

Again, Presidency, Ministers  
Commend Indorama Fertilizer  
@MAN Exhibition in Lagos!



INDORAMA - NIGERIA

# IMPACT

In-House Magazine of INDORAMA-Nigeria

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[www.indoramaeleme.com](http://www.indoramaeleme.com) [www.indoramafertilizers.com](http://www.indoramafertilizers.com)



**NIGERIA'S 57TH INDEPENDENCE**

**Indorama holds  
Marathon Relay  
& Public Lecture**

**MONKEY  
POX**

How to prevent it

**SON's MANCAP  
Certificate for  
Indorama Fertilizer**

# 100% QUALITY

How Indorama Petrochemicals and Fertilizer Products Stand Out

**INDORAMA-Nigeria**

Ethylene | Polyethylene | Polypropylene | PET | Fertilizer | Methanol





**Dear All, the year has gradually come to an end. Looking back, we have a cause to celebrate. In spite of so many challenges on our way, we triumphed. The Presidency of Nigeria inaugurated our world-class fertilizer plant in July. Report from our fertilizer marketing team shows that Indorama Urea is now serving farmers nationwide. Their crop yield has increased tremendously. Farmers are happy. And we are happy too.**

Here at Indorama, our string of successes shows our resilient spirit. So much obstacles come our way. Difficulties are everywhere. But we are always determined for success. We bring new ideas and innovations into our operations. We were able to survive the economic hardship of the year.

It is a thing of joy that Nigeria has technically exited recession. There is no doubt that our operations have contributed immensely to this national feat, and we must work harder to help the nation to exit fully from recession. We take pride in the fact that our petrochemicals and fertilizers

are the engine of economic activities across the country. Our exports also help in building the brand reputation of Nigeria.

The focus of this edition of IMPACT magazine is therefore very apt – how Indorama assures 100% quality of its products. Our Quality Assurance and Quality Control (QAQC) laboratories have first-class equipment. It is not surprising that our polymer resins are rated very high in both local and international markets.

I am glad to receive the report that the Standards Organisation of Nigeria (SON) has issued its

MANCAP certificate for our Urea fertilizer -- a bold endorsement of the product's quality!

As we prepare to enter the New Year, 2018, let everyone invigorate his or her efforts with more diligence and hard work, fresh ideas, team spirit and determination for collective success. I thank all our employees, government officials, community stakeholders, etc who have contributed to our successes in 2017. God bless you all. Happy Christmas and prosperous New Year in advance!

**Manish Mundra**  
Managing Director



**Re: Celebrating Nigeria @ 57: The Great Inauguration of Indorama's \$1.5b Fertilizer Plant**

We acknowledge the receipt of your publication "Impact" magazine which focused on the inauguration of Indorama's world-class fertilizer plant and commemoration of the Nigeria's 57th independence.

We have no doubt that the publication will be a useful compendium to the Bureau.

We wish you more strides. Please accept the assurance of our highest esteem.

*Chukwuoma Nwokoh*  
Head,  
Public Communications Unit,  
Bureau of Public Enterprise  
(The Presidency)

**Re: The Great Inauguration of Indorama's 1.5b Fertilizer Plant**

I am directed to acknowledge the receipt of a copy of the special

edition of Indorama Nigeria "IMPACT" Magazine dedicated to commemorate Nigeria 57th independent anniversary.

The office wishes to also acknowledge your passion to collaborate with it for the improvement and development of the Nigeria economy and further congratulate you on the successful inauguration of Indorama's \$1.5b fertilizer plant.

While wishing you more fruitful years of operation in Nigeria, the office appreciates your company's partnership and look forward to a sustained mutual relationship.

Please accept the warm assurance of the Director General's esteemed regards at all times.

*Mr. N.C Orji*  
For: Director General  
National office for  
Technology Acquisition and  
Promotion

*(Federal Ministry of Science and Technology)*

**Letter of Acknowledgment**

On behalf of the Management of the Nigerian Export Import Bank (NEXIM), we write to acknowledge and thank you for the receipt of a copy of the Indorama-Nigeria Impact Magazine celebrating Nigeria's 57th Independence Anniversary.

We particularly congratulate you on the inauguration of Indorama's world-class fertilizer plant which is aimed at developing the Nigerian economy and look forward to collaborating with you in areas relating to our mandate

Please accept our esteemed regards.

*Tayo Omidiji*  
Ag. Head, Corporate  
Communications Dept.,  
Nigerian Export-Import Bank  
(NEXIM)

**Re: Celebrating Nigeria @ 57: The Great Inauguration of Indorama's \$1.5b Fertilizer Plant**

We acknowledge with thanks the receipt of the October 2017 Special Independence Day Edition of your publication -- "IMPACT"

We want to seize this opportunity to congratulate you on the successful inauguration of your World-class \$1.5b fertilizer plant and commend you for your modest contributions to the growth of the Nigerian economy.

We also commend the quality of your magazine which will be a useful reference material at our library.

Please accept the Managing Director's warm regards.

*Richard Obianu*  
Ass. General Manager (MDO)  
For: Managing Director  
Nigeria Export Processing  
Zones Authority (NEPZA)



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Editor's Note

**t**his is another exciting edition of Indorama-Nigeria IMPACT magazine. Our main focus is how Indorama achieves 100% Quality for its products --- mainly petrochemicals and fertilizer. The story has details of Indorama's Quality Assurance and Quality Control (QAQC) policies and practices as well as state-of-the-art laboratories. It is therefore not surprising that Indorama products are of international standards. It is a story everyone should read.

Then we have other stories and articles that are must-read. To mark Nigeria's 57th Independence Anniversary celebration, Indorama organized a public lecture and marathon relay. It turned out an excellent event to showcase the company's patriotic spirit and corporate citizenship.

At the Annual General Meeting and Exhibition of the Manufacturers Association of Nigeria (MAN) held in Lagos, Indorama's products were on display and attracted the attention of federal Ministers and top personalities who visited the company Pavilion.

