National Building Research Organisation

Ministry of Public Administration & Disaster Management

2019 PROJECTS & PROGRAMS

(a) Continuation Programs (Ongoing)

No	Vote	Project Title/ Activity	Description of the project/program	Budget for 2019	Remarks
NBRO-OG 1	106-02-05-1- 1508 Recurrent Expenditure)	Issuance of Landslide Risk Assessment Reports /clearance certificates prior to building construction and development work in landslide prone areas	It has become a pre-requisite of a building permit issued by the local authority to obtain Landslide Risk Assessment Report (LRAR) by project implementing agencies prior to any type of construction or development activity in landslide prone areas in order to minimize lives & property loss due to landslide disaster. 10 District offices are functioning since March 2011. (Continuation Program)	28.00	The annual expenditure for the program is Rs 40.0 Mn. Rs. 10.0 Mn expected from the nominal payment charged from the applicants /clients. The extra cost is expected by the treasury considering this as a public service
NBRO-OG 3	106-02-05-5 2509	Integrated Landslide Mitigation Program (ILMP) TEC Rs 4,300 Mn. (Period – 2014- 2020)	Landslide Mitigation Program Funds have been sought for (a) Stabilization of unstable slopes in and around schools, hospitals and other governmental organizations in the hill country on priority basis identified by the hazard mapping & special investigations as highlighted in the ILMP (b) Application of immediate mitigation measures of critically unstable landslides in other areas (Continuation Program)	200.0	Many schools, hospitals, settlements, institutions and many roads in the central highland are under landslide threat. NBRO involve in risk reduction in these sites by applying appropriate mitigations measures on priority basis.

	Vote	Project Title/ Activity	Description of the project/program	Budget for 2019 (Rs. Mn.)	Remarks
NBRO- OG 2	106-02- 05-4 2509	Landslide Investigation, Research & Development	Landslide Hazard Zonation Mapping [LHMP] Research & Development Program, Landslide Special Investigations, Procurement of Research (Lab & Field) Equipment	70.0	To continue the program as planned (2016 -2020 TEC 400.0) (Annually Rs. 80.0 Mn)
		2509-11 A	Landslide Hazard Zonation Mapping [LHMP]- Filling the gaps of Landslide Hazard Zonation Mapping -extended gap filling programme. Scale 1:10,000 Nuwara Eliya / Kegalle District - 160 sq.km; Kandy District - 160 sq.km, Matara District - 160 sq.km Scale 1:5,000- Kandy MC - 27 sq.km	15.0	
		2509-11 B	Research & Development Program for creating disaster resilience To conduct research studies in disaster management and related areas with the strengths available in the NBRO's Technical Divisions in view of creating safe built environment and disaster resilient capacity of community	15.0	New research proposals have been selected on priority basis to carry out in 2017 in addition to ongoing research projects including ground subsidence studies in Matale.
		2509-11 C	Landslide Special Investigations Detailed landslide vulnerability reports are requested by the relevant Government Institutions, District Secretaries, and Divisional Secretaries etc. in disaster situations. Reports are also called during high rain seasons to reach firm decisions on landslide vulnerability, evacuation and resettlement planning. About 500 requests are received for a year but this will increase in emergency situations.	20.0	Annual Program. Rs. 20.0 Mn is expected considering that the number of investigation requisitions is increasing in the field. Funds are sought to carry out this work as a public service (Rs. 33.2 Mn. has been utilized in 2014 due to extreme weather situation).
		2509-11 D	Procurement of Research (Lab & Field) Equipment -Procurement of Lab & Field and office Equipment are required to perform laboratory and the field investigations and this grant is expected to enhance the capacity of NBRO Head Office and District offices	20.0	Proposed list of specialized equipment is given as Annexure

	Vote	Project Title/ Activity	Description of the project/program	Budget for 2019 (Rs. Mn.)	Remarks
NBRO-0G-4	106-02- 05-6 2509	Development of a Landslide Risk Profile TEC Rs. 246.0 Mn. (Period 2016-2020	 Digitizing of building layers, GN division boundary verification process, preparation of exposure maps at Divisional Secretariat and GN Division level and data collection on elements at risk (building survey) in Kandy and Matale Districts. Establish community disaster management committees in Kandy, Matale, Ratnapura, Kalutara, Galle and Matara Districts. Online database development on community at risk for landslides in Kalutara, Galle, Matara and Hambantota Districts. 1:5000 scale landslide risk profile development in 4 urban centres. Development of Divisional Secretariat level landslide risk profiles in Kegalle, Kalutara, Galle and Matara, Hambantota districts. 	30.0	(Period 2016-2020) Total Estimated Cost Rs. 246.0
NBRO-0G-5	106-02- 05-8 2509	Enhance Real Time Landslide Forecasting and Early Warning Capacity by Expanding Automated Rain Gauge Network in Sri Lanka Maintenance cost for next 3 years (TEC Rs. 30.0 Mn.)	Installation of a rain gauge system to issue landslide early warning automatically to the locations identified as high risk; identify gaps and introduction of additional automated rain gauges and cutting-edge technologies were completed under this project. About 230 rain gauges are functioning at present and in order to continue the system uninterruptedly and to improve methodologies and accuracy of landslide early warning issued, replacement of spares and batteries, periodical maintenance and calibration are required.	10.0	(Period 2016-2018) TEC Rs.131.0 Mn Total Estimated Cost of Maintenance Rs. 30.0 Mn. (2019-2021)

