

Guest editorial

Industrial Engineering in Namibia - A personal and preliminary view

While Namibia is a Republic with just over two thirds the geographical area of South Africa, its population is only 2.3 million (under 5 percent of that in South Africa). Its estimated production (measured by GDP) is \$ 9.4billion (US) as compared with \$ 287billion (US) for South Africa (just over 3 percent) making it less wealthy per person than South Africa. As a small economy in Southern Africa many people may say that Industrial Engineering in Namibia does not exist. They are incorrect as Industrial Engineers do *“the integration of resources and processes into cohesive strategies, structures and systems for the effective and efficient production of quality goods and services”* (Sperotto 1994¹). That includes all who start and run the wealth creating organisations including those in Namibia.

Although smaller than South Africa, Namibia aspires to be an industrialized nation by 2030 facing significant challenges like poverty. (Only about 47% of households have a main source of income from salaries and wages, with about 29% relying on subsistence farming). Whether the population is at present educated to a level where they can be employed in an industrialized economy is not clear. For example a claim of a literacy rate of 84% does not address the level of proficiency. While the cure-all seems to be education, education that does not lead to wealth creation does not help to cure poverty.

The Namibian GDP, according to the 2008 statistics, is about 73billion N\$ (1N\$=R1) with most in secondary industry (37billion N\$) like wholesale and retail, public administration and defense and education. The largest single sector published is mining and quarrying at 12billion N\$ (diamonds and uranium particularly). Manufacturing produces 9billion N\$ which is split between food products and beverages, and manufacturing of many diverse items. The Namibian, like the South African, economy is diversified. However the wealth creating ability of government monopolies (like public administration and defense) cannot be determined, but in creating wealth, Namibia is more dependent on wholesale and retail trade and mining than South Africa.

In trade, since independence from South Africa in 1990, Namibia is looking beyond South Africa, notably to Angola. Some processes in Namibia are poor. Waiting in places where there is no competition is frustrating (whoever thought that any government unlikely to lose power could get complex processes running well). There are monopoly situations in, for example a government that is unlikely to face serious competition and some strong trade unions. Monopolies in any country will always have the potential for their members or cronies to gouge, raping the country's wealth for themselves. It is the ingenious industrious people facing competition who grow economies. Namibia has Harold Pukewitz found in many businesses and the retailers “Woermann Brock & Co” who compete against the onslaught of other businesses. South African businesses are everywhere, although not observed yet is the Chinese influence which, if reports can be believed, is growing quickly. In addition there are many small businesses, although like South Africa, these are often driven by immigrants.

Even in the education sector Dr Tjama Tjivikua the rector of the Polytechnic of Namibia displays ingenious skills at growing tertiary education, building considerable physical infrastructure and people in the face of legal, financial and other constraints. He saw the

¹ Sperotto, F. 1994. *In the footsteps of Homo Industrialis: A chronology of industry and Industrial Engineering*, Sandton: Piesie Press.

need for Industrial Engineering tertiary education and hopes to start it formally in 2012. Of course real wealth comes from people with ingenious ideas and tenacity to make them work to the benefit of all. In the process, they change themselves, change those who work with them and will industrialize Namibia. While designing and running superior systems are at the heart of Industrial Engineering, it is the people in them who matter both consumers and producers.

People seem to mix freely in Windhoek with little to no animosity. This capital city is cosmopolitan with other countries represented like Germany, the United States of America, the United Kingdom and Sweden outside Africa; and Nigeria, Uganda, South Africa, Kenya, Zimbabwe, Cameroon from inside. With diversity differences do occur. For example the thoughts of what industrial engineering is in other countries, may, at times, conflict with those of those found in South Africa and its fellow "Washington accord" countries like the rising nations of China and India and the developed countries of the USA and the UK. However there is faith that good sense will prevail for the good of the people of Namibia.

Ethical behaviour is paramount in producing a good society. Purely as a personal observation I am impressed by the moral tone in Namibia. Most people seem ethical in their dealings. One small example is that car attendants place a small piece of paper on the car's windscreen if they obtain a request to guard the car. They do not approach for a donation if they have not prearranged the "guard duty". (In virtually all cases such guarding is unnecessary as the chances of criminals being caught are high). Whether ethical behaviour is because of the fear of the consequences may be an open question.

Interestingly a founder of South African Industrial Engineering, Prof Kris Adendorff, spent his high school years in Windhoek. One can only wonder what would have happened had he decided to return to Namibia to start Industrial Engineering instead of in South Africa. Industrial Engineering tertiary education may be getting ready to start as there are people with tertiary training from Zimbabwe, the Czech Republic and South Africa. Still much help and effort will be needed to plant Industrial Engineering successfully at tertiary level in Namibia.

Of course tertiary engineering students have high aspirations. One student (from Cameroon) wants a service to "fly people from house to house by helicopter" as the "government is corrupt and the roads are impassable". There are still the remnants of war where another student wants a better firing system for simultaneous use of an AK47 and a RPG launcher. While I prefer life to death, these students seek ingenious solutions and are part of the future Industrial Engineers of Africa. If Namibians are allowed to flourish without excess bureaucracy, gouging, handouts and war then, I believe that, introducing Industrial Engineering tertiary education can help make Namibia an industrialized nation. We must pray that such an industrialized nation will choose Industrial Engineering for life rather than death.

Roy Snaddon

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