The articles on Monkey Pox, Diwali – the festival of lights, Green Label Award for Indorama and Good news from Indorama-Senegal, etc will surely thrill our readers. Enjoy this edition and send us your feedback.

**Jossy NKWOCHA**, PhD, FNIPR  
Head of Corporate Communications/  
Special Adviser to the MD

Managing Director, Indorama Nigeria  
and CEO, Africa

**Manish Mundra**

CEO, IEFCL

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Representative of President Muhammadu Buhari, Hajia Zainab Ahmed (2nd from left), MAN President, Dr. Frank Jacobs, the Vice President's representative, Dr. Okechukwu Enelamah and others visit Indorama Pavilion, and Dr. Jossy Nkwocha explains Indorama Fertilizer to them.

## Again, Presidency, Ministers Commend Indorama Fertilizer @MAN Exhibition in Lagos!

Once again, Indorama Urea fertilizer dominated market space at a two-day exhibition of made-in-Nigeria products organised by the Manufacturers Association of Nigeria (MAN) at Oriental Hotel, Lekki, Lagos between Wednesday 13th – Thursday 14th September, 2017.

The Indorama pavilion attracted a large crowd and top government officials including President Muhammadu Buhari's representative, the Minister of State for Budget and National Planning, Hajia Zainab Ahmed and Vice President Yemi Osinbajo's representative, the Minister of Industry, Trade & Investment, Dr Okechukwu Enelamah.

Dr Jossy Nkwocha, Head of Corporate Communications and Special Adviser to the MD, told the special guests how Indorama fertilizer is reaching farmers across the country. The President's representative was quite impressed and commended the company for such a

good job.

"I am impressed with how Indorama is supplying fertilizers to farmers. I have heard that many farmers are happy with your Urea fertilizer. I commend your company and urge your Management to continue in that direction. The government has so much confidence in the ability of Indorama to supply fertilizers to farmers nationwide."

Indorama products namely the Urea fertilizer and the petrochemicals (in bags) were on display at the pavilion --- with the company's corporate publications given out to guests who made enquiries. The Indorama Group

marketing teams were also on hand to attend to the enquiries of guests. Most of

them commended Indorama for its fertilizer, which has become the saving grace to



**Manish Mundra**, Managing Director of Indorama-Nigeria Companies re-elected into the National Council of MAN.



farmers across the country.

The exhibition was part of the activities marking the 2017 Annual General Meeting (AGM) of MAN. Indorama was well represented at both the private and open sessions. The Indorama team included Mr Praveen Jain – head of Finance/Accounts; Dr. S. K. Srivastava – head of Indorama fertilizer Sales & Marketing; Ms Sandrina Gomes – head of Business Development; Dr. Balbir Singh – Chief Agronomist; Mr. Mahesh Apatt; Mr. Avijit Sinha, and Dr. Jossy Nkwocha.

At the private session,

delegates from various manufacturing companies across the country elected a new national council to run the affairs of the association for another year. Dr Frank U. Jacobs, Chairman of Jacobs Wines, was re-elected President. Managing Director of Indorama Group of Companies in Nigeria, Mr. Manish Mundra, was re-elected into the Council, as well as other eminent manufacturers including President of the Dangote Group, Alhaji Aliko Dangote.

The open session featured speeches from federal and Lagos state government officials and a public lecture delivered by former President

of the United Republic of Tanzania, Mr Benjamin Mpaka. His lectured was quite stimulating on how, as President, he pulled his country out of economic crisis. The manufacturing sector, he noted, played a key role in achieving the feat. A major aspect of the lecture dwelt on the controversial European Partnership Agreement (EPA) which the European Union is campaigning for African governments to sign. The Agreement is to allow European products to flood African countries without restraint at the expense of local industries. Mr. Mpaka warned Nigeria not to sign such an agreement.

The two day MAN event discussed various issues and difficulties that impede manufacturing in the country. Both ministers who attended the meeting as well as the Lagos State Government officials agreed to address such issues. The previous night, the Comptroller of Customs, Col. Ahmed Ali had also addressed CEOs on the difficulties their companies were experiencing. It is expected that the newly elected National Council will be more vigorous in representing the interest of manufacturers to ease their operation and help return the economy to buoyancy.



MAN President, **Dr Frank Jacobs** (4th from right), Rivers State Govt. Rep., Guest Speaker, Branch Council members of MAN and top guests at the Branch AGM.



Indorama corporate and marketing staff at the PH Exhibition.

## Great Outing of Indorama Companies at Port Harcourt Exhibition

Indorama Group companies in Nigeria recorded great outing at the Made-in-Nigeria exhibition organised by the Rivers / Bayelsa states branch of the Manufacturers Association of Nigeria (MAN) at the Atrium Events Centre, Port Harcourt between Thursday 5th – Friday 6th October, 2017.

The products on display were the petrochemicals (polymer resins), PET resins, Preform,

industrial sacks, and Urea fertilizer --- which attracted many visitors to the Indorama Pavilion.

Indorama corporate and marketing teams were on hand to attend to visitors who made enquires about Indorama's range of products.

One of the star guests was Hon. Alabo George, Chairman of the Rivers State House of Assembly Committee on Commerce &

Industry who represented the State Governor, Chief Nyesom Wike.

Other top personalities included President of MAN, Dr Frank Jacobs; Senior Vice President at Centre for Values in Leadership, Lagos, Mr Rasheed Adegbenro who was the guest speaker; Director-General of MAN, Mr Segun Ajai-Kadri; Chairman of Rivers / Bayelsa states branch of MAN, Hon. Prince Charles Beke, among others.

As it was at the national MAN event in Lagos, the Port Harcourt exhibition was part of the 2017 AGM of the branch, which attracted delegates of over 75 manufacturing companies operating in the two states, as well as the PH Chamber of Commerce, banks, regulatory bodies, agro-dealers, security agencies, among others.

