ADAPTATION FUND

Project Completion Summary

Section A: Project result and performance

1. Basic information

Title of project/programme	MNG/MIE/DRR/2017/1
Project/Programme category	**Flood Resilience in Ulaanbaatar Ger Areas** Climate Change Adaptation through Community-Driven Small-Scale Protective and Basic-Services Interventions
Project period (if the project was granted an extension, include the original as well as the revised completion date)	4 years and 10 Months Approval Date: 16 July 2018 Start Date: 28 February 2019 Originally Completion Date: 27 February 2023 Actual Completion Date: 31 December 2023
Country(ies)	Mongolia
Sector(s)	Disaster Risk Reduction
Implementing entity name	United Nations Human Settlements Programme, UN-Habitat
Type of implementing entity (MIE, NIE or RIE)	Multilateral Implementing Entity (MIE)
Executing entity(ies)	• Ministry of Environment and Tourism (MoET), Government of Mongolia • Municipality of Ulaanbaatar (MUB), and the Governor's Offices and District Governors of Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts • Ger-Communities in the Target Khoroos (subdistricts) within Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts • World Vision International Mongolia (WVIM) • Urban Development Resource Center (UDRC) • Climate Change on Nature and Society (CCNS) • Mongolia Taiwanese Technology Transfer Center (MTTTC)
Amount of financing approved (USD)	USD 4,495,235

Project contact(s)	Ms. Odicea Angelo Barrios, Human Settlements Officer, UN-Habitat Regional Office for Asia and the Pacific, Fukuoka, Japan. Email: odicea.angelobarrios1@un.org Ms. Enkhtsetseg Shagdarsuren, National Project Manager, UN-Habitat Mongolia Office, Ulaanbaatar, Mongolia. Email:enkhtsetseg.shagdarsuren@un.org
Date of report	30 June 2024

2. **Key milestones** – *Please refer to the overview tab in the latest PPR. For the delay in project implementation and related reasons refer to the lessons learned tab, section on "implementation and adaptive management"*

Project inception	28 February 2019
Mid-term review (if applicable)	30 June 2021
Project completion	31 December 2023
Terminal evaluation	31 July 2024
If any, delay in implementation and reasons for delay	COVID-19 outbreak and pandemic, related restrictions and lockdowns, Post COVID-19 economic impacts caused by the 'Zero Covid Policy' implemented by the Government of China were the main unprecedented risks and reasons for delays in the FRUGA project implementation.

3. Project overview and description

The FRUGA Project's objective was "to enhance the climate change resilience of the seven most vulnerable Ger khoroo settlements focusing on flooding in Ulaanbaatar City." The project was implemented by UN-Habitat with support from Executing Entities (EEs), such as the World Vision International Mongolia (WVIM), the Urban Development Resource Center (UDRC), Climate Change on Nature and Society (CCNS), and the Mongolia Taiwanese Technology Transfer Center (MTTTC), and in cooperation with the Ministry of Environment and Tourism (MoET), Municipality of Ulaanbaatar city, Governor's Offices of Bayanzurkh, Songinokhairkhan and Sukhbaatar districts, target ten subdistricts (initial seven subdistricts were administratively restructured into ten subdistricts during the project implementation period) and their Ger-communities. The implementation of the FRUGA project was overseen by the UN-Habitat Mongolia Country Programme, Ulaanbaatar, with inputs from the UN-Habitat Climate Change in Cities Initiative channeled through the UN-Habitat Regional Office for Asia and the Pacific (ROAP), Fukuoka, Japan.

The target Ger communities in Ulaanbaatar city are characterized by a high exposure to multiple climate hazards ranging from wind and dust storms, air pollution, and particularly by floods – cited as the main climate issue that required addressing by the communities – during

the rapid needs assessment. Climate sensitivity is underpinned by rapid urbanization and population growth, leading to people residing in high-risk areas, with unsanitary and unhygienic conditions, which exacerbates public health risks. Underlying vulnerabilities are poverty, limited social support networks, limited access to basic urban services, gender inequalities and urban environmental degradation – all of which results in poor quality of life. Moreover, the adaptive capacities at household, community and governance levels are barriers for change due to very limited knowledge and awareness of risks and their own vulnerability.

Project investments aimed to reduce vulnerabilities and identified barriers by implementing four interconnected components:

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

4. **Results and key outcomes** (Alignment with the Adaptation Fund core impact indicators – Number of Direct Beneficiaries reached including women; Trainings conducted including women trained, Early Warning Systems (EWS); Assets Produced, Developed, Improved, or Strengthened; Natural Assets Protected or Rehabilitated i.e. hectares of natural habitats/ meters of coastlines) – *Please refer to the "Performance at completion" in the Results Tracker section in the last PPR to extract this information.*

			Total (direct + indirect beneficiaries)	Direct beneficiaries supported by the project	Indirect beneficiaries supported by the project
Impact: Increased resiliency at the community, national, and regional levels to climate variability and change	Core Indicator: No. of beneficiaries	*Total*	148,982	56,400	92,582
		% of female beneficiaries	52.02	54	50.03
		% of Youth beneficiaries	5	5	5

				Hazards information generated and disseminated	Overall effectiveness
Outcome 1: Reduced exposure to climate-related hazards and threats	Indicator 1: Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	Number of targeted stakeholders			
		Total	12,984	Inland flooding	Effective
		% of female targeted	67.2		

Output 1.1 Risk and vulnerability assessments conducted and updated	Indicator 1.1: No. of projects/programmes that conduct and update risk and vulnerability assessments	No. of projects/programmes that conduct and update risk and vulnerability assessments	Sector	Scale	Status
		1	Disaster risk reduction	Sub-national	Risk and Vulnerability assessments completed or updated
Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes	Indicator 3.1: Increase in application of appropriate adaptation responses	Percentage of targeted population applying adaptation measures		Sector	
		38.78		Disaster risk reduction	
Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities	Indicator 3.1.1: Percentage of targeted population awareness of predicted adverse impacts of climate change, and of appropriate responses	No. of targeted beneficiaries	% of female participants targeted	Level of awareness	
		12,984	67.20	Mostly aware	
Output 3.2: Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	Indicator 3.2.1: No. of technical committees/associations formed to ensure transfer of knowledge	No. of technical committees/associations	% of women represented in committees/associations	Level of awareness	
		5	40-60%	Mostly aware	
Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	Indicator 4.1: Increased responsiveness of development sector services to evolving needs from changing and variable climate	Project/programme sector	Geographical scale	Response level	
		Flood risk reduction	Local	Mostly responsive	
	Core Indicator 4.2: Assets produced, developed, improved or strengthened	Sector	Targeted asset	Changes in asset (quantitative or qualitative)	
		Disaster risk reduction	5 Physical assets produced/improved/ strengthened	Newly constructed	
		Water &Sanitation	1,133 flood resilient household sanitation	Newly constructed	

			facilities constructed	

All the activities planned for the FRUGA project outputs have been successfully completed by 31 December 2023. In total, **92,582 residents (50.03 % female) in 10 peri-urban Khoroos (subdistricts) in Ulaanbaatar's Ger areas have benefitted** from the construction of the flood protection infrastructure and improved flood resilient sanitation facilities, and the organization of capacity building activities.

