO rather than a national executing agency due to the complex nature of the operational and monitoring setup and stringent checks and balances required of the People's Process; and also based on prior experience implementing projects with UNOPS and INGO, via the Peoples Process in other countries in Asia and the Pacific and globally. The contracting modality between the UN-Habitat, UNOPS and INGO will be a UN to UN agreement and AOC respectively, negotiated at the regional level and cleared by respective headquarters.

i. PEU will ensure:
    a) Efficient and effective implementation of project activities;
    b) Efficient coordination with beneficiary communities;
    c) Efficient coordination with the key stakeholders for successful implementation of the project; and
    d) Any other activities, as necessary.

ii. PEU will consist of:
    a. Climate Change Advisor (International 1); Community Development & Contract Advisor (International 1);
    b. Field Engineer (National 1); Urban Planner (National 1); Operations/Finance Officer (National 1); Social Mobilizers (National 6);

PEU will also include a short term knowledge management advisor to support the activities related to high level advocacy and advisory inputs for rollout of ICT initiatives such as the simulator; supported by a national coordination and communications officer who will ensure field level monitoring & public information as well as knowledge dissemination and social media support for Components 3 an 4 respectively.

UNOPS will facilitate the administration of Agreements of Cooperation (AoCs) related to Output 3.1. The INGO[30] will provide technical advisory support on the aspects related to the People's Process and community contracting. UN-Habitat will sign community contracts (Community Implementation Agreements) directly with the Community Development Councils.

[30] Details of Proposed INGO: Strategic Centre for Disaster Risk Reduction (SCDRR) was registered in Nepal in 2011 as a non-governmental organization. The focus of the organization is to protect and prevent loss of life, property and environment from disaster (natural and man-day) and climate change adaptation by preparing the community through community organization, pre-disaster risk reduction, mitigation, education, outreach and training programs. The organization seeks to collaborate with both national and international agencies in these efforts. The team members of the organization have focused their activities in post-earthquake reconstruction training; bio-engineering in physical construction for slope stabilization; assessment (seismic, vulnerability, floods and landslide prone zones); etc. Two of the team members have extensive experience in community mobilization and involvement in many different contexts in Nepal, India, Bangladesh, Indonesia, South Sudan, Mongolia, Afghanistan, etc.

Ger Communities

The Ger Communities will be key executing entities for community level infrastructure adaptation works through the formation of Community Development Councils (CDC's) of which one will be setup per khoroo, and depending on the scale of the work planned for the location. Primary Groups (PG's) consisting 20 or so households per group will be setup and recipient of one community contract with UN-Habitat. Below are the roles and functions of the CDC's and the Primary Group's in relation to the People's Process.

Primary Groups

- Group of 20 households will form Primary Group of the beneficiaries interested in installing improved latrines
- They will elect one Chair, one Vice Chair, one Treasurer and one Secretary
- With the assistance of the Social Mobilizer and Field Engineer the PG will prepare plan for implementing the improved latrines (format provided)
- They will receive contract from their CDC to implement improved toilets in their plot in given format
- The AOC (see above) will be countersigned by the Khoroo Governor
- Funds will be disbursed in three instalments based on 75% work completion of each tranche/instalment, confirmed by PEU.
- Upon completion of the construction they will submit financial report for the amount received and completion report in format provided
- They will be responsible for collecting 10% household contribution before the disbursement of the first instalment
- Social Mobiliser and Field Engineer will provide assistance to prepare the community contract for signature with the CDC

Community Development Councils

- The Chair of each Primary Group will be the member of the CDC
- They will elect one Chair, one Vice Chair, one Treasurer and one Secretary
- With the assistance of the Social Mobilizer and Field Engineer the CDC will prepare an integrated schedule of plans received from the PGs.
- In Year 2: They will receive contract from UN-Habitat for the following:
  - 40% of the improved latrines units allocated for the Khoroo
- In Year 3: They will receive contract from UN-Habitat for the following:
  - 60% of the improved latrines units allocated for the Khoroo
- The AOC will be countersigned by the Khoroo Governor
- The CDC will sign community contract with the respective Primary Groups who have collected 10% of their contribution
- The CDC will make subsequent disbursement based on physical progress and financial report certified by the Project Engineer and Social Mobilizer
- The CDC will prepare progress report and financial report and submit to UN-Habitat every three months
- The CDC will meet every four months (every 2 months during the construction season) to
  - review status of all planning aspects of the physical works in the area
  - review status of all AOC signing, disbursement and implementation status
  - review the financial statement / progress
  - assist in solving issues at community level and at official level
  - provide suggestions on managing the project

LEGAL AND FINANCIAL ARRANGEMENTS

UN-Habitat, the Ministry of Environment and Tourism, the Municipality of Ulaanbaatar (MUB) and the General Manager and Head of the Governor's Office of Ulaanbaatar, the District Governors and Ger-Communities within Songinokhairkhan, Bayanzurkh and Sukhbaatar will sign a joint **Memorandum of Understanding** to which this Project Document will be attached, to ensure that all partners are fully committed to the project.

The PEU will develop an operational manual that clearly outlines the roles and responsibilities of the key project stakeholders and contain all the necessary tools, forms and templates required to administer the project. The operation manual will be shared with the Project Coordination Unit (PCU) for inputs, cleared by the Project Implementation Unit (PIU) of UN-Habitat and endorsed by the Project Advisory Committee (PAC).

GOVERNANCE ARRANGEMENTS

At the national level, the Project will be supported by a **Project Advisory Committee** (PAC). The PAC will be formed to oversee and keep abreast of project progress and facilitate the implementation of the project, including overseeing and cooperating with the project implementing and project executing team, the technical advisory groups,.

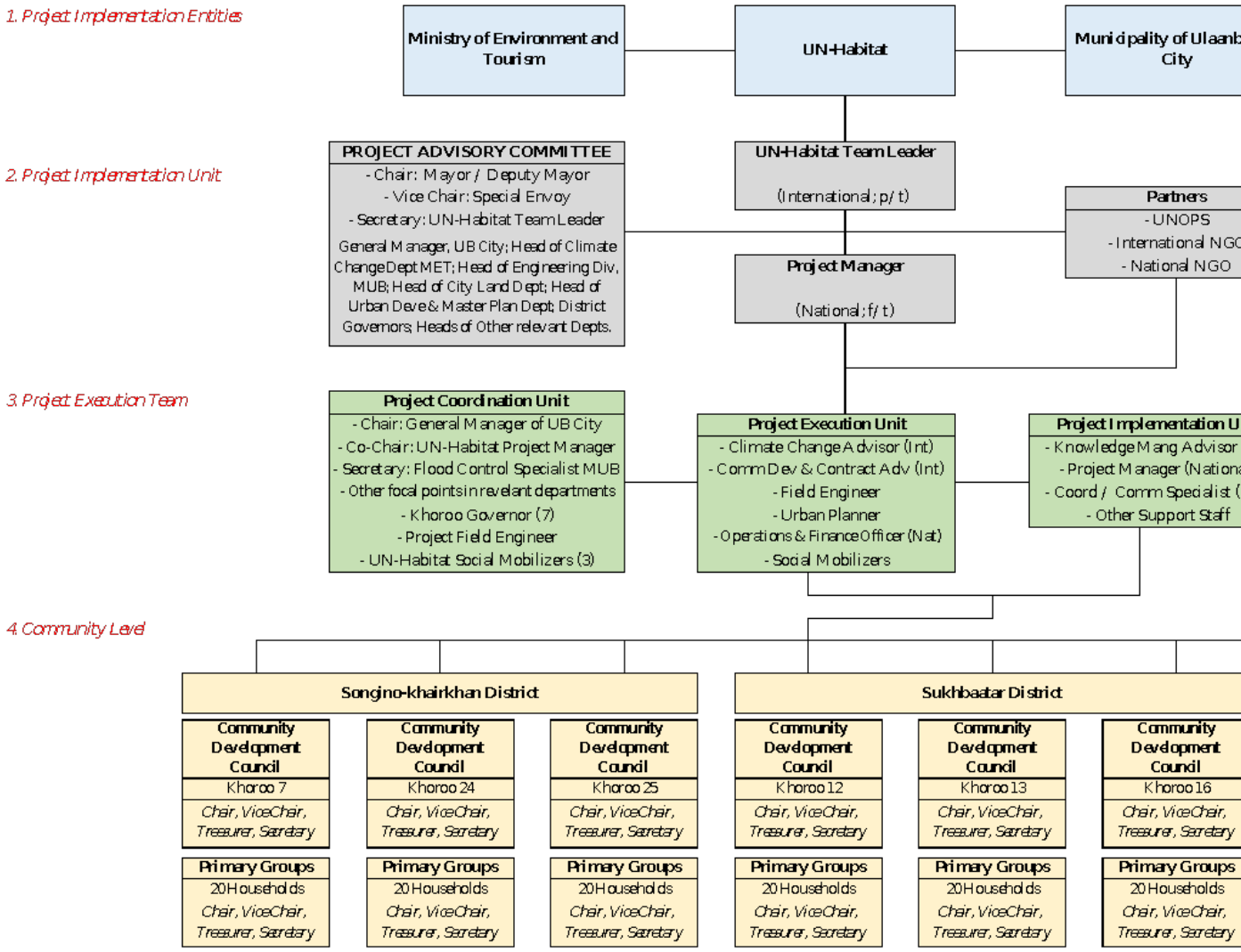
The PAC will be chaired by the Mayor and the Vice Chair will be the Special Envoy for Climate Change of the MoET. The Secretariat services will be provided by UN-Habitat. The voting member from UN-Habitat will be the responsible officer at the Regional Office for Asia and the Pacific (Team Leader) or his/her designate. Other voting members will be the members as shown in the organigram.

The PAC will: (1) approve annual work plans and review key project periodical reports; (2) will review and approve the contractual agreements, including work plans, with a particular emphasis on environmental and social safeguards, budgets and payment schedules; (3) review any deviations and consider amendments to work plans and contractual arrangements. The PAC will meet at least once every six-months and whenever needed in fulfillment of the above functions.

LAUNCH OF PROJECT

At the launch of the project UN-Habitat's PIU together with the PEU will organize a **high-evel inception workshop** inviting all key stakeholders cited within project as well as INGO's, academia, civil society and donors and representatives of the community, in order to present the concept, approach and the proposed outputs of the project, discuss impact and solicit feedback and inputs on a wide scale in a participatory manner. Comments and feedback will be sought, captured and incorporated for desigining the most appropriate implementation workplan for the project. The plan for the incepetion workshop will be presented to the Project Advisory Committee (PAC) within two month of securing the project. UN-Habitat will hold the inception worksship within three months of approval of the project by Adaptation Fund and clearance through UN-Habitat systems.

ORGANOGRAM OF THE PROJECT



B. Measures for financial and project risk management

Under guidance of the UN-Habitat Regional Team Leader, supported by the Project Manager, Field Monitoring Officer will monitor the status of financial and project management risks, including those measures required to avoid, minimise or mitigate these risks, throughout the project (please see also Section D, Part III

The main financial and project risk are related to short construction seasons due to cold weather and the lack of ministerial support due to regular change of government. Besides that, the lacking capacity regarding land use planning, community organization and high quality and resilient infrastructure delivery requires quality control from UN-Habitat side.

The table below gives an overview of overall project management and financial risks, an assessment of the significance of the pertaining risks in terms of probability and impact and outlines measures that have been embedded in the project design in order to manage and/or mitigate these risks.

Table 14: overview of financial and management risks and measures to mitigate these

Nr	Category and risk	Rating of probability and impact (1: Low; 5: High)	Management/mitigation measure
1.	Environmental/social: Current climate and seasonal variability and long winters (October – April) result in infrastructure construction delays	Impact: 4 Prob: 2 (medium)	❑ It is proposed that the project will start in October so that there will be three (3) summers within the project duration and enough time for the technical design and approval of it.
2.	Institutional: Loss of government support (at ministerial and municipal level) for the project (activities and outputs) may result in lack of prioritization of AF project activities.	Impact: 2 Prob: 3	❑ Establishment of a project advisory and coordinator committees and the overall participatory and inclusive project design will improve national, municipal/ district and beneficiary level ownership throughout and thus enhance government support for project implementation. ❑ UN-Habitat will establish agreements (MoUs and AoCs) to ensure executing entities will deliver project activities and outputs. UN-Habitat will facilitate planning processes to deliver these outputs at all levels of government and in communities. ❑ A strong participatory approach at the community level is required to ensure ownership and support of communities
3.	Institutional: Loss of government support (at Khoroo / community level) for the	Impact: 2 Prob: 2	❑ A strong participatory approach at the community level is required to ensure ownership and support of communities

	project (activities and outputs) may result in lack of prioritization of AF project activities; Due to communist history and many immigrant community organisation is limited.		❑ UN-Habitat already has strong ties in the target Khoroos from former projects
4.	Institutional: Capacity constraints of local institutions, communities and the private sector may limit the effective implementation of interventions	Impact: 2 Prob: 2	❑ The project has a strong capacity building and training component (component 2), designed to promote effectiveness and sustainability at the community level. ❑ UN-Habitat will contract expert in the field of climate change and land use planning, community organization and technical design and M&E to ensure quality control from UN-Habitat side.
5.	Financial: Inflation and instability of the national currency leading to budget issues and increased prices for infrastructure delivery	Impact: 3 Prob: 2	❑ All budgets will be in US$ ❑ Include clause in contract with private sector that they can't increase the costs during the project duration.
6.	Financial: Inflation and instability of the national currency leading to budget issues and increased prices for infrastructure delivery	Impact: 3 Prob: 2	❑ All budgets will be in US$ ❑ Include clause in contract with private sector that they can't increase the costs during the project duration.
7.	Institutional: Communities may not adopt activities during or after the AF project, including infrastructure maintenance	Impact: 3 Prob: 1	❑ To ensure ownership and sustainability, community members will need to bring in 10 percent of the value of the latrines. ❑ Capacity building and training of communities will be undertaken to improve their awareness and understanding of the benefits of the activities, including infrastructure maintenance (component 2). ❑ Communities will be involved in project implementation/decision making throughout the project. In depth community consultations will take continue to take place
8.	Financial: Complexity of financial management and procurement. Certain administrative processes could delay the project execution or could lack integrity	Impact: 2 Prob: 1	❑ Financial management arrangements have been defined during project preparation. ❑ UN-Habitat's control framework, under the financial rules and regulations of the UN secretariat, will ensure documentation of clearly defined roles and responsibilities for management, internal auditors, the governing body, other personnel and demonstrates prove of payment / disbursement.

			❑ Procurement will be done by the executing entities as agreed through AoCs (with relevant conditions). The project manager and the project team have a certifying role (for key procurements / expenditures). The Project Management Officer (PMO) in ROAP will have the oversight responsibility ❑ UN-Habitat will assist communities with contracting appropriate private sector partners, including clear conditions and binding arrangements in the contract
9.	Institutional: A lack of coordination between and within national government Ministries and Departments.	Impact: 1 Prob: 1	❑ The Project Advisory Committee under the leadership of the MoET is to ensure coordination. Should UN-Habitat observe coordination problems, the agency will try to resolve issues directly with concerned parties and or the PAC.

C. Measures for the management of environmental and social risks

Sections II.E and II.K show the outcome of a systematic screening and assessment process that has been done based on information from consultation with national and local government stakeholders, a wide range of other concerned stakeholders as well as the target communities. The project design has benefitted from this process.