Dr Jossy Nkwocha, head of Corporate Communications was re-elected to represent Indorama Group companies in the Branch Council.





The Marathon Relay:  
A Run for National Unity.

# Indorama Marks Nigeria's 57th Independence with Public Lecture, Unity Marathon

Nigeria on Monday, 1st October, 2017 celebrated its 57th Independence Anniversary with a public holiday and several activities all over the country. But earlier on Friday, 29th September, the management and staff of Indorama-Nigeria companies rolled out the drums, and marked the anniversary with a public lecture, a marathon relay, cutting of an independence anniversary cake, and other exciting activities.

The Indorama expansive Complex was generously decorated, as usual, in the national colours of green-white-green, and sweet jingles blaring on the radio waves, all extolling the country.

In his address at the occasion, the Managing Director, Mr. Manish Mundra, represented by Technical Head, Mr A. B. Rao, congratulated Nigeria and Nigerians on the 57th Independence Anniversary celebration, declaring that the

country's future is bright because of its hardworking and resourceful manpower.

The activities brought together both Nigerian and expatriate employees in frenzied excitement,

especially the marathon relay competition covering almost eight kilometres, tagged "A Run for the Nation." It involved sections within the Indorama-Nigeria group of companies producing teams to compete against one another. A large crowd cheered the runners all through the routes.

The competition was won by the Fertilizer operations group made up of six runners, namely Peter Isaac Francis, Kamal Kumar Wadhwa, Johnson Temitope, Hardeo Singh, Cyril Lobo and Abel Joseph. In all, 36 persons took part in the competition, and were all given cash prizes.

This was followed by the indoor activities especially a Public lecture titled "Nigerian Independence, National Unity and Foreign Direct Investment: The Indorama



The Winning Team: Fertilizer Operations group.



## Indorama Marks Nigeria's 57th Independence

Experience" delivered by Professor Godwin Igwe of the University of Port Harcourt.

His lecture stressed that Nigeria's diversity of 250 ethnic groups and languages is a strength that can be properly tapped for national development in an atmosphere of peace and harmony.

"Nigeria has huge market, and is a heaven for investments, if there is peace, unity and security. Without peace, there will be no development, no jobs, no infrastructure, no investors, no life of happiness," he said.

He added that Indorama's huge investments in petrochemicals and fertilizer projects in Nigeria, is perhaps the highest in the downstream sector of Nigeria and in West



Mr. A.B. Rao leads senior Management team to cheer the runners.

Africa. The scholar commended Indorama for hosting such a public lecture in honour of the Nigerian nation.

"The keys to successful transformation of our economy lie in attracting more FDIs like Indorama. Most importantly, on this Independence Day, we need Nigeria to be peaceful and united to enjoy the benefits of our natural resources" Prof. Igwe concluded.



Prof. G. Igwe, Guest Speaker



Mrs. Eva Onyebuoha, HR

Top officials of Federal Government agencies namely Nigeria Army, Nigeria Police, Department of Petroleum Resources (DPR), and the National Drug Law Enforcement Agency (NDLEA) were invited on the occasion and they expressed happiness that Indorama was celebrating Nigeria in a big way.



Operations Support Team



Petrochemicals Operations Team



Services Departments Team



Cutting the Independence Anniversary Cake





# 100% Quality

## How Indorama Petrochemicals and Fertilizer Products Stand Out

**Indorama Eleme Petrochemicals Limited (IEPL) has very strong Quality Assurance and Quality Control systems that ensure that the company produces internationally competitive products that satisfy the needs of customers. Various QA/QC systems together with human and material resources are put in place to achieve this goal at the least possible cost. QA/QC with its operations has contributed immensely in ensuring quality products in IEPL that stands the test of time.**

The term Quality control and Quality assurance (QA/QC) are often used interchangeably to refer to ways of ensuring the quality of a product or service. The terms however, have different meanings. Quality Control is the operational technique and activities that are used to fulfill requirements for quality. QC laboratories in IEPL are the ones which support the plants in the

day-to-day control of intermediate streams and semi-finished products.

Quality Assurance, on the other hand, is the planned and systemic actions necessary to provide adequate confidence that a product or service satisfies requirements for quality. QA laboratories in IEPL check the quality of incoming raw materials, packaging materials and finished products and also conduct processing trials on polymer grades.

QA/QC laboratories in IEPL have adequate manpower resources and sophisticated

analytical instruments required for testing. Below is a chart showing some of the quality measuring instruments in the QA/QC laboratories.

The QC laboratories are: Water and Oil Lab, Chrome Lab, Polyethylene (PE) Lab, Polypropylene (PP) Lab and Quality Assurance (QA) Lab.

**The QA Laboratories are: Quality Assurance (QA) Lab, PTDC**

These laboratories are fully equipped to take care of the analytical needs of the plant. Samples are collected from the

plants / Chemical W/H/ MMD / Bagging / Tank farm by Lab personnel and analyze as per agreed schedule.

The major activities of QC Labs are: Analysis of process intermediate streams and semi-finished products; Timely reporting of results and findings for corrective measures (if any); Giving analytical support to various plants; Certification/ Calibration/ grading of products where applicable; Standardization / calibration of equipment; New method development on need basis, and Water and effluent (waste) samples from each plant are analysed before they are discharged.

The QA Lab takes care of polymer and chemical analysis. Its main activities are; analysis & approval of all incoming raw materials from stores and tank farm; certification of finished products (PE & PP) from bagging and warehouses as per specifications; regular application trials before dispatch on various polymer grades; and release of polymer products through Oracle as Prime, B and C grade quality as the case may be.

