



Convocation Address

By Professor M.J.S. Wijeyaratne

Title:- University Research towards Sustainable Development

The Right Venerable Chancellor, Vice-Chancellor, Deans of Faculties, Members of the Council, Senior Professors, Professors and other members of the academic staff, Librarian, Registrar, Bursar and members of the Administrative staff, Distinguished invitees, Graduates who have been conferred the degrees today, Parents, Well-wishers, Ladies and Gentlemen;

May I first thank the Vice-Chancellor and the Senate of the University of Ruhuna for inviting me to deliver the Convocation Address of your esteemed University. I consider it a great honour and privilege.

I congratulate all the graduates who have been conferred degrees at this convocation. You, the graduates of one of the leading universities of Sri Lanka, are stepping out into the world today as leaders with advanced knowledge and numerous skills who can play a significant role in the development of our country.

Today Sri Lanka is aiming at a rapid economic development and this development has to be sustainable; if not it will collapse and we all will be in a really difficult situation. The United Nations, identifying the importance of the sustainability of the development, about 8 months ago on 25th September 2015 adopted the “2030 Agenda for Sustainable Development”. This includes 17 goals to be achieved by 2030 by all nations (UN 2016). Even though the achievement of these goals by 2030 by all countries of the world may not be 100% successful as experienced with millennium development goals identified in 2000, at least working towards an aim will be beneficial and



would result in a better tomorrow. Contribution of everybody is needed for this.

All our strategic plans for development should focus on these goals, which include among others, ending poverty, achieving food security, ensuring sustainable agriculture, ensuring healthy lives and equitable education for all, promoting lifelong learning, sustainable management of water, access to reliable energy for all, promoting sustainable economic growth and sustainable industrialization, fostering innovation, combatting climate change, conservation and sustainable use of oceans and protecting terrestrial ecosystems.

Our university community especially the academics and the students as well as the passing out graduates have a key role to play in achieving sustainable development. In the Universities, it is of utmost importance that our academics conduct research on these aspects and also produce future researchers.

I am very happy to say that there are many globally renowned researchers in our universities. According the most recent ranking of Sri Lankan researchers, there are 183 researchers who have an *h*-index of 10 or more. H-index is a measure of the productivity and impact of the research publications of a scholar. It is based on the number of citations of research papers of a researcher. H-index was suggested in 2005 by a physicist called Jorge E. Hirsch. When a scholar has an h-index of 10, he has 10 research publications each of which has been cited in a minimum of 10 publications of other scholars. Of the 183 researchers in Sri Lanka with an h-index of 10 or more, the scholar with the highest h-index (82 as at April 2016) is from your university. Among the top 5 scholars, there are two researchers from your University. I am sure that all of you are proud of your university and your



academics. In addition, recently the world universities were ranked according to number of citations of the research papers published by their staff. There are 04 Sri Lankan universities among the top 2000 universities of the world ranked based on the productivity and impact of the research publications of their staff measured using the number of citations. Of these four Sri Lankan universities, the top university is your university, the University of Ruhuna, which holds the 1209th rank among approximately 25000 universities in the world. I am sure that you are very proud because you have graduated from such a top-class university of the world. Your staff may also be proud that they are a part of such a high ranked University.

In addition to conducting research, another main function of a university is to produce researchers who are capable of conducting research. For rapid economic development and to sustain that development, relevant human resources with required skills and competencies are needed. Human resources required to conduct research have to be produced by universities.

The number of Research and Development (R & D) personnel required for economic development by different countries has been determined by the UNESCO. According to their estimates, Sri Lanka needs 20,000 R & D researchers by 2020. According to Frascati Manual of the OECD, The definition for a researcher is “a professional engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of projects concerned. Postgraduate students reading for PhD degrees and engaged in R & D activities are also considered as researchers (OECD 2002). In Sri Lanka, we can broaden this definition by including the postgraduate students of the Master of Philosophy (MPhil) level who are engaged in R & D activities also as they too are engaged in fulltime research. Although we need 20,000 R & D researchers by 2020, according to



the most recent statistics, in 2013 we had only 5707 (NSF 2015). The highest number of these researchers are from the field of Natural Sciences (25%), followed by Engineering (20%), Agricultural Sciences (19%), Medical Sciences (17%) and Social Sciences and Humanities (12%). The annual increase in the number of R & D researchers from 2010 to 2013 has been only 3.39% (NSF 2015). At this rate we will have only 7205 R & D researchers by 2020 which is far less than the required number of 20,000. Therefore in order to meet the required number, the universities, while doing research have to produce more and more researchers also

We need researchers in every field of study. Although scientific research has been identified as the basis for economic development, researchers in the fields of Humanities, Social Sciences and Management are also necessary to have a balanced development in a sustainable manner. It is necessary to carry out research on high trust areas which can directly contribute to national economy. At the same time research on human health, both physical and mental are needed because without a healthy nation development will not sustain. Similarly, research on the ways and means of ending poverty, ensuring equitable quality education and promoting lifelong learning, ensuring sustained energy for all, ensuring food security, combatting climatic change, protecting terrestrial habitats, reducing biodiversity loss and sustainable utilization of marine resources are also needed.

