Building Businesses' Climate Resilience (BBCR) Project in Sri Lanka

INSTITUTIONALIZATION PLAN FOR BUILDING BUSINESSES' CLIMATE RESILIENT TOOL IN SRI LANKA

FUNDED BY

Table of Contents

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1. Background

In Sri Lanka, the implications of recurrent flooding for households, businesses and subsequently the national economy are widespread. Small and Medium Sized Enterprises (SMEs) which are considered as the backbone of the Sri Lankan economy, are strongly affected by cascading impacts of disaster damages, and direct and indirect losses. Climate change is expected to exacerbate the threat of flooding which have adverse impacts on physical assets, production processes, access to raw materials, employee absenteeism, supply chain movements, and health etc. These SMEs typically do not have enough access to recovery measures due to lack of technical knowledge and financing. Existing responses are often reactive and engaging in disaster risk management (DRM) or investing in adaptation initiatives is rarely an option for SMEs. Building the capacity of SMEs to deal with climate risks and invest in DRM and adaptation are therefore the key to ensure the business continuity and build the resilience of vulnerable business communities.

Addressing the current gap to reduce SMEs' recurring flood impacts and related costs, Nordic Climate Facility has supported the consortium of UNEP DTU Partnership (UDP), Asian Disaster Preparedness Center (ADPC), the Ceylon Chamber of Commerce (CCC) and MPEnsystems Advisory Pvt. Ltd., for developing the BBCR tool enhancing the knowledge and confidence of SMEs' in Sri Lanka to accelerate investment in risk management and climate adaptation. As a long-term and sustainable solution, it has taken the approach which includes the development of the BBCR tool to trigger risk management considering various climate related stresses, and appropriate adaptation actions allowing them to systematically deal with climate risks.

The BBCR tool which has the potential to transform the vulnerable SME communities to climate proof business ecosystem, can attract the commercial interest of private sector services and supporting organizations supporting SMEs to fulfil the embedded adaptation options and opportunities for,

- Improved financial viability and capacity of SMEs to climate proof their businesses
- Increased behavioral change amongst targeted SMEs and key support organizations in relation to
    - assessing climate risks to SMEs and their supply chains
    - integrate and invest in DRM and adaptation measures and business continuity planning
    - promote financial models to support adaptation investments
- Enhanced networking to generate innovative business continuity products and new climate resilient market opportunities (e.g., early warning systems, green infrastructure)
- Creation of new income generating activities (e.g., capacity building)
- Creation of multi-stakeholder dialogue between key organizations that support SMEs at the local and national levels providing opportunities for knowledge sharing

2. Participation in BBCR Tool Development

The BBCR project initiated with the aim of developing and rolling out an undefined emergent 'tool' for supporting SMEs to be prepared for disruptive flooding events. The co-creation approach was identified as the most suitable means of understanding emerging resilience needs, including the value of and feasibility from the perspective of the SME community and capturing the reflections on features to be built into such a product.

Furthermore, the BBCR tool development was a participatory process which reflects the SMEs willingness and acceptance. The institutionalization of BBCR tool will be ensured as the BBCR tool is based on the actual needs and priorities of vulnerable SMEs, as well as the realities within which they operate. The multi-tier stakeholder consultations, with number of repeated consultations, provided adequate feedbacks for shaping the BBCR tool to the final version.

