

Keynote Address

**Reflections on the Brain Drain**

*Lincoln University Global Studies Institute*

First Annual International Conference

Lincoln University, Pennsylvania

March 22, 2001

and

*Summer Institute for Future Global Leaders in the Caribbean*

University of the Virgin Islands

May 21, 2001

**Orville Kean, Ph.D.**

President

University of the Virgin Islands

St. Thomas, U.S. Virgin Islands

The thesis of this presentation is that the movement of talented and educated people from less developed places to more developed places – the brain drain – is a significant measure of underdevelopment. Accordingly, strategies for development in the emerging economies will produce limited results, particularly in the long term, if they do not include programs to create the jobs and business opportunities that are necessary to stem the brain drain or mitigate its deleterious effects.

I will suggest that the virtual character of the new economy provides favorable conditions to develop such programs. The key factors for success seem to be connectivity, tax incentives, business friendliness, the capacity to innovate, and the appropriate local education and training programs. Local colleges and universities can therefore become an important part of the solution to reduce the brain drain and help create jobs for their graduates by providing the Information Technology (IT) connection, the business friendliness, the innovation, and the appropriate education and training programs.

Before mustering support for my point of view, I will share a number of perspectives on change, innovation, information technology, globalization and the brain drain. These perspectives will serve as a backdrop for the body of my remarks.

If you look at what has happened to people and places in the last ten years as a result of explosive growth of information technology and the globalization of national economies, and listen to what the leaders in the less developed countries and dependencies have said about the impact of these two economic forces on their societies, the thought that seems to best capture their sentiments is Mark Twain's statement, "I'm all for progress, it's change I don't like."

The idea is that change – for the better or worse – is not generally embraced by human beings is an old idea. Reams have been written about the natural inertia of the human mind and spirit. It is not surprising, therefore, that there is a large body of scholarship exhorting the need for change to achieve progress. The popular book, **The Change Masters**, by Rosabeth Moss Kanter is a good example of such scholarship. The book's subtitle, *Innovation and Entrepreneurship in the American Corporation* and its definition of change masters as, "those people and organizations adept at the art of anticipating the need for, and of leading productive change," set the tone for the leadership environment she felt was necessary for an American corporate renaissance in 1983.

Moss Kanter's view of what the term "innovation" means is more cogent now than it was 18 years ago when the book was published. "If most people were asked

to list some of the major innovations of the last few years”, she said, “microprocessors and computer related devices would be mentioned frequently. Fewer people would mention new tax laws or the creation of enterprise zones, even though these are innovations too.” Her definition of innovation is “the generation, acceptance, and implementation of new ideas, processes, products or services.”

The value that can accrue to a developing society from the accumulation of these diverse forms of innovations can be astonishing. For example, a few years ago businessmen on the island of Bermuda developed the e-suite concept which enabled e-businesses to incorporate virtually in the British colony. After passage of the appropriate legislation, a large number of e-businesses incorporated virtually on the island and boosted the economy to unprecedented heights. Now, a number of other places, including islands in the Caribbean, are trying to replicate Bermuda’s success in implementing the e-suite innovation.

Next, I would like to share another point of view on the need for change. This one comes from the Caribbean and it speaks to the role of governments and social science as agents for progress. In 1991, in the paper, *Rethinking Development: Out Loud*, Norman Girvan made the following observations:

. . . the brutal fact is that, after nearly fifty years of attempts at state sponsored social engineering informed by social science, the problem of world poverty is much more massive and seemingly intractable than before.

The dominant role of the state as an instrument of change (modernization) and transformation (socialism) must now be ruthlessly evaluated in light of the post-colonial experience.

This shortage of management and technical manpower is highlighted by Girvan as a key factor that limits the ability of Caribbean states to facilitate their own economic development, regardless of ideology or political will.

In most cases, and in most places, the brain-drain contributes significantly to the shortage of skilled manpower. Nevertheless, there seems to be no tradition in the literature on economic development that correlates the brain drain with underdevelopment and suggests the need for national policies to stem the tide of the exodus to greener pastures of the best, brightest and most hard working. This lack of a tradition is odd since there is general acknowledgment that the brain drain

constitutes a subsidy which poor countries contribute to wealthier countries by investing resources to create human capital that subsequently migrates abroad.

Indeed, it is remarkable that a highly respected international development institution such as the World Bank would state in one of its reports written during the time of the Edward Seaga administration in Jamaica, that one of the critical problems in Jamaica was, "an acute scarcity of skilled, managerial and technical personnel, particularly in the public sector, mainly as a result of massive emigration in recent years", then turn around and not include one recommendation in the 13 that were offered, on the linkage between migration and development and the need to develop national policies that will make that linkage as positive as possible for the individual and for society.