The summary of the various output-specific activities is as follows:

Under Output 1, the following knowledge products were prepared and are being used for practical applications by the beneficiary communities and local government:

- The development of a 'Climate Change and Flood Simulation Model for Ulaanbaatar city and Ger-areas.'
- Flood risk maps for Ulaanbaatar city, northern Ger areas, and target ten khoroos (subdistricts) developed using the 'Climate Change and Flood Simulation Model.'
- Main maps of land use and urban development master plans of Ulaanbaatar city in which the flood risks were identified and reflected.
- A smartphone application for building public awareness of the flood risk areas will help people avoid settling or buying land in flood-risk areas and take protective measures from potential flooding in case they (already) live in flood areas.

Under Output 2, target communities from 10 Khoroos (subdistricts) have been trained and empowered through 498 consultations for community mobilization and organization from the start of the project. The consultations were attended by 6,924 representatives of beneficiary communities, with 65% female participation. As a result of these activities, 144 community groups were formed under the FRUGA project, with 49% having women as community group leaders; 53.9% of the members of community groups are women. The community groups have further been trained and empowered under the FRUGA project to construct the improved toilets for their peer community members with close monitoring and supervision conducted by the EE field staff. Sex-disaggregated databases for community participation in meetings, consultations and community-led activities were developed and maintained by the EE field staff and monitoring officer to ensure the beneficiaries' equal participation.

Under Output 3, five (5) flood protection infrastructures extending up to 4.517 km (4,517 meters) were constructed. As a result of this infrastructure, 221 hectares Ger settlement areas are now protected from climate change-induced flooding. A total of 8,707 most vulnerable people living in 10 Ger khoroos (subdistricts) have improved their household-level sanitation facilities (i.e., toilets) to climate-resilient and gender-responsive sanitation facilities (i.e., improved, resilient toilets). The infrastructures and sanitation facilities were tested and proven effective during the heavy flooding that occurred three times in the summer of 2023 in Ulaanbaatar city.

Under Output 4, the FRUGA project has supported the capacity building of the Ger area communities and the local government with regard to resilience building for flooding and climate change and improving the quality of life. A total of 28 workshops for 'Community Action Planning' for resilience building, and 283 training sessions for disaster risk reduction and mitigation, environmental hygiene, disinfection and disease prevention, waste management, operation & maintenance, climate change and flood risk awareness-raising, sustainable resilience building, and the 'People's Process' were organized.

The national and local government partners and target communities have valued and appreciated the project results and immediate impacts. With their request and collaboration, the proposal for 'Ger Community Resilience Project' (GCRP)' was developed to scale up the FRUGA project. The AFB approved the GCRP for funding and implementation, and its implementation is underway.

The FRUGA project activities of EEs, including those of the beneficiary communities, have been closely monitored and guided by the PEU and PIU staff in the field. At the critical milestones, specialists from the Municipality of Ulaanbaatar and the Ministry of Environment and Tourism have supported the project team.

5. **Issues, challenges and mitigation measures** (Environmental and social risks, gender considerations and other risks) – *Please refer to the lessons learned tab in the PPR, specifically the section on "Implementation and Adaptive Management"*

   As the project was well prepared with the predefined risk mitigation strategies for the environmental and social, and other risks identified during the project preparation, the project team has not encountered any substantial issues and challenges related to those risks during the project implementation.

   However, the COVID-19 pandemic, the related lockdowns, and its economic impacts exacerbated by the 'Zero COVID Policy' implemented by the Government of China have been the main unprecedented risks that affected the FRUGA project implementation. The construction of the flood control infrastructure and resilient toilets were affected and delayed due to the COVID-19 pandemic and the related lockdowns and economic impacts in the form of an increase in the cost of and the limited availability of construction materials. An extension of the FRUGA project was requested by IE on 2nd November 2022 from the AFB to accommodate the COVID-19-induced delays and to complete the planned activities. Upon the approval by AFB for the extension of the project on 9th December 2022, the Agreement of Cooperation (AOC) with EE (World Vision International Mongolia) was extended. The EE (World Vision International Mongolia) completed the planned activities within the extended duration of the FRUGA project.

   The UN-Habitat National Project Manager for Mongolia worked as the Gender Focal Point, ensuring that gender equity was considered and ensured during the implementation of all activities under the FRUGA Project. Women in the target communities were encouraged and empowered to participate in the project through training and consultation sessions. Their involvement was monitored through sex-disaggregated attendance sheets. Women beneficiaries were very active and instrumental in defining the specific needs of women, people with disabilities (PWD), children, and older persons in terms of flood-resilient improved toilet design and implementation and the application of safety measures for women and children during and after the construction of the flood facilities. As per the sex-disaggregated attendance data, 67.17% of the total 12,984 participants were women in the FRUGA project

activities, such as community consultations, meetings, training sessions, and workshops. A total of 144 Primary Groups have been established, representing 1827 households and 7,508 population. A total of 985 women members represents their households in the target Ger area communities. Another 212 women (49.4%) hold the leadership position in the Primary Groups. Women's engagement in the training and consultation sessions was 67.17%. Among the beneficiaries of the improved resilient toilet construction, 23% were female-headed households. Over half (51.5%) of the total beneficiaries were women, 37% were population aged 0-18, 11.3% were people aged 60 or over, 3.4% were people with disabilities (PWD).

6. **Lessons learned** (Best practices, adaptive management, what worked during the implementation and what did not, what corrective actions were taken during implementation, what are the ways to improve the intervention) – *Please refer to the lessons learned tab in the PPR, specifically the section on "Implementation and Adaptive Management"*

6.1 Best Practices

a) **High level of women participation from the start of the FRUGA Project.** The FRUGA project's official start date was marked by the 'Project Inception Workshop' held on 28 February 2019, organized at both national and district levels. The 'National-level Inception Workshop' saw a significant representation of women at 57.4%. Following this, three 'District-level Inception Workshops' were conducted in the three target districts on 15, 19, and 20 March 2019; these were attended by diverse stakeholders, with significant female participation ranging from 68.7% to 74.1%. A total of 237 participants, 67% women, discussed proposed activities under the FRUGA project. These workshops were attended by representatives from the various government ministries, municipal departments, target districts, and potential partner organizations, including the United Nations agencies and NGOs.

b) **People's Process of community mobilisation, organization, and Community Action Planning.** In implementing the FRUGA project, the IE utilized the People's Process approach of UN-Habitat to involve grassroots communities in implementing various projects and programmes in the Asia-Pacific region. The application of the People's Process was useful in mobilizing Ger area communities, organizing them in 'Primary Groups', and establishing 'Community Development Councils' in each of the three districts, i.e., Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts. A total of 144 Primary Groups have been established, representing 1,827 households and 7508 population (as mentioned earlier).