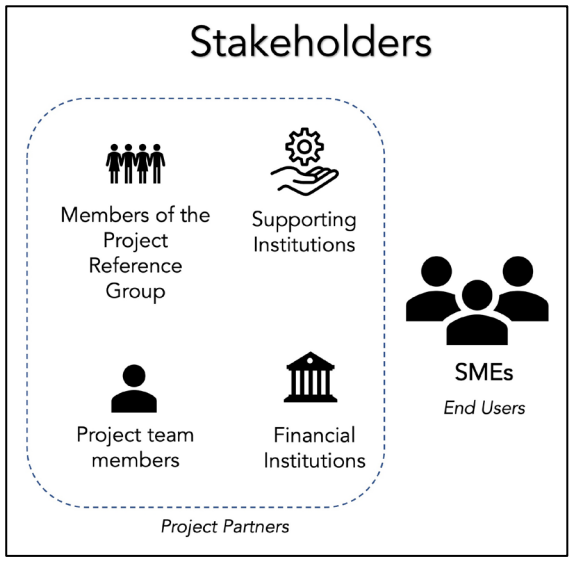


Figure 1 Multi-tier stakeholders

The baseline study and validation were given insights of the vulnerabilities of SMEs and existing assistive environment. The co-creation activities conducted with stakeholders using scenario tools, brainstorming, and story writing were able to synthesize tool with the own experiences, expertise, and expectations of SMEs for building their resilience. The feedback from SMEs and service providers during the first piloting with the prototype indicated that the features in the developing tool was broadly in line with the features that had been suggested through the co-creation phase. The overall useability of the tool and its features such as risk assessment and precipitation data algorithms were tested with SMEs in the piloting phases. With the feedback from both piloting sessions the BBCR tool was upgraded enhancing the features.

3. BBCR tool features

BBCR tool is built with three main features. The rainfall as a three-day generic forecast and also measured rainfall in 24-hour accumulation can be tracked through the BBCR tool. If the user wish, the notifications with the changes of rainfall in the vicinity shall be activated. The BBCR tool has the provision of crowdsourcing rainfall data if SMEs are volunteered to measure the rainfall.

Technically modeled flood hazard maps for a few river basins are included in the BBCR tool. Hence the flood hazard risk shall be self-assessed by activation of hazard maps and zooming to the area of interested.

Algorithm for assessing the flood risk on SMEs are embedded in the BBCR tool. The SMEs may answer the inbuilt questions and determined the level of flood risk on the business elements, equipment, premises, operations, inventory and employees.

Furthermore, BBCR tool provides appropriate built-in recommendations for reducing the risk on theses business elements. The recommendations are provided as financing for risk reduction and risk financing, physical and structural interventions, and general recommendations.

The BBCR tool and resulting adaptation actions to be opted by SMEs will have long-term benefits to SMEs themselves and wider business community and the government as follows:

- primarily, enabling SMEs to identify and adopt viable adaptation strategies that will reduce business disruptions and economic losses from recurrent flooding impacts and secure the current client base and staff
- enabling climate resilient value chains administered by the downstream stakeholders
- climate resilient SMEs require less government expenditure for disaster recovery thereby allowing those funds to be spent elsewhere in development agendas
    - *additionally, creating new business opportunities for adaptation engineering and service providing companies, who will provide advisory services, construct and set-up the selected adaptation solutions*
    - *creating opportunities for BCM consultants to provide services to continue the SMEs adopting Business Continuity Plans and appropriate measures*
    - *creating a platform for business development consultants to work with SMEs to identify viable resilient investments and new market opportunities with innovative products taking the advantage of climate change and optimum use of financing subsidies enabled time to time*
    - *enhancing/expanding roles and support services of business associations in creating better business environment for SMEs, particularly for building awareness and capacity related to DRM and climate adaptation*

4. BBCR tool ecosystem

After the development of the BBCR tool, the BBCR tool ecosystem has been redefined based on functional requirements for the sustainability of such a product. The key stakeholder categories and the projected functions are,

- Service partners
    - Upload data and maintain the BBCR tool live
    - Provide specific services for improved resilient of SMEs by fulfilling the recommended actions
- End users
    - Reach the BBCR Tool services and elevate to higher level of business resilience
    - Share the lessons learned in user forums
    - Volunteer to upload rainfall data for the benefit of fellow SMEs
- System administrator

- Maintain the BBCR tool up and running
- Update the BBCR tool and bug fixing
- Admin of both partners and users
- HELP DESK for user & partner assistance

Additionally, there are more players in the climate and disaster resilience domain working toward achieving their respective sector goals, i.e., concerned government agencies. In the national disaster management plan, initiatives have been included on effective risk financing and transfer mechanisms for utilization by SMEs. It is also a thrust area in Sendai Framework for investing in disaster risk reduction and business continuity in SMEs for their resilience. The National Policy Framework for SME development has included capacity building and outreach services of the institutes offering special programs on resilient entrepreneurship. The Climate Change Secretariate at the Ministry of Environment, as the National Focal Point to the UNFCCC, work particularly towards the capacity building of the vulnerable SME sectors to address adverse climate impacts.