Examples of policies to reduce the brain drain and its negative effects exist can sometimes be found in the least expected places – in developed countries such as the United States. These examples are useful because they often illustrate the complexities of the problem, the misapprehensions it engenders and the limitations of many proposed solutions. The response of several states in the United States to their perceived brain drain problem are given as cases in point.

In 1998 Nebraska's Governor, E. Benjamin Nelson proposed a new merit-scholarship program to stop – or at least to lessen – the brain drain which he faulted for weakening the state's economic development initiatives. The governors of Alabama, Alaska, Maryland and South Carolina have also proposed funding for merit-based scholarships, particularly for students who seek degrees in computer science, engineering and other fields which are considered important to the states economy.

Some university presidents have also expressed the view that the loss of their graduates to other states represents a subsidy from their state to the state to which their graduates relocate. Their response to the brain drain has been to form partnerships with business groups to help to secure jobs for their graduates. This approach certainly appears to make more sense than simply offering merit-scholarships since the propensity of college graduates to stay at home is often based on the availability of the appropriate jobs that pay desirable wages.

It is important to note that the availability of appropriate jobs is not enough to keep trained manpower from leaving a place, the wages which the jobs pay must be competitive with those paid by similar jobs which are located in places to which the trained workers can move, *ceteris paribus*.

The nursing profession in the U.S. Virgin Islands illustrates this point well. Although the University of the Virgin Islands has graduated students for the past 35 years from its nursing program, most graduates from the program migrate to the United States to secure nursing positions that pay significantly more than comparable nursing positions in the U.S. Virgins. As a result a "permanent" nursing shortage exists in the islands. The U.S.V.I.'s solution is to out source the hiring of nurses to a contractor who brings in nurses from the United States that are paid premium wages. Meanwhile, the University continues to be harassed by public officials and members in the community for not graduating enough nurses to adequately staff the hospitals and clinics which exist on the three main islands. In general, the evidence seems to suggest that the politics of the brain drain is driven by the denial that the phenomenon arises from the unavailability of jobs at home that pay well enough.

In addition to the shortage of skilled manpower, there are a number of characteristics which are common to most emerging economies and which are seen as impediments to economic growth by many commentators.

One is the dependance of these economies on the developed countries. Emerging economies are often too small or narrowly focused to be self sufficient, and their distance from markets and associated shipping/travel costs make it difficult for their industrial sectors to be viable without grants or forgiven loans from, or preferential trade agreements with one or more of the developed countries. This situation leaves much to be desired because aid policies and trade policies in the developed countries are always subject to the winds of political change. Accordingly, the less developed economies always live with the knowledge that things could change for the worse with little warning.

Another characteristic is the difficulty attracting foreign investments. The reasons for this characteristic seem to run the gamut from incompatible social and business cultures to the low productivity of workers and the red tape and inefficiency of government agencies. Also, protecting property rights and ensuring an effective legal system and efficient financial markets are important prerequisites that need to be in place before foreign investments are likely to be made.

A third characteristic is communications infrastructure. The communications infrastructure is always cited as one of the most important factors in determining success in the new economy, which is the fastest growing sector in the global economy. A number of new economy gurus have predicted that the income gap between the rich and poor countries will grow larger because the IT infrastructure in the less developed countries is so inadequate that a "digital divide" will be created

between rich and poor countries. The lack of computers and connection to the Internet are usually mentioned as the two factors that most limit the participation of poorer countries in the new economy.

All the perspectives that have been presented about the factors that constrain development in emerging economies (and there are many more that can be added to my list) must be responded to by an optimist like myself who believes that the virtual character of the new economy provides favorable conditions to accelerate growth in the less developed countries including those in the Caribbean and Latin America, and, also, to stem the brain drain from these countries. My challenge, then, is to demonstrate how investments might be attracted to lesser developed countries that are used to develop and expand their economies and that create high paying jobs and good business opportunities to retain many more of the best educated and most talented citizens.

First, I would like to dispel the concerns regarding the existing inadequate IT infrastructure in poor countries. This situation should improve dramatically in the next few years because of the advances that are being made in the technology. These advances will enable developing economies to bypass old technologies such as copper wires and analog phones by investing in the more cost efficient wireless technology and more powerful and versatile digital phones. These emerging features of IT will allow computers, modern telecommunications and Internet connection to diffuse into the poorer countries at a level that will enable these countries to participate in the new economies in ways that speak to the concerns of Persaud mentioned earlier.