c) **Participatory Identification of Flooding Problems.** The communities organized in the form of 'Primary Groups' and 'Community Development Councils' contributed to the identification of climate change-induced flooding problems, including inundation of Ger areas, loss of mobility during the periods of flooding, negative physical impacts on housing infrastructure, and the resultant fall in property values with potentially dire economic consequences for Ger area residents.

d) **Participatory Identification of Resilient Toilet Beneficiaries, including the Elderly and Persons with Disabilities.** The organized communities in the form of 'Primary Groups' provided crucial support in identifying most needy beneficiary households, especially those with older persons family members and persons with disability. This critical contribution by the 'Primary Groups' was very helpful in extending the benefits of

the FRUGA project to the neediest households in the communities of the target Ger settlements.

e) **Strengthened Community Capacities for Replication and Scaling-up of Project Activities.** As the FRUGA project aimed at building the adaptive capacity of the beneficiary communities through their direct involvement and participation, the knowledge and experience from the project implementation are endowed in the target Ger area communities and the Primary Groups organized and established under the project. This rich experience has transformed the perspective of Ger area communities from that characterized by 'individual struggles' of approaching the local government to address the flooding problem to that of 'collective strength', which now encourages them to replicate or scale up the project activities (especially about building 'resilient toilets') within and outside of the target area under the FRUGA project.

f) **Multiplier Effect of Training of Trainers on Disaster Risk Reduction and Resilience Building.** The FRUGA project's beneficiary communities in Ger khoroos (subdistricts) were provided with "Training of Trainers" on disaster risk reduction and resilience building. These trained community members can now train other community members on disaster risk reduction and resilience building and share their experiences within and outside the FRUGA project area.

6.2 Adaptive management

a) ***Selection of the main EE for the Implementation of the project*.** There was a delay in the selection of the main Executing Entity (EE) for the implementation of the project, as UN-Habitat envisaged in the FRUGA project proposal that it would engage UNOPS for this purpose. However, the negotiation between UN-Habitat and UNOPS took longer than expected. Hence, UN-Habitat decided to go with the open selection of an Executing Entity. In this regard, five (5) proposals were received, and "World Vision International Mongolia" (WVIM, an International NGO) was selected for the purpose. The contract with WVIM as an EE for Component 3 commenced on 19th August 2019.

b) ***Changes in the FRUGA Project Organigram*.** As advised by the national partners based on their working practices, a 'Project Working Group' was established in place of the 'Project Advisory Committee' suggested in the FRUGA project proposal. Also, a 'Sub-Working Group' was established at each of the target districts as suggested and agreed by the participants during the Inception Workshops to replace the 'Project Coordination Team' proposed in the project proposal. The District Deputy Governors worked as the 'Sub-Working Groups' Chairs in their respective Districts. The 'Sub-Working Groups' comprised specialists from the key divisions of the District Offices and Khoroo Governors of target khoroos (subdistricts). The 'Sub-Working Group' under the target district's Governor's Office was officialized in May 2019 through the District Governor's resolutions in the Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts.

c) Output 4.3 "Bringing Global Knowledge on best practices to in-country Implementing Partners and communities, customized widely used appropriate tools on adaptation building local capacity" was added to the FRUGA project after considering the following reasons. During the Inception Workshop (conducted in February 2019 with the support of UDRC) and during consultations with the government partners, it was observed that there was a greater need to implement a 'Comprehensive Knowledge Management Strategy' aiming at multi-level stakeholders bringing international expertise under the different

components in a more integrated manner. The objective was to address the knowledge gaps on climate change and resilience at different levels, including among government partners and communities. This required inputs from global experience integrating into the local context, customizing widely used tools and peer reviews on flood resilience action plans, guideline documents, etc. Similarly, knowledge management strategy outcomes should inform the development of regional and global capacity development tools and normative products. Therefore, a separate outcome was established incorporating the international experts' inputs under the new output (4.3), which links to all outputs. Accordingly, Outputs of 1.1-d, 1.2-b, 2.1-d, 2.2a Subcomponent 1 were moved to Output 4.3.

d) During the COVID-19 pandemic, the working-from-home modality was applied to all PIU, PEU, and IP team members to mitigate COVID-19 infection risks for the project staff. Online training and consultation modalities were also applied to organizing community and stakeholders' consultations and training sessions. A 'Business Continuity Plan' was prepared and was updated as required. With these arrangements, the FRUGA project team implemented planned activities, although 61% of team members were infected with COVID-19 at different points during project implementation.

e) Along with the 1st PPR submitted in March 2020, UN-Habitat requested approval from AFB to change the alignment of the drainage infrastructure planned in Khoroo 40 under Output 3.1. The AFB approved this change in September 2020. The main reason for this re-alignment was the layout change of the planned infrastructure under the Asian Development Bank (ADB) financed 'Ger Area Development Investment Programme', which got underway in 2019. It was not highlighted and foreseen in the original project proposal because, in 2017, the initial plan of the ADB investment programme was to construct a thermal plant to serve the Bayankhoshuu sub-centre in Khoroo 9 area; however, it was changed in 2019 to the construction of the heating pipelines across the Khoroo 7 to connect the sub-centre to the central heating system in place of the construction of a thermal plant.

6.3 What worked during the FRUGA project implementation and what did not? What corrective actions were taken during implementation?

a) ***What worked well*** (as explained in detail in Section 6.1: Best Practices):

- People's Process of community mobilization, organization, and Community Action Planning;
- Participatory identification of flooding problems;
- Participatory identification of resilient toilet beneficiaries, including older persons and persons with disabilities;
- Successful community engagement in the construction of flood control infrastructure;
- Strengthened community capacities for replication and scaling-up of project activities; and
- Multiplier effect of training of trainers on disaster risk reduction and resilience building.

b) What did not work, and the corrective actions taken

The limited market supply and cost increase of imported construction materials and fuel sustained during the COVID-19 pandemic period were the main reasons for the delays in Output 3 implementation, the construction of both flood control facilities and flood-resilient improved toilets. Hence, an extension of the FRUGA project was requested by IE (UN-Habitat) on 1st December 2022 from AFB to accommodate the delays and finish the planned activities. Upon the approval by AFB for the extension of the project on 9th December 2022, the AOC with EE (World Vision International Mongolia) has been extended. The EE was able to complete the planned activities within this extended period.

6.4 What are the ways to improve the intervention?

The grassroots communities mobilized and organized under the FRUGA project were the key partners for the concrete adaptation interventions. For sustainable results, they needed to be nurtured organically to support their communities in resilience building in the context of resilient urban development in Ulaanbaatar city and its Ger Khoroo (subdistrict) communities. They should also be empowered to participate in local decision-making processes related to climate change, disaster risk reduction, preparedness, and response mechanisms.