New Projects

No	Project Title/ Activity	Description of the project/program	Budget for 2019 (Rs. Mn)	Remarks
NBRO-NP-6	Systematic Diagnostic Assessment of Chemical Disaster Risks in Sri Lanka	Chemical disaster risk has not been adequately addressed in the present context of Disaster Management. Records indicate that incidence of chemical related accidents taking place in the country is increasing. This project was formulated to develop a systematic diagnostic assessment method for chemical disaster risks, an inventory of industries with potential hazards, and guidelines for the purpose of usage in making policy framework when strengthening the legislations up to an adequate level.	10.0	(Period 2018-2019) Total Estimated Cost Rs. 25.0
NBRO-NP-7	Developing a system for building assessment and condition reporting	Assessment of building condition is of utmost importance to decide whether a building can be repaired or to be demolished. Currently, NBRO is conducting such investigations as a consultancy work. But due to fund limitation this service is not extended to parties free. This project proposes to enhance NBRO capacity, improve and standardize investigation methodologies and establish a mechanism to provide building assessment and condition reports for a nominal fee to the general community and free in difficult situations to local authorities.	35.0	(Period 2018 onwards) Total Estimated Cost Rs. 115.0 Mn.(First year Rs. 35.0 Mn & 20.0 Mn. each for continuation 4 years)
NBRO-NP-8	Establishment of permanent of District Offices for enhancing capacity for landslide disaster risk reduction activities (Badulla and Kandy) Phase I	Due to the recent upheaval of disastrous landslides, it has become necessary for NBRO to work directly from offices close to high risk areas. It has been planned to upgrade the physical capacity of all district offices. As Cabinet of Ministers directed the Kandy and Badulla offices will be established in new buildings with required lab and field equipment.	60.0	Period 2019 -2020

Projects Under Foreign Aid

oN ON	Project Title/ Activity	Description of the project/program	Budget for 2019 (Rs. Mn)	Remarks
NBRO-LP-13	Development and deployment of structural and non-structural measures for effective mitigation of landslides and associated hazards and related capacity strengthening (Technical Cooperation – JICA)	This project is an extension to the project of Technical Corporation for landslide Mitigation (TCLMP) carried out during 2016-2017 for mitigation of four high risk landslides in Kandy, Matale, Nuwaraeliya & Badulla with capacity building of NBRO and Japanese technology transfer. This new project mainly focuses on soft mitigation measures.	JICA – Rs. 75.0 Mn GOSL Rs. 25.0 Mn	Period 2019-2021 TEC Rs. 450.0Mn. JICA – Rs. 380.0 Mn GOSL Rs. 70.0 Mn
NBRO-LP-14	Reduction of Landslide Vulnerability by Mitigation Measures	Many highly vulnerable landslide locations have been identified during the Landslide Hazard Zonation Mapping, Risk Mapping and Landslide Special Investigations done in landslide prone districts. Immediate risk reduction strategy should be adopted in order to reduce the risk in these locations due to frequent extreme weather events. These landslide & unstable slope locations are categorized as follows. 1. High risk landslide-prone locations close to townships & communities living in sloping grounds 2. Landslide/unstable slope locations in and around the premises of schools, hospitals, government buildings and business centers 3. Roadside landslide/unstable slope locations in major highways and roads 4. Critical, unstable and vulnerable slope locations along the rail track from Rambukana to Badulla Critical landslides from the above in eleven districts were selected for immediate mitigation in collaboration with a suitable development partner. Mitigation work under Foreign Loan (104.0 USD Mn.) -Asian Infrastructure Investment Bank (AIIB) (Foreign loan) (75.0 Mn. USD) -GOSL Component (29.0 Mn. USD)	3,040.0 1,104.0	Period 2018-2022 TEC 104.0 Mn USD (16,640.0 Rs. Mn.)

NBRO-LP-15	Resettlement of High Risk Communities in Landslide Prone Districts	In order to protect the identified 14,860 families prone to landslide and flood hazard by either mitigation or resettlement, a suitable program has to be implemented. Mitigation of most of the high-risk landslide areas is not cost effective due to technical constraints and hence, resettlement in safe locations remains as the most viable option. Reconstruction of affected houses with resilient features in the same location would be the most viable option for flood prone areas. This project was thus formulated to resettle families in the identified high-risk areas in safer locations and to reconstruct flood-affected houses in the same location with resilience features. Arrangements have been made to; Construction of 10,000 precast disaster resilient houses by M/s China Railway Beijing Engineering Group Co. Ltd (CRBE) together with Yapka Construction Pvt. Ltd. & GOSL Component NBRO Technical Work Component	14,148.0 50.0	Total Estimated Cost Rs. 24,874.0 Mn. (Period 2019-2020)