5. BBCR tool institutionalization arrangements

Currently the DRM and adaptation related services are typically considered as the responsibility of the public sector. Deviating from the practice, the BBCR tool concept is innovative, considering the potential of an untapped resource for resilience building of SMEs in a commercially feasible manner, without relying on ongoing subsidies or other forms of direct supports. The BBCR tool will thus be the initial step towards transforming the SME business ecosystem while creating opportunities for many other actors.

The objective of this initiative is to identify the most suitable institutional arrangements for the institutionalization of the BBCR tool for long-term sustainability. First, a model to institutionalize or mainstream the tool into the mandates and services of the public sector, business associations and other partners will be explored. At the same time, a pathway to create the interest of all tiers of actors in the SME business ecosystem is explored to catalyze the application and persuade of the economic benefits of adaptation investments by SMEs.

As of the proposed institutionalization model, three major components of the institutionalization of BBCR tool have been introduced.

1. Partner engagements
2. Outreach to user segments
3. System administration

5.1. Partner engagements

The partners shall be engaged in provision of,

- Rainfall data and flood hazard maps, and
- Services for fulfilling the recommendation given by the BBCR tool.

5.1.1. Provision of data

In its current state, the available rainfall data for BBCR tool is minimal and unverified. Time and effort should be invested to create robust continuous data both from government sources and private individuals. Bulk of rainfall data is available with government agencies and sometimes it might need to digitise and create APIs for integration. Crowdsourcing rainfall data is new to SME communities in Sri Lanka. Hence there shall be proper motivation for gathering data from communities.

5.1.2. Knowledge on notifications

In time, with frequent referring to the rainfall measurements users will understand the flooding risk with the rainfall pattern in the upstream. However, it is good if the specific knowledge on the catchment behaviours is built for self-notifications. In addition, algorithm is built in the BBCR tool for push notifications based on the surrounding rainfall intensities. It might need timely reviews and revisions.

5.1.3. Fulfilling recommendations

In the self-assessment of risk to SMEs, resilient actions will be proposed by the BBCR tool. Users may implement them as relevance and appropriate to reduce the potential damages and losses due to flood events. The service partners, as linked to the BBCR tool, that includes expert in the areas of design & build flood proof structural elements, business continuity management, emergency services and financing for adaptation investments etc. will provide various technical expertise and adaptation solutions for SMEs.

Some of the recommendations may need financing. For the improved financial viability and capacity of SMEs to climate proof their businesses there shall be existing or new schemes proposed by the Government as relief schemes or bank or lending institutions as SME loan schemes. Accessing such financing packages, links shall be provided through the BBCR tool and frequently updated. Risk financing options are yet to be improved in the country. However, there are number of insurance schemes

have been designed and operated for flood risk. BBCR tool link them with the SMEs with residual risk.

Potential for structural interventions for the mitigation of impacts due to flood hazard will also be given as recommendations. Engineers and designers shall be linked to SMEs for providing such consultancy and construction services. There shall be generic solutions as well as case specific applied to new investments or retrofitting existing. Those shall be in the form of elevated functions above the flood levels, drainage improvements, individual rainwater underground storage, and inflatable dams as available in other countries.

Hazard Information in the form of 10-year return period flood hazard maps for most critical three river basins are provided in the BBCR tool. These shall definitely be needs for more detailed hazard information for making resilient decisions. Historical data records, runoff details, hazard maps with flood levels etc. are the potential data request. Further, early warning messages customized to different user segments and geographies might be requested by SMEs. The institutes with information shall be prepared providing such services while knowing the availability by SMEs.

With the warning for evacuation, there shall be requirements for moving inventories, machineries, and equipment of SMEs to safer locations. Even just after, for resuming operations, there will be lots of cleaning involved. Movers and cleaners shall also be linked through the BBCR tool.

Knowing the new opportunities emerge within the SME communities, the institutes and professional individuals involved in above mentioned services shall design alternative solutions and promote through the BBCR tool.

5.2. Outreach to user segments

The BBCR tool is primarily intended to use for building the resilience of businesses' by mainly means of alerting and preparedness. However, the project team identified potential alternative uses not only for promoting and supporting resilience building and also business operational supports.