Others are issuance of certificate of quality of products through electronic media; periodic





# Lab Analysts in the QAQC Dept Bare Their Minds!



Kalu Orji Kalu



Mathew Udoka



Stella Nwankwo



Atabila Alaibim Obu

**"I feel happy and satisfied working in this department"--- Kalu Orji Kalu, PP Lab**

In "Quality Control, Quality Assurance," we make sure that all our products meet customer satisfaction. Here we have a reference standard that is acceptable all over the world that guides what we analyse. As a quality control analyst in Polypropylene Lab, my responsibility here is to sample the products from the semi-finished products following our Sequence of Operations (SOP) and report to the plant operators to work with the sample analysis.

On the overall, my contribution is to ensure that I report the results promptly to the plants in case there is any deviation from the standards expected. They will make the correction so that at the end we achieve quality products.

Here in PP Lab, we carry out quality control, meaning as long as the plant is operating, we work very closely with those in PP plant. We take samples from the plant, we analyse and give them results. So it is based on our results that they operate the plant.

We also relate with those in Quality Control, part of their job is to confirm our analysis. We also work closely with those in Water

Lab and Chrome Lab for various sample analysis and if the reports are good, they will okay it.

I feel happy and satisfied working in this department because on daily basis, we give our contributions to ensure we get the best. Our products have been distributed to various parts of the world. Here in QAQC, our optimal goal is high quality products that meet customers' satisfaction.

**"We ensure quality at the beginning, the middle and at the end" --- Udoeshiet Saturday, Chrome Lab**

Quality control are series of procedures that make sure that while the product is yet to be produced, step-by-step process and procedures are taken to ensure it corresponds to standards. Here in Chrome Lab, we take samples at every strategic point in the course of production to make sure that nothing comes in between. We don't wait until the final product is produced.

In the course of production, we collect the samples, and if there is anything that is wrong, it is better to correct it than to wait till the final product which will cost the company so much. So what we do is to check the quality at the

beginning, middle and the final product, so by doing so if there is anything wrong, it is more economical than to wait till the end.

My contribution in this whole process is to make sure that samples are taken at the right time, because timing here is most of essence. Because if you do not take the sample at the right time, the impurity might have passed without you noticing it but if you take the sample when you are meant to do so, analyse it and release the results as fast as possible so that the people in the plant will not be working blindly. I am delighted because it has always been my dream to serve in a quality assurance and control of an establishment.

**"We try to achieve 100% quality in our products" --- Mathew Udoka, QA Lab**

Indorama Eleme Petrochemicals has a strong quality control and assurance system that produces internationally competitive products that meet customers' demand. What I do here is that I carry out chemical evaluation of incoming raw materials and finished products.

What that means is that any incoming raw material that comes into the complex being

used by the various plants, such as PP, PE, PPU&O, it is first analysed in QA Lab to ascertain its quality before it is accepted. If the raw material meets specifications it is then accepted and if it doesn't, it is rejected.

Same thing goes for the finished products which are polyethylene and polypropylene resins. Before the Logistics unit dispatch the final products to customers, it is the duty of our Lab to equally ascertain the outgoing product which we refer to as our finished product. We do that by carrying out several types of analyses to ensure that any product going out to the customer is of high quality.

In QAQC we don't just operate, we use international best practices. There are standards that are set for each of the analysis we carry out. And for us to achieve 100% quality we must follow standards as per whatever analysis that we carry out.

In QAQC, there are regulatory bodies that have certain standards on how a product should be, so we follow the standards set by these regulatory bodies -- one of them is America Standard for Testing and Materials (ASTM) and the Standards Organisation of

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## Lab Analysts in the QA/QC Dept Bare Their Minds!



**Udoeshiet Saturday**

Nigeria (SON). I thank the company for the opportunity to work here. It has further enhanced my knowledge in my chosen career.

**Both Lab and plants collaborate to achieve standard quality products" --**

**Atabila Alaibim Obu, Fertilizer Lab**

Part of my responsibilities is to ensure timely collection of samples and analysis of such samples as per schedule and entry of test results in working register and daily report as well. As we carry out our daily routine job, we ensure safety of lab personnel and equipment, by observing all safety rules and regulations.

As an employee I work, bearing in my mind the objective of the company which is producing quality products that satisfy customer demand. So the process and procedures are very paramount: timely reporting of results to the plant with special attention to abnormalities. I assign priority to samples for analysis in coordination with the plant personnel; preserve disputed samples for further testing and investigation and ensure approved procedures are

followed for testing.

There is no plant that works in isolation. We work in collaboration with the various plants and departments to achieve results. Basically, they rely on the lab for a confirmation that they are on the right process. This is achieved through proper communication and timely management of emergency samples.

**"I have the obligation to contribute to 100% Quality of our products" -- Stella Nwankwo, Water and Oil Lab.**

We ensure that our processes and procedures are controlled to meet international standard through analysing all our products. In Water and Oil lab, we carry out water and oil analysis. First we analyse the water that comes out from the borehole before distributing to the plants and other sections.

We analyse water for

domestic and plant use. For the domestic use we ensure that water meant for consumption is treated very well by the Utility section. Then we analyse it to ensure it meet's the World Health Organisation (WHO) standards.

We relate very closely to other plants by analysing the water and the oil the plants use. Through these analyses we can determine whether the plant is healthy or not. We analyse some parameters like the moisture and flashpoint of the oil and others. If they are not up to standards, we still instruct the plant with our results and they will do the needful.

As quality control officers, we don't go below standard so that our output will always come out the best. I have the obligation to contribute to 100 percent achievement of these processes. The experience and training acquired have really instilled high level of confidence in me, and

### QA/QC How Indorama Ensures 100% Quality



information services in terms of daily, weekly, monthly and annual reports. Some of these reports include statistical data on critical product parameters; analysis and certification of polymer product packaging materials; and handling of product complaints from customers and rendering of analytical support to them as well through the PTDC section.