7. **Innovation:** description of any innovative practices or technologies that figured prominently in this project – *Please refer to the lessons learned tab in the PPR, specifically the section on "innovation"*

- ***Development of a Climate Change and Flood Simulation Model for Ulaanbaatar City*.** The FRUGA project interventions under Component 1 resulted in developing a Simulation Model for forecasting future impacts of climate change flooding in Ulaanbaatar city and its Ger areas. The project analysed the duration of precipitation and discharge at meteorological and hydrological stations. The analysis used ERA5 atmospheric data and considered sea level pressure, 500 hPa geopotential height, and temperature advection during flood periods. The present and future discharge projections were estimated using the Weather Research and Forecasting (WRF)-Hydro model, considering the maximum daily precipitation change. Ulaanbaatar city's climate change projection was made using the ensemble mean of 10 Global Climate Model (GCM) outputs under different GHG emissions scenarios, such as RCP2.6, 4.5, and 8.5. The WRF-Hydro model applied historical flood simulation based on 1966 precipitation control data, considering the change at 26 – 53%. A numerical experiment was done with different control data, and the impact of floods was modelled for the years 2030, 2050, and 2080. The corresponding maximum flows were projected to be 100-1200 m3/sec in the project area in Ulaanbaatar. The historical and projected flood flow simulation with 30m grid resolution produced an inundation map for the project area with 1966 as the base year. It projected to the future in 2030, 2050, and 2080.
- ***Development of Flood Risk Maps for Ulaanbaatar City*.** One of the project's key findings is that the lack of knowledge on the existing risks makes people settle in a flood-prone areas in Ulaanbaatar city. Based on the 'Climate Change and Flood Simulation Model for Flood Risk Forecasting' (see previous para above), the FRUGA project developed 'Flood Risk Maps' for Ulaanbaatar city's northern Ger areas and 10 target khoroos (subdistricts) using the 'Climate Change and Flood Simulation Model'. Further, flood risks were identified and reflected in the main maps of land use and urban development master plans of Ulaanbaatar city. Flood risks can be substantially reduced,

and respective adaptation measures can be developed and implemented at the community level by generating an evidence-based flood risk map for public use.

- ***Development of a Smartphone App for Public Awareness on Flood Risks*.** As part of the FRUGA project implementation, a 'Smartphone Application' (App) was developed for building and enhancing public awareness with regard to flood risk areas in Ulaanbaatar city. This App can help people avoid settling or buying land in flood-risk-prone areas in the city and take protective measures from potential flooding if they (already) live in flood areas. During the implementation of the FRUGA project, an attempt was made to publicize this app. The relevant public authorities require more time to decide because making this App public has potential implications for property prices.
- ***Application of UN-Habitat's People's Process to Climate Change Adaptation in Ulaanbaatar City*.** Under the FRUGA project, the IE applied the UN-Habitat's People's Process for (i) the participatory identification of adaptation needs, (ii) the participatory identification of most needy beneficiaries for flood-resilient improved toilets, and (iii) successful community negotiation with relevant households for the construction of flood control infrastructure in the target Ger areas. All these participatory activities resulted in successful adaptation under the Adaptation Fund-supported FRUGA project. Through these participatory mechanisms, the beneficiaries were involved in decision-making and implementation and thus, the knowledge and experience they gained will remain in the beneficiary communities.

8. **Description of the vulnerable communities and social groups affected by the project, and how they have been engaged and empowered** – *You might want to refer as well to the section on "community/national impact" in the lessons learned tab of the PPR.*

- Due to increased warm summer days and nights in central Mongolia, where Ulaanbaatar is located, there has been more frequent flooding in recent years. A relatively recent Flood Risk Assessment study[1], which looked at 35 floods that occurred within the period of 1915-2013, found that 60% of these floods took place within the decade of 2000-2010. The study stated that 50% of these floods were of 'alluvial' type due to water flow and run-off from mountain slopes and along dry riverbeds. Besides that, Ulaanbaatar city suffers from flash floods and groundwater flooding.
- The communities residing in Ger khoroos (subdistricts) are hit hardest by all types of floods. For instance, the 2003 flash floods killed 15 people, made 30 families homeless, and destroyed 93 houses. While climate change-induced flooding affects the Ger area communities in general, its impacts are felt most severely when the open-pit latrines used in Ger areas become inundated, causing sludge overflow. As these latrines become unusable, the most affected are children, women, older persons, and persons with disabilities.
- The mobilized and organized grassroots communities were the key partners of the FRUGA project for the implementation of concrete adaptation interventions on the ground in the target Khoroos (subdistricts) in the Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts. All soft and hard interventions under the FRUGA project have contributed to local resilience-building, particularly at the household and community levels. The primary purpose of concrete adaptation measures was to address the priorities of the high-risk

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

communities and vulnerable Ger-area residents and demonstrate quick improvement in the living conditions.

- The People's Process approach of community mobilization and organization introduced and implemented under the FRUGA project has empowered the Ger area communities for participatory needs assessment, participatory identification of toilet beneficiaries, participatory design and construction of flood-resilient improved toilets, and participatory monitoring of project implementation.

9. **Description of how long-term institutional and technical capacity for effective adaptation has been strengthened** – *Please refer to the lessons learned tab, section on "readiness interventions".*

The implementation of the FRUGA project and its various activities have strengthened the long-term institutional and technical capacity for effective adaptation in Ulaanbaatar city in particular and in the urban development context of Mongolia in general, as the following:

9.1. Executing Entities

- World Vision International Mongolia (WVIM, an EE). The FRUGA project was the first Adaptation Fund-supported project implemented by WVIM in Mongolia. The project helped build WVIM's long-term institutional and technical capacity to work with an Adaptation Fund project as well as with UN-Habitat (IE) with regard to effective adaptation, project implementation, and monitoring and reporting.
- Climate Change on Nature and Society (CCNS, an EE). The FRUGA project supported the first-ever preparation of 'Climate Change and Flood Simulation Model for Ulaanbaatar City' by partnering with CCNS as an EE. This resulted in the development of CCNS's long-term institutional and technical capacity for preparing 'Climate Change and Flood Simulation Model' using the Weather Research and Forecasting (WRF)-Hydro model utilizing huge amounts of climate data. It also helped CCNS to go through the process of sourcing climate data from various sources and analysing it for preparing the 'Climate Change and Flood Simulation Model for Ulaanbaatar City.'
- Mongolian Taiwanese Technology Transfer Center (MTTTC, an EE). The FRUGA project partnered with MTTTC for the development of 'Ger Khoroo (Subdistrict) level Detailed Land-use Plans', specifically targeting flood risk reduction in ten target Khoroos (Subdistricts) across Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts. These 'Detailed Land-use Plans,' specifically focusing on flood risk reduction, are pivotal for effectively implementing local flood resilience and climate change adaptation measures in 10 target khoroos in three districts. Thus, the project helped build the long-term institutional and technical capacity for preparing 'Ger Khoroo (Subdistrict) level Detailed Land-use Plans' with regard to effective adaptation.
- Companies for Detailed Design Development, Construction and Construction-related Supervision. Through EE (WVIM), the FRUGA project partnered with four companies to design and build flood control infrastructures and supervise the construction process. Through this engagement under the Adaptation Fund-supported project, these companies developed their long-term institutional and technical capacity for effective adaptation in the urban development context of Mongolia.