Primary use

- Near real-time rainfall data for being alert on floods
- Proactive measures for improved resilient; knowing the risk
- Monitor the varying risk with changes in the environment

Secondary use

- Assess the resilience of a second party for engagement; banks for investments, value chain engagements etc.
- New business opportunities

Tertiary use

- Business operation planning; Latex collection, Delivery of rain sensitive products etc.

5.2.1. Promotion, delivery and outreach channels of the BBCR tool

Very little has been done in this space, and SMEs are typically unaware of the measures they have at their disposal. Hence, adequate measures shall be taken to promote the BBCR tool in an organized manner. The substantial flood-related losses within the SME sectors indicated in the past PDNAs provide a potential outreach opportunity for BBCR tools.

Since the resilient actions traditionally promote by the government, initially the government agencies that support SME operations shall be mobilized to introduce the BBCR tool. Existing and new government programs and services in which the BBCR tool can be integrated to enhance their capacity and resilience building support through their networks, shall be explored.

The Ceylon Chamber of Commerce shall promote the BBCR tool on their business information portal, which offers business and market information to their members. CCC is linked to various district level Chambers throughout Sri Lanka and the BBCR tool shall be disseminate through these chambers.

Industry associations, banks and insurance providers may also promote the BBCR tool amongst their memberships. The professional institutes, such as Institute of Engineers, Association of Disaster Risk Management Professional, which will be part of the resilient ecosystem, may contribute lot in the outreach of the BBCR tool.

Potentially, the larger enterprises which are directly affected by business disruptions along their value chain may promote the BBCR tool making their value chains climate resilient. As such, MAS Holding shall also target their suppliers as part of a CSR strategy.

The lending institutions (banks, cooperatives, microfinance lenders) and insurance providers shall create awareness about the importance of SMEs' adaptation planning. The possibility of packaging BBCR tool as part of their

existing and new products and services, which can be offered to a wider SME base, shall be explored.

A key challenge to understanding the domain is the limited data available on SMEs and the high presence of informal SMEs. Key to creating a demand for BBCR tool will be providing incentives for SMEs to build their adaptation capacity. It shall involve providing promotional cluster support to attract potential SMEs such as cluster/sector Business Continuity Plan at shared expense. There shall be media propagandas at the initial stage and at the times of community sensitive incidents to create awareness of the need for SME adaptation.

A number self-guidance including a manual and videos of the BBCR tool are already developed under the project. The online platform will also support these processes, where guidance material will also be available, together with case examples and where SMEs can exchange experience and best practices. There shall be few case studies demonstrating the adaptation measures applied as recommended by the tool and the benefit of resilient investments. CCC in collaboration with ADPC shall provide guidance on the application of the BBCR tool amongst their members at national and regional chambers. The cost of this training may be offered at a subsidized rate and included in their annual membership fees.

5.3. System administration

The institutionalization of the BBCR tool is contained in the generic value chains extending through SMEs' business ecosystem including all support services or resource pools linked to the tool. There shall be a system administration that articulate effective and systematic ways to engage all tiers of public and private partners in institutional arrangements and governance of the BBCR tool, promotion and outreach, and cost recovery.

5.3.1. Governance

As per the original settings, the BBCR tool will be offered by ADPC in Sri Lanka, while UDP will be the product owner internationally. Technical guidance and creating the pool of facilitators will be initiated by ADPC led project team in the proposed platform of leadership forum. There shall be an identified BBCR Admin continually involved in the outreach of the BBCR tool providing guidance and advice to the SMEs. Initially, guidance from experts on design and implementation of adaptation measures shall also be facilitated through BBCR Admin.

The intellectual property rights for the BBCR tool will be owned by UDP as the licensor. ADPC will be authorized to use these rights as licensees through a non-exclusive license specific to a geographical area. The BBCR tool will need periodical updates to ensure relevance and adequacy, which will be mainly performed by the local partner ADPC with technical guidance from UDP. In upscaling the tool, both UDP and ADPC will negotiate the IPR conditions to maximize access and benefits of the tool to diverse groups of SMEs.

