THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE CAMPUS, TRINIDAD & TOBAGO, WEST INDIES
OFFICE OF THE CAMPUS PRINCIPAL
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Address by the Campus Principal and Pro Vice-Chancellor Professor Brian Copeland

Research Symposium held by the Department of Chemical Engineering

Salutations

I've been asked to speak about our engagement with Industry, as well as our research and commercialisation efforts. You will be happy to know that I've been given 10 minutes to speak so I've made every effort to pare all that could be said down to a few essentials.

The University of the West Indies has long seen our Research and innovation as a key differentiator, not just in terms of international reputation, but also as the means by which wealth can be generated in the Caribbean, in a region where dependence on natural resources – be they oil and gas, bauxite, or sun, sand, and sea – makes us vulnerable to the depletion and degradation of resources and the vagaries of people.

That need to diversify has clearly reached critical proportions. You are as much aware as I am that, in terms of global trade for petroleum products, over-production in the last three years

has forced the price of oil and gas downwards. It now fluctuates around $50 per barrel, on a good day. Climate change, environmental destruction, is laying waste to our sun, sand, and sea package and every economic downturn in northern climes could mean financial disaster to a tourist destination.

Sustainable development is our insurance that the existence of generations to come remains uncompromised. Achieving this developed country mode requires cutting edge scientific enquiry; product and process creation; product development; production, and services. It means having a mind set to turn all of these into commercial activity and, therefore, into revenue.

All of this can only become possible by consciously adopting an aggressively innovative culture to strengthen the ability of our companies to compete internationally and allow Small Island Developing States such as ours, to succeed in international markets. Unquestionably, it speaks directly to economic diversification.

Again, none of the above is at all possible unless we establish stronger working relationships with Industry to build our capacity in the areas of internship, innovation, entrepreneurship, and commercialisation.

We at The UWI define 'Innovation' as the application of new knowledge for positive societal benefit, a necessary component of wealth generation which, in turn, fuels sustainable development. Furthermore, the most complete wealth generation engine involves, at least in the specific case of commercial products, the creation of or access to cutting edge scientific research which can motivate product conception and creation. Once viability is determined, the new product is legally protected, and prepared for the market entry. Along

with a production system comes the corresponding marketing strategy. The new product is then put into sales and distribution.

As you would recognise, just as Innovation goes hand in hand with Research; Entrepreneurial activity is an offshoot of both.

We call this process - taking a brand new concept right through to market entry - the "Innovation Pipeline." It is interesting to note that the United States puts some 4% of GDP towards funding research and development in the innovation pipeline. In Trinidad and Tobago, that percentage is 0.04%. A challenge, yes; but not an insurmountable one.

The Department of Chemical Engineering is very clear that its mission is to provide national and regional service to process industries: industries such as petroleum and petrochemicals, bauxite, sugar, and food processing as well as medium and small-scale process categories in, for example, soaps, detergents, paints, pharmaceuticals, oils and fat.

The theme of this Symposium is therefore specific. It speaks to the Department's – and The University's - awareness that it must promote industrial linkages, applied research, fundamental research, and the continuing education of persons in the relevant disciplines.

Just two weeks ago, Chemical's sister Department, Mechanical and Manufacturing Engineering showcased equipment designed and built by students to improve the work efficiency of farmers and manufacturers. Our students have designed and constructed equipment to process a wide range of crops like cassava, sweet potato, dasheen, breadfruit,

pigeon peas, coconuts, and a basket of others. In consultation with stakeholders in manufacturing, our primary focus has been making companies more competitive.

A few years ago, the St. Augustine Campus established the Office of Research Development and Knowledge Transfer with a mandate to identify and develop revenue-generating opportunities for funding our enterprise. It is strategically positioned to establish strong partnerships with stakeholders, while engaging with and leveraging the collective expertise of various researchers and subject matter experts. Team members guide, identify, and match the needs of our stakeholders with the results of research of The UWI. They would either secure funding to further the commercialisation process (through grants), or direct the outputs to an external stakeholder with whom it has already engaged, forging a mutually acceptable relationship with clear terms and conditions.

Coming in the 2017-2019 biennium and matching the services offered by the Office of Research Development and Knowledge Transfer in Intellectual Property vetting, drafting, prosecution; project proposal preparation support, administration of projects funded by the European Union, IADB, UNDP, GORTT and various institutes, commercial and industrial entities, is a new Centre for Entrepreneurship and Innovation.

This Centre will improve the alignment of research initiatives to local and regional priority needs and bring cohesiveness and focus to the Innovation imperative as we seek to commercialise our research. Research shows that our chances for success are greatly increased if we partner with Government and Industry. However, in so doing, we must create a structure that will make it a lot easier to move ideas to market.

Be assured that the St. Augustine Campus is totally committed to creating an innovative and entrepreneurial university, one that continues to be a vital partner to Industry and to Governments in Caribbean development. When we use the products and solutions created here, in this country and this region, to generate wealth, then we can truly say we're on the road to economic independence and sustainable development.

St. Augustine can be a major catalyst in economic diversification through our teaching and outreach programmes. Commercialisation of cutting-edge research will undoubtedly provide opportunities for Industry to be First World competitive and give Governments a leg up in achieving economic diversification. At the same time, commercialisation offers The UWI an additional revenue stream, improves visibility of our research, and enhances our reputation and brand.

We need local and regional businesses to advantage of the capabilities existing within our universities so as to establish an innovation-generating relationship. Bright, young minds are willing and ready to push boundaries in research; and to use that research to push products and processes on a total operational basis. With Industry funding, Academic/Industry supervision, student internships, everything and anything become possible. Relevant, directed research will then be in step with current and future critical needs of Caribbean societies.

We appeal to regional Industry and Governments. Join us and forge a strong, symbiotic partnership with the like objective of achieving a sustainable, competitive economy for the material and mutual benefit of all.

I thank you.