To ensure that remaining risks are well managed, the project management and governance section (Section III.A) and the Monitoring and Evaluation section (Section III.D + designated budget) fully take the management of environmental and social risks into account. In addition, annex x fully demonstrates how the project complies with the ESP and annex x shows how the Environmental and Social risks will be managed through an ESMP.

The ESMP developed for this project, and detailed in Annex 5, lists all potential risks identified and the preventive / mitigation measures proposed to reduce potentially adverse environmental and social impacts to acceptable levels. The plan also shows how these potential risks and mitigation measures will be further motored, including responsibilities. Specifically, the ESMP:

(i) Identifies and summarizes all anticipated adverse environmental and social risks and impacts in line with the Adaptation Fund's ESP principles;
(ii) Provides information about the significance of the risks of interventions
(iii) Describes mitigation measures, both from the perspective of mitigating risks at each activity and from the perspective of upholding all ESP principles.
(iv) Refers to responsibilities and sections where responsibilities for further screening and monitoring is discussed.
(v) Takes into account, and is consistent with, other mitigation plans required for the project in particular those that relate to national law

Sections II.E and II.K provide an overview of the 15 principles, the initially screened and assessed risks and potential need for further screening, assessments and monitoring throughout the project.

Additional to the risk mitigation measures identified in the ESMP in annex 5, the following elements will be put in place to ensure the compliance with the ESP:

(i) All MoUs and Agreements of Cooperation with Executing Entities will include detailed reference to the ESMP and in particular the 15 ESP Principles.
(ii) The ToR of Committees and Advisory Groups, project personnel and focal points will include will include detailed reference to the ESMP and in particular the 15 ESP Principles.
(iii) All key Executing Entity Partners will receive training / capacity development to understand the 15 Principles, the ESMP and in particular their responsibilities. This will include members of the Project Advisory Committee, the Project Coordination Unit and the Communities.
(iv) A Monitoring and Evaluation Framework, including monitoring of risks and mitigation measures, will be developed by the project management team and presented for approval to the Project Advisory Committee.
(v) The UN-Habitat Human Rights Officers and PAC will check project compliance to the AF ESP during the project (besides the project manager).
(vi) A grievance mechanism will be put into place, allowing any affected stakeholder to raise concerns, anonymously if they wish

D. Arrangements for monitoring, reporting and evaluation

The AF project will comply with formal guidelines, protocols and toolkits issued by the AF, UN-Habitat and the government of Mongolia. The Monitoring and Evaluation (M & E) of progress in achieving project results will be based on targets and indicators established in the Project Results Framework (see below). Besides that, the status of identified environmental and social risks and the ESMP, including those measures required to avoid, minimize, or mitigate environmental and social risks, will be monitored throughout the project (at the activity level and through annual project performance, mid-term and terminal reports). The same applies to financial and project management risks and mitigation measures.

Monitoring and Evaluation Framework

UN-Habitat will ensure the timeliness and quality of project implementation. The oversight and general guidance of the project will be provided by the Project Advisory Committee. UN-Habitat will ensure that the project team and the key national executing partners are fully briefed on the M&E requirements.

Activities for Component 3 will be detailed through consultation with the local stakeholders through their Community Development Councils and with the participation of the local authorities (Khoroo/District). Local indicators and targets will be reviewed and fine-tuned during the planning workshop. This exercise will facilitate participatory, results-based monitoring by the communities themselves.

Activities related to other components will be planned and monitored by the Project Implementation Unit and approved by the Project Advisory Committee.

Audit of the project's financial management will follow UN finance regulations and rules and applicable audit policies.

The M&E plan will be implemented as proposed in the table below.

Table 15: M & E plan

Type of M&E Activities	Responsible Parties	Time Frame	Reporting
Inception Workshop and Report	Project Manager Project Implementation Unit Project Advisory Committee UN-Habitat ROAP	Workshop: within first two months of start Report: within first quarter	Inception Report
Periodic status/ progress reports	Project Manager and PIU team members	Quarterly	Quarterly Report
Final Evaluation	Project Manager and PIU team members UN-Habitat ROAP Project Advisory Committee External Consultants	At least three months before the end of project implementation	Final Evaluation Report
Project Terminal Report	Project Manager and PIU team members UN-Habitat ROAP Local consultant	At least three months before the end of the project	Terminal Report
Audit	UN-Habitat ROAP Project Manager and PIU team members	As per UN-Habitat regulations	Audit Reports
Community consultations / workshops / training	Project Manager and PIU team members	Within one week after each event	Documentation
Visits to field sites	UN-Habitat ROAP Project Advisory Committee Government representatives	Every six months	Field Report

For the M & E budget and a breakdown of how implementing entity fees will be utilized in the supervision of the M&E function, please see the detailed budget (section G). For related data, targets and indicators, please see the project proposal results framework (section E).

M&E Activities

a. Project Advisory Committee

The Project Advisory Committee will meet every six months, and ad-hoc meetings will be held as needed. The meeting will review the delivery of inputs and outputs, project progress and provide guidance and coordination. The first Project Advisory Committee meeting will be held within the first two months of the start of the project.

b. Periodic Project Site Visits

Members of the Project Advisory Committee and representatives of UN-Habitat will visit project sited and hold meetings with the local stakeholders to review the implementation of project

activities.

c. Community Level Participatory Monitoring

At the community level, the Primary Groups and Community Development Councils will prepare a plan for the community level activities. Annual targets to measure progress will be established through a participatory process/workshop which will be facilitated by the project field staff (social mobilizers).

Project activities implemented at the community level as part of Component 3 will be primarily monitored by the Primary Groups and Community Development Councils according to the targets and indicators set in the annual plan. A participatory community monitoring system will be the basis for measuring project progress. Particularly for the improved latrines, the Primary Groups will collect household beneficiary data, map location of the beneficiaries in the Khoroo and photo document progress of construction.
The findings will be discussed during the monthly meetings of the Primary Groups and Community Development Councils and documented through written minutes. This will not only involve the communities in data collection but also provide opportunity to discuss issued in project implementation, replication and maintenance.

The reports from the community level will be aggregated and feed into the overall project monitoring and reporting.

d. Final Evaluation

Three months before the end of the project and before the final meeting of the Project Advisory Committee meeting, a final evaluation will be conducted following UN-Habitat guidelines. It will be conducted by an independent team of international and national experts.

The scheduling of the final evaluation and the terms of reference will be discussed at the Project Advisory Committee and consulted with the donor. The Terms of Reference will be prepared by UN-Habitat focusing on delivery of project activities as initially planned (or modified after the mid-term evaluation) and will also look at the impact and sustainability of the results. The evaluation will provide recommendations for follow-up activities.

e. Financial Audits

A professional, certified organization will review the financial management of the project and adherence to required standards and regulations.

Reporting

a. Inception Workshop and Report

By the end of the first quarter of the start of project implementation, an Inception Report will be submitted to the Project Advisory Committee and the donor.

A Project Inception Workshop will be held within the first three months of the start of the project to help build ownership of the project. It will be participated by members of the Project Advisory Committee, representative from the Khoroo/District level, representatives from the community and members of the Project Implementation Unit. One of the outputs of the workshop will be to prepare the annual work plan for year one.

The Inception Workshop will address a number of key issues, including:

a. assist all participants to fully understand the project objectives and activities and take ownership of the project
b. discuss the organizational structure of the project
c. discuss the roles and responsibilities of all agencies involved in the project including decision making, reporting, and lines of communication
d. discuss conflict resolution mechanisms.
e. review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
f. prepare and framework finalize the annual work plan for year one.
g. discuss project monitoring, evaluation and reporting requirements
h. discuss financial procedures.

b. Quarterly Reports

The Project Implementation Unit will be responsible for preparing the Quarterly Reports to be submitted to the Project Advisory Committee and the donor. The Project Manager will prepare the report based on information the field staff and reports from the CDCs. A qualitative Bi-annual Report will be prepared once a year and an Annual report including a financial status report once a year. The report will be submitted by the end of the first month of the next quarter.

The Social Mobilizers (Field Coordinators) will prepare quarterly reports if the field activities in consultation with the Khoroo CDCs and discussed at the Khoroo Level Coordination Unit. After that the report will be provided to the UN-Habitat Project Manager as input for the Project Quarterly Report.

c. Annual Project Reports

The Project Implementation Unit will be responsible for preparing the Annual Reports to be submitted to the Project Advisory Committee and the donor. The Project Manager will prepare the report based on information the field staff and reports from the CDCs. The Annual Report will include project activities implemented from 1 January to 31 December and submitted by 31 January.

The Social Mobilizers (Field Coordinators) will prepare quarterly reports for the field activities in their area of responsibility in consultation with the Khoroo CDCs and discussed at the Project Coordination Unit. After that, the report will be provided to the UN-Habitat Project Manager as input for the Project Annual Quarterly Report.

The Annual Report will include:

- progress made towards the project objectives and project outcome with indicators for cumulative progress
- project outputs delivered as per annual targets in the annual plan
- lessons learned and better practices identified
- comments on risk assessment and adaptive measures
- environmental and social risks (i.e. status of implementation of ESMP, including those measures required to avoid, minimize, or mitigate environmental and social risks. The reports shall also include, if necessary, a description of any corrective actions that are deemed necessary;

- project financial and management risks (same as per above).
- financial status
- other issues, concerns, observations.

d. Site Visit and Community Level Meeting /Workshop / Training Reports

The Social Mobilizers (Field Coordinators) will prepare photo documented site visit reports and reports on all community-level meetings, workshops, and training within one week of the event.

e. Final Evaluation Report

The Team Leader of the team of independent consultant will prepare the Final Evaluation Team which will describe the achievements made by the project based on the project reports, field visits and consultations with all stakeholders. The report will provide reasons for discrepancies between the expected and actual results and also elaborate on the impact and sustainability of the results.

f. Terminal Report

The Project Manager and members of the Project Implementation Unit will prepare a comprehensive Terminal Report during the last three months of the project. It will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems and other relevant issues.

E. Project proposal results framework

Table 16: Project results framework with indicators, their baseline, targets, risks & assumptions and verification means.

Expected Result	Indicators	Baseline data	Targets	Risks & assumptions	Data collec
Project objective: enhance the climate change resilience of the seven§ most vulnerable Ger khoroo settlements focusing on floodi					
Project component 1: Producing hazard and risk information / evidence for increasing resilience and developing land use plans to in and Khoroo level.					
<u>Outcome 1.1</u> Relevant threat, hazard information, evidence and recommendations (on land use and zoning) generated for increasing resilience at the city level	See below outputs (In line with AF outcome 1: reduced exposure at national level (which is also city level in Mongolia threats)				
<u>Output 1.1.</u> One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan, with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2 *(includes the three (3) high risk target districts covering the seven (7) most vulnerable khoroos)	Number of Territorial land use plans with identified flood risks developed In line with AF indicator 1.1. No. and type of projects that conduct and update risk and vulnerability assessments Women participating in planning process	0	One (1) > 50 % women	Ensure criteria to assess the plans and model and how they are managed are clear	Compile ar data on cu and hazard (sector, sc interventio Collect dat governmer managing models Participatio photos
<u>Output 1.2</u>. Simulation model for forecasting future impacts of climate change flooding in UB city & Ger-areas established	Number of flood simulation models developed In line with AF indicator 1.1. No. and type of projects that conduct and update risk and vulnerability assessments	0	One (simulation model		
<u>Output 1.3.</u> Seven (7) Detailed Ger-khoroo level Land Use Plans with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people	Number of Territorial land use plans with identified flood risks developed In line with AF indicator 1.1. No. and type of projects that conduct and update risk and vulnerability assessments	0	Seven (7) > 50 % women		

	Women participating in planning process				
Project Component 2: Participative planning and capacity development for flood resilience in Ger-areas at the district / khoroo and operate and maintain - and mitigate any potential risks related to - the interventions under component 3).					
Outcome 2.1 Target inhabitants are aware of resilience building and climate risk reduction processes and have ownership over proposed interventions at the District, Khoroo and community level	Percentage of targeted population aware of predicted flood risks and appropriate responses In line with AF indicator 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	0	Mid-term: 30 % End: 50 % > 50 % women	Active engagement in action planning – to be recorded in community consultations	Surveys: u 1 to 5 to su findings of
Output 2.1. Seven (7) Khoroo-level floods resilience action plans to implement the interventions under component 3; A series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of interventions under component 3	Number of Khoroo-level flood resilience action plans In line with AF indicator 3.1.1 No. and type of risk reduction actions or strategies introduced at local level Women participating in planning process	0	Seven (7) > 50 % women	Ensure criteria to assess the plans and how they are managed are clear	Compile ar data on cu and hazard (sector, sc interventio Collect dat governmer managing models Participatio photos
Output 2.2. Khoroo / community level interventions operation & maintenance* and awareness campaigns and trainings to support the sustainable implementation of interventions under component 3. **(Awareness will also cover potential risks mitigation)*	Number of awareness campaigns and trainings In line with AF indicator 3.1.1 No. and type of risk reduction actions or strategies introduced at local level Women participating	0	4 per Khoroo > 50 % women	Awareness raising campaigns and trainings are focused on operation and maintenance needs of concrete interventions and to mitigate potential risks.	Training re of trainings response t (operation, and mitiga Participatio photos
Output 2.3. Technical studies – Engineering and hydrological - required to implement the interventions under component 3.	Number of studies	0	Four (4) for the flood protection and drainage intervention (1x Khoroo 7, 2x Khoroo 9 and 1 x Khoroo 24)	The studies need to comply to both national and AF requirements for risks assessment	Assess stu purpose to compliance
Project component 3: Enhance resilience of community level flood protection assets					

Outcome 3.1 Increased adaptive capacity within prioritized community assets (In line with AF outcome 4: increased adaptive capacity within relevant development and natural resource sectors).	See below outputs In line with AF indicator 4.2. Physical infrastructure improved to withstand climate change and var				
<u>Output 3.1</u> Physical assets developed or strengthened in response to climate change related flood impacts as prioritized (by Khoroos drainage and sanitation) – implemented through community contracting	Number of physical assets strengthened, constructed, and/or modified. to reduce or withstand floods In line with AF indicator 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types) Toilets are appropriate for women, elderly and disabled where required	0	Four (4) for the flood protection and drainage intervention: 1x Khoroo 7 2x Khoroo 9 1 x Khoroo 24 Seven (7) for the sanitation interventions: 7 x in 7 Khoroos >50 % of toilets adapted to specific needs	Interventions will be subdivided into sections manageable by community groups (see budget); these needs to be grouped for monitoring and evaluation Calculate the number of assets that have been fully completed during the period under review. Criteria to measure appropriateness of toilets for women, elderly and disabled need to be clearly defined	Count the assets that has streng constructe modified. Assess ap of assets t
<u>Output 3.2</u> Management & operations; design & supervision of assets / physical infrastructure – procured as consulting services	Not relevant				
Project component 4: Awareness raising, knowledge management and communication					
<u>Outcome 4.1</u> Institutional capacity strengthened to develop and replicate this approach	See output below In line with AF indicator 2: Strengthened institutional capacity to reduce risks associated with clima environmental losses				
<u>Output 4.1.</u> Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities, civil society, and policy-makers in government appropriate mechanisms. Workshops and trainings will be organised targeting city- and district government	Number of institutions trained In line with AF indicator 2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks Women participating	0	>1 municipal >3 districts > 50 % women	Approach to replicate the approach should be agreed upon between the municipality, districts and Khoroos	Training re of trainings response t (operation, and mitiga Participatio photos

officials with a focus on replication of processes, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans.					