5.3.2. Partnership model

At present the project is being implemented on the participatory approach benefiting from synergies with the Asian Preparedness Partnership (APP)[1], which is a multi-sectoral platform of national disaster management organizations, civil society organizations and private sector networks. The Sri Lankan arm of APP, Sri Lanka Preparedness Partnership (SLPP [2] was launched in 2017 to strengthen preparedness for response and recovery and ADPC serves as the secretariat. ADPC has promoted and demonstrated the 'BBCR Tool' mobile app to SMEs and their key support agencies, including public and private sector institutions to explore the potential means of institutionalization and outreach. The Regional Dissemination Forum for Building Businesses' Climate Resilience Tool was also an opportunity to share the tool and lessons learned in its development with selected private-sector partners from the Asia Region[3]. MAS Holdings which engaged in a large garment value chain, was supposed to be a partner on the BBCR tool delivery and is engaged with other APP private sector Initiatives.

In addition, various tiers of potential partners have been identified including SME communities themselves, the organizations that support SMEs such as insurance and financial lenders (e.g., banks and cooperatives), industry association and chambers of commerce, larger businesses at the downstream end of value chains and government agencies (e.g., Ministry mandated for Disaster Management, Climate Change, Industries and SMEs). It is also envisaged that some of the SMEs are informal, and some are connected with local government authorities. Hence the mechanisms shall be identified channelling such SMEs for adaptation actions. Moreover,

[1] https://app.adpc.net/
[2] https://app.adpc.net/sri-lanka/
[3] https://app.adpc.net/news/regional-dissemination-forum-for-building-businesses-climate-resilience-tool-in-sri-lanka/

there will be opportunities to develop adaptation initiatives with local NGOs who support informal SMEs with microfinance.

5.3.3. Technical settings

There shall be a mechanism to accommodate feedback from SMEs who use the BBCR tool, which will consolidate the feedback, and facilitate the necessary modification needed to its design, and updating etc. The continued dialogue between various government, private and non-government sectors catalyze to identify new opportunities to support SMEs for climate resilience. The risk assessment formulas built-in the BBCR tool shall be further reviewed with the real applications and revise appropriately to communicate the risk to business owners in best ways.

5.3.4. Maintenance and cost recovery

Maintenance cost

The BBCR tool needs to be maintained and updated periodically by connecting with information and services provided from government technical agencies etc. while addressing the feedback from SME users. Thus, there will be a cost involved for the maintenance and updating the BBCR tool and to sustain the platform in the long-term.

1. Overall administration of the BBCR tool ecosystem
2. Application programing maintaining the BBCR tool up and live
3. Provision of user and partner support
4. Auditing quality of data and information and security
5. Dissemination and outreach
6. Inputs from scientists and experts as it needs
7. Equipment such as computers
8. Hosting in iOS and Android platforms
9. Translations as required

To provide reference for the potential cost and benefit associated to maintaining the BBCR tool, a cost-benefit survey together with a number of interviews among various SMEs, several supporting institutions, members of the PRG, and project team, was carried out in Sri Lanka in June-July 2021.

Based on the survey and interviews, the required resources/costs are listed in terms of the number of employers needed per function, duration of employment, and their gross wage. Gross wage is based on most recent salary statistics by Salary.lk. It is assumed that the App will require thorough

redevelopment every three years and that all listed temporary employment will be required again. An estimation on the potential cost for maintaining and operating the BBCR tool is listed in Table 1. In the first year, the total costs amount to 16,604 USD and in the following years the recurring costs equal 10,086 USD.

Table 1. Estimated cost for maintenance of the BBCR tool

Function	Number of employee	Duration of employment (Months)	Gross monthly wage* (USD)	Su-total cost (USD)
IT Project leader	1	permanent	597	7.164/yr
IT applications programmer	1	3	626	1.877
IT user support technician	1	permanent	243	1.461/yr
Quality inspector, computer equipment	1	3	270	810
Marketing professional	1	6	360	2.161
Translator	0,5	2	309	309
Environmental scientist	0,5	6	454	1.362

