# ENVIRONMENTAL SAFETY AND MANAGEMENT TRAINING: ITS' IMPACT ON RUBBER RESEARCH INSTITUTE OF NIGERIA

### Isiaka O. Bakare

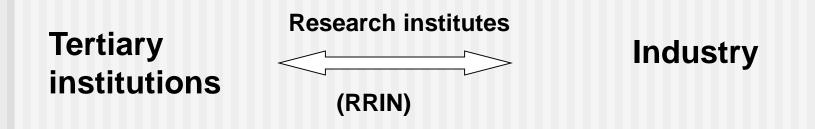
Rubber Research Institute of Nigeria, P. M. B 1049, Benin City 300001, Nigeria Lack of environmental safety and health management consciousness among Technical staff and Scientists in Research Institutes have been identified as the main reason for the poor safety procedures and practices in laboratories in Nigeria.

It is believed that implementation of environmental safety and health management is very expensive, hence there has not been any deliberate effort in this regard.

Therefore, It was thought that there is need for safety training in Rubber Research Institute of Nigeria (RRIN).

#### **Background information**

**RRIN** has the mandate to disseminate proven research results and techniques to farmers, relevant agencies on rubber and gum arabic; co-ordinates extension services in Nigeria on her mandate crops; Organize technical and vocational courses in areas relevant to the above; Provide laboratory and other technical services to farmers, agro-based industries, tertiary institutions and others who are interested in these services etc.



As a result of these mandate, the Institute has always been one of the center for training of fresh graduates and under-graduates from Nigeria universities, polytechnics and other tertiary institutions in the form of industrial attachments with duration ranging from three months to one year.



# **Trained in MITSUI Inc Japan**

### ANY ACHIEVEMENT AT HOME AT ALL ?

# 1st Approach

- Scientists and technical staff in RRIN were trained and
- RRIN Safety Committee was established to regularly monitor and ensure compliance to safety rule and regulation in the institute.

The RRIN Safety committee developed laboratory safety manual for the use of Scientists and Technical staff in the institute.

This committee also meets quarterly with the technical staff in the Institute.

The laboratories within the institute (RRIN) were recently renovated and all provided with necessary safety material like fume hood, fire alarm, fire extinguishers, safety wears (like safety goggles, laboratory coats etc) based on recommendation of the Safety Committee.

Chemicals in each division were shelved and labeled.

These safety materials were previously perceived to be too expensive to procure.



# **2nd Approach**

The Industrial attachment program has always been the link between RRIN and rubber/polymer industries, Universities/Polytechnics/Colleges of Science & Technology in Nigeria. Environmental, Safety and Management training has since been included as one of the activities during industrial attachments training regularly given to these undergraduates and fresh graduates while on attachment in the Institute (Rubber Research Institute of Nigeria).

### Achievements

We have trained over 510 students from three Universities within the Southern part of Nigeria and over 162 students from Polytechnics from 2006 till date.



### **3rd Approach**

Most, Research institutes and tertiary institutions in the country lack most modern scientific equipments. Consequently, these institutions depend mostly on commercial laboratory for their analysis and product characterization.

Therefore, there is need to extend ESM training to such commercial laboratory.

Although, only two of such laboratories gave access to their laboratory since commencement of this scheme

# 4<sup>th</sup> Approach

Laboratory chemicals and equipment supplier/ Sales Agents

We have also extended the training to all our chemical and equipment suppliers/ sales representatives.

Their chemical stores were assessed and safety advice was rendered.

These suppliers were made to properly shelf their chemical and also to provide their staff with necessary safety wears.

### In future

**Rubber Research Institute of Nigerian (RRIN) was recently designated Central Testing Laboratory (CTL) for the implementation of the Standard African Rubber** (SAR) scheme.

The empowerment of RRIN with recent acquisition of modern rubber (polymer) testing equipment, manpower retraining and development of physical infrastructures in the institute enable RRIN performs its statutory mandates.

Since CTL, RRIN engaged in carrying out testing, grading and quality certification of all types and grades of rubber produced in the country

To ensure high quality natural rubber through Quality Scheme in Nigeria (QSN).

ESM training of the staff will further create direct access to Rubber Producers, Processors & Marketers in Nigeria and ensure their environmental health and safety awareness and thereby creating the right environment for production of good quality natural rubber.

We shall continuously embark on enlightenment campaign and educate various stakeholders in natural rubber production to adopt modern rubber farming / processing techniques and also ensure that ESM standards are adhered to.

These achievements recorded were due to the IUPAC-UNESCO-UNIDO Safety training extended to me in 2005.

Acknowledgement

### Mitsui Chemical Inc, Japan for the Training

#### **Committee on Chemistry and Industry/IUPAC**

**RRIN** Safety Committee for their co-operation

**Thank You All**