9.2. Partner Agencies and Grassroots Communities

- Municipality of Ulaanbaatar (MUB). On behalf of MUB, the City Engineering Facilities Division (CEFD) and the Company of Geodesy and Water Construction (CGWC) were

actively involved in implementing the FRUGA project. CEFD was the 'main coordinating body' representing the 'Mayor's Office of Ulaanbaatar City'. It was involved during the entire project implementation process, including infrastructure need assessment, project design, identification of infrastructure layout, procurement process (tender evaluation and selection of construction and construction-supervision companies), and the construction of flood control infrastructure. CGWC is the municipality-owned company in-charge of the operation and maintenance of the flood management infrastructure in Ulaanbaatar city. Both these agencies under MUB built their long-term institutional and technical capacity on effective adaptation in Ulaanbaatar city, with particular reference to the Ger khoroos (subdistricts).

- Governor's Offices of Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts. In the three target districts of Songinokhairkhan, Bayanzurkh, and Sukhbaatar under MUB, the three Governor's Offices led the 'Sub-Working
- Groups established to coordinate project implementation. In this process, the Governor's Offices in the three target districts built their long-term institutional and technical capacity on effective adaptation in the Ger khoroos (subdistricts).
- Ger-area Communities in the Target Khoroos (subdistricts). The FRUGA project facilitated the mobilization and organization of communities in 10 target Ger khoroos (subdistricts) and their working together as community organizations for building disaster resilience that became operational even before the project's completion.

10. **An overview of complementarity and/or coherence of other climate finance sources in the context of this project (synergies with other projects, national plans etc.)** – *Please refer to the lessons learned tab, section on "complementarity and coherence".*

10.1 Complementarity and Coherence with UN-Habitat Operations in Ulaanbaatar

UN-Habitat has worked with Ger-communities in Ulaanbaatar 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), successfully implemented in multiple cities across 12 countries in Asia and the Pacific.

UN-Habitat has implemented community development projects in some of the target Ger-areas Bayankhoshuu and Selbe sub-centres where the agency led the key component of community mobilization and consultations for Ulaanbaatar city and all partners for the ADB's ongoing Ulaanbaatar Urban Services and Ger Areas Development Investment Programme. UN-Habitat provided implementation support to the ADB's Investment Programme by establishing Community Development Councils (CDCs) as 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.

Due to the ongoing presence and good working relationships of UN-Habitat (IE) with stakeholders in these areas, the FRUGA project setup and implementation of activities began smoothly with minimum delays.

10.2 Complementarity and Coherence with Operations of the Asian Development Bank (ADB) in Ulaanbaatar

The new ADB financed 'Ger Area Development Investment Programme', not foreseen at the time of the FRUGA project preparation, would be located in Khoroo 40 on a roughly north-

south axis, in parallel to the site of the formerly proposed infrastructure. This overlap was one of the primary drivers of re-designing this infrastructure under the FRUGA project.

Therefore, along with the 1st PPR submitted in March 2020, UN-Habitat (IE) requested approval from AFB to change the alignment of the drainage infrastructure planned in Khoroo 40 under Output 3.1. The AFB approved this change in September 2020. The main reason for this re-alignment was the layout change of the planned infrastructure under the ADB financed 'Ger Area Development Investment Programme', which got underway in 2019. It was not highlighted and foreseen in the original proposal of the FRUGA project because in 2017, the initial plan of the ADB investment programme was to construct a thermal plant to serve the Bayankhoshuu sub-centre in Khoroo 9 area; however, it was changed in 2019 to the construction of the pipelines across the Khoroo 7 to connect the sub-centre to the central heating system in place of the construction of a thermal plant.

11. **Sustainability, scalability and replicability** – *Please refer to the lessons learned tab, section on "climate resilience measures".*

11.1. Sustainability

The People's Process approach for community mobilization and organization was introduced to ensure the long-term sustainability of the project results in the target Ger Khoroos (subdistricts). Organized communities have been trained to be the key stakeholders to maintain the project's achievements and continue with the resilience-building activities at the community level.

The participatory monitoring approach was applied during the implementation of all the field activities, assuring participation by the beneficiaries, regularly observing what was going on in the field, and avoiding any negative environmental and social impacts on the ground.

Working closely with the consultants and construction companies, the FRUGA project addressed all safety-related issues. It mitigated any negative impacts on the surrounding environment in the target Ger Khoroos (subdistricts) in the Songinokhairkhan, Bayanzurkh, and Sukhbaatar Districts.

For sustainable results, the organizations ('Primary Groups' and 'Community Development Councils') of Ger area communities need to be further supported and strengthened by the local government entities, i.e., District and Khoroo (Subdistrict) Offices, for further resilience building in the target areas. They should also be legally empowered to participate in the local decision-making processes at both Khoroo (Subdistrict) and District levels as part of the climate change, disaster risk reduction and preparedness, resilience building and response mechanisms. This will keep these community organizations engaged with the urban development and resilience-building activities led by the local government at Kheseg (neighborhood), Khoroo (subdistrict) and District levels.

As the beneficiaries in 10 target Ger khoroos were involved in the decision-making and implementation of the FRUGA project, this valuable knowledge and experience will remain in the community. Also, the beneficiary communities were trained as trainers for disaster risk reduction and resilience building. So they can teach others and share their experiences in and outside the project area in Ulaanbaatar.

11.2. Scalability and Replicability

There is a high potential for replication and scaling up of the FRUGA project's activities within and outside the project area in Ulaanbaatar city. The national partner (Ministry of Environment and Tourism) and local government partners (MUB, and District Offices) and target

communities have valued and appreciated the FRUGA project's results and immediate impacts. The effective adaptation achieved by the FRUGA project was tested and demonstrated in response to floods that occurred in the Summer of 2023.

To scale up the FRUGA project, and in response to the requests received from and with the collaboration of the national and local partners, the proposal for the Ger Community Resilience Project[2] (GCRP) in Ulaanbaatar city was developed by IE (UN-Habitat). The AFB approved the GCRP for funding with the grant amount of USD 7.96 million, and its implementation is underway with UN-Habitat as the IE.