** Wages date source: https://salary.lk/salary/salary-check#/ (2021).*

Cost recovery

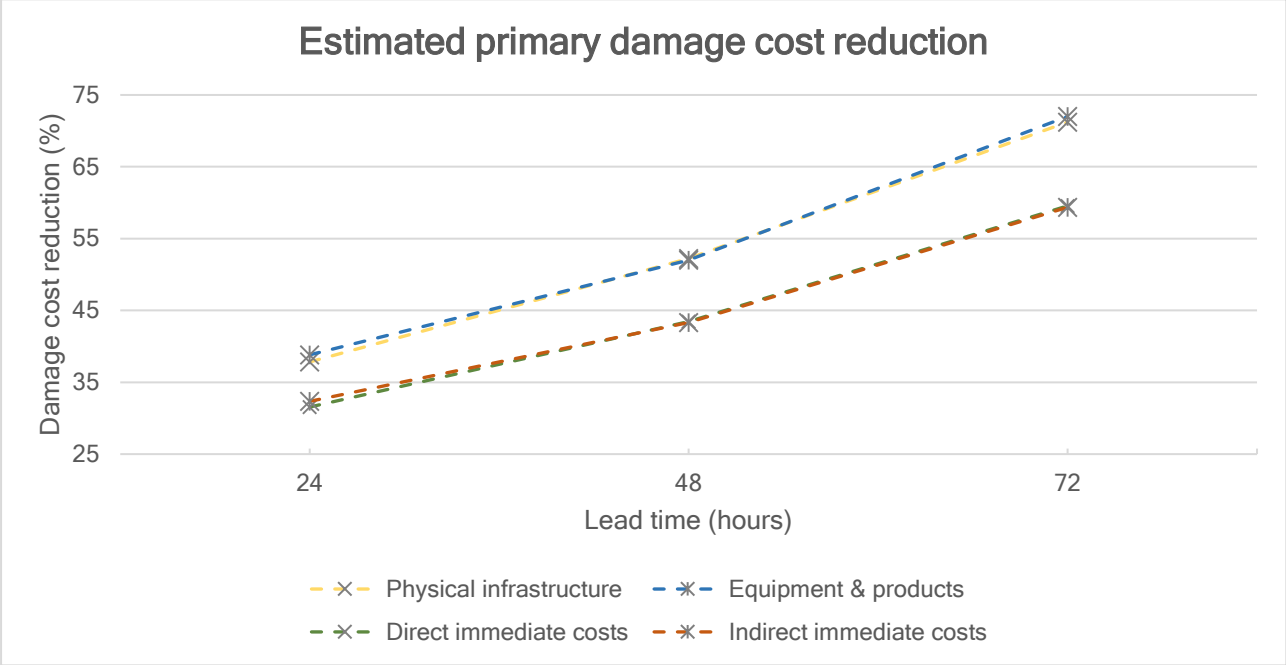
As initially proposed, the BBCR tool will be offered by ADPC in Sri Lanka, while UDP will be product owners internationally. MPEnsystems will promote it in India. Technical guidance will be offered by ADPC, while other intended partners provide specific services. The intellectual property rights for the BBCR tool will be owned by UDP as the licensor, but ADPC will be able to operate the BBCR tool free for charge in Sri Lanka. Both ADPC and MPEnsystems will also be authorized to use these rights as licensees through a non-exclusive license specific to a geographical area.

At present, the rationale for buying the BBCR tool and investing in adaptation is limited from the perspective of SMEs. There shall be alternative cost recovery arrangement such as developer host, partner host, user paid and hybrid.

Initially, the 'BBCR Tool' will be maintained as 'OPEN ACCESS' by the Project team. In this context, cost recovery is considered from the perspective of risk reduction. For the BBCR tool, the benefits are measured in terms of avoided damages that result from the risk reduction measures. The key risk reduction measure is the early warning-functionality with the self-risk assessment tool and tailored adaptation recommendations being the secondary measures.

The results from the cost benefit survey reveal damage cost reduction estimates on the primary expenses and total revenue loss. Currently, more than half of the flood early warnings (54%) came in merely an hour prior to the flooding and only 4% of the warnings were received more than 24 hours in advance (BBCR Baseline Report, 2019). It is assumed that the full damage cost reductions are reaped for the given lead times. Figure 2 demonstrates the damage reductions influenced by lead times of 24 or 48 hours. Estimation on absolute damage costs are provided in more detail in Annex 1.

Figure 2. Estimated average reduction (%) in primary damage costs against the lead time



Economic efficiency

To help the potential hosting organisation gain an understanding of the economic efficiency of maintaining this BBCR tool, a few of factors i.e., NPV (net present value), B/C-ratio (benefit-cost ratio) and IRR (internal rate of return) are provided in Table 2. It considers the case of warnings being issued 24 or 48 hours prior to floods.

