

POLICY BRIEF

University Enterprise Collaboration for Economic Recovery and Resilience



University Enterprise Collaboration for Economic Recovery and Resilience in Sri Lanka

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Summary

Sri Lanka is currently experiencing its most severe economic crisis, attributable to the ineffective economic policies implemented by successive governments since the country's independence in 1948. The situation has been exacerbated by increasing corruption and politicization, particularly following the adoption of an open economy in 1977. The scale of this economic crisis is comparable to, if not greater than, the impact of any disaster that the country has faced to date, including those from natural hazards such as flooding and the 2004 Indian Ocean Tsunami. Many Sri Lankans are suffering from several social and economic issues because of the present crisis created by the combination of many factors. Most affected communities in the country are low-income, and middle-income earners due to the high inflation of essential goods, rapidly increasing fuel costs and utility bills, power-cuts and shortages of fuel. Strong University-Enterprise Collaborations (UECs) could provide better options for economic recovery while solving emerging social and economic problems meanwhile focusing on Disaster and Risk Resilience (DRR) activities. These resilience building activities must address the breadth of hazards that pose a threat to Sri Lanka, including natural, biological and societal hazards.

Key Points

- ***Economic Crisis in SL***
- ***Effective UECs***
- ***Strengthening UBL***
- ***Recommendations for strengthening UECs***

Recommendations in Brief:

- *Strengthening UBL Cells*
- *Improving R&D infrastructure facilities*
- *Promoting industry internships*
- *Encouraging industrial visits*
- *Inviting experts from the industry to engage in academic work*
- *Organizing University-Enterprise joint activities*
- *Encouraging academic and industry representation in both sectors*
- *Strengthening and encouraging academic members to engage in UECs*
- *Allowing universities to manage funds through UECs*
- *Offering incentives for UECs and developing R&D infrastructure*

Effective UECs

UECs for innovation and entrepreneurship-led economic development were recognized as major requirements by different research in the world while triple-helix model of Etzkowitz and Leydesdröff (2000) reiterated the active role of universities in this regard. UECs are promoted through collaborative research, training programs, knowledge and technology transfers, conducting lectures by industry experts, and industry training for staff and students. A restructured

university sector with the University Interface Unit (UIU) for mutual benefit, especially in developing country contexts, was suggested by Galli and Tuebal (1997) through their *System 2 Configuration*.

The Higher Education sector of the country has contributed to open up education opportunities to the people by creating 17 universities and elevating professional standards. With the encouragement of the universities by the Presidential directives and support from AHEAD (Accelerating Higher Education Expansion and Development) and other projects to promote innovation and entrepreneurship culture, University Business Linkage (UBL) cells were established by issuing UGC Circular 10/2016 as liaison offices to promote UECs (Weerasinghe et.al, 2022). However, the effectiveness of the operations and the sustainability of these attempts are in doubt due to a lack of structured policies and insufficient directives.

DRR Activities

Sri Lanka is highly susceptible to various natural and man-made disasters due to its geographic and climatic conditions. The most frequent disasters follow the occurrence of natural hazards such as floods, landslides, cyclones, droughts, coastal erosion, and epidemics. Among these, the 2004 Indian Ocean tsunami stands out as the most devastating recent disaster, causing extensive loss of life and property, underscoring the necessity for robust early warning systems. Disease outbreaks, such as dengue fever, are common due to tropical conditions and inadequate sanitation. The country has also faced numerous societal hazards, including civil unrest, armed conflict and financial shocks. The recent COVID-19 pandemic also revealed the threat of cascading hazards, such as the impact of the financial disruption due to lockdowns and reduced trade and tourism that significantly impacted Sri Lanka's economy and human life. This diverse disaster profile indicates that Sri Lanka requires a comprehensive disaster management approach to mitigate impacts. This approach emphasizes early warning systems, community preparedness, and sustainable development practices.