Table 17 Activities and milestones

Project Components	Milestones	Main Activities
component 1: Producing hazard and risk information / evidence for increasing resilience and developing land use plans to increase this resilience at the city, District and Khoroo level.	Output 1.1. and 1.3. Territorial land use plans with identified flood risks developed	Procurement preparation and administration for land use plans
		Development of land use plans that especially include identification and response to floo risks areas through a) analysis of past climate variables (rainfall, temperature etc) in th targeted area; b) study on basin coverage of dry beds and small rivers around th Ulaanbaatar city, especial attention to percentage of urbanization, urbanization effect basi cover change (and also basin morphometry); c) estimate of flash flood discharge wit different return period of small rivers and dry beds by different flood estimation method and technologies in the selected study area, etc.
	Output 1.2. Simulation Model developed	Procurement preparation and administration for the development of the simulation model
		Development of city wide simulation models forecasting impacts of Climate Change an flooding, which includes a) simulation of extreme flood case using hydro meteorologica model; b) projection and downscaling of climate change and extreme event (flood, hea wave etc) frequency and intensity; c) flood producing rainfall intensity analysis around th Ulaanbaatar city; d) impact and risk assessment of flood on targeted area
		Hazard maps development for Ulaanbaatar city/ger areas
Component 2. Participative planning and capacity development for flood resilience in Ger-areas at the district / khoroo and community level	Output 2.1. Khoroo-level floods resilience action plans developed	Khoroo-level High-risk Ger areas resilience action plan development through consultativ workshops with key stakeholders including target area communities
		Organization of Resilience Action Plans Validation and Information Sharing Workshops a city/district level
	Output 2.2. Khoroo / community level interventions operation & maintenance and awareness campaigns and trainings conducted	Community mobilization and organization at the target khoroos: Primary groups an Community Development Councils establishments and capacity building
		Establish and train a Community Risk Reduction Committee composed of Communit Development Councils' members and khoroo staff at khoroo level with the responsibilitie to reduce climate induced risks in khoroo area, monitor O&M of flood control facilities generate, capture and distribute lessons learned and best practices regarding resilien development
		Trainings on community-based disaster risk reduction and assets protection and O&M o flood control facilities
		Trainings on environmental hygiene, water and air borne disease preventions, solid wast management and safe disposals of household waste for community health education an behavioural changes
Component 3 Enhance resilience of community level flood protection assets	Output 3.1. Physical assets developed or strengthened in response to climate	Procurement of detailed design services
		Detailed design development of the planned flood control facilities
		Approval process
		Land freeing for the start of construction activities including community agreement
		Procurement of construction
		Construction of planned flood control facilities and monitoring and supervision during the construction

	change related flood impacts	Handing over the constructed facilities to Ulaanbaatar Municipality and District governors offices
		Resilient sanitation improvements for the selected households through community contracting
Component 4 Awareness raising, knowledge management and communication	Output 4.1. Workshops and trainings organised	Information and education materials development and dissemination using different means of communication
		Project evaluation
		Information dissemination and knowledge sharing workshops with city, district and khoro levels for further replication of the project interventions

F. Project alignment with the Adaptation Fund results framework

Table 18 Project alignment with the Adaptation Fund results framework

Project Outcome	Project Outcome Indicator	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Outcome 1.1: Relevant threat, hazard information, evidence and recommendations (on land use and zoning) generated for increasing resilience at the city level	See related outputs below	**Outcome 1:** Reduced exposure at national (and city) level to climate-related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	**391,790**
Outcome 2.1. Target inhabitants are aware of resilience building and climate risk reduction processes and have ownership over proposed interventions at the District, Khoroo and community level	Percentage of targeted population aware of predicted flood risks and appropriate responses	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	**442,186**
Outcome 3.1. Increased adaptive capacity within prioritized community assets	See related outputs below	**Outcome 4:** Increased adaptive capacity within relevant development and natural resource sectors	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	**2,660,000**
Outcome 4.1. Institutional capacity strengthened to develop and replicate this approach	See related outputs below	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	**255,694**
Project Output	**Project Output Indicator**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Output 1.1. One (1) Ulaanbaatar northern Ger-Area*	Number of Territorial land use plans with	**Output 1.** Risk and vulnerability assessments	1.1. No. and type of projects that conduct and update risk and	**91,790**

Territorial Land Use Plan, with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2**(includes the three (3) high risk target districts covering the seven (7) most vulnerable khoroos)*	identified flood risks developed	conducted and updated at a national level	vulnerability assessments	
Output 1.2. **Simulation model** for forecasting future impacts of climate change flooding in UB city & Ger-areas established	Number of flood simulation models developed	**Output 1:** Risk and vulnerability assessments conducted and updated at a national level	1.1. No. and type of projects that conduct and update risk and vulnerability assessments	**50,000**
Output 1.3 Seven (7) Detailed Ger-khoroo level Land Use Plans with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people	Number of Territorial land use plans with identified flood risks developed	**Output 1*:*** Risk and vulnerability assessments conducted and updated at a national level	1.1. No. and type of projects that conduct and update risk and vulnerability assessments	**250,000**
Output 2.1. Seven (7) Khoroo-level floods resilience action plans to implement the interventions under component 3**;** A series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of	Number of Khoroo-level flood resilience action plans	***Output 3***: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at local level	**195,390**

interventions under component 3.				
Output 2.2. **K**horoo / community level interventions operation & maintenance* and awareness campaigns and trainings to support the sustainable implementation of interventions under component 3. **(Awareness will also cover potential risks mitigation)*	Number of awareness campaigns and trainings	***Output 3:*** Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1. No and type of risk reduction actions or strategies introduced at local level	**196,796**
Output 3.1: Physical assets developed or strengthened in response to climate change related flood impacts as prioritized (by Khoroos drainage and sanitation) – implemented through community contracting	Number of physical assets strengthened, constructed, and/or modified. to reduce or withstand floods	**Output 4:** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	**2,265,904**
<u>Output 4.1</u> Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities, civil society, and policy-makers in government appropriate mechanisms. Workshops and trainings will be organised targeting city- and district government officials with a focus on replication of	Number of institutions trained	***Output 2:*** Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events	2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	**255,694**

processes, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans.				

Table 19 Indicative Core Indicator Targets

Adaptation Fund Core Indicators	Indicative Targets	Comments
1 Number of Beneficiaries	50 % of target communities Flood protection and drainage infrastructure ☐ Direct with interventions area: 29.865 ☐ Total target community: 33.829 Flood resilient latrines ☐ Direct with interventions area: 6.064 ☐ Total target community: 88.839	A percentage of targets beneficiaries applies. Beneficiaries of supporting / soft activities are not considered here but are in place in the results framework.
3. Assets Produced, Developed, Improved, or Strengthened	Four (4) for the flood protection and drainage intervention: 1x Khoroo 7 2x Khoroo 9 1 x Khoroo 24 Seven (7) for the sanitation interventions: 7 x in 7 Khoroos	
4. Increased income, or avoided decrease in income	Numbers can't be estimated	Community infrastructure is expected to contribute to increased income generation in- because of improved mobility and health as effect from reduced flooding impacts

Methodology to apply: https://www.adaptation-fund.org/wp-content/uploads/2016/04/AF-Core-Indicator-Methodologies.pdf

G. Detailed budget

Table 20 Detailed Budget

Project Components	Expected Concrete Outputs	Expected Concrete Outcomes	TOTAL	Year 1 6 m
Component 1 National/City Level Producing hazard and risk information / evi-dence for increasing resilience and devel-oping land use plans to increase this resili-ence at UB City level.	**Output 1.1** One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan, with zoning, legal framework recommendations and a specific focus on flood risk reduction - building on 1.2 *(includes the three (3) high risk target districts covering the seven (7) most vulnera-ble khoroos)	**Outcome 1.1** Relevant threat, hazard information, evidence and recommendations (on land use and zon-ing) generated for increasing resilience at the city level (In line with AF outcome 1: reduced exposure at national (and city) level to climate-related hazards and threats)	**91,790**	23,263
	Output 1.2. Simulation model for forecasting future impacts of climate change flooding in UB city & Ger-areas established		**60,000**	5,000
	Output 1.3 Seven (7) Detailed Ger-khoroo level Land Use Plans with specific focus on flood risk reduction and building resilience of the most vulnerable areas and people		**250,000**	-
Component 2 Khoroo/Community level Participative planning and capacity devel-opment for flood resilience in Ger-areas at the district / khoroo and community level (including activities to operate and maintain - and mitigate any po-tential risks related to - the interventions under component 3).	**Output 2.1** Seven (7) Khoroo-level floods resilience action plans to implement the interventions under component 3; A series of District, Khoroo and community level consultations / workshops introducing the People's Process and Community Based Disaster Risk Reduction approach, focused on building social cohesion and consensus on community level implementation of inter-ventions under component 3.	**Outcome 2.1** Target community members are aware of resilience building and climate risk reduction processes and have ownership over proposed interventions at the District, Khoroo and community level (In line with AF outcome 3: strengthened awareness and ownership of adaptation and climate risk reduction processes at local level)	**195,390**	48,463
	Output 2.2 Khoroo -community level in-terventions operation & maintenance and awareness campaigns and trainings to support the sustainable implementation of inter-ventions under component 3. *(An Estimated 20 nos trainings)*		**212,956**	41,334
	Output 2.3 Technical studies – Engineering and hydrological - required to implement the interventions under component 3.		**50,000**	-

Project Components	Expected Concrete Outputs	Expected Concrete Outcomes	TOTAL	Year 1	Year 2
				6 m	12 m
Component 3 Enhance resilience of community level flood protection assets	**Output 3.1** Physical assets developed or strengthened in response to climate change related flood impacts as prioritized (drainage and sanitation) – implemented through community contracting	**Outcome 3.1** Increased adaptive capacity within prioritized community assets (In line with AF outcome 4: increased adaptive capacity within relevant development and natural resource sectors)	**2,225,904**	-	1,029,38
	Output 3.2 Management & operations; design & supervision of assets / physical infrastructure – procured as consulting services		**418,780**	51,883	141,26
Component 4 Awareness raising, knowledge management and communication	**Output 4.1** Lessons learned and best practices regarding flood-resilient urban community development are generated, captured and distributed to other Districts and khoroo communities, civil society, and policy-makers in government appropriate mechanisms. Workshops and trainings will be organised targeting city- and district government officials with a focus on replication of process-es, land use plans and interventions and to discuss how lessons can be integrated into existing strategies and plans	**Outcome 4.1** Institutional capacity strengthened to de-velop and replicate this approach (In line with AF outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses)	**244,682**	41,641	69,56
Sub-total Programme Costs			**3,749,501**	**211,584**	**1,881,77**
Project Execution Costs	Project Manager		**17,000**	4,250	4,25
	National Operational Staff		**226,404**	18,867	75,46
	Travel Related to Execution		**12,000**	3,000	3,00
	Operations		**108,189**	9,016	36,06
	Evaluation		**30,000**	-	4,00
	Sub-total Project Execution Costs	**9.50%**	**393,593**	**35,133**	**122,78**
SUB-TOTAL			**4,143,094**	**246,717**	**2,004,55**
Programme Cycle Management Fee	Project Support Cost (ROAP) - Project Management Committee Meetings - IE staff salaries / supervision of reports etc. - Project supervision missions	1.25%	**51,789**	3,084	25,05
	Evaluation Support costs (HQ)		**10,000**	1,500	2,80
	PSC 7 percent on total operational budget including components below) approx 7 percent	7.00%	**294,342**	17,591	142,26
	Sub-total Programm Cycle Managament Fee	8.60%	**356,130**	**22,175**	**170,12**
Amount of Financing Requested			**4,499,224**	**268,892**	**2,174,67**

Table 21 Budget notes

Components		TOTAL	Year 1	Year 2	Year 3	Year 4		Rate	Year 1	Year 2	Year 3	Year 4	Year T
			6 m	12 m	12 m	6 m			6	12	12	6	36
Output 1.1													
Main Partner	AOC	**50,000**	10,000	40,000	-	-							
Workshops, Consultations		**2,400**	800	1,600	-	-		400	2	4			**6**
Report		**2,000**	-	2,000	-	-		1,000		2			**2**
Climate Change Assessment Specialist	IICA	**20,218**	6,739	13,478	-	-		6,739	1	2			**3**
Travel		**17,172**	5,724	11,448	-	-		5,724	1	2			**3**
Sub-total		**91,790**	**23,263**	**68,526**	**-**	**-**							
Output 1.2													
Main Partner	AOC	**50,000**	-	50,000	-	-							
Knowledge Management Specialist		**10,000**	5,000	5,000	-	-		5,000	1	1			
Sub-total		**60,000**	**5,000**	**55,000**	**-**	**-**							
Output 1.3													
Main Partner	AOC	**250,000**	-	250,000	-	-		35,714		7			
		-	-	-	-	-							
Sub-total		**250,000**	**-**	**250,000**	**-**	**-**							
TOTAL		**401,790**	**28,263**	**373,526**	**-**	**-**							
Output 2.1													
Main Partner	AOC	**130,000**	30,000	100,000	-	-							
Climate Change Assessment Specialist	IICA	**20,218**	6,739	13,478	-	-		6,739	1	2			**3**
Travel		**17,172**	5,724	11,448	-	-		5,724	1	2			**3**
Report		**10,000**	-	10,000	-	-		1,000		10			**10**
Workshops, Consultations, Action Plan		**18,000**	6,000	12,000	-	-		1,000	6	12			**18**
Sub-total		**195,390**	**48,463**	**146,926**	**-**	**-**							
Output 2.2													
Community Deve and Infras Advisor	INGO	**48,000**	12,000	12,000	12,000	12,000		12,000	1	1	1	1	**4**
Travel		**22,896**	5,724	5,724	5,724	5,724		5,724	1	1	1	1	**4**
Urban Planner	LICA	**23,346**	3,891	7,782	7,782	3,891		1,297	3	6	6	3	**18**
Social Mobilizers		**79,974**	13,329	26,658	26,658	13,329		1,481	3	6	6	3	**18**
Report	INGO	**10,000**	-	10,000	-	-		1,000		10			**10**
Workshops, Consultations, Action Plan	INGI	**13,440**	3,840	3,840	3,840	1,920		320	12	12	12	6	**42**
Training	INGO	**15,300**	2,550	5,100	5,100	2,550		425	6	12	12	6	**36**
		-	-	-	-	-							
Sub-total		**212,956**	**41,334**	**71,104**	**61,104**	**39,414**							
Output 2.3													
Main Partner		**50,000**	-	50,000	-	-							
		-	-	-	-	-							
Sub-total		**50,000**	**-**	**50,000**	**-**	**-**							
TOTAL		**458,346**	**89,797**	**268,030**	**61,104**	**39,414**							