Table 2. Economic efficiency for a public organisation maintaining the BBCR tool

Lead time	NPV (USD)	B/C-ratio	IRR (%)	Damage reduction (%)
24 hours	19,473,944	157.1	9389	35,9
48 hours	23,376,657	212.4	12711	48,5

The cost benefit analysis indicates that the economic efficiency remains convincingly positive reflected by the B/C ratios, which are 157.1 for lead time of 24 hours, and 212.4 for lead time of 48 hours. This suggests that the estimated benefits significantly outweigh its costs, and operating this BBCR tool could expect $157.1 to $ 212.4 in benefits for each $1 of costs, for the lead time of 24 or 48 respectively. This implies that in the situation where a Sri Lankan public organisation would receive the final test version of the BBCR tool free of cost, the benefits that the tool generates for the SMEs in flood-prone areas of the three selected districts substantially outweigh the costs the public body would incur for the final development and maintenance of the tool.

This relatively high B/C-ratios in this case compared to what is found in the literature on DRM measures (average B/C-ratio lies at 5), is due to the fact that a major part of the cost for designing and develop this BBCR tool is provided by BBCR Project, which is not considered neither is included as a cost for the potential hosting organisation.

6. Value addition

At different discussion forums for the BBCR tool development, the partners and SMEs have proposed potential value additions to the BBCR tool for enhanced delivery of resilient services.

Embedding multiple hazards into the system provide more comprehensive approach. Most potentially, landslides triggered by heavy rains are becoming more frequent hazard. There are lots of information readily available with relevant agencies.

There are a few other apps providing similar information/services, but available in isolation. There is a high potential of linking the BBCR app with other apps or platforms utilized by SMEs or the general public in Sri Lanka. Some of them are,

- DEWN - provides disaster alerts and manage by Dialog, a mobile service provider
- APADA - provides disaster information by crowdsourcing

There are real-time observation cameras are fixed along the critical revers and the video footages linked to the BBCR tool will be able to visible information on flood levels. Further flood levels and emergency response needs shall be crowdsourced. Location of safe centers will be an additional useful type of information which can be mapped in the BBCR tool.

Annex 1 Supplementary data on damage costs *(Source: Baseline Survey, 2019)*

During the baseline study, the absolute damage costs were estimated based on a survey with 116 SMEs located in three flood-prone districts of Gampaha, Kalutara and Ratnapura. Those SMEs were categorised into micro, small and medium sizes based on their annual turnover and number of employees as defined by the Ministry of Industry and Commerce, Sri Lanka. Response rate represents the percentage of SMEs who provided the respective data.

Table A: Damages to physical infrastructure

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	77%	298	178	319
Small (n=64)	63%	658	435	602
Medium (n=22)	45%	462	269	431
All districts (n=116)	63%	518	314	531

Table B: Damages to equipment and products

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	53%	1.630	1.310	1.750
Small (n=64)	53%	3.434	1.434	5.669
Medium (n=22)	50%	1.867	977	2.242
All districts (n=116)	53%	2.678	1.329	4.511

Table C: Direct immediate expenditures

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	87%	513	409	455
Small (n=64)	77%	644	332	849
Medium (n=22)	64%	517	222	629
All districts (n=116)	77%	586	320	724

Table D: Indirect immediate expenditures

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	53%	295	275	235
Small (n=64)	81%	555	303	652
Medium (n=22)	73%	689	530	689
All districts (n=116)	74%	531	364	616

Table E: Total annual damage costs

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	53%	2.079	1.016	2.712
Small (n=64)	64%	9.196	4.308	16.591
Medium (n=22)	45%	9.784	415	14.951
All districts (n=116)	58%	7.584	3.077	14.599

Table F: Total revenue loss

Size of business	Response rate	Mean *(USD/yr)*	Median *(USD/yr)*	SD
Micro (n=30)	60%	15,0%	10,0%	13,3
Small (n=64)	91%	26,8%	30,0%	17,0
Medium (n=22)	68%	14,2%	9,0%	11,7
All districts (n=116)	78%	22,4%	20,0%	16,6