UECs in DRR have globally produced innovative tools, services, and advancements, making close partnerships between universities and industry crucial for reducing community vulnerability. These partnerships, defined by contractual relationships with specified joint rights and responsibilities, are essential for effective DRR. Authorities should invest more in R&D activities rather than consultative works. Enterprises also often lack the capability to absorb advanced research. Although universities conduct advanced research, such as developing damage functions for flood risk estimation in Colombo, local authorities seldom utilize this knowledge (Weerasinghe, et.al, 2022).

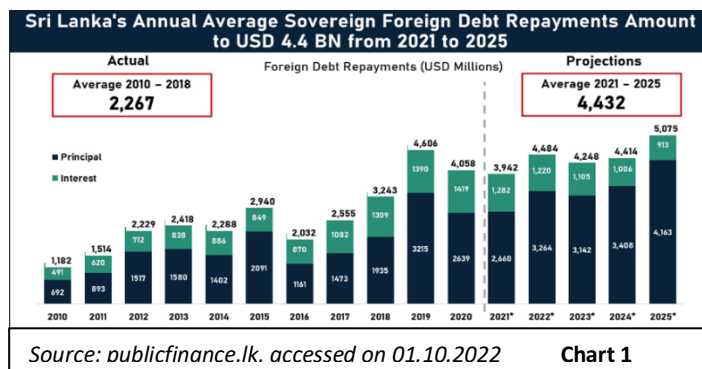
Few enterprises support DRR activities, and while private enterprises and universities might benefit from financing, government funding remains critical. Attracting more private enterprises to DRR activities would be advantageous. Funding accessibility depends on enterprises recognizing the value of UECs and research activities, necessitating a strengthened perspective towards academia. The limited number of local graduates and postgraduates in the field of DRR hampers effective UECs, compounded by uncertainties and lack of trust between enterprises and universities and doubts about universities' technological capabilities. Past UECs have often focused on one-time transfers and tangible outputs, but a shift towards sustainable and impactful partnerships is needed.

The Economic Crisis

We are all expecting a respectable and comfortable life through socio-economic development. Although many economic policies were tested and adopted during the last 75 years, we have missed the important concerns that are necessary for the socio-economic progression of the country. Sri Lanka has been named an economic worst-case scenario and labeled as a bankrupt nation in 2022. The Covid-19 pandemic hit the economy by creating a big foreign exchange crisis due to a reduction in tourism and a decrease in foreign employment remittances, deepening our devastating long-term trade deficit and causing long queues for essential items such as fuel, gas, and milk powder.

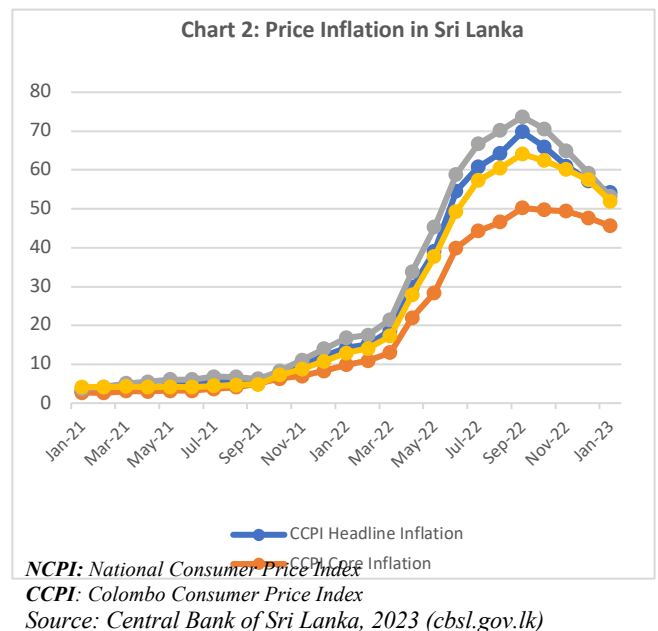
The crisis has been worsened by the delinquent repayment installments for foreign loans resulting in increasing debt in recent years, causing a considerable outflow of foreign reserves. Finally, the Central Bank of Sri Lanka abandoned the repayment of the loans in 2022.