Components		TOTAL	Year 1	Year 2	Year 3	Year 4		Rate	Year 1	Year 2	Year 3	Year 4	Year T
			6 m	12 m	12 m	6 m			6	12	12	6	36
Output 3.1													
Physical Infrastructure Implementation	UNOPS	1,455,534	-	722,164	733,370	-							
Improved Latrine construction support	Comm Con	749,250	-	299,700	299,700	149,850							
Audit		15,000	-	5,000	5,000	5,000		5,000		1	1	1	
AOC processing costs		6,120	-	2,520	3,600	-							
TOTAL		2,225,904	-	1,029,384	1,041,670	154,850							
Output 3.2													
Community Deve and Infras Advisor	INGO	72,000	12,000	24,000	24,000	12,000		12,000	1	2	2	1	6
Travel		45,792	5,724	17,172	17,172	5,724		5,724	1	3	3	1	8
Sub-total		117,792	17,724	41,172	41,172	17,724							
Community Consultations		2,800	700	700	700	700		100	7	7	7	7	28
Urban Planner		23,346	3,891	7,782	7,782	3,891		1,297	3	6	6	3	18
Social Mobilizers	LICA	79,974	13,329	26,658	26,658	13,329		1,481	3	6	6	3	18
Field Engineer		93,384	7,782	31,128	31,128	23,346		1,297	3	12	12	9	36
Finance Officer		101,484	8,457	33,828	33,828	25,371		2,819	3	12	12	9	36
Sub-total		300,988	34,159	100,096	100,096	66,637							
TOTAL		418,780	51,883	141,268	141,268	84,361							
Output 4.1 and 4.2													
Climate Change Assessment Specialist	IICA	20,218	-	-	13,478	6,739		6,739	0	0	2	1	3
Travel		17,172	-	-	11,448	5,724		5,724	0	0	2	1	3
Field Monitoring, Comm &Coordination Officer	LICA	46,692	3,891	15,564	15,564	11,673		1,297	3	12	12	9	36
Measurement of Means of Varification, Inception Report		30,000	30,000	-	-	-							
Community Consultations		2,000	200	800	800	200		200	1	4	4	1	10
Project Steering Committee Meetings		3,000	500	1,000	1,000	500		500	1	2	2	1	6
Local Steering Committee Meetings		2,500	250	1,000	1,000	250		250	1	4	4	1	10
Seminar / Training / Workshops		47,500	5,000	20,000	17,500	5,000		2,500	2	8	7	2	19
International Workshops & Conferences		40,000	-	20,000	20,000	-		20,000		1	1		2
Studies Surveys, Reports		14,000	-	4,000	6,000	4,000		1,000		4	6	4	14
Visibility, Web Development, Advocacy		21,600	1,800	7,200	7,200	5,400		600	3	12	12	9	36
TOTAL		244,682	41,641	69,564	93,990	39,486							

Components		TOTAL	Year 1	Year 2	Year 3	Year 4		Rate	Year 1	Year 2	Year 3	Year 4	Year T
			6 m	12 m	12 m	6 m			6	12	12	6	36
PROJECT EXECUTION COST													
Team Leader		17,000	4,250	4,250	4,250	4,250							
National Staff													
Deputy Project Manager	LICA	167,220	13,935	55,740	55,740	41,805		4,645	3	12	12	9	36
Drivers	LICA	59,184	4,932	19,728	19,728	14,796		822	3	12	12	9	36
Travel Related to Execution													
Travel		12,000	3,000	3,000	3,000	3,000		3,000	1	1	1	1	4
Operations													
Vehicle Operations & Maintenance		36,000	3,000	12,000	12,000	9,000		1,000	3	12	12	9	36
Communication		3,600	300	1,200	1,200	900		100	3	12	12	9	36
Office Rent		50,400	4,200	16,800	16,800	12,600		1,400	3	12	12	9	36
Office Operations		12,600	1,050	4,200	4,200	3,150		350	3	12	12	9	36
Office Supplies and Stationery		5,589	466	1,863	1,863	1,397		155	3	12	12	9	36
Project Evaluation		30,000	-	4,000	4,000	22,000							
TOTAL		393,593	35,133	122,781	122,781	112,898							

Components		TOTAL	Year 1	Year 2	Year 3	Year 4		Rate	Year 1	Year 2	Year 3	Year 4	Year T
			6 m	12 m	12 m	6 m			6	12	12	6	36
Drainage system													
Khoroo 24 River training to reduce flood impacts by communities		**50,000**	-	25,000	25,000	-		50,000		0.5	0.5		**1**
Khroo 7 Drainage channels	7A1	**177,620**	-	-	177,620	-		535			332		**332**
		24,030	-	-	24,030	-		270			89		**89**
	7A2	**158,895**	-	-	158,895	-		535			297		**297**
		19,170	-	-	19,170	-		270			71		**71**
	7A3	**233,795**	-	-	233,795	-		535			437		**437**
	7A4	**62,100**	-	62,100	-	-		270		230			**230**
	7A5	**178,200**	-	178,200	-	-		270		660			**660**
	7A6	**180,360**	-	180,360	-	-		270		668			**668**
	7A7	**90,720**	-	90,720	-	-		270		336			**336**
Khoroo 9 Dam at source of secondary stream to lead water into main river		**73,500**	-	-	73,500	-		150			490		**490**
Khoroo 9 Drainage channels		**159,750**	-	159,750	-	-		150		1065			**1,065**
Bridge		**5,000**	-	5,000	-	-		5,000		1			
Design and Supervision required by Law (3%)		**42,394**		21,034	21,360								
Sub-total		**1,455,534**	-	**722,164**	**733,370**	-							
Resilient toilets													
Khoroo 7		**22,500**	-	9,000	9,000	4,500		450		20	20	10	**50**
Khoroo 24		**144,000**	-	57,600	57,600	28,800		450		128	128	64	**320**
Khoroo 25		**123,750**	-	49,500	49,500	24,750		450		110	110	55	**275**
Khoroo 9		**33,750**	-	13,500	13,500	6,750		450		30	30	15	**75**
Khoroo 12		**117,000**	-	46,800	46,800	23,400		450		104	104	52	**260**
Khoroo 13		**168,750**	-	67,500	67,500	33,750		450		150	150	75	**375**
Khoroo 16		**139,500**	-	55,800	55,800	27,900		450		124	124	62	**310**
		-		-	-	-							
Sub-total		**749,250**	-	**299,700**	**299,700**	**149,850**			-	**666**	**666**	**333**	**1,665**
Sub-total		**2,204,784**	-	**1,021,864**	**1,033,070**	**149,850**							
AOC management costs		**6,120**	-	2,520	3,600	-		360		7	10	-	**17**
TOTAL		**2,210,904**	-	**1,024,384**	**1,036,670**	**149,850**							

Table 22 Resilient latrines

Resilient toilets

Khoroo	Population	HHS	Percent	No	Actual	Rate	Cost			PP
7	20128	5510	1%	55	50	450	22,500	3.7	183	123
24	13689	4040	8%	323	320	450	144,000	3.4	1,084	133
25	13678	3488	8%	279	275	450	123,750	3.9	1,078	115
9	13701	3785	2%	76	75	450	33,750	3.6	271	124
12	7162	2182	12%	262	260	450	117,000	3.3	853	137
13	9136	2522	15%	378	375	450	168,750	3.6	1,358	124
16	11945	3127	10%	313	310	450	139,500	3.8	1,184	118
	89,439	**24,654**	**56%**	**1,686**	**1,665**		**749,250**			

Table 23 M&E budget

M&E						
Type of M & E Activity	**Row**	**Total**	**1**	**2**	**3**	
Measurements of means of verification (baseline assessment and M & E plans)	57	**30,000**	30,000	-	-	
Direct Project Monitoring and Quality Assurance including progress and financial reporting, project revisions, technical assistance and risk management	56	**46,692**	7,782	15,564	15,564	
Independent terminal evaluation	79	**30,000**	-	4,000	4,000	
	PCM	**10,000**	1,500	2,800	3,900	
Project management committee meetings	59	**5,500**	750	2,000	2,000	
Travel	71	**12,000**	3,000	3,000	3,000	
Total		**134,192**	**43,032**	**27,364**	**28,464**	

H. Disbursement schedule

Table 24 Disbursement schedule

	Year 1	Year 2	Year 3	Year 4
Milestone	1st disbursement – upon agreement signature Milestones (by end of year) - Inception workshop report - 1 risk reduction action or strategy introduced at local level (assessment and planning tools developed) - 1 demo project for infrastructure/natural assets developed - Website established - Advocacy materials produced - Steering Committee	2nd disbursement – One Year after project start ▪ Upon First Annual Report ▪ Upon financial report indicating disbursement of at least 70% of funds Milestones (by end of year) - X local authorities integrate resilience in local planning schemes - X (new) khoroo-wide assessments conducted and x assessments updated - 6 khoroo-wide hazard maps - khoroo-wide climate change action plans for 6 participating khoroo. - X urban planners/resilience officers established. - Community-based climate vulnerability assessments in 6 Ger communities - Community-level resilience, recovery and upgrading plans in 6 Ger-communities - Adaptation and risk reduction assessments and awareness activities for 3 (50%) targeted population groups. -10% of household and community livelihood strategies strengthened in relation to climate change impacts (X total). - 10% of infrastructure/ natural assets developed - Advocacy materials	3rd disbursement - Two years after project start ▪ Upon Second Annual Report ▪ Upon financial report indicating disbursement of at least 70% of funds Milestones (by end of year) - Adaptation and risk reduction assessment and awareness activities for X targeted population groups. - x (50%) strengthened household and community livelihood strategies in relation to climate change impacts. - Advocacy materials produced - 50% of infrastructure/natural assets constructed / developed - Steering Committee	4th disbursemer Year after Proje ▪ Upon Third Report ▪ Upon financ indicating disbursemen least 70% of Milestones (by year) - Advocacy mat produced - Regional advo - 100% of infrastructure/na assets construc developed - Steering Comm

		produced - Steering Committee		
Schedule date	October 2018 or Upon signing	June 2019	June 2020	June 20
A. Project Funds (US$)	**211,584**	**1,881,773**	**1,338,033**	**318,11**
B. Programme Execution	**35,133**	**122,781**	**122,781**	**112,89**
C. Programme Cycle Mgt	**22,175**	**170,126**	**125,968**	**37,86**
(B+C) MIE Fee (US$)	**57,308**	**292,907**	**248,749**	**150,74**
Total	**268,892**	**2,174,679**	**1,586,782**	**468,87**

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[31]

Dr. Batjargal Zamba Special Envoy for Climate Change National Focal Point UNFCC, IPCC, GCF Ministry of Environment and Tourism of Mongolia Suite: 22-7G Amar Street, 8th khoroo Ulaanbaatar - 14200 Tel: 976-7000 0743 Fax: 976-11-310743 e-mail: zbatjargal@mne.gov.mn	Date*: January 12, 2018*

[31] 6. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

MINISTRY OF ENVIRONMENT,
AND TOURISM

ENVIRONMENT AND CLIMATE FUND
7th floor, 22 building, Amar street, 8th micro-district,
Sukhbaatar district, Ulaanbaatar, Mongolia
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E-mail: contact@ncf.mn, http://www.ncf.mn

Date 2018.01.12 № 08

To: The Adaptation Fund Board Secretariat c/o Global Environment Facility Secretariat
1818H Street, NW, MSN P-4-400
Washington DC, United State of America
Email: secretariate@adaptation-fund.org
Fax: +1 2025223240/5

Subject: Endorsement of the project proposal: "Flood Resilience in Ulaanbaatar Ger Areas (FRUGA) - Adaptation through community-driven small-scale protective and basic-services interventions

Dear Sir/Madam,

In my capacity as Designated Authority for the Adaptation Fund in Mongolia, I confirm that the above national project is in accordance with the government's national priorities in implementing adaptation activities to reduce the adverse impacts and risks posed by climate change and enhance resilience in Mongolia.

Accordingly, I am pleased to endorse the above project proposal for support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Human Settlements Programme (UN-Habitat) and executed by the Ministry of Environment and Tourism, the Municipality of Ulaanbaatar (MUB) and Ger-Communities within Songinokhairkhan, Bayanzurkh and Sukhbaatar Districts of Ulaanbaatar via a Programme Execution Unit set up with United Nations Office for Project Services (UNOPS). Several other line ministries/departments, district and sub-district (khoroo) authorities and non-governmental organizations will also be involved in the implementation of this project.

The project proposal builds on the national, municipal and district level strategies and priorities which seek to address key and urgent climate change adaptation requirements being faced by vulnerable Ger-communities in Ulaanbaatar. To this end, following consultation with key stakeholders, a series of in-depth community consultations were conducted in 3 priority districts and 7 sub-district (khoroo) communities, to support the project development process. These most-vulnerable communities in high-risk areas were identified in collaboration with the Mayor's office and municipal authorities; in support of the urgent thematic priorities identified in close consultation with Ministry of Environment and Tourism and key national government entities.

In addition to being fully aligned with the Ulaanbaatar 2020 Master Plan and Development Directions for 2030 as well as the Ulaanbaatar Floods Risk Management Strategy 2015; the project proposal aims to support the implementation of commitments in the Mongolia National Action Programme on Climate Change (Phase II - 2017-2021); the National Green Development Policy (2014-2030) and the Intended Nationally Determined Contributions (INDC) to the 2015 Agreement under the United Nations Framework Convention on Climate Change (UNFCCC). Furthermore, the project would be able to demonstrate concrete adaptation measures in line with the second phase of the National Adaptation Plan for Climate Change (NAP) from 2017-2021 focusing on the implementation of climate change adaptation measures.

In this regards, this project proposal is fully endorsed by the DA of Mongolia for the AF.

Yours sincerely,

Dr. Batjargal Zamba

Special Envoy for Climate Change
National Focal Point for the UNFCCC & DA for the Adaptation Fund
Ministry of Environment and Tourism of Mongolia

B. Implementing Entity certification

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans including Mongolia's National Development Strategy, Second National Communication under the UNFCCC, Mongolia National Action Programme on Climate Change (Phase II - 2017-2021), National Climate Risk Management Strategy, National Green Development Policy and Action Plan (2015), Ulaanbaatar Master Plan 2030, and the Flood Risk Management Strategy of Ulaanbaatar City, and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.
Rafael Tuts Director, Programme Division UN-Habitat
Date: 12 January 2018 | Tel.: +254-20-762-3726 Email: raf.tuts@unhabitat.org
Project Contact Person: Nadine Waheed, Human Settlements Officer, Regional Office for Asia and the Pacific
Tel.: +81-92-724-7121 Email: Nadine.Waheed@unhabitat.org; Nadine.Waheed@un.org

Annex 1

List of district office governors and officials surveyed during Rapid Assessments

No.	District	Khoroo	Position	Name
1	Sukhbaatar	12	Khoroo Governor	Dolgormaa
			Social worker	Amarjargal
			Community health center	Conver
2		13	Khoroo Governor	Bayar-Erdenee
			Manager	Tuvshin
			Community health center	Sankol
3		16	Khoroo Governor	Erdenesukh
			Manager	Khajidmaa
			Community health center	Mandam
4	Bayanzurkh	9	Khoroo Governor	Gankhuyag
			Manager	Tuul
			Community health center	Enkh-enerel
5	Songinokhairkhan	7	Khoroo Governor	Oyunchimeg
			Manager	Nyambayar
			2thkheseg leader	Uranchimeg
			7thkheseg leader	Badamkhand
			9thkheseg leader	Dorjmaa
			10thkheseg leader	Munkhtsetseg
			11thkheseg leader	Altangerel
6		24	Khoroo Governor	Tumurbaatar
			Manager	Tsend-Ayush
			Community council representative	Myagmardorj
7		25	Khoroo Governor	Batchuluun
			Manager	Sevjidsuren
			Social worker	Otgonchimeg