Once a critical mass of IT infrastructure is achieved the key to attracting new economy investments is to find ways to exploit special niche markets in the sector or to create new niche markets. Of course, the exploitation of special niche markets is very much a part of the economic history of every century. This is especially true in the Caribbean where highly specialized niche markets have been the region's economic salvation.

One of the most effective ways to succeed in niche markets in the new economy is to innovate along the lines described by Moss Kanter in **The Change Masters** and as illustrated by the creation of the e-suite business model in Bermuda. The broader and more diverse the scope of the innovations the more they are likely to attract investments. What will be required are innovations on the part of governments, the business sectors and the schools and institutions of higher education.

Governments would be expected to provide innovations in areas such as tax benefits, enterprise zones, industrial parks, intellectual property, legal simplifications, streamlined court systems, non-bureaucratic government procedures, one-stop compliance centers, etc.

Businesses would be required to create new corporate and organizational structures, new ways of doing business, new products and services, new ways to increase value and return on investments, new ways to expand markets and create new markets, new ways to improve civic engagement, etc.

Schools, colleges and universities would have to develop new governance and revenue generating structures, more relevant courses, curricula, certificate and degree programs; better pedagogies; new collaborative strategies with other schools, and colleges and universities; better IT infrastructure; stronger partnerships with businesses and governments; more useful research and public service programs, etc.

How would one go about creating an innovative model for economic development based on these ideas? One of the best ways to illustrate how this might be done is to provide an example. Fortunately, I have such an example in my pocket . . . the model is currently being carried out at the University of the Virgin Islands.

The UVI vision for 2000 - 2005 is to be internationally recognized for its success in facilitating the social and economic development of the U.S. Virgin islands to meet the challenges of the 21<sup>st</sup> century. The vision is the result of a year long process to develop a strategic plan for the University, and most of the ideas that are included in this presentation emerged during the planning process.

One of the best ideas that surfaced was the possibility of creating special enterprise zones on the St. Croix and St. Thomas campuses of the University of the Virgin Islands, each of which would be used to locate a world-class, mixed-use Research and Technology Park and Incubator Facility designed to spur the territory's economic development and broaden the University's teaching and research capabilities. It is envisioned as a partnership with the public and private sectors to create information-age opportunities for local employment.

The Park would consist of several components. One component would be virtual and would provide the opportunity for businesses to have a virtual presence in the Park. This component would create additional business in telecommunications, banking, accounting services, and legal assistance.

The second component would be a more traditional business and research park providing an on-campus home for knowledge-based companies. This component would be driven by the space and facility needs of stateside technology and knowledge-based businesses that desire to relocate appropriate business segments to the Virgin Islands. The University is interested in developing strong partnerships with these businesses because their presence in the park enhances the University's learning and research environment, creates new teaching and research opportunities for faculty and students, and provides job placement opportunities for students as both interns and graduates.

The third component would be the development of incubator facilities for start-up businesses that would be supported by the institution's Small Business Development Center and corporate partners in the Park.

The University subsequently retained the services of an internationally respected consultant to determine the feasibility of the Enterprise Zone/Technology Park model. The consultant found that with the appropriate legislation and business partners, the model is very feasible and should have no difficulty achieving its key objective if implemented. Over a million firms in the United States alone are involved in e-business applications which can be carried out virtually, and the number continues to grow exponentially in the U.S. and in other developed countries. It is estimated that over a 15 - 20 year period these e-business applications can create more than 1500 high tech jobs in global e-business and application development. Moreover, the e-business activity is expected to generate additional jobs in the legal, accounting and banking sectors of the economy. Currently, UVI is doing the legal research required to draft the needed legislation and speaking to prospective business partners. On Saturday, March 24, 2001, the Board of Trustees will be asked to approve the findings of the feasibility study and direct the administration to proceed with the development of the Enterprise Zone/Technology Park model.

The University has also revised its general education courses to make them more relevant to the developmental needs of the Virgin islands and wider Caribbean, and is currently revising its science and mathematics courses to include more civic engagement. Additionally, we are providing counseling and tutorial services for an elementary school and have established year-round Science and Mathematics Academies for select middle and high school students from all the schools in the U.S. Virgin Islands. The idea is to prepare more high school students to succeed in the mathematics and science courses that undergird the new economy. Indeed, the list of initiatives that have been undertaken in support of the vision is long enough to comprise another keynote address.



It is evident that I believe strongly in the ideas I have expressed here today and have already begun to put them into practice. It is a great adventure with more risk, perhaps, than some colleges and universities find comfortable, but we are committed to this project as a means to develop and expand the economy of the Virgin Islands and to stem its brain drain.

We would appreciate your thoughts on our ideas and actions and we would be even more appreciative of your prayers.