Papua New Guinea – A General Introduction

Papua New Guinea (PNG) is an island nation in the South Pacific with a population of some 6 million people according to the 2000 National Census. PNG gained its political independence from Australia in 1975, of which it shares its southern international border. It also shares the land border with Indonesia, and sea border with Micronesia in the north and the Solomon Islands to the east. In terms of its stage in development, PNG is ranked as an under-developed nation.

Papua New Guinea recognizes the Queen of England as its Head of State therefore; it is a full member of the Commonwealth of Nations. The democratic form of government instituted by the Constitution and practiced since Independence in 1975 is the Westminster System whereby one Parliament term is 5 years.

The 2000 National Census record states that some 80 percent of the population sustains their livelihoods through subsistence farming and the informal sector. Only 20 percent work in the formal employment sectors, and they pay regular income tax to the Government. Although the bulk of the population does not pay income tax to the Government, they continuously demand services like roads, schools, and aid posts to be provided.

The 20 percent of the population in the formal sector work in Building & Construction, Agriculture, Forestry & Fisheries, and the Mineral Sectors. However, according to the June 2009 Quarterly Report by the Bank of PNG, the minimum wage of an employee in the formal sector is K37.20 per week. This is very low compared with those of other countries that are in the same developmental stage as PNG.

Exports out of Papua New Guinea consist of both agricultural as well as non-agricultural products. The major agricultural export earners are Palm Oil, Cocoa and Coffee whilst in the non-agricultural sector, Crude Oil, Logs, and Copper & Gold take the lead. The main international trading partners of Papua New Guinea are Australia, Japan, Malaysia, USA, South Korea, the Philippines, New Zealand and Spain.
Introduction to Standards & Conformance in Papua New Guinea

Standards and conformity assessment work in PNG was previously coordinated through the Standards Division of the Department of Trade & Industry. Standards for use in PNG were mainly adopted Australia (& New Zealand) and ISO published standards. There was only a handful of Standards published specifically for the PNG conditions. The only conformity assessment program in operation then was laboratory accreditation. The maintenance and dissemination of measurement standards was also a part of the Standards Division.

With the view to expanding its scope of activities, the National Parliament passed the National Institute of Standards & Industrial Technology (NISIT) Act in 1993. The passage of this Act enabled the Institute to come into operation in 1994. Under the NISIT Act, the Institute is now required to perform the role of being the peak standards body in PNG. Its main function and responsibility is to safeguard the health and safety of PNG citizens including protection of the environment through adoption and/or publication of internationally recognized best practices or Standards.

As a statutory authority, NISIT has its own organizational and reporting structure as follows;

- **Technical Standards Division**
  - Development, adoption, and publication of Papua New Guinea Standards (PNGS).
  - Standards adopted are mostly Australian, New Zealand, ISO, IEC, Codex, and ASTM.
  - Dissemination of standards information to industries and the public through public awareness programs and seminars.
• **Metrology Division**
  o Maintenance of PNG’s hierarchy of measurement according to the BIPM requirements.
  o Maintain and update issues regarding PNG’s obligation to the ‘Metre Convention’.
  o Maintenance of all trade measurement for export and manufacturing purposes.
  o Maintain and disseminate the OIML Recommendations to Government Regulators and industries in PNG.
  o Dissemination of measurement standards to industries in PNG through calibration.
  o PNG’s measurement traceability loops into the Australian Measurement System coordinated by the National Measurement Institute of Australia.

• **Audit & Certification Division**
  o Product audit and certification services.
  o Provision of training to industries on all related subjects in these audit and certification programs.

• **Laboratory Accreditation Division**
  o Accreditation of testing laboratories to the ISO 17025 Standard.

**The Role, Structure and Scope of the Organization**

As NISIT is a statutory organization, all its funding comes from the Government on an annual basis. It must also be pointed out that the slow pace of economic and infrastructural developments taking place in Papua New Guinea requires NISIT to structure itself in a manner that takes care of only the immediate industry needs of the country. One-off or technologically advanced enterprise needs are usually referred to our counterparts abroad.