Annex 2

UN-Habitat projects list – Interventions in Ulaanbaatar, Mongolia

Project	Objective	Donor
Managing Cities in Asia- Ulaanbaatar: Urban Renewal and Affordable Housing 2016-2017	This is ADB PPTA for a project development on improved housing conditions in Ulaanbaatar ger areas. The project outcome will be the establishment of replicable, sustainable, and comprehensive solutions for affordable housing and ger areas redevelopment. UN-Habitat is supporting the ADB in participatory concept and methodology development of affordable housing and urban renewal	Asian Developmen Bank (ADB)
Community Engagement and Small and Medium Enterprises Development under the ADB Ulaanbaatar Urban Services and Ger Areas Development Investment Program, Mongolia 2015-2018	The objectives of the project are to enhance residents' quality of life, to ensure that communities are fully involved in and benefit from the redevelopment process of the sub- center, and to generate employment in selected Ger areas.	Municipality Ulaanbaatar (MUB)

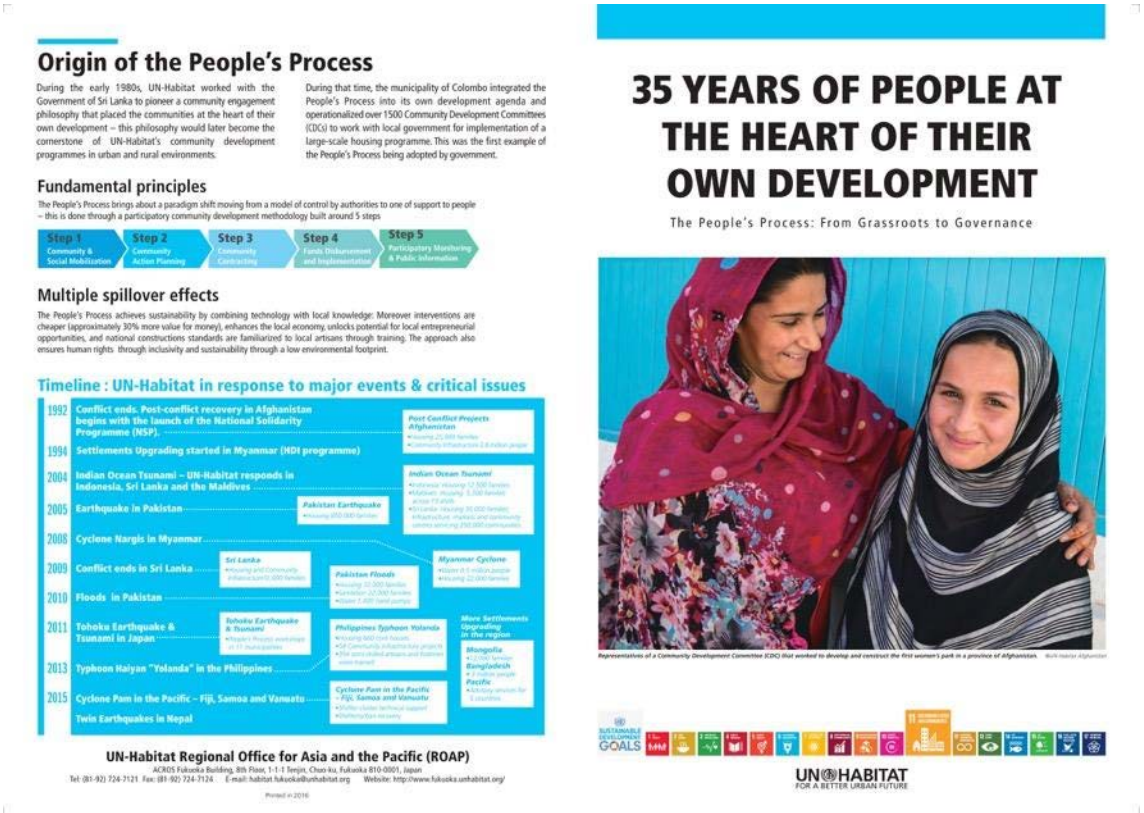
Community Engagement for Slum Upgrading within the Health System Strategy in Songinokhairkhan District, Ulaanbaatar, Mongolia, 2015	The main expected results of UN-Habitat's support to project is that the communities in the Ger settlements of the Songinohairkhan district are actively and meaningfully engaged in the implementation of the Strategy of Health System Strengthening.	World Health Organization (WHO)
Guidelines for Participatory Urban Development in Ulaanbaatar City 2013-2014	This project aims to establish written guidelines on the process of community mobilization, organization, and strengthening which can be readily available reference materials for the staff and officials of MUB and districts responsible for Ger area projects implementation. This project will likewise train the key focal community leaders who will serve as trainers from the 9 districts of Ulaanbaatar to establish the foundation of strong community organizations which can develop and manage projects using the community-led and participatory approach.	Municipality Ulaanbaatar
Community Engagement Support to Public-Private Partnership in New Ger Area Redevelopment in Ulaanbaatar City 2013-2015	This community engagement component will facilitate the community engagement in the MCUD- funded project to ensure that the design and plans of the infrastructure projects are according to needs of the residents, that issues especially pertaining to making land available for the project are adequately discussed and resolved within the community.	Mongol Divir LLC
Ulaanbaatar Urban Services And Ger Areas Development Investment Programme (Ulaanbaatar Urban Renewal Community Participation) 2012-2014	This is ADB PPTA for a Multi Facility Funding Programme development on Ger area Development and Investment Programme. UN-Habitat supported the PPTA in participatory planning of the required basic and social infrastructures in the selected areas.	Asian Developmen Bank (ADB)
Citywide Pro-poor "Ger Upgrading Strategy and Investment Plan" (GUSIP) 2006-2010	The overall objective of the project is to prepare a Citywide Pro-poor “Ger-area Upgrading Strategy and Investment Plan” (GUSIP) for Ulaanbaatar through a structured consultative process, involving public sector agencies, Duureg (District) and Khoroo (Sub-District) Councils, Ger-area communities, private sector agencies, civil society organizations and non-governmental organizations.	Cities Allianc
Community-Led Ger Area Upgrading in Ulaanbaatar City 2009-2013	The overall objective of the Project was to improve the quality of life of selected ger area communities through community-led upgrading by empowering the communities through mobilization and organization. The Project builds on the ongoing urban development and strategic planning efforts in Ulaanbaatar City.	JICA

Annex 3

UN-Habitat People's Process Benefits Poster

Annex 4

UN-Habitat People's Process Impacts Brochure



Origin of the People's Process

During the early 1980s, UN-Habitat worked with the Government of Sri Lanka to pioneer a community engagement philosophy that placed the communities at the heart of their own development – this philosophy would later become the cornerstone of UN-Habitat's community development programmes in urban and rural environments.

During that time, the municipality of Colombo integrated the People's Process into its own development agenda and operationalized over 1500 Community Development Committees (CDCs) to work with local government for implementation of a large-scale housing programme. This was the first example of the People's Process being adopted by government.

Fundamental principles

The People's Process brings about a paradigm shift moving from a model of control by authorities to one of support to people – this is done through a participatory community development methodology built around 5 steps

Step 1 Community & Social Mobilization
Step 2 Community Action Planning
Step 3 Community Contracting
Step 4 Funds Disbursement and Implementation
Step 5 Participatory Monitoring & Public Information

Multiple spillover effects

The People's Process achieves sustainability by combining technology with local knowledge: Moreover interventions are cheaper (approximately 30% more value for money), enhances the local economy, unlocks potential for local entrepreneurial opportunities, and national constructions standards are familiarized to local artisans through training. The approach also ensures human rights through inclusivity and sustainability through a low environmental footprint.

Timeline : UN-Habitat in response to major events & critical issues

1992 Conflict ends. Post-conflict recovery in Afghanistan begins with the launch of the National Solidarity Programme (NSP).
1994 Settlements Upgrading started in Myanmar (MDI programme)
2004 Indian Ocean Tsunami – UN-Habitat responds in Indonesia, Sri Lanka and the Maldives
2005 Earthquake in Pakistan
2008 Cyclone Nargis in Myanmar
2009 Conflict ends in Sri Lanka
2010 Floods in Pakistan
2011 Tohoku Earthquake & Tsunami in Japan
2013 Typhoon Haiyan "Yolanda" in the Philippines
2015 Cyclone Pam in the Pacific – Fiji, Samoa and Vanuatu
Twin Earthquakes in Nepal

Post Conflict Projects Afghanistan
Indian Ocean Tsunami
Pakistan Earthquake
Sri Lanka
Myanmar Cyclone
Pakistan Floods
Philippines Typhoon Yolanda
More Settlements Upgrading in the region
Mongolia
Bangladesh
Pacific
Tohoku Earthquake & Tsunami
Cyclone Pam in the Pacific – Fiji, Samoa and Vanuatu

UN-Habitat Regional Office for Asia and the Pacific (ROAP)
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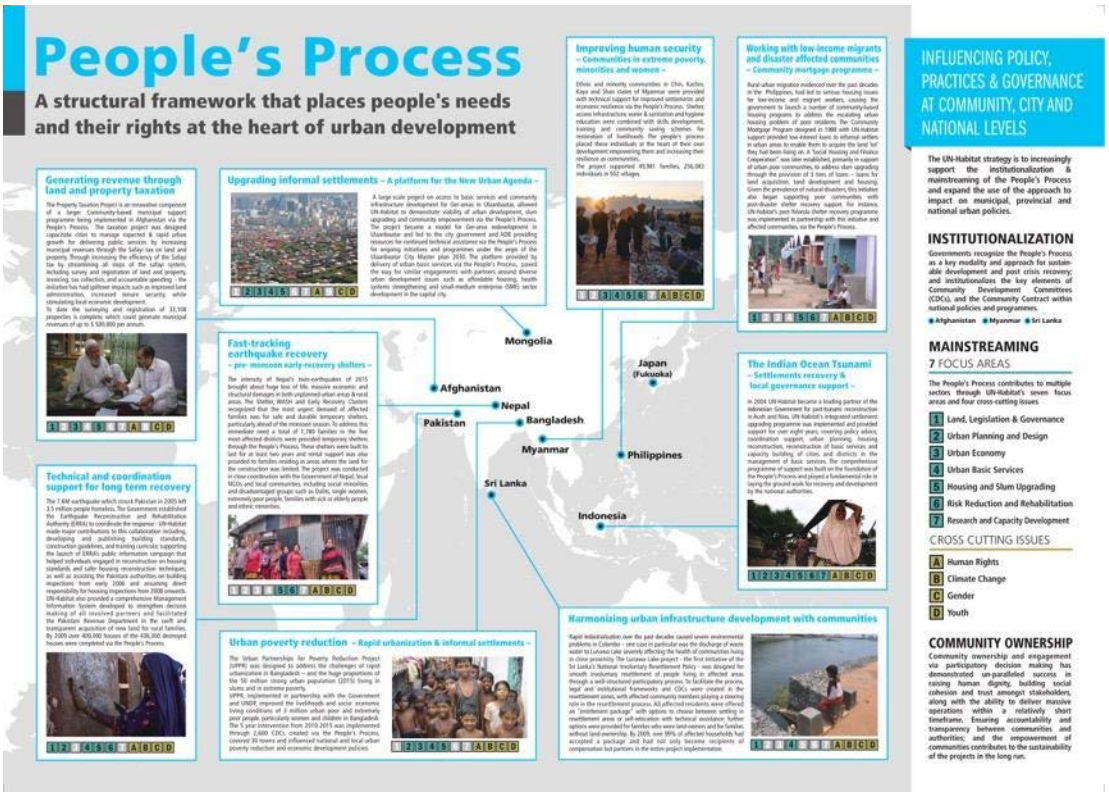
Printed in 2016

35 YEARS OF PEOPLE AT THE HEART OF THEIR OWN DEVELOPMENT

The People's Process: From Grassroots to Governance

Representatives of a Community Development Committee (CDC) that worked to develop and construct the first women's park in a province of Afghanistan.

UN@HABITAT
FOR A BETTER URBAN FUTURE



People's Process

A structural framework that places people's needs and their rights at the heart of urban development

Generating revenue through land and property taxation

The Property Taxation Project is an innovative component of a larger, Community-based municipal support programme being implemented in Afghanistan via the People's Process. The taxation project was designed capacitate cities to manage expected & rapid urban growth for delivering public services by increasing municipal revenues through the Safayi tax on land and property. Through increasing the efficiency of the Safayi Tax by streamlining all steps of the safayi system, including survey and registration of land and property, invoicing, tax collection, and accountable spending - the initiative has had spillover impacts such as improved land administration, increased tenure security, while stimulating local economic development.

To date the surveying and registration of 33,908 properties is complete, which could generate municipal revenues of up to $ 500,000 per annum.

Upgrading informal settlements – A platform for the New Urban Agenda –

A large-scale project on access to basic services and community infrastructure development for Ger-areas in Ulaanbaatar, allowed UN-Habitat to demonstrate viability of urban development, slum upgrading and community empowerment via the People's Process. The project became a model for Ger-area redevelopment in Ulaanbaatar and led to the city government and ADB providing resources for continued technical assistance via the People's Process for ongoing initiatives and programmes under the aegis of the Ulaanbaatar City Master plan 2030. The platform provided by delivery of urban basic services via the People's Process, paved the way for similar engagements with partners around diverse urban development issues such as affordable housing, health systems strengthening and small-medium enterprise (SME) sector development in the capital city.

Improving human security – Communities in extreme poverty, minorities and women –

Ethnic and minority communities in Chin, Kachin, Kaya and Shan states of Myanmar were provided with technical support for improved settlements and economic resilience via the People's Process. Shelter, access infrastructure, water & sanitation and hygiene education were combined with skills development, training and community saving schemes for restoration of livelihoods. The people's process placed these individuals in the heart of their own development empowering them and increasing their resilience as communities.

The project supported 49,981 families, 256,083 individuals in 552 villages.

Working with low-income migrants and disaster affected communities – Community mortgage programme –

Rural-urban migration evidenced over the past decades in the Philippines, had led to serious housing issues for low-income and migrant workers, causing the government to launch a number of community-based housing programs to address the escalating urban housing problem of poor residents. The Community Mortgage Program designed in 1988 with UN-Habitat support provided low-interest loans to informal settlers in urban areas to enable them to acquire the land 'on' they had been living on. A 'Social Housing and Finance Cooperative' was later established, primarily in support of urban poor communities, to address slum upgrading through the provision of 3 tiers of loans – loans for land acquisition, land development and housing. Given the prevalence of natural disasters, this initiative also began supporting poor communities with post-disaster shelter recovery support. For instance, UN-Habitat's post-Yolanda shelter recovery programme was implemented in partnership with this initiative and affected communities via the People's Process.

Fast-tracking earthquake recovery – pre- monsoon early-recovery shelters –

The intensity of Nepal's twin-earthquakes of 2015 brought almost huge loss of life, massive economic and structural damages in both unplanned urban areas & rural areas. The Shelter, WASH and Early Recovery Clusters recognized that the most urgent demand of affected families was for safe and durable temporary shelters, particularly ahead of the monsoon season. To address this immediate need a total of 1,780 families in the five most affected districts were provided temporary shelters through the People's Process. These shelters were built to last for at least two years and rental support was also provided to families residing in areas where the land for the construction was limited. The project was conducted in close coordination with the Government of Nepal, local NGOs and local communities, including social minorities and disadvantaged groups such as Dalits, single women, extremely poor people, families with sick or elderly people and ethnic minorities.