#### Quality Monitoring of Product by QA/QC laboratories

The quality of a product refers to the degree to which the product meets the customer's expectations. QA/QC in IEPL through its quality policy is

committed to meet the needs of customers and exceed their expectations by offering analytical services in terms of promptness, accuracy and reliability.

The monitoring of the quality of products starts with the incoming raw materials which are evaluated analytically to ascertain its suitability for smooth plant operations. In achieving this, an internationally accepted standard testing procedures (ASTM, ISO, APHA or Licensor) as well as specification are followed. The finished product is also monitored as well before it is released into the market.

#### QA/QC Systems

Various systems and practices are adopted by QA/QC in ensuring that quality is achieved. These include: good laboratory practices (GLP); safe working practices; Well documented quality management systems (QMS); safe handling of hazardous chemicals and glasswares; safe disposal of waste generated; following standard calibration practices with certified reference standard; in-house quality checks system to verify the produced results; and participation in proficiency test program conducted by ASTM

#### QA/QC and benchmarking

Benchmarking is a process of continuously measuring and comparing one's organisational processes with comparable processes in leading organisations to obtain information that will help the organisation, identify and implement improvements. This is employed by QA/QC in ensuring an improved performance in IEPL product quality. QA/QC has engaged in several benchmarking processes which translates its vision into actions. This equally raises IEPL's level of maximum potential performance by using

tested and proven practices.

#### PTDC Section

Plastic Technology Development Centre (PTDC) is a section which works jointly with QA/QC. This section covers the use of product grades (plastic raw materials) for the appropriate applications. It also covers the development of new applications to satisfy our local requirement and to provide a practical technical back-up for the downstream industries.

#### Major activities of PTDC

PTDC provides technical support, constant product up-gradation and new product development; provides expertise to the processing industry for solving their technical difficulties; routine customer visit for feed-back; application trials of product at customer end; benchmark of product with international standards; competitor material data base and analysis; product certification for Food contact plastic; and handling of customer complaints.

Plastic processors depend on this section to ensure that the right raw material is used on the right machine for a specific end product and to meet product performance standards.



# QUALITY CONTROL

## Process Managers in Olefins, PE and PP Speak!



Ernest Larry Ikpuku



Hillary Bishop Kopchan



Charles Osuji

**“Lab analysis and results guide us to fine tune our processes”** -- Ernest Larry Ikpuku, Olefins Process Manager

Olefins plant is a process plant for processing Natural Gas Liquid (NGL) to produce quality Propylene and Ethylene as feed stock for the downstream polymerization unit. The Quality Control unit monitors what we do.

We could set up all our parameters right but it is not a guarantee that the product will be exactly the quality envisaged. It is therefore the Lab that directs us if actually we are on line. The Lab analysis and results guide us to fine tune our processes to get the best quality of our products.

I have been in this type of business for almost 40 years. I have been running plants all through my life. It's been very enjoyable because you see what you put in and you are able to control and convert it to something good. For instance, I started with Refinery from there to the Fertilizer plant in Onne and here I am in Indorama. It is really interesting. When you look out, you see what you have done and how it is impacting the lives of people positively.

Indorama plant is designed to produce standardized quality polymers for the world market. You know it is a competitive business; there are other

polymers plants all over the world. This plant is designed to compete and as such, we are very careful

Quality Control (QC) normally takes samples from our production process and analyse

required standards. So QAQC department to a large extent controls what we do in PE plant. We want to make sure that our customers are satisfied with our products.

**As a company, we are one of the leading manufacturers of polymers in the world,...The quality of our products delight our customers locally and internationally.**

with what we do here. That's why, right from the onset, we meet the standard: Ethylene, 99.99 and Propylene, 99.6. This standard has to be maintained when they go down to the consumer units -- PE and PP plants. That is why we don't play with the Quality Assurance, Quality Control unit,

**“The importance of QAQC and quality cannot be over emphasized”** -- Charles Osuji of PE Plant

Here in Polyethylene Plant (PE), we produce polyethylene resins of different grades from High Density Polyethylene (HDPE) to Low Linear Density Polyethylene (LLDPE). The products are produced to meet local and international standards in quality. We therefore have a quality control lab here in PE plant.

them two hourly to check and confirm our products are within the confines of our specifications.

We now use the information provided by QC to navigate the plant to ensure that the products coming out meet the specified quality. When the products have been taken to bagging unit, Quality Assurance (QA) now takes sample and does its analysis to confirm that the products meet the standard.

I feel very glad to be part of these processes. As a company, we are one of the leading manufacturers of polymers in the world, and our quality speaks for us. The quality of our products delight our customers locally and internationally.

The importance of quality cannot be over emphasized because they make sure that production units comply with

**“QAQC ensures that our processes and products conform to standards”** ---

Hillary Bishop Kopchan – Polypropylene Plant Process

The QAQC are responsibilities for analysing our products and giving us parameters, doing their findings and giving us feedback, which must meet market specification in the interest of customers.

It is my obligation to keep contributing to the continuous improvement in the quality of our Polypropylene product. From the routine analysis done by Quality Assurance, it ensures that our processes and products conform to standards. The temperature in producing a particular product varies from that of producing another.

I will always ensure that I do my job right in ensuring that the target is realised and maintained. If I get any feedback from the Lab that a particular product sample is abnormal, my immediate response as a panel operator is to make necessary correction; because if the process is faulty the whole process would a failed one.





## “QAQC is the Quality Ambassador of Indorama Products”

- Mr A. K. Sharma, Head of Dept.

### What is QAQC?

**Q**AQC is a term that has many interpretations because of the multiple definitions for the words “assurance” and “control”.... One definition of quality assurance is: all the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will fulfill requirements for quality. One definition for quality control is: the operational techniques and activities used to fulfill requirements for quality. Often, however, “quality assurance” and “quality control” are used interchangeably, referring to the actions performed to ensure the quality of a product, service or process.