[2] https://www.adaptation-fund.org/project/ger-community-resilience-project-gcrp/

Section B: Project expenditure

Outputs	Original Budget	Expenditure	Variance
Output 1.1 One (1) Ulaanbaatar northern Ger-Area* Territorial Land Use Plan, with 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)	91,790	100,485.85	(8,696.35)
Output 1.2 Simulation model for forecasting future impacts of climate change flooding in UB city & Ger-areas established	60,000	57,640.23	2,359.77
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	143,914.92	106,085.08
Output 2.1 Seven (7) Khoroo-level floods resilience action plans to implement the interventions	195,390	20,441.90	174,948.10
Output 2.2 Khoroo community level interventions operation & maintenance and awareness campaigns and trainings (50 percent women where possible) to support the sustainable implementation	212,956	182,319.00	30,637.00
Output 2.3 Technical studies – Engineering and hydrological - required to implement the interventions under COMPONENT 3.	50,000	38,432.39	11,567.61
Output 3.1 Physical assets developed in response to climate change related flood impacts as prioritized by Khoroo communities the core concrete interventions are flood protection and drainage infrastructure and resilient sanitation to reduce floods impacts – implemented through community contracting.	2,225,904	2,529,554.54	(303,651.04)
Output 3.2 Management & operations; design & supervision of assets / physical infrastructure to comply with national and local regulations and processes – procured as consulting services	418,780	372,999.10	45,780.90
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.	116,012	114,835.73	1,175.81
Output 4.2 Workshops and trainings will be organised targeting city- and district government officials (50 percent women where possible) 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.	128,670	128,670.46	0.00
Output 4.3 Bringing Global Knowledge on best practices to in country Implementing Partners and communities, customized widely used appropriate tools on adaptation building local capacity		49,009.57	(49,009.57)
Total Outputs	**3,749,501**	**3,738,303.69**	**11,197.31**
PROJECT EXECUTION COST			
Total (Project Execution Cost)	**393,593**	**387,455.27**	**6,137.73**
PROGRAMME CYCLE MANAGEMENT FEE			
Project Support cost (ROAP)	48,060	48,111.66	(51.66)

Evaluation Support cost (HQ)	10,000	10,000.00	0.00
Total (PCMF)	58,060	58,111.66	(51.66)
Total (PCMF+PEC)	451,653	445,566.93	6,086.07
TOTAL	4,201,154	4,183,870.62	17,283.38
PSC 7%	294,081	292,870.94	1,210.06
GRAND TOTAL	**4,495,235**	**4,476,741.56**	**18,493.44**
Exchange rate (loss) gain			12.91
Available Balance			**18,506.35**

Annex 1. Project Visibility Materials prepared under the project

1. FRUGA Project brochure 1

УЛААНБААТАР ХОТЫН ГЭР ХОРООЛЛЫН ҮЕРИЙГ ДАВАН ТУУЛАХ ЧАДАВХИЙГ БЭХЖҮҮЛЭХ ТӨСӨЛ

Санхүүжүүлэгч байгууллага: Дэлхийн үүр амьсгалын өөрчлөлтөд дасан зохицох сан
Төсөл хэрэгжүүлэгч байгууллага: НҮБ-ын Хабитат
Хэрэгжүүлэх хугацаа: 3 жил
Санхүүжилт: 4.5 сая ам доллар
Төсөл хэрэгжих талбар: Сонгинохайрхан дүүргийн 7, 24, 25 дугаар хороо; Сүхбаатар дүүргийн 12, 13, 16 дугаар хороо; Баянзүрх дүүргийн 9 дүгээр хороо

Нийтлэг үндэслэл

Дэлхий даяар явагдаж буй үүр амьсгалын өөрчлөлт Монгол улсад мөн хурдтай явагдаж байгааг эрдэмтэд, судлаачдын судалгаа харуулж байгаа билээ. Энэ өөрчлөлт нь хэт халуун, хүйтэн өдрүүдийн тоо олширох, хур борооны тоо, эрчим нэмэгдэх, үүр амьсгалын гэнэтийн үзэгдлүүд болох, цөлжилт, хөрсний элэгдэл, доройтол зэргээр илэрч байгаа бөгөөд хүн ам олноор суурьшсан хот суурин газруудын хувьд үндны ус, орон байр, нөмөр хамгаалалт, байгаль орчны асуудлыг хөндөж хүний эрүүл мэндэд илэрхий нөлөөлөл үзүүлэх болсон байна.

Дэлхийн банкны санхүүжилтээр 2015 онд хэрэгжүүлсэн Улаанбаатар хотын үерийн эрсдэлийн судалгаагаар Улаанбаатар хотын жилийн дундаж температур сүүлийн 60 жилд 1.56 градусаар ихэссэн ба үүний дүнд цасан бүрхүүлийн хугацаа, гүн багасч цас хайлж эхлэх, дуусах хугацаанд өөрчлөлт гарсан нь шар усны үерийн хэмжээнд нөлөө үзүүлж байгааг үзүүлсэн байна. Дээрх эрсдэлийн судалгаанд Улаанбаатар орчимд 1915-2013 онуудад болсон 35 үерийн мэдээг авч үзсэнээс 60 хувь нь 2000-2010 онд болжээ. Энэ нь үүр амьсгалын өөрчлөлттэй холбоотойгоор температур өөрчлөгдсөн нь Улаанбаатар хотын үерийн тоо, хэмжээнд шууд нөлөө үзүүлж байгааг харуулж байна. Үерийн хамгаалалт муутай төлөвлөлтгүй үүссэн суурьшил болох гэр хороолол энэ нөлөөнд илүү өртөмтгий эрсдэл өндөртэй байгаа билээ.

НҮБ-ын Хүн амын нутагшил суурьшлын хөтөлбөр (НҮБ-ын Хабитат) 2006 оноос хойш Улаанбаатар хотын гэр хорооллыг иргэдийн оролцоотойгоор амьдрахад таатай суурьшлын бүс болгож хөгжүүлэх стратеги боловсруулах, тэрхүү стратегийн хэрэгжилтийг хангахад Улаанбаатар хотын захиргаанд техникийн туслалцаа үзүүлэх чиглэлээр төслүүд хэрэгжүүлж ирсэн билээ. НҮБ-ын Хабитатын багаас гэр хорооллын нөхцөлийг оршин суугчдын оролцоотойгоор сайжруулан хөгжүүлэх арга туршлага дээрээ үндэслэн "Улаанбаатар хотын гэр хорооллын үерээс хамгаалах болон үүр амьсгалын өөрчлөлтөнд дасан зохицох чадавхийг бэхжүүлэх" төслийг 2017 онд боловсруулж үүр амьсгалын өөрчлөлтөд дасан зохицох дэлхийн санд хандаж санхүүжилт хүссэн нь 2018 оны 7 дугаар сард дэмжигдэн хэрэгжихээр болсон юм.