The Indian Ocean Tsunami – Settlements recovery & local governance support –

In 2004 UN-Habitat became a leading partner of the Indonesian Government by post-tsunami reconstruction in Aceh and Nias. UN-Habitat's integrated settlement upgrading programme was implemented and provided support for over eight years, covering policy advice, coordination support, urban planning, housing reconstruction, reconstruction of basic services and capacity building of cities and districts in the management of basic services. The comprehensive programme of support was built on the foundations of the People's Process and played a fundamental role in laying the ground work for recovery and development by the national authorities.

Technical and coordination support for long term recovery

The 7.6M earthquake which struck Pakistan in 2005 left 3.5 million people homeless. The Government established the Earthquake Reconstruction and Rehabilitation Authority (ERRA) to coordinate the response - UN-Habitat made major contributions to this collaboration including, developing and publishing building standards, construction guidelines, and training curricula; supporting the launch of ERRA's public information campaign that helped individuals engaged in reconstruction on housing standards and safer housing reconstruction techniques, as well as assisting the Pakistani authorities on building inspections from early 2006 and assuming direct responsibility for housing inspections from 2008 onwards. UN-Habitat also provided a comprehensive Management Information System developed to strengthen decision making of all involved partners and facilitated the Pakistan Revenue Department in the swift and transparent acquisition of new land for rural families. By 2009 over 400,000 houses of the 436,300 destroyed houses were completed via the People's Process.

Urban poverty reduction – Rapid urbanization & informal settlements –

The Urban Partnerships for Poverty Reduction Project (UPPR) was designed to address the challenges of rapid urbanization in Bangladesh – and the huge proportions of the 50 million strong urban population (2015) living in slums and in extreme poverty.

UPPR, implemented in partnership with the Government and UNDP, improved the livelihoods and social- economic living conditions of 3 million urban poor and extremely poor people, particularly women and children in Bangladesh. The 5 year intervention from 2010-2015 was implemented through 2,600 CDCs, created via the People's Process, covered 30 towns and influenced national and local urban poverty reduction and economic development policies.

Harmonizing urban infrastructure development with communities

Rapid industrialization over the past decades caused severe environmental problems in Colombo – one case in particular was the discharge of waste water to Lunawa Lake severely affecting the health of communities living in close proximity. The Lunawa Lake project - the first initiative of the Sri Lanka's National Involuntary Resettlement Policy - was designed for smooth involuntary resettlement of people living in affected areas through a well-structured participatory process. To facilitate the process, legal and institutional frameworks and CDCs were created in the resettlement zones, with affected community members playing a steering role in the resettlement process. All affected residents were offered an "entitlement package" with options to choose between settling in resettlement areas or self-relocation with technical assistance. Further options were provided for families who were land-owners and for families without land ownership. By 2009, over 99% of affected households had accepted a package (and had not only become recipients of compensation but partners in the entire project implementation.

INFLUENCING POLICY, PRACTICES & GOVERNANCE AT COMMUNITY, CITY AND NATIONAL LEVELS

The UN-Habitat strategy is to increasingly support the institutionalization & mainstreaming of the People's Process and expand the use of the approach to impact on municipal, provincial and national urban policies.

INSTITUTIONALIZATION

Governments recognize the People's Process as a key modality and approach for sustainable development and post crisis recovery; and institutionalizes the key elements of Community Development Committees (CDCs), and the Community Contract within national policies and programmes.

Afghanistan Myanmar Sri Lanka

MAINSTREAMING

7 FOCUS AREAS

The People's Process contributes to multiple sectors through UN-Habitat's seven focus areas and four cross-cutting issues

1 Land, Legislation & Governance
2 Urban Planning and Design
3 Urban Economy
4 Urban Basic Services
5 Housing and Slum Upgrading
6 Risk Reduction and Rehabilitation
7 Research and Capacity Development

CROSS CUTTING ISSUES

A Human Rights
B Climate Change
C Gender
D Youth

COMMUNITY OWNERSHIP

Community ownership and engagement via participatory decision making has demonstrated un-paralleled success in raising human dignity, building social cohesion and trust amongst stakeholders, along with the ability to deliver massive operations within a relatively short timeframe. Ensuring accountability and transparency between communities and authorities; and the empowerment of communities contributes to the sustainability of the projects in the long run.

Mongolia
Japan (Fukuoka)
Afghanistan
Nepal
Pakistan
Bangladesh
Myanmar
Philippines
Sri Lanka
Indonesia

Annex 5

Demonstrating compliance with the ESP, including:

- Approach and process to comply to the AF ESP and screening and categorization results
- Environmental and social management plan, including detailed screening results and monitoring arrangements

Approach and process to comply to the AF ESP and screening and categorization results.

The proposed project fully complies with international and national laws and the Adaptation Fund's Environmental and Social Policy. In line with UN-Habitats Environmental and Social Safeguards System and in line with the Adaptation Fund's Environmental and Social Policy, UN-Habitat completed an initial risk analysis of potential environmental and social risks and impacts of the proposed interventions and the project as a whole.

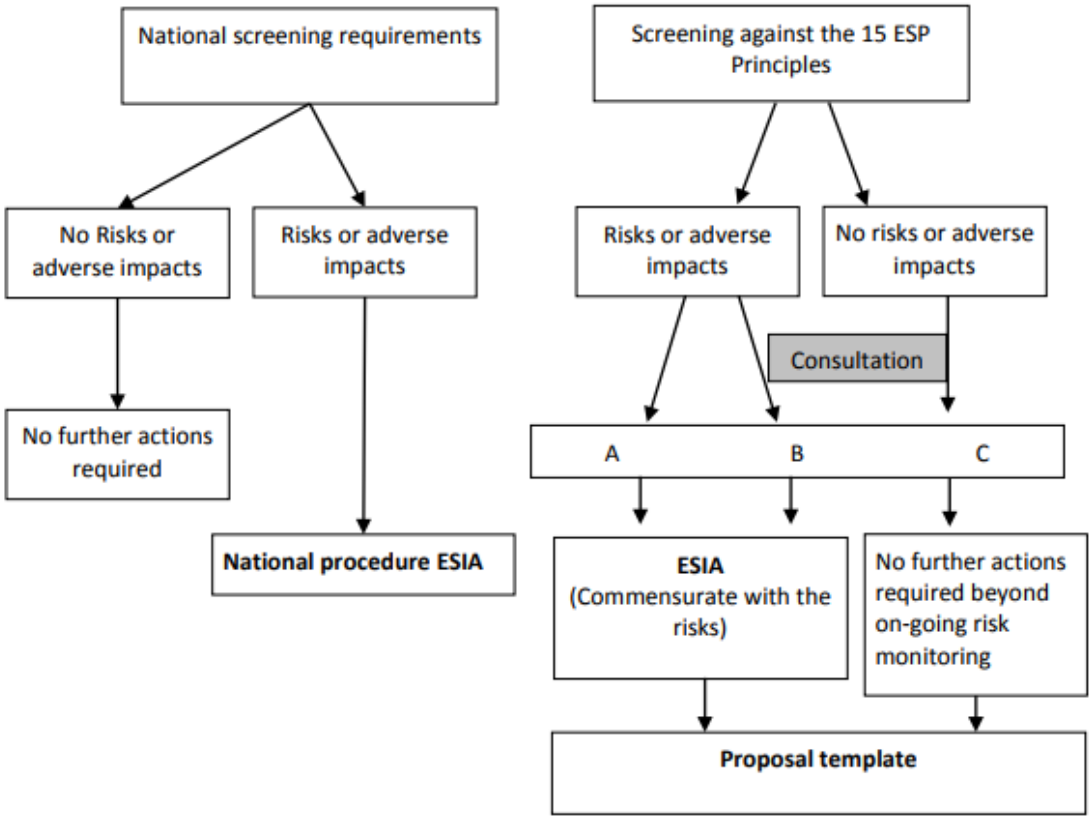


Fig 18 Screening and Assessment Process (from AF ESP Guidance Document, p. 5)

In line with the Adaptation Fund's guidelines, all interventions / activities were screened against international and national rules, regulations and standards, as represented in the left flow chart in Fig 18 above and documented in part II, section E. For the concrete interventions, it has been specifically checked if ESIAs would be required by law. This has been done by analysing the relevant standards and requirements and by double-checking these requirements with the municipality, which confirmed that ESIA's would not be required for the proposed interventions.

Further, in line with the Adaptation Fund's ESP guidelines (flow chart on the right in Fig 18) the entire project and separate project components concrete interventions and softer activities have been screened (and a report was prepared based on the above process and presented to UN-Habitat's Project Review Committee.[32] Based on this exercise, the overall risk ranking for this project has been determined as Category B.

Workshops, community consultations, capacity development, training events, mentoring, information sharing (throughout the components) are not expected to have negative environmental or social risks or impacts. However, to prevent potential risks related to the equal or unequal involvement / representation of different groups (related to principles 2, 3 and 5), some measures have been put in place. This is to ensure that different groups are organized and that equal participation is possible. Therefore, quotas will be used. As for outputs 1.1-3 (land use plans) and output 2.1 (technical studies, leading to proposed designs of interventions) also no negative impacts and risks are expected However, to prevent any principle to be triggered, the project will ensure that all principles will be taken into account when developing these land use plans and conducting these technical studies, thus ensuring compliance. This will be done by including standard clauses requiring the compliance with the safeguard areas in AoC and contracts + screening the plans for compliance with the 15 safeguard areas. As for the risk categorization of activities under components 1, 2 and 4, the overall risk ranking has been defined as low (in line with Category C). An overview of activities, potential risks, preventive measures and monitoring indicators and responsibilities is presented below

Component 3 includes concrete adaptation interventions. At this stage, some risks could not be fully excluded and thus a preliminary screening and assessment of the core concrete interventions has been carried out. The result is that some principles were triggered. To minimize possible risks under designated principles, preventive and mitigation measures have been proposed (including monitoring indicators and responsibilities, as presented in a table below. An overview of this is also presented in Section II.K. During project execution, all project interventions / activities will be further screened for environmental and social risks, applying the ESMP. Measures to prevent and mitigate such risks will also be planned through the ESMP, according to the procedures presented in annex x.

Environmental and social management plan, including detailed screening results and monitoring arrangements

1. Introduction

The ESMP lists all potential risks identified and the preventive / mitigation measures proposed to reduce potentially adverse environmental and social impacts to acceptable levels. The plan also shows how these potential risks and mitigation measures will be further motored, including responsibilities. Specifically, the ESMP:

(i) Identifies and summarizes all anticipated adverse environmental and social risks and impacts in line with the Adaptation Fund's ESP principles;

(ii) Provides information about the significance of the risks of interventions

[32] According to UN-Habitat's guidelines this report is not approved for public disclosure but a copy is made available to the Adaptation Fund Board / and Adaptation Fund Board Secretariat.

(iii) Describes mitigation measures, both from the perspective of mitigating risks at each activity and from the perspective of upholding all ESP principles.

(iv) Refers to responsibilities and sections where responsibilities for further screening and monitoring is discussed.

(v) Takes into account, and is consistent with, other mitigation plans required for the project in particular those that relate to national law

Sections II.E and II.K provide an overview of the 15 principles, the initially screened and assessed risks and potential need for further screening, assessments and monitoring throughout the project.

2. Additional Risk Mitigation

Additional to the risk mitigation measures identified below, the following elements will be put in place to ensure the compliance with the ESP:

(vii) All MoUs and Agreements of Cooperation with Executing Entities will include detailed reference to the ESMP and in particular the 15 ESP Principles.

(viii) The ToR of PCT and Advisory Groups, project personnel and focal points will include will include detailed reference to the ESMP and in particular the 15 ESP Principles.

(ix) All key Executing Entity Partners will receive training / capacity development to understand the 15 Principles, the ESMP and in particular their responsibilities. This will include members of the PAC, PCT and the Communities.

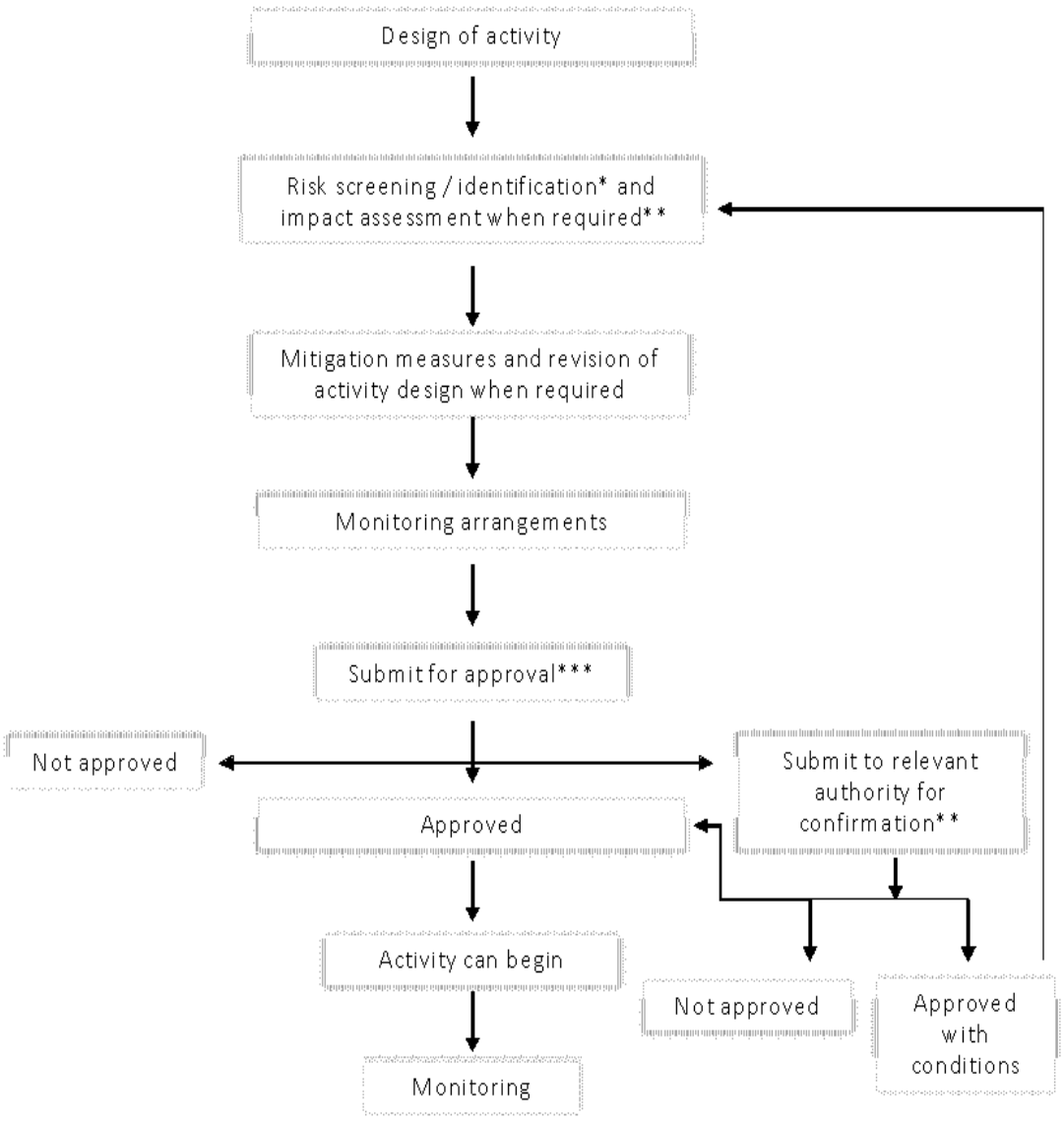
(x) A Monitoring and Evaluation Framework, including monitoring of risks and mitigation measures, will be developed by the project management team and presented for approval to the Project Advisory Committee.