### Why do we have QAQC department in Petrochemicals and Fertilizer plants?

To produce final product, it is a long process in Olefins, Polyolefins and Fertilizer plants where various reactions and steps are involved to get desired quality of product. These steps are interrelated to each other therefore it is very critical to control and monitor the quality at each and every stage so that appropriate corrective actions can be taken immediately to avoid any downgraded / off spec. product. Generation of off spec. quality product is huge financial loss to the organization therefore QC is important. On the other hand, QA always does extra tests before dispatch to ensure that produced products are fit for use as per customer requirement. It also helps in monitoring the consistency of the product.

### What are the various Laboratories and what are their specialties?

We have six dedicated QC laboratories linked with respective plants and these labs are well equipped with modern and latest analytical instruments required to monitor and ensure the quality of the product. These labs have well educated and trained staff to carry out the tasks. As testing requirement/pattern of each plant is different therefore IEPL has developed QC laboratories separately to have effective quality control.

Good Laboratory Practices are well implemented and followed strictly, various best practices like round robin /Inter/intra lab exercise, Calibration check, Reporting system with MDL, implementation of Five S, unique documentation

and Data compilation makes Indorama laboratories different than others.

Each and every member of QAQC team plays an important role as a police controller to monitor, guide for process control and act as a quality Ambassador to the organization.

### How does Indorama ensure 100% quality of our fertilizer and Petrochemicals?

We have QAQC policy - QA/QC is committed to meet the needs of customers and exceed their expectations by offering analytical services in terms of promptness, accuracy and reliability. These 3 highlighted words have lots of meaning for us and by following these, we ensure 100% quality.

As stated above, Indorama has established QAQC department which has a very strong total quality management, in fact with its 4 layer quality monitoring.

1st Stage: Ensure quality of all incoming materials including feed stock before taken in to process. 2nd Stage: Quality control of various process intermediate streams from plants. 3rd Stage: Quality assurance by extra measures from tank farm / Ware houses just before dispatch to customers.

Particularly in Polyolefin product, IEPL has PTDC where



each lot is checked for its processing behaviour on processing machines like blown film, Blow Moulding and Injection Moulding machines for final classification. Like Urea is being re-checked from bagged product and warehouse before shipping.

4th Stage: In particular, for Polymer product, IEPL provide expertise support on processing in case any customer is having any challenge at their end.

**What are the awards, permits Indorama Labs have won on quality through QAQC?**

QAQC is the part of IMS certificates for ISO 9001, ISO 14001 & OHSAS 18001, apart from this Water & Oil Lab has accreditation to operate Environmental consultancy by the Federal Ministry of Environment. Standards Organization of Nigeria (SON) audits quarterly and certifies the polymer laboratories for PE and PP testing. I am a member of SON technical committee to develop PE and PP national standard.

IEPL polymer Lab is participating half yearly in Proficiency Test program at international Level which is conducted by ASTM. All PE and PP grades are certified for Food contact plastics as per requirements of

- EU Regulation 10/2011, as Amended by EU Regulations;
- USA FDA Code of Federal

Regulations (CFR21) Sec. 177.1520.

HDPE & LLPDE grades are also having REACH Registrations for European market

**How do you feel being the Head of such important section of the company?**

Quality of product is a brand and image of the company therefore QAQC always works toward customer delight and I feel very proud to share that quality of IEPL and IEFCL products as world-class standard and acceptable globally. Customer feedback and data of customer complaints in last 10 years evidently speak about quality of our products.

Being a Head of such an important dept., I always have gratitude that my team always takes quality very seriously and maintain the image of the company. I would like to say that my dept. is not only for maintaining quality of products but has demonstrated highest in occupational health, safety, environment and fire (HSEF) and other areas..

**What are the challenges?**

See, to achieve the highest standard, it required lots of efforts to reach there but to maintain or sustain the highest level all the time, it's a difficult task. I can say that to maintain the highest standard (6 sigma) / integrity of the dept is the biggest challenge

and need to follow the philosophy "Do the right thing at first time" for always.

**How does the lab relate with the PTDC and how operational is the Plastic Technology Development Centre (PTDC)?**

The role of PTDC is quite different than QAQC. It is basically after sales support to customers in terms of technical expertise in downstream processing industry in solving their problems / issues. PTDC manager regularly visits to customer sites for Feedback of our product and also take trials for new grades.

Benchmark of our product with international standards is also an important & regular task to evaluate our product & further improvement.

PTDC has well operational processing/ extrusion machines like Blown film, Blow moulding, Cast film extrusion and Injection moulding etc. which help in assessment of our product and use as a tool for further improvement.

**You would soon be on the way to your new location (US), what are your parting words to your staff and colleagues here in Nigeria?**

Yes, I am going to join another Indorama Company in US next month. I can say proudly that I have the best team in the IEPL complex and the best

performance department is not because of me, but is because of my team members (expatriates and Nigerians).

Please note that when Indorama took over this plant and started revitalization, we took decision to build / develop a team with fresh minds so that we can train / mould them with the best practices in the lab and every member of team responded positively in all manners.

I and my colleagues have spent lots of time to impart required training, enhance their knowledge and analytical skill and today result is in front of everyone. I use to challenge any Nigerian agencies visiting us that my team is the best in the country in the field of Petrochemical and Fertilizer as lab professionals.

Once we have developed such a nice team, where we have very strong bonding / relationship as one family. It will be a painful moment for me to move away, I know they all may not be physically with me but will always remain in my heart. I am proud of my team and hope my team might have the same feeling and thinking. My team is the biggest asset for me and will remain forever.

I would like to request my team members to continue good work throughout and keep laboratory flag high and extend same support to my successor.

**MANCAP Quality Certificate for Indorama Granular Urea Fertilizer!**



Vivek Sharan



Innocent Kpndem

which can be exported to other countries. The MANCAP certificate is an endorsement of SON.