This debt has been created over the longterm, because our government maintained large annual budget deficits, lost their financial discipline for all spending, and obtained loans from very adverse internal as well as external sources (Total External Debt is 59% of the GDP in 2022); then disbursed those costly funds for non-performing investments and unnecessary government or political projects.



Sri Lanka's key inflation rate eased for the fourth straight month to 54.2 percent in January 2023, the lowest since May 2022, compared to 57.2 percent in December 2022. Sri Lanka has recorded the third highest inflation according to Hanke's Inflation Dashboard presented in April 2022.

Regardless of the crisis, Sri Lanka needs to plan for sustainable socio-economic development to create resilient communities in similar crises. Long-term policy initiatives are needed meanwhile taking short-term actions to reduce the adverse effect of high inflation by reducing the pressure on low- and middle-income groups. Academics can contribute to the economy by making effective collaborations with enterprises and government institutions to set up conducive eco-systems for innovation and entrepreneurship.



Policy Recommendations

We focus on our policy brief to connect UECs with economic resilience as all disasters finally end ups with negative economic impacts as Sri Lanka experiences after Covid 19 pandemic. Strong UECs will directly create conducive platform for effective engagements on DRR activities. Future

partnerships lead to Creating a conducive environment for effective UECs is the responsibility of many parties. We highlight the policy intervention of the higher education sector while emphasizing the importance of policy adjustments for other participants. We were inspired by the study conducted by the research team of the Strengthening University Enterprise Collaboration for Resilient Communities in Asia (SECRA) project for revealing present initiatives in Sri Lankan UECs and identifying the pain points. The study was conducted by reviewing existing documents and surveying important stakeholders and revealed that funding, continuity, long-term strategic plans, and practical implementation are lacking in UEC in the context of disaster resilience in the three Asian countries including Sri Lanka. The study further revealed that UEC devised and executed good practices and identified significant enablers and barriers that foster or hinder successful collaborations (Tucker et.al, 2023). We recognize the recent initiative have already been implemented and are being implemented by the government, the UGC and some universities. This policy brief urging the requirement of further strengthening such initiatives and ensuring sustainability of those initiatives. This policy brief presents ten recommendations aimed at leaders and policymakers within the higher education sector to offer guidance for the enhancement of effective UECs. These recommendations are categorized into three overarching themes: structural enablers, relationship building, and work-integrated learning.

Structural Enablers

1) Strengthen industry liaison offices (UBL Cells) in the universities

All state universities have taken initiatives to establish University Business Linkages (UBL) Cells as guided by UGC circular with the funding support of the AHEAD project to work as the industry liaison office. The UBL is staffed with a director appointed among the academic, hired manager on contract basis and one or two research assistant work on temporary basis. Funds were initially disbursed by the AHEAD project to operate the UBL cell initially. However, sustainability of the UBL Cell has become an issue in many universities due to non-availability of permanent cadre and absence of assured budget allocations after the AHEAD funding. Further, the establishment of UBL has created some structural issues as some universities have already established and practiced unique approaches to make UECs. Centralized UBL is sometimes isolated and there are several units in some universities at the faculty levels and the departmental Levels. It is recommended in this policy brief to make a proper evaluation of the operations and configuration of the UBL cells and strengthen its operations with appropriate policy measures.

2) Improve R&D infrastructure facilities at universities

Modern infrastructure facilities such as R&D laboratories and tech-centers are essential for conducting high-quality research, especially in the field of science and technology. Research infrastructures is the driving force behind science and technology by making top-notch facilities, resources, and services accessible to researchers, collaborators, and businesses. There should be policy focus on ensuring funds and making effective collaboration with local as well as international entities to develop infrastructure facilities which will motivate staff members to make industry led R&D activities in collaboration with different partners.

3) Strengthen academic members through their capacity building and motivate them to engage in UECs

Capacity building for engaging in R&D with cutting-edge technologies and current trends is needed to be compatible with the industrial requirements. There should be clear policy interventions to improve those capabilities and make them feel free to go to industry to conduct R&D work collaboratively and conduct training programs and seminars for industry participants to impart their knowledge and skills. Academics can be motivated by incentivizing them through financial rewards for such activities as well as considering the contribution as a part of the

promotion schemes. Policy intervention is needed to make it formalize the procedures and ensure academics are free from hassles in making collaborations.