Монгол улсын холбогдох бодлого, стратегийн баримт бичигтэй нийцсэн байдал

Энэхүү төслийг Улаанбаатар хотыг 2020 он хүртэл хөгжүүлэх ерөнхий төлөвлөгөө, 2030 он хүртэл хөгжүүлэх хөгжлийн чиг хандлага болон 2015 онд боловсруулсан Улаанбаатар хотын үерийн эрсдлийн менежментийн стратегийг хэрэгжүүлэх ажлын хүрээнд үүр амьсгалын өөрчлөлтөд дасан зохицох Монгол улсын бодлогын чиглэл, стратеги дээр үндэслэн Улаанбаатар хотын Захирагчийн ажлын алба, Байгаль орчин, аялал жуулчлалын яам болон Сонгинохайрхан, Баянзүрх, Сүхбаатар дүүргүүдийн үерийн аюултай бүсэд орших 7 хорооны захиргаа, иргэдийн оролцоотойгоор боловсруулсан болно.

Тогтвортой хөгжлийн зорилт, Хот байгуулалтын шинэ хөтөлбөртэй уялдах байдал

Төсөл нь Тогтвортой хөгжлийн 6, 11, 13 дугаар зорилтууд болон НҮБ-ын гишүүн орнуудын Хот байгуулалтын шинэ хөтөлбөр (New Urban Agenda)-ийн 2. Хотжилт ба тогтвортой хөгжил; 9. Эрсдэлийг бууруулах; 12. Үүр амьсгалын өөрчлөлт; 15. Орон нутаг дахь үйл ажиллагаа ба хэрэгжүүлэлт; зэрэг зорилтуудыг хэрэгжүүлэхэд чиглэгдэнэ.

Төслийн зорилго

Төслийн гол зорилго нь Улаанбаатар хотын хамгийн өндөр эрсдэл бүхий гэр хорооллын 7 хорооны үүр амьсгалын өөрчлөлтөд дасан зохицох, ялангуяа үерийн аюулыг тэсвэрлэх чадавхийг оршин суугчдын оролцоотойгоор үерийн хамгаалалт болон суурь үйлчилгээг сайжруулах замаар бэхжүүлэхэд оршино.

Хамтран хэрэгжүүлэгч талууд

Байгаль орчин, аялал жуулчлалын яам, Нийслэлийн Захирагчийн ажлын алба, Толгойт, Сэлбэ, Улиастайн голын савд үерийн аюултай бүсэд орших Сонгинохайрхан, Сүхбаатар, Баянзүрх дүүргийн нийт долоон хорооны захиргаа, иргэд

МОНГОЛ УЛСЫН ЗАСГИЙН ГАЗАР БАЙГАЛЬ ОРЧИН, АЯЛАЛ ЖУУЛЧЛАЛЫН ЯАМ

ADAPTATION FUND Readiness Programme for Climate Finance

UN HABITAT FOR A BETTER URBAN FUTURE

2. FRUGA Brochure 2

PROJECT ALIGNS WITH SUSTAINED DEVELOPMENT GOALS AND NEW URBAN AGENDA

БАРИЛГА УГСРАЛТЫН АЖЛЫН ЯВЦ:

24TH KHOROO

Construction of an earth ditch allowed for reduction of surface water, benefiting 150 children, 300 households residing in 108 estates residing in an area of 15.2 hectares.

FLOOD PROTECTION INFRASTRUCTURES BUILT IN 9TH KHOROO OF BAYANZURKH DISTRICT:

Ravines going downstream from Eej Khairkhan Mountain have had their banks broken by flood water, causing leakages near the area where it meets Uliastai River. Such leakages led to flooding of households living in the area. Construction of drainage channel has resolved this issue. The channel starts from ravine to the east of SEMUT and connects to Uliastai River, with a total length of 1066m. With this, a total of 713 households residing in 424 estates in an area of 113.2 hectares are now protected.

Channels previously built for irrigation purposes near vegetable fields of Akhmad from Uliastai river have long caused flooding to ger areas near 16th kheseg of 9th khoroo. This earth ditch protects a total of 516 households residing in 243 estates in an area of 41.4 hectares.

WITHIN THE FRAMEWORK OF PRODUCING HAZARD AND RISK ANALYZE FOR THE CLIMATE CHANGE AND FLOOD RISK, AND VULNERABILITY:

Projection of climate change impact was prepared for the city of Ulaanbaatar, and validated the result by the citizen based on the developed the mapping towards flood risk based on the result of the projection the data was shared with community members of such areas.

IN THIS PROJECTION, SEASONAL CLIMATE WILL GO UP BETWEEN

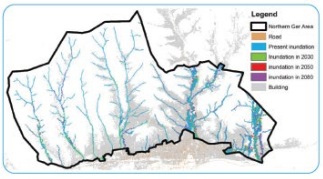
2016-2035 years - by 1-1.5ºC-Celsius,

2046-2065 years - by 1.3-3.1ºC-Celsius,

2081-2100 years - by 1.2-5.6ºC-Celsius,

Rainfall will also increase for these timeframes by 2.8-12.1%, 6.2-30.7%, and 5.1-52.4% respectively.

Mapping of the current and future flood risk areas of northern Ulaanbaatar.



Based on above projections, details of risky areas for each target khoroo can be seen:

District and khoroo	Size of Current Areas at Risk By Hectare	Size of Areas at Risk 2030-2080 (increase shown by %)
7th khoroo of Songinokhairkhan district	86.6	105.1 (21.4%)
24th khoroo of Songinokhairkhan district	269.8	298.7 (10.7%)
25th khoroo of Songinokhairkhan district	254.6	278.9 (9.5%)
16th khoroo of Sukhbaatar district	126.8	150.9 (19.0%)
13th khoroo of Sukhbaatar district	72.8	80.1 (10.0%)
12th khoroo of Sukhbaatar district	48.1	56.6 (17.6%)
9th khoroo of Bayanzurkh district	178.5	203.3 (13.9%)

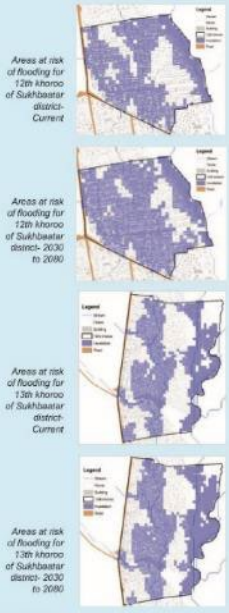
UN-HABITAT FOR A BETTER URBAN FUTURE | БАЙГАЛЬ ОРЧИН, АЯЛАЛ ЗОХИЦУУЛАЛТЫН ЯАМ | ЗАА | ADAPTATION FUND | World Vision ДЭЛХИЙН ЗӨВ МОНГОЛ

UN-HABITAT FOR A BETTER URBAN FUTURE | БАЙГАЛЬ ОРЧИН, АЯЛАЛ ЗОХИЦУУЛАЛТЫН ЯАМ | ЗАА | ADAPTATION FUND | World Vision

WTHIN THE FRAMEWORK FOR IMPROVING THE RESILIENCE AND ADAPTIVE CAPACITY OF THE GER SETTLEMENTS TOWARDS CLIMATE CHANGE:

PROJECTION RESULTS OF AREAS AT RISK OF FLOODING- CURRENT AND FUTURE

Example on 2 khoroos of Sukhbaatar district



Based on above study, community level discussions were held in order for community members to help understand that they're living on areas at risk of flooding, that they need to move or reduce risk factors through collective action at each neighborhood.