These research should not be done for the sake of doing research and end as final reports that are shelved in the granting agencies as experience for some research done in Sri Lanka. The patentable products resulting in due to research should be immediately patented. Results of other research should be published without much delay in order to disseminate the knowledge



generated. Sometimes we experience that most of the research done for PhDs and MPhils are found only in the dissertations which are never published or sometimes papers based on these research are written after 10 years or even later during which time some of the results would be obsolete. Therefore, as doing research, it is important to publish the findings of these research, also because the public too has the right to know about the research done in universities as most of these research are funded by the Government using public funds. Therefore, publishing research findings is a prime duty of the researcher. Here too what most of our researchers do is to present the findings at a research symposium in front of a very small crowd, which is sometimes confined to only the coauthors and the session chair. We have experienced this situation in some of the research symposia held in Sri Lanka, especially when there are parallel sessions. When presented at a research symposium, only the abstracts of these research are published. Getting a paper accepted for presentation in a symposium is very easy as the organizers very rarely reject those as the number of papers presented is considered as an indicator of the success of the symposium. In addition to presenting the research findings in research symposia, it is very important to submit the full research paper to a scholarly journal and get it published there. Here too now there is a new trend where the papers are accepted for publication for a fee. For most of these journals poor quality papers are accepted for payment. Most of these journals have a highly attractive name starting with the words ‘The International Journal of’ followed by a broad subject area or areas. I wish to share my own experience with you regarding such a journal. A research paper submitted to a Sri Lankan journal was sent to me for reviewing and it had many mistakes including language and spelling errors in addition to factual errors. I pointed them and recommended resubmission after correcting those errors. The author, without correcting any of those, submitted it to a so called



“International journal” and got it published. However, not all journals are like that and some of the journal starting with the terms “International Journal” are of high standards and usually they do not charge fees for publishing. Researchers should ensure that they publish their research in high impact journals so that their research findings are available to a wider audience.

The universities are not only the places where research is carried out but also the places where researchers are produced. To produce researchers, universities should have academics who are capable of supervising research and producing new PhDs and MPhils. If a University academic does not have a PhD or a MPhil, how such a person would produce a degree holder of that level unless he/she has vast experience in research with a very high h-index. According to Sri Lanka Qualifications Framework (SLQF), Doctoral degree students should be guided by a supervisor holding a PhD or equivalent qualification and the MPhil students should be guided by a supervisor having a MPhil or a higher degree (UGC 2015). However, as per the UGC circular No. 11/2015 issued in September 2015, except in the Faculties of Science, Applied Science, Agriculture and Engineering, promotion or appointment to Senior Lecturer Grade I and II can be done even with a Masters degree with a research component, which is below the SLQF level of PhD or MPhil. This may have serious impacts on the number of PhDs and MPhils produced by our universities in future as there may not be sufficient number of academics with qualifications required to supervise such degrees. Therefore, the authorities have to seriously consider imposing the requirement of having a PhD or MPhil for recruitment or promotion to Senior Lecturer grades in future, in order to produce the required number of researchers for the development of the country and also to sustain that development.



In addition to recruiting qualified personnel who can do research and train researchers at the MPhil and PhD levels, they should also be encouraged to do so. This may be done by providing additional benefits to the academics who supervise PhD and MPhil students. At present, some marks are given for their promotion to the Associate Professor and Professor grades, that too with certain limits, and already promoted academics will not have any benefits. Therefore, devising a mechanism to encourage the academics to produce more and more researchers by supervising more and more MPhil and PhD students will ultimately result in producing the required number of researchers for the development of our country. At present, the National Science Council has a scheme to encourage supervisors of MPhil and PhD students but that too with certain limitations.

Further, providing non-financial benefits, financial support to present research findings at international scientific forums, recognizing the researchers by way of prestigious awards such as President's Awards and providing a conducive environment for research by minimizing administrative barriers and impediments will also help to improve research and produce more researchers. It is also necessary to encourage the qualified researchers in research institutes and private sector to supervise MPhil and PhD students. This can be done by offering them attractive designations so that they would carry out collaborative research together with university academics and at the same time will train the researchers needed for the development of the country.

It is also necessary to attract capable students for research. This can be done by giving them an attractive stipend similar to that of a probationary lecturer and also by ensuring them employment at a senior level after completing their postgraduate research degree.



One of the main constraints for research and producing researchers is lack of funds. However, even with the current budgetary constraints, the Government has allocated additional SLR 600 million to the universities this year to conduct Nationally relevant research, Scientific Engineering and Information Technology related innovative research, research on demographic, sociocultural and economic issues, and research relevant to industrial and technological development and university industry linkage leading to innovative technological solutions.

In addition, it is necessary to promote collaborative research with research institutes and private sector so that the resources can be shared. Some of the research institutes have many facilities and with the collaboration of university researchers, these resources can be maximally utilized for the development of the country.

Today you are stepping out into the world as graduates of one of the prestigious universities in the country as well as in the world. Your contribution for the development of our country is very much needed. I sincerely hope that your intelligence, knowledge and skills would be successfully harnessed to develop our country and also to make that development sustainable.

I wish you all the very best.

Thank you.

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