The presentation coincided with the 4th Quarter inspection visit of officials of SON to the fertilizer plant, during which it monitors and ensures that the quality of the product conforms to standards. The certificate was received on behalf of IECFL by Mr A.K. Sharma, head of Quality Assurance, Quality Control (QAQC); Mr Vivek Sharan, head of Logistics, Mr Innocent Kpndem of the Logistics Department, among others.

Details in next edition of IMPACT magazine.

It was a very happy moment on 10th November, 2017 when the Rivers State Head of the Standards Organisation of

Nigeria (SON), Engr. Ololade Ayoola presented its MANCAP certificate for Indorama Granular Urea fertilizer to officials of Indorama Eleme

Fertilizer & Chemicals Limited in Port Harcourt. MNCAP is SON's prime Certificate of Quality issued in favour of any product produced in Nigeria,



Photo Splash



1.



2.



5.



3.



6.



4.

1. **Manish Mundra**, Managing Director of Indorama-Nigeria (middle), **Praveen Jain** (right), **Pradeep Ekka** (right) and **Ranbir Seth** at Indorama Pavilion at an event organized by Indian community in Nigeria at Tafawa Balewa Square, Lagos.
2. **Ms Sandrina Gomes**, Indorama's head of Business Development poses with **Dr. Mark Abani**, CEO of MSCA Projects at Europe-Nigeria Business Forum held in Lagos recently.
3. **Dr. SK Srivastava** (2nd from right, sitting), Indorama's Head of Fertilizer Sales & Marketing with other participants at the D-8 Developing Countries (Bangladesh, Egypt, Indonesia, Iran, Malaysia, Pakistan, Turkey and Nigeria) ministerial meeting in Abuja recently.
4. **Deepu Srivadas** (sitting 1st from right), Chief Technical Officer of Indorama Group poses with faculty and participants at a recent Process Safety Management training conducted for Indorama staff by Ingenero USA.





Indorama Group was fully represented at the AGM **5.** of the Manufacturers Association of Nigeria (MAN) held in Lagos recently. Frn: **Praveen Jain, Sandrina Gomes, Dr. Balbir Singh, Mahwesh Appat, Dr. SK Srivastava** and **Avijit Sinha.**

Officials from Chemical Weapon Convention (in the Office of the Secretary to the Government of the Federation) led by **Mr. O. D. Ilariogun** came on routine inspection of Indorama on 7th September, 2017. Photo shows them and officials of Indorama after the inspection. **6.**

At Indorama event marking Nigeria's 57th Independence Anniversary: **L-R: A. B Rao, Technical Head; Dr. Jossy Nkwocha, SA to MD; Praveen Jain, Head of Finance/ Accts; and Pradeep Ekka, Head of Human Resources.** **7.**

**Prof. Goddy Igwe,** Guest Speaker explaining a point at the Public Lecture to mark Nigeria's 57th Independence Anniversary. **8.**

**Kendrick Oluka,** Head of Community Relations & Development (1st right) announces names of winners of the competitions at the independence celebration. With him are **PJS Bajwa,** Head of Fertilizer Operations, and **Godswill Eke** of the HR Dept. **9.**

At the Marathon Relay competition making Nigeria's independence: It was great fun as many heads of departments participated in the exercise as officials. **10.**





Mr. Avijit Sinha (1st from right) and other team members with two guests at the Indorama Pavilion.

# Indorama Fertiliser Co-Sponsors National Agriculture Show in Nassarawa State!

## ... Agric Minister, Chief Audu Ogbe Commends Company

As part of its support of farming development in Nigeria, Indorama Fertilizer has participated in sponsoring a five day National Agricultural Show organised by the National Agriculture Foundation of Nigeria in collaboration with the Federal Ministry of Agriculture and Rural Development.

The National Agriculture Show was held from 16-20th October at Karu LGA headquarters in Nassarawa State; and attracted very prominent personalities including the Minister of Agriculture and Rural Development, Chief Audu Ogbe. Indorama, as one of the

sponsors of the event, was invited to give the goodwill message which was delivered by Mr Avijit Sinha, North Central zonal head of Indorama Fertilizer marketing.

The All Farmers Association of Nigeria (AFAN) had arranged its members to display their produce at the show. State governments namely Nassarawa, Kano, Katsina and Kogi also participated in the event.

Honourable Minister of Agriculture, Chief Audu Ogbe visited Indorama booth and appreciated the company's efforts to support farmer education activities, and supply

of its Urea fertilizer nationwide. The minister informed that the Ministry plans to draw up a Rural Extension program for next year which Indorama Fertilizer shall be given an official invitation to partner with the Ministry.

The Governor of Kebbi State Alhaji Abubakar Atiku Bagudu and Chairman of Senate Committee on Agriculture, Senator Abdullahi Adamu also visited the Indorama pavilion and appreciated the company's efforts towards bringing awareness on the importance of soil testing.

The company's Crop folders which have been developed for the farmers were also well

appreciated and distributed to visitors. Link to the Indorama website was given to the executive governor for his reference.

Over 3000 farmers visited the Indorama stall and were given free farming advisory, including soil testing services. The Indorama Stand was indeed a cynosure of all eyes.

The Indorama agronomist present in the Indorama stand was effectively explaining the importance of soil testing and distributing the crop folders, Indorama Urea USP and flyers during all five days of the program.

During a special "Indorama Day," allotted the company, local musicians were engaged to have "road show" to entertain the farmers present on the day. Indorama Fertilizer won the second prize in the Input-category in the event.



Chief Audu Ogbe, Minister of Agriculture and other top personalities listens to Indorama staff at the National Agricultural Show.



Sen. Abdullahi Adamu (middle) and other guests at the Indorama Pavilion.