(xi) The UN-Habitat Human rights officers and PAC will check project compliance to the AF ESP during the project (besides the project manager).

3. Risk Screening and Management Procedure

All project activities will be screened against the 15 environmental and social risks. This will be done in spite of any previous screening that may have already been done during the project design phase. In addition to upholding the ESP of the Adaptation Fund and to familiarize all project stakeholders with the 15 ESP principles, this will also ensure that all stakeholders fully take ownership of the environmental and social safeguards procedures of the project and that any activity that may have been altered or not yet assessed in full detail.

The following flow chart (Fig x) represents the risk management and safeguarding process during the project.



* For all activities against the 15 ESP principles.
Use of Risk Assessment Sheet where necessary

** In consultation with Technical Advisory Group

*** All after activities to be approved by Project Management Committee

Fig x Activity approval in the context of environmental and social risk management

Step 1: Activity design at the project management level or through EIs or in close consultation with Communities is to take all 15 ESP principles into consideration.

Step 2: Project screening will be conducted under the direct responsibility of the national project manager. The risk screening used is filled below for the flood protection and drainage infrastructure and resilient latrines below.

Step 3: In consultation with environmental authorities and affected population, those responsible for the project design, the national project manager will (confirm) or identify and plan for mitigation measures.

Step 4: If and when needed additional monitoring mechanisms will be developed. Ongoing project monitoring will always be implemented.

Step 5: The project manager will clear the screening and assessment report after the local authorities and will submit it to the Project Advisory Committee.

Step 6: With additional information, activities may be rejected and thus a new project design will be required. Project activities may be approved with conditions, requiring either assessments in line with national procedures, minor design changes, additional mitigation measures or further monitoring. Such changes will have to be resubmitted for approval. Only approved activities can proceed to implementation and will be monitored. Where activity specific monitoring arrangements are needed, risk mitigation measures for all identified risks will include:

- ✓ A baseline and risk indicators
- ✓ A monitoring plan, developed in a participatory manner (in the case of community projects), which emphasizes the role of communities as front-line monitoring agents.
- ✓ Minutes will be compiled from all meetings with communities and reviewed by the Technical Committee.
- ✓ Ongoing monitoring exercises and an end of year review will be carried out and included in the annual progress reports.

The UN-Habitat Project Manager will ensure that screening and assessments adequately include and/or reflect the following:

- ✓ The 15 ESP Principles

- ✓ Utilize strategic, sectoral or regional environmental assessment where appropriate.

- ✓ Assess adequacy of the applicable legal and institutional framework, including obligations under Applicable Law and confirm that the activities / sub-project would not be supported if it contravenes (inter) national obligations.

- ✓ Assess feasible investment, technical, and siting alternatives, including the “no action” alternative, as well as potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and the institutional, training and monitoring requirements associated with them.

- ✓ Enhance positive impacts and avoid, minimize, and/or mitigate adverse impacts through environmental and social planning and management. Develop a management plan per concrete intervention that includes the proposed measures for mitigation, monitoring, institutional capacity development and training (if required), an implementation schedule (including maintenance), and cost estimates.

- ✓ Ensure compliance with international standards and, where appropriate, use independent advisory panels during preparation and implementation of sub-projects that contain risks or that involve serious and multi-dimensional social and/or environmental concerns.

- ✓ Examine whether particular individuals and groups may be differentially or disproportionately affected by the sub-project potential adverse impacts because of their disadvantaged or marginalized status, due to such factors as race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. Where such individuals or groups are identified, recommend targeted and differentiated measures to ensure that the adverse impacts do not fall disproportionately on them.

- ✓ All proposed concrete interventions with environmental and social risks will be assessed and managed with the purpose to identify potential application of requirements of the Overarching Environmental and Social Policy (ESP) and Principles.

4. Project Grievance mechanism

UN-Habitat will implement a grievance mechanism in the target areas, which will allow an accessible, transparent, fair and effective means of communicating if there are any concerns regarding project design and implementation. Employees, and people affected by the project will be made aware of the grievance mechanism for any criticism or complaint of an activity.

This mechanism considers the special needs of different groups as well as gender considerations. A combination of mailboxes (at Khoroo level), confidential persons in the community and telephoning options offer an immediate way for employees and people affected by the project to express their concerns. The options will allow local languages and offer the opportunity for and people affected by the project to complain or provide suggestions on how to improve project design and implementation.

Project staff will be trained in procedures for receiving messages and on the reporting of any grievances. Community chiefs will also be briefed how to obtain feedback from community members on a regular basis. In addition, monitoring activities allow project participants to voice their opinions or complaints as they may see fit.

The address and e-mail address of the Adaptation Fund will also be made public (i.e. project website, Facebook and mailbox) for anyone to raise concerns regarding the project:

Adaptation Fund Board secretariat
Mail stop: MSN P-4-400
1818 H Street NW
Washington DC

Table 25 overview of activities other than concrete interventions and potential risks, proposed mitigation measures and monitoring arrangements

Component	Output	Potential principle triggered	Preventive measure	Monitoring arrangements	
				Indicator and methos	Frequency and responsibility
1	1.1-3	Non-consideration of / compliance to the AF ESP when developing these plans	Include standard clauses requiring the compliance with the safeguard areas in AoC and contracts + screening the plans for compliance with the 15 safeguard areas	Check (list) to assess compliance to safeguard areas	Before and after plans Local project manager
2	2.1	Non-consideration of / compliance to the AF ESP when conducting studies			
1,2,3	1.1-3 2.1-3 4.1	2, 3 and 5. Risk that different groups are not equally involved in planning processes, workshops, trainings, etc.	Communities will be organized and quotas will be used to ensure different groups are included / represented. For government workshops and trainings, gender quotas will apply.	Count % different groups Attendance sheets and photos	Every meeting; annually Local project manager

Table 26 Filled risk screening sheets for the two concrete interventions (flood protection and drainage systems and resilient latrines, including overview of environmental and social risks, the significance of the risks, mitigation measures and management / monitoring arrangements

TABLE 1: GENERAL INFORMATION	
1. Intervention	**Flood protection and drainage infrastructure** (to reduce flood risks to vulnerable people, assets; reduce health impacts of flood toilets and related disease incidents
2. Project number (if relevant)	Ulaanbaatar nr 1
3. Project location (village, districts, geographical coordination)	Khoroo 7 and 9 and 24

TABLE 2: ACTIVITY / SUB-PROJECT DETAILS	
TECHNICAL INFORMATION (WHAT WILL BE DEVELOPED / CONSTRUCTED AND LOCATION DETAILS, LENGTH, SIZE, ETC.)	
4. Activity description and or asset to be developed	☐ Construct a flood retention wall / dike in Khoroo 9 o Length: 490 meters o Hight: 1,5 meters o Width 1,5 meters ☐ Covered drainage channels in Khoroo 7 o Length: 1066 meters o Dimension: 1 m2 ☐ Drainage channel in Khoroo 7 o Length: 1954 meters o Dimension: 1m2 ☐ Drainage ditch/channel next to the road in Khoroo 9 o Length: 1065 meters o Dimension: 1m2 ☐ River training to protect assets / houses in Khoroo 24 o Ad hoc interventions by settlers who will do the construction work
5. Materials to be used	☐ Construct a flood retention wall / dike in Khoroo 9 o Soil, rock and cement ☐ Covered drainage channels in Khoroo 7 o Cement ☐ Drainage channel in Khoroo 7 o Cement ☐ Drainage ditch/channel next to the road in Khoroo 9 o Cement ☐ River training to protect assets in Khoroo 24 o Material from the river
6. Other technical specifications	☐ Plans with maps need to be developed ☐ Hydrology, soil and engineering studies need to be conducted
7. Is an ESIA required by law?	☐ The final plan, including the studies need to be approved by a committee consisting of hydrology and engineering experts

8. Who owns the land the activity is planned on and / or who uses the land and why?	☐ An ESIA is not required for any of the interventions ☐ Construct a flood retention wall / dike in Khoroo 9 o Public / not used as it is currently a flood area (and frozen in winter) ☐ Covered drainage channels in Khoroo 7 o Some parts are private. Therefore, there will be an open-and-close approach. ☐ Drainage channel in Khoroo 7 o Public (along road and dike) ☐ Drainage ditch/channel next to the road in Khoroo 9 + foot bridge to cross o Public (along road) ☐ River training to protect assets in Khoroo 24 o Public / not used as it is currently a flood area (and frozen in winter)
9. Start date of activity / works	Year 1
10. End date of activity / works	Year 3
USE OF ASSETS (BENEFITS AND ACCESS)	
11. How will the asset be used	☐ All interventions are selected to efficiently drain flash and gully flood water. The footbridge is required to safely pass the drainage channel and road.
12. Interventions required for appropriate use of the asset(s)	☐ Conduct detailed hydrology, soil and engineering studies and develop detailed technical plans ☐ Dredge the river along desired course and use the soil to protect assets in the riverbed ☐ Community organization and agreement on beneficiaries, including selection criteria for who can be involved in activities ☐ Need agreement of all settlers affected by drainage that will go through private plots ☐ Raise awareness and train community members about flood risk areas and how to reduce risks by: o Not dumping waste into the drainage system o Introducing protection options and techniques
13. Interventions required for sustainable management and maintenance of the asset(s)	☐ Community groups will be formed for implementation of projects (involving Khoroo/District officials) and to raise awareness / discuss disposal of sludge on roads, proper removal of sludge, not throwing waste in canals. ☐ Agreement between community groups and officials about maintenance; District Landscaping and Common Services Division will be in charge of O & M of the flood protection intervention. However, community groups of HHs live nearby to the flood facilities can put a monitoring over the O&M of the facilities with help of Kheseg Leaders ☐ Involve Khoroo and District officials during project selection, implementation, certification of transfer of funds installments, oversight, etc.

CONSULTATIONS	
14. Was the community (and specific groups) consulted 15. Have relevant local authorities been consulted	August 2017: Khoroo level vulnerability assessments October / November 2017: Khoroo level action planning / interventions prioritization December 2017: Vulnerable groups (women, elderly, disabled and parents of school children) focus group discussion to capture concerns and needs regarding proposed interventions and to understand how communities can contribute to maintenance. Outcomes include: Specific concerns Children falling into open drainage channels Although people (including directly affected) agreed with the planned drainage in Khoroo 7, we need to make sure people fully agree with all steps taken and that houses won't be affected New drainage may lead to crossing issues for elderly, disabled, etc. Check if underground high voltage lines are in the development area Ensure vegetables can still grow in Khoroo 9 Specific needs Drainage must have curb or fence to protect children and Safety warnings should be installed Fully involve all affected households in the planning and deisgn process Some pedestrian crossings over drainage channels Roles and responsibilities of residents / households and government need to be clear enough regarding operation and maintenance of the drainage The flood protection wall shall be handed over to the District Governor's office as the district's property. However, community groups of households living nearby to the flood facilities can assist monitoring of operation and maintenance of the facilities with help of Kheseg Leaders. July 2017: Ulaanbatar Municipality; District Governors, Khoroo officials December 2017: Ulaanbatar Municipality, District Governors, Khoroo officials Was emphasized that flood reduction / management is the main priority. Sanitation is recognized as a big problem, as well as waste management.
ENVIRONMENTAL AND SOCIAL CONTEXT	

2	Description of the environmental context and the main environmental issues on the site / in the area	In summer, when ice melts and rain falls, water comes down from the northern hills, leading to floods around gully's and rivers. These floods affect, houses, other assets and overflow of outdoor pit latrines, leading to heavily polluted water and soil, which in turn lead to disease incidents, often affecting children. In the downhill / lower-lying Khoroos, another problem besides floods is stagnant water and groundwater coming up. This stagnant water, which is polluted due to overflow of the latrines, often from upstream, can stay for month and results in cars, ambulances, fire trucks, etc. not being able to enter the Khoroo. After the summer, the stagnant water freezes to then melt again in summer. Other environmental problems are extreme air pollution and waste management. In winter, gullies or streams, which are then frozen, are often used as roads.
3	Description of the social context and the main social issues on the site / in the area	In the target areas, poverty incidences are high and coping mechanism for floods are very limited. Knowledge of resilient latrines design is almost not existent and awareness of hygiene related to sanitation and hand washing is very low. Due to land pressure, newcomers often reside in informal areas in high risk areas such as riverbeds or at the foot of gullies. Land use plans don't really exist, especially at the Khoroo level. Most of the land is private / allocated to inhabitants. Due to ex-communist times, community organization is very limited. Women are generally very vocal and equally treated.

TABLE 3: CHECKLIST OF POTENTIAL RISK AREAS OF NON-COMPLIANCE WITHIN THE ADAPTATION FUND'S ENVIRONMENTAL AND SOCIAL PRINCIPLES	ANSWER (Y/N)
Adaptation Fund principle 1: Compliance with the Law	
20 Is there a risk that the activity does not comply with an applicable domestic or international law?	N
Adaptation Fund principle 2: Access and equity	
21. Is there a risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them?	Y
22. Is there a risk that the activity would impede access of any group to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, land rights, etc.?	N
23. Is there a risk that the activity does not provide fair and equitable access to benefits from the project to all affected stakeholders?	N
24. Is there a risk that the activity exacerbates existing inequities, particularly with respect to marginalized or vulnerable groups?	N
Adaptation Fund principle 3: Vulnerable and marginalized groups	
25. Are there any marginalized or vulnerable groups present among project beneficiaries?	Y
26. Is there a likelihood that the activity would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups?	N
27. Could the activity potentially restrict availability, quality of and access to resources or basic services to marginalized individuals or groups?	N
Adaptation Fund principle 4: Human rights	
28. Could the activity lead to adverse impacts on enjoyment of the human rights (civil,	N

political, economic, social or cultural) of the affected population?	
29. Would the activity possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	Y
Adaptation Fund principle 5: Gender equality and women's empowerment	
30. Is there a likelihood that the proposed activity would have adverse impacts on gender equality and/or the situation of women and girls?	N
31. Would the activity potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	N
32. Would the activity potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	N
Adaptation Fund principle 6: Core labour rights	
33. Does the activity involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?	Y
Adaptation Fund principle 7: Indigenous people	
34. Are indigenous peoples present in the project area?	N
35. Would the proposed activity potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	N
36. Would the activity adversely affect the development priorities of indigenous peoples as defined by them?	N
37. Has there been an absence of culturally appropriate consultations on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	N
Adaptation Fund principle 8: Involuntary resettlement	
38. Would the activity potentially involve temporary or permanent and full or partial physical displacement?	Y
39. Is there a risk that the activity would lead to forced evictions?	N
40. Will the activity lead to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood)?	N
Adaptation Fund principle 9: Protection of natural habitats	
41. Is the activity within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	N
42. Would the activity potentially cause adverse impacts to habitats (e.g. natural, modified, and critical habitats) and/or ecosystems and ecosystem services?	N
43. Does the activity involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?	N
Adaptation Fund principle 10: Conserving biodiversity	
44. Could the activity lead to the reduction or loss of biological diversity?	N
45. Would the activity pose a risk of introducing invasive and/or non-native species?	N
46. Is monoculture foreseen?	N
47. Would the activity pose risks to endangered species?	N
Adaptation Fund principle 11: Climate change	