The services provided to industry are done on a cost-recovery basis due to several reasons. For example, whilst PNG has some of its own technical experts to implement NISIT’s standards and quality programs, it still requires technical experts from abroad to assist in areas which it lacks in capacity. It is usually the cost of hire of these technical experts that directly impacts on enterprise paying a higher price for NISIT’s services. The same applies to provision of standards information and dissemination of measurement standards.

In terms of enhancing the productive capacities of exporters, NISIT only provides an advisory role to the industry sector which requests its input. With regard to agricultural exports and others like timber and logs, they are governed by their own Acts and Regulations which generally makes reference to compliance with either industry and/or voluntary standards. In this instance, NISIT is called upon to provide some advice to the concerned industry sector.
When it was enacted by Parliament in 1993, the initial plan was for NISIT to have its own institutional building/premises to house the physical measurement laboratories, standards development and publication facilities, and the conformity assessment programmes. This has never happened and the Government continues to rent buildings and office space for NISIT to carry out its functions and responsibilities. This arrangement has its constraints such as limited space for expansion, and lengthy process of gaining approvals to make modifications to the building.

Despite of these constraints, NISIT has been ably supporting the industry sectors in PNG to meet international market requirements. In 2008, it was very much involved with the Fisheries Sector in the establishment of the National Fish Export Standard. This Standard has been launched and every enterprise in PNG dealing with fish and fishery products are required to use it. The Standard also specifies the import requirement of certain international markets like the European Union and Japan for which the PNG exporters must satisfy before their fish and fishery products can be accepted.

In terms of dissemination of information, NISIT has a Standards Information Centre that respond to all queries from industry regarding Standards and other related information. The only set-back is that information is provided in hardcopies as the Institute does not have the capacity to provide soft-copies online. The Information Centre is a member to the ISONET therefore it has access to standards information from other standards writing bodies around the globe.

NISIT is also the WTO-TBT Contact Point for Papua New Guinea where information of this nature is received and transmitted to all concerned stakeholders within the PNG economy.

As part of its metrology program, NISIT runs the Measurement Standards Laboratory of PNG. It the only accredited calibration laboratory in the country whose accreditation was granted by the National Association of Testing Authorities, Australia. Since 2004, it has been providing accredited calibration services to industries in Papua New Guinea, and the scope of its activities in growing every year.

Trainings are provided by all the technical divisions of NISIT to industries. Most of the trainings are general in nature however, there are few specific ones for industries and organizations which are serious in obtaining accreditation and/or certification of their business processes. The Technical Standards Division also run awareness seminars on documented standards. With the general lack of understanding about Standards; NISIT in 2009 embarked on conducting awareness programs with provincial and local level governments in PNG on the benefits of accepting and following internationally accepted best practices. This program has started and is still continuing.

The Papua New Guinea Laboratory Accreditation Scheme (PNGLAS) has been in operation since the 1980’s. It has close working relationship with the National Association of Testing Authorities (NATA) of Australia with which it receives assistance in terms of acquiring additional technical assessors for its assessments. In 2009, it underwent an external audit by the Asia Pacific Laboratory Accreditation Cooperation (APLAC) to allow it to be a signatory to the APLAC Mutual Recognition Arrangement.
The Existing Relationship between NSB’s and TPO’s

As the government agency responsible for all standards and conformance work in the country, NISIT has a very good working relationship with all the other relevant regulatory agencies of government including the Trade Division of the Department of Foreign Affairs and Trade. Perhaps it is through the quality component of all trading negotiations within the South Pacific Community and Asia Pacific Region, and at the WTO that the Trade Division calls for NISIT input. This has certainly made the relationship stronger and one worth maintaining.

With other sector organizations, NISIT has a cordial relationship with the following:

- Manufacturers Council of Papua New Guinea
- Business Council of Papua New Guinea, and the
- PNG Chamber of Mines & Petroleum.

In spite of the very good partnership with the Trade Division, there are two major setbacks worth mentioning. Firstly, sharing of information between the two organizations is currently being done manually. This is due to lack of IT support from both the TPO and NSB management. Whilst NISIT has an up and running website, it is hardly being updated with the current standards and conformance information as it is managed in an ad-hoc manner. The TPO on the other hand, does not have a website and an effective electronic mailing system. The second setback is the limited amount of knowledge and understanding by officers of both organizations in appreciating the roles each of the organizations. The officers need to fully understand how their work complements each other to enable trade to take place across international borders. When these setbacks are appropriately addressed, will the flow of information to exporters become readily available.