From such discussions, it could be seen that due to lack of knowledge and available information on areas at risk, many citizens unknowingly purchase land in such areas, make no preparations for such disasters, and placing their assets and lives in danger.

It is therefore vital to provide evidence based and accurate information to the public, take account of it in land planning and real estate liaison, and inform all entities responsible for usage of land and heads of district and khoroo administrative units in order to reduce such risk factors.

WTHIN THE FRAMEWORK FOR IMPROVING THE RESILIENCE AND ADAPTIVE CAPACITY OF THE GER SETTLEMENTS TOWARDS CLIMATE CHANGE:

Through organization of community groups, the project is supporting initiatives such as improving existing outdoor toilets, digging surface water drainage ditches, and improving their knowledge on flood risk factors.

In this regard

10 khoroos among **11156** citizens

118 trainings have been held under the reducing disaster risk and climate change adaptation

1227 citizens voluntarily jointed, into **92** primary groups to improve their neighborhood

Amongst the actions considered important by the community groups were planting trees in the neighborhood, sorting trash types for recycling, and improving outdoor toilets.

Citizens, organized into community groups, are jointly working with the project to improve their living environments and outdoor toilets, and are making sure that the flood drainage facilities built by the project are not blocked off by trash.

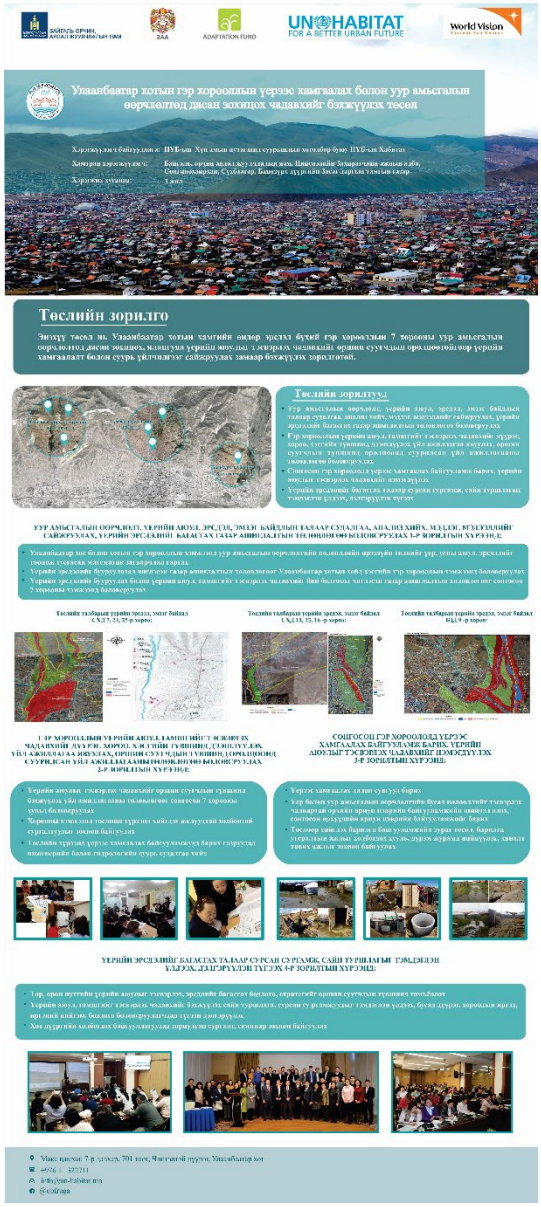
For example, citizens of Sukhbaatar, Songinokhairkhan, and Bayanzurkh districts were organized into community groups,

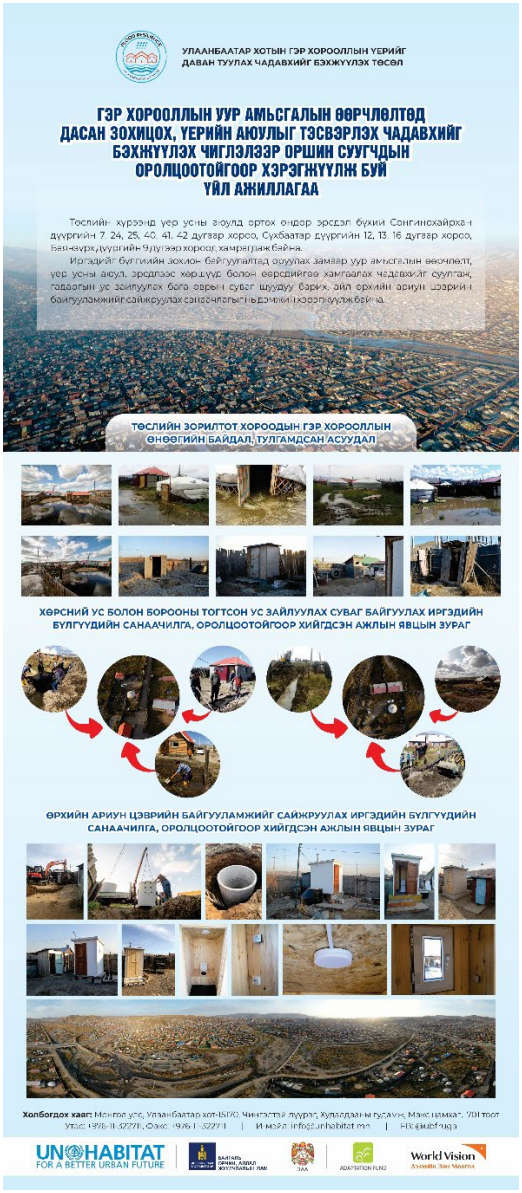
which officially became registered as NGOs such as Tsegeen Khairkhanii Orshin Suugchid, Khamtiin Oloit, and Oichid Devjikh. These NGOs jointly worked with the project to construct outdoor toilets for selected households under contractual terms.

10 khoroos **1153** households **733** toilets **1509** children **3493** adults **367** people with disability directly benefited

UN-HABITAT FOR A BETTER URBAN FUTURE | БАЙГАЛЬ ОРЧИН, АЯЛАЛ ЗОХИЦУУЛАЛТЫН ЯАМ | ЗАА | ADAPTATION FUND | World Vision

3. Posters





4. Video documentation

The video documentation of the project implementation was done throughout the project from the start of the project to its completion. The videos can be found at https://www.dropbox.com/scl/fo/bh9ha2sntjh4ar5fsybmc/APysv2ICjYLJ4JRoBG0tdFY?rlkey=vipio6ma7woy2gct42veyg4lz&st=4hw4qdq4&dl=0