48. Will the activity result in significant greenhouse gas emissions or may it exacerbate climate change / maladaptation (e.g. negative effects in other areas)?	N
Adaptation Fund principle 12: Pollution and resource efficiency	
49. Does the activity require significant consumption of raw materials, energy, and/or water?	Y
50. Would the activity potentially result in the generation of waste (both hazardous and non-hazardous)?	N
51. Would the activity potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	N
52. Will the activity involve the application of pesticides?	N
Adaptation Fund principle 13: Public health	
53. Would the activity result in potential increased health risks (e.g. from waterborne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	N
54. Would the activity pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials?	N
55. Would elements of activity construction, operation, or decommissioning pose potential safety risks to local communities?	Y
Adaptation Fund principle 14: Physical and cultural heritage	
56. Will the proposed activity result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)?	N
Adaptation Fund principle 15: Land and soil erosion	
57. Will the activity lead to the conversion of wetlands, waterways, or woodlots?	N
58. Will the activity cause the clearing of natural vegetation and/or forest?	N
59. Is there a risk that the activity leads to soil degradation?	N
60. Is there a risk that the activity is designed without proper soil analysis and/or does not match soil capability?	N

Table 4: Identifying probability, impact, significance and risks mitigation measures

Table partially filled out, to provide examples for project staff to complete the table fully. Please use the checklist (table 3) to identify risks

WHAT ARE THE POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS?					
AF principle number and description of risks	**Probability (P) and Impact (I) Score 1 - 5**	**Significance (= impact x probability) Low: 1-7 Med: 8-14 High: 15-25**	**Comment (also to identify significance of risk, i.e. evidence)**	**Mitigation measures proposed**	**Mon ind**
AF Principle nr 2: risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them	P= 1 I = 3	Low (3)	During consultations, it became clear that no specific group is treated differently. However, to ensure that informal settlers, poor people, etc. are involved in decisions that may affect them a mitigation measure is proposed. In some areas, pedestrian crossings over drainage channels, especially focused on elderly and disabled, may be needed	Community organization where everyone can participate, but quotas will be used to ensure different groups are included. Also, criteria for beneficiaries' selection will be established in advance. Primary Groups membership will include all households benefitting from construction of drainage Construct foot bridges where needed	Meet atten shee phot
AF Principle nr 3: risk that some vulnerable affected groups may not participate in decisions making processes regarding design and planning of activities that may affect them	P= 1 I = 3	Low (3)			
AF Principle nr 4: risk that tenure arrangements and/or community based property rights are affected	P= 2 I = 4	Med (8)	In Khoroo 7, there is 1 km of planned underground drainage. This drainage channel is underground because it will go through some private plots. Although people living in this area agreed with an open-close approach, a mitigation measure is still proposed to ensure no intervention will take place without their agreement. In Khoroo 9, a flood protetction wall in planned. It need to be ensured this is built on public land or that the land owner agrees with the intervention	Community Development Councils will be formed with membership of all households benefitting from construction. The design of drainage sections will be managed in neighborhood sections which can be managed by these CDCs. Have all possibly affected households sign that they agree with the intervention; include clause in all contract that contractor will comply to human rights markers. Although inhabitants agree with the intervention in principle, an alternative drainage plan will be developed (and has already been considered) if inhabitants don't agree	Sign shee contr HR r
AF principle 8: risk of temporary or permanent and full or partial physical displacement					

				The UN-Habitat Human rights officers and PAC will check compliance.	
AF Principle nr 6: Risk of employing underage people and to support underpayment and unsafe working conditions	P= 2 I = 3	Low (6)	There is limited knowledge of safe work conditions. However, there is no reason companies and people won't adhere to ILO standards. To ensure they will, a mitigation measure is proposed	Employment and working conditions following ILO standards will be included in legal agreements with all subcontractors; The community contracts to be signed with Community Development Councils will state that under aged children will not be employed and all workers will be paid equal wage. Ensure that ICSC international health and safety standards are clearly accessible and understood. e.g. by putting clearly visible signs detailing health and safety standards to be located at projects sites and by supplying protective equipment. Before construction, it will be checked where high voltage wires are located underground Where needed, drainage channels will be fenced to avoid children falling in.	Chec contr signs
AF Principle nr 13: Risk that elements of activity construction, operation, or decommissioning pose potential safety risks to local communities					
AF principle nr 12: Risk that consumption of raw materials will have a negative effect (elsewhere)	P= 2 I = 1	Low (2)	The interventions will require cement, soil and rock. Although the practice is that these are purchased through Mongolian companies a mitigation measure is proposed to ensure soil and rocks are not acquired in areas that in can have negative effects, such as from the river.	Discuss with companies and check source of material before purchase	Bills

TABLE 1: GENERAL INFORMATION	
16. Intervention	**Resilient sanitation delivery** (to reduce health impacts related to overflow of toilets
17. Project number (if relevant)	Ulaanbaatar nr 2
18. Project location (village, districts, geographical coordination)	Khoroo 7, 9, 12, 13, 16, 24 and 25

TABLE 2: ACTIVITY / SUB-PROJECT DETAILS	
TECHNICAL INFORMATION (WHAT WILL BE DEVELOPED / CONSTRUCTED AND LOCATION DETAILS, LENGTH, SIZE, ETC.)	
19. Activity description and or asset to be developed	☐ Construct resilient toilets (per household) suitable for rock and soft/wet underground
20. Materials to be used	☐ Cement / cement blocks, and some other materials of limited quantity
21. Other technical specifications	☐ The toilets will be designed to withstand floods and to be suitable for women, elderly, disabled, etc, when needed.
22. Is an ESIA required by law?	☐ An ESIA is not required for this intervention
23. Who owns the land the activity is planned on and / or who uses the land and why?	☐ It will be on private plots. The toilets are typically placed next to the Ger or house.
24. Start date of activity / works	Year 1
25. End date of activity / works	Year 3
USE OF ASSETS (BENEFITS AND ACCESS)	
26. How will the asset be used	☐ One improved latrine per household
27. Interventions required for appropriate use of the asset(s)	☐ Select a design that is appropriate for withstanding floods and very low temperatures ☐ Community organization and agreement on beneficiaries, including selection criteria for who will have the toilets ☐ Raise awareness and train community members about risk of overflowed toilets and related health risks and benefits of hand washing ☐ 10 % contribution from construction price to ensure ownership and to be used for replication
28. Interventions required for sustainable management and maintenance of the asset(s)	☐ Community groups will be formed for implementation of projects (involving Khoroo/District officials) and to raise awareness / discuss disposal of sludge on roads, proper removal of sludge, not throwing waste in canals. ☐ Formation of Primary Groups and Community Development Councils in areas where toilets and drainage being constructed in order to provide community structure and forum to discuss issues related to implementation and maintenance.

	□ Involve Khoroo and District officials during project selection, implementation, certification of transfer of funds installments, oversight, etc. □ A tripartite agreement can be signed between the project, HH and the latrine developer covering O&M roles and responsibilities
□ Consultations	
29. Was the community (and specific groups) consulted	□ August July 2017: Khoroo level vulnerability assessments □ October / November 2017: Khoroo level action planning / interventions prioritization □ December 2017: Vulnerable groups (women, elderly, disabled and parents of school children) focus group discussion to capture concerns and needs regarding proposed interventions and to understand how communities can contribute to maintenance. Outcomes include: Specific concerns □ General: people get sick, including children, due to soil and water pollution □ Some low income HHs which received support and subsidy get used to the support and tend to not take any post responsibility □ Design needs to be appropriate for cold weather and for emptying service □ People without septic tanks should be penalized □ It would be good if the project can foresee and prevent further problems with improvement (design) of the latrines Specific needs □ To select HHs who are willing to improve their latrines and take care of them further by themselves □ Select the most flooded and polluted areas by the overfilled pit latrines □ The toilet is the primary need of HHs so the most of HHs agree with the contribution of 10 or more % of the required cost of improved latrine □ Inner lining of septic tanks (to avoid waste water penetrating the soil and ground water) should be designed with consideration of permafrost interaction □ Toilet design should be appropriate for women, elderly, disabled and children □ Septic tanks should be installed with consideration of latter emptying service access □ Some public toilets may need to be constructed
30. Have relevant local authorities been consulted	□ July 2017: Ulaanbatar Municipality; District Governors, Khoroo officials

	□ December 2017: Ulaanbatar Municipality, District Governors, Khoroo officials Was emphasized that flood reduction / management is the main priority. Sanitation is recognized as a big problem, as well as waste management.
ENVIRONMENTAL AND SOCIAL CONTEXT	
4 Description of the environmental context and the main environmental issues on the site / in the area	In summer, when ice melts and rain falls, water comes down from the northern hills, leading to floods around gully's and rivers. These floods affect, houses, other assets and overflow of outdoor pit latrines, leading to heavily polluted water and soil, which in turn lead to disease incidents, often affecting children. In the downhill / lower-lying Khoroos, another problem besides floods is stagnant water and groundwater coming up. This stagnant water, which is polluted due to overflow of the latrines, often from upstream, can stay for month and results in cars, ambulances, fire trucks, etc. not being able to enter the Khoroo. After the summer, the stagnant water freezes to then melt again in summer. Other environmental problems are extreme air pollution and waste management. In winter, gullies or streams, which are then frozen, are often used as roads.
5 Description of the social context and the main social issues on the site / in the area	In the target areas, poverty incidences are high and coping mechanism for floods are very limited. Knowledge of resilient latrines design is almost not existent and awareness of hygiene related to sanitation and hand washing is very low. Due to land pressure, newcomers often reside in informal areas in high risk areas such as riverbeds or at the foot of gullies. Land use plans don't really exist, especially at the Khoroo level. Most of the land is private / allocated to inhabitants. Due to ex-communist times, community organization is very limited. Women are generally very vocal and equally treated.

TABLE 3: CHECKLIST OF POTENTIAL RISK AREAS OF NON-COMPLIANCE WITHIN THE ADAPTATION FUND'S ENVIRONMENTAL AND SOCIAL PRINCIPLES	ANSWER (Y/N)
Adaptation Fund principle 1: Compliance with the Law	
21 Is there a risk that the activity does not comply with an applicable domestic or international law?	N
Adaptation Fund principle 2: Access and equity	
61. Is there a risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them?	Y
62. Is there a risk that the activity would impede access of any group to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, land rights, etc.?	N
63. Is there a risk that the activity does not provide fair and equitable access to benefits from the project to all affected stakeholders?	N
64. Is there a risk that the activity exacerbates existing inequities, particularly with respect to marginalized or vulnerable groups?	N
Adaptation Fund principle 3: Vulnerable and marginalized groups	
65. Are there any marginalized or vulnerable groups present among project beneficiaries?	Y
66. Is there a likelihood that the activity would have inequitable or discriminatory adverse	N

impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups?	
67. Could the activity potentially restrict availability, quality of and access to resources or basic services to marginalized individuals or groups?	N
Adaptation Fund principle 4: Human rights	
68. Could the activity lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population?	N
69. Would the activity possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	N
Adaptation Fund principle 5: Gender equality and women's empowerment	
70. Is there a likelihood that the proposed activity would have adverse impacts on gender equality and/or the situation of women and girls?	N
71. Would the activity potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	N
72. Would the activity potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	N
Adaptation Fund principle 6: Core labour rights	
73. Does the activity involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?	Y
Adaptation Fund principle 7: Indigenous people	
74. Are indigenous peoples present in the project area?	N
75. Would the proposed activity potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	N
76. Would the activity adversely affect the development priorities of indigenous peoples as defined by them?	N
77. Has there been an absence of culturally appropriate consultations on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	N
Adaptation Fund principle 8: Involuntary resettlement	
78. Would the activity potentially involve temporary or permanent and full or partial physical displacement?	N
79. Is there a risk that the activity would lead to forced evictions?	N
80. Will the activity lead to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood)?	N
Adaptation Fund principle 9: Protection of natural habitats	
81. Is the activity within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	N
82. Would the activity potentially cause adverse impacts to habitats (e.g. natural, modified, and critical habitats) and/or ecosystems and ecosystem services?	N
83. Does the activity involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?	N

Adaptation Fund principle 10: Conserving biodiversity	
84. Could the activity lead to the reduction or loss of biological diversity?	N
85. Would the activity pose a risk of introducing invasive and/or non-native species?	N
86. Is monoculture foreseen?	N
87. Would the activity pose risks to endangered species?	N
Adaptation Fund principle 11: Climate change	
88. Will the activity result in significant greenhouse gas emissions or may it exacerbate climate change / maladaptation (e.g. negative effects in other areas)?	N
Adaptation Fund principle 12: Pollution and resource efficiency	
89. Does the activity require significant consumption of raw materials, energy, and/or water?	N
90. Would the activity potentially result in the generation of waste (both hazardous and non-hazardous)?	N
91. Would the activity potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	N
92. Will the activity involve the application of pesticides?	N
Adaptation Fund principle 13: Public health	
93. Would the activity result in potential increased health risks (e.g. from waterborne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	N
94. Would the activity pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials?	N
95. Would elements of activity construction, operation, or decommissioning pose potential safety risks to local communities?	Y
Adaptation Fund principle 14: Physical and cultural heritage	
96. Will the proposed activity result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)?	N
Adaptation Fund principle 15: Land and soil erosion	
97. Will the activity lead to the conversion of wetlands, waterways, or woodlots?	N
98. Will the activity cause the clearing of natural vegetation and/or forest?	N
99. Is there a risk that the activity leads to soil degradation?	N
100. Is there a risk that the activity is designed without proper soil analysis and/or does not match soil capability?	N

Table 4: Identifying probability, impact, significance and risks mitigation measures

Table partially filled out, to provide examples for project staff to complete the table fully. Please use the checklist (table 3) to identify risks

WHAT ARE THE POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS?					
AF principle number and description of risks	**Probability (P) and Impact (I) Score 1 - 5**	**Significance (= impact x probability) Low: 1-7 Med: 8-14 High: 15-25**	**Comment (also to identify significance of risk, i.e. evidence)**	**Mitigation measures proposed**	**Mon ind**
AF Principle nr 2: risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them?	P= 1 I = 3	Low (3)	During consultations, it became clear that no specific group is treated differently. However, to ensure that informal settlers, poor people, etc. are involved in decisions that may affect them a mitigation measure is proposed. Elderly, disabled people and women requested to consider their needs in the designs of the latrines	Community organization where everyone can participate, but quotas will be used to ensure different groups are included. Also, criteria for beneficiaries' selection will be established in advance. Primary Groups membership will include all households benefitting from construction of improved latrines. Involve different groups in the final design of the latrines	Meet atten shee phot
AF Principle nr 3: Risk that some vulnerable affected groups may not participating in decisions making processes regarding design and planning of activities that may affect them	P= 1 I = 3	Low (3)			
AF Principle nr 6: Risk of employing underage people, underpayment and unsafe working conditions	P= 2 I = 3	Low (6)	There is limited knowledge of safe work conditions. However, there is no reason companies and people won't adhere to ILO standards. To ensure they will, a mitigation measure is proposed	Employment and working conditions following ILO standards will be included in legal agreements with all subcontractors; the community contracts to be signed with Community Development Councils will state that under aged children will not be employed and all workers will be paid equal wage. Ensure that ICSC international health and safety standards are clearly accessible and understood. e.g. by putting clearly visible signs detailing health and safety standards to be located at projects sites and by supplying protective equipment.	Chec contr signs
AF Principle nr 13: Risk that elements of activity construction, operation, or decommissioning pose potential safety risks to local communities					