4) *Formulate clear and transparent mechanism allowing universities to generate, retain and use revenues through UECs*

There is a lack of clear direction for the generation of income, retaining it and using those funds in the university development. Different actions and guidance are issued from time to time making it more difficult and discouraging for those who are engaging in UECs. Hence, it requires formulating a clear and stable policy on generation and utilization of funds through UECs.

5) *Government attention on ensuring funds, tax reductions for UECs, setting up industrial parks, tech-centers and incubations, and development of public R&D infrastructure facilities connecting with universities*

It is obvious that the present situation is not encouraging tax rebates and investments in development of infrastructure to promote UECs. However, leaders in the higher education sector need to break the vicious circle of poverty. The government should encourage to make available public seed money to promote UECs and allocate considerable fund for developing common R&D infrastructure as promised on S&T policy formulated in 2009. Furthermore, subsidies and tax incentives are factors influencing private sector R&D, which is dependent on complex business decisions and numerous variables in the economic environment. Intermediary centers such as industrial parks, tech-centers, incubators are needed to support the expansion of companies, start-ups, and communities in industries including IT, AI, machine learning, IoT, biotech, virtual reality, robots, and more.

Relationship Building

6) *Organize joint conferences, informal meetings, talks, and communications and publicize university activities relevant to the industry*

There is a growing emphasis on deeper and more demanding types of communication and collaborations with industries, such as organizing conferences collaboratively, involving in joint R&D committees, prototype testing panels, and business incubation meetings, student evaluation process. Further, strategies for promoting university activities that will attract the interest of the industry and promote them to engage in UECs are important. Those popularizing programs will enhance networking between academia, industries, government and the general public. Accordingly, there should be policy invention to promote such initiative within the university sector.

7) *Encourage academic representation in industry committees and encourage industry representation in university committees*

The gap between industry and academia can be considerably reduced through bi-lateral participation in decision making bodies in both sectors. There is a statutory requirement of participating industrial experts in the faculty board meetings of the universities and considerable stakeholder participation in the councils of the universities. There should be a strong policy intervention to select such statutory participants to take the maximum contribution from the industry. Furthermore, it is required to promote industry participation at different level of the decision-making committees in the university. University academics should be encouraged in participation of the boards of the external organizations, chambers and other committees to interact with industry participants actively.

Work Integrated Learning

8) *Promote Industry Internships as a part of Curriculum*

Most higher education institutes have incorporated internship in the programs' curriculum. Internships in the private sector play a significant role in academic degree programs at present. A formal internship program should be designed in collaboration with industrial partners to provide students with the best learning opportunity through firsthand experiences and find

industry-led research possibilities through business links. This cutting-edge internship program comprises students, instructors, business partners, and employees from the Career and Development Center. It is recommended to revisit existing internship programs of the universities and set up strong policy for making effective internship programs considering it as a compulsory component in higher education.

9 Encourage industrial visits by students and academics

Undergraduate, graduate students and staff members who tour industrial sites have excellent opportunities to network with professionals and subject matter experts. It gives the students the chance to network with business owners, legislators, experts from industry, and corporations. Industrial visits by the academics will support to find most effective teaching strategies since they provide students with the opportunity to learn via contact, working procedures, and employment practices. The primary goal of industrial tours is to expose students and staff to the realities of the workplace. It is recommended to study the issues related to staff and students mobilities and form a conducive environment through policy initiatives for these mobilities.

10) Invite experts from the industry as visiting lectures, guest speakers, student mentors

Industry and higher education institutions may become a potent force for innovation and economic progress when they engage in teaching programs to achieve new knowledge heights. There should be policy initiatives to promote universities to invite industry expertise or make it compulsory in curriculum while paying attention to the impediments that will restrict industrial participation in academic programs.

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