The Potential Future Relationship between NSB’s and TPO’s

Papua New Guinea is very fortunate that under the European Union’s Trade Related Assistance Programme or EU TRAP which was launched in early 2009, a Quality Expert is now being engaged on short term. The main task of this Expert will be to study the current Quality Infrastructures of Papua New Guinea and the challenges that come with it. The Expert will then make recommendations to the Government to reorganize the current structures to make them more effective. This project is still in its infant stages with nothing concrete coming out as yet. Since the engagement of this Quality Expert is coordinated by PNG’s Trade Division, certainly it has seen the importance of standards and quality in its trading negotiations and as such, has recommended to the European Union to fund the study of the country’s quality infrastructure.

At this stage, it is assumed that the main trading negotiations which the Trade Division undertake relates to the export of PNG’s primary (agricultural) produce and to some extent the manufactured goods, for example canned beef and fish. In regard to primary (agricultural) produce, whilst efforts have always been made to promote a variety of products, it is important to also take into account all the associated costs. It is wise to spend the limited resources and effort in developing the agricultural commodities that have the potential to become big export earners for the country.
Papua New Guinea already has commodities such as Palm Oil, Coffee and Cocoa which are already proving to be its huge export earners. These commodities have their own research and development facilities. They require NISIT and the Trade Division to become partners with them to increase their productive outputs.

In terms of the endorsement by the respective Ministry, the following procedure is followed:

- NISIT Council has the administrative authority in running the affairs of the Institute. Only policy matters are brought to the attention of the Minister for endorsement.
- With financial and institutional requirements, this is done through the annual budgetary allocations from the Government via the National Budget. However, the implementation or usage is approved by the NISIT Council through the Office of the Director General.
- With human resource requirements, a review is done every three years whereby staffing needs are identified. Endorsement of the organizational structure is made by the NISIT Council and final approval is granted by the Department of Personal Management for recruitment to proceed.

**Conclusion**

It is common knowledge that the economy of most under-developed countries is based on agriculture whether it is subsistence farming or semi-market. Some of these countries have managed to transform their economy from being under-developed into one of developing using various strategies. One such strategy was identifying what commodities they are good at producing and what the export market requirements are. With this information at hand, they establish plans and develop strategies to improving the quality of these agricultural commodities to enable them to be easily exported. In the long run, they become the major players in the world market for these commodities and they also control the supply and demand to their benefit.

These countries also sit on the committees of international standards setting bodies for these commodities and they influence the outcome of the final document. They influence the final outcome of the international standard in a manner that the Standard will be beneficial to their exporters/ producers.

In the case of Papua New Guinea, our efforts have been sparsely placed and as such, our limited resources including manpower and skills are under-utilized. Apart from the non-renewable resources such as gold, copper and oil, there are a handful of agricultural commodities which the country is already good at producing and is exporting to major world markets. These commodities also have their own research and development programs to help in improving the yield quality and quantity. However, PNG does not effectively participate in the writing of international standards so that it has its interest captured in the final document. As such, the PNG commodity producers struggle to modify their processes to satisfy the quality requirements of the importing countries.
As a start to the way forward for Papua New Guinea, is the need to assess the kind of quality infrastructures in place. The assessment should also include reviewing the various legal frameworks PNG has in terms of its current quality infrastructures. From the outcome of these assessments, a clear role and responsibility of the various institutions involved with standards and quality could be redefined and properly aligned so that enterprise/industries in PNG could have easy access to information and services relating to their export commodities. In this case, PNG is fortunate that the European Union has provided an Expert under its EU TRAP Program to conduct these assessments and report back to the Government the identified gaps and relevant recommendations for implementation.

Finally, with its location as the gateway from Asia into the Pacific, Papua New Guinea could become the strategic centre for the flow of goods and services provided it has the required infrastructures in place including transport, telecommunication, standards and quality.