# GREEN LABEL AWARD

## Nigerian Environmental Society Honours Indorama for its Sustainable Environmental Policies & Practices

**The Nigerian Environmental Society (NES) has bestowed its Green Label Award on Indorama Eleme Petrochemicals Limited (IEPL) for its sustainable environmental policies and practices. This was at its 27th National Conference and Annual General Meeting (AGM) held in Port Harcourt, Rivers State from 2nd – 4th November, 2017. “The theme of the event was “Deployment of Green Initiatives for Economic Diversification of Africa.”**

In his welcome address at the conference, the National President of NES Prof. Lawrence Ezemonye recognized the contribution of Indorama Eleme Petrochemicals and Fertilizer Companies as major stakeholders and partner in the activities of the Association.

The President said the NES awards on professionals, honorary fellowships on select Nigerians and Green Label awards to deserving individuals, Government establishments and corporate institutions were for those who have distinguished themselves with their outstanding contributions towards the protection of the Nigerian environment and also for their environmentally friendly footprints. Indorama came under the corporate institution's award.



He said Indorama was awarded the Green Label for its outstanding contributions to a good environment. He presented the award to Engr. Felix Okeke, technical assistant to the Managing Director Mr. Manish Mundra, while Engr. Felix Okosun of the HSE department of Indorama Eleme Fertilizer & Chemicals Limited and Engr. Wai Ogosu (Environment consultant to Indorama and Past National President of NES) stood by.

While presenting the award, the National President, Prof. Ezemonye noted that the activities of Indorama with respect to Environmental practice are quite commendable and in tandem with the principles and philosophy of Nigeria Environmental Society.

“It is in recognition of these commendable good environmental footprints that the NES has conferred on

also encourage others to follow the path of this development. Prof. Lawrence Congratulated Indorama on this award.

While responding on behalf of Indorama, Engr. Felix Okeke thanked the NES for the noble recognition. He said Indorama received the award with great humility. He said Indorama will continue to do their best to sustain good environment practice.

Indorama's head of Environment, Dr M K. Jain said the award will encourage the company to do more for the sustenance of the environment for the present and future generations. He noted that in 2012, the company had also won the NES "Corporate Environmental Excellence Award", and promised that the company will continue to do better.

Indorama the GREEN LABEL AWARD," he said.

He informed that the expectation of this award is to further encourage Indorama to do more in sustaining good environmental practice, and to



L-R: Felix Okeke, Special Assistant to MD and Felix Okosun, all of Indorama and other delegates at the NES Conference.



## WORLD FOOD DAY IN PORT HARCOURT Indorama Urea Fertilizer Gets Kudos!

The Management of Indorama Eleme Fertilizer and Chemicals Limited (IEFCL) has been commended for contributing to increased crop production and food security in Nigeria.

Rivers State Commissioner for Agriculture, Hon. Charles Nworgu and King Alfred Diette Spiff, paramount ruler of Twon Brass in Bayelsa State made the commendation when they visited Indorama Pavilion at the World Food Day celebration on Monday, 16th October, 2017.

The event, which was held at Boro Park, Port Harcourt was organised by the Rivers State Ministry of Agriculture on the theme: "Change the Future of Migration, Invest in Food Security and Rural Development"

Hon. Nworgu who was excited seeing Indorama fertilizer bags at the pavilion said he had heard so much about Indorama

granular Urea, and how the company is contributing to increased crop yield and food security in the country. "Please extend my best wishes to your management in this regard," he said.

In the same vein, King Diette-Spiff said he was happy to hear about the contributions of Indorama to the nation's agricultural sector, as well as its creation of employment especially for the youths.

Indeed, Rivers State Governor, Chief Nyesom Wike in his speech to declare the event open enjoined youths in the state to invest in agriculture for a better tomorrow.

The Governor who was represented by Secretary to the State Government Mr. Kenneth Kobani said it is the state government's priority to ensure that all the youths in the state who are willing to go into Agriculture are given the opportunity and incentives to do so.

He said there are great potentials of human capital

development in agriculture and charged all stakeholders to join hands with the state government to invest in agriculture to enhance food security in the state.

All the 23 local government areas (LGAs) in Rivers State and several Ago-based companies operating in the state participated in the exhibition of their farm produce, oragro-chemicals, equipment, etc.

The farmers called on the State Government for partnership by providing them enabling

environment to ensure they go beyond subsistence farming to mechanized agriculture and contribute to food security in the state.

Mr. Mike Achaziem of Corporate Communications and Mr. Jerry Obe of Fertilizer Marketing who represented the company at the event explained the various applications of Indorama Urea fertilizer to all who visited the Indorama pavilion.



Hon. Charles Nworgu, Commissioner of Agriculture, Rivers State listens to Mike Achaziem of Indorama Corporate Communication at the Indorama Stand.

## Safety: Indorama Conducts Maiden Mock Fire Drill at Fertilizer Plant



Safety is always an important aspect of all aspects of Indorama-Nigeria companies' operations. As part of its safety-priority tradition, Indorama Eleme Fertilizer and

Chemicals Limited (IEFCL), the newest baby in the Indorama-Nigeria family, on 8th September, 2017 conducted its first mock fire drill at the Ammonia Plant.

According to Senior Safety Manager, Mr. Balaji Lakshman

Rao, the objectives of the mock drill which lasted for 34 minutes were to check the emergency preparedness of all personnel in responding to emergency.

He said it is also to check the efficacy of the communication system; effectiveness of the pre-planned and practiced procedures for handling an emergency and the turnout and response of all employees during an emergency scenario.

Mr Rao who was interviewed by Impact magazine, mentioned other reasons for conducting the drill. These include to check the performance of fire-fighting equipment and fire alarm system, the performance of emergency management skill of fire personnel, plant operation staff, plant maintenance, safety, environment and security personnel and to determine how well the fire team knew the different areas of the new Fertilizer Plant.

Were the goals of the fire drill achieved? Mr. Rao replies in the affirmative: "Yes I will say the objectives were achieved. We captured the emergency preparedness of our personnel, the effectiveness of our communication system, the response time of personnel and performance of the fire-fighters, among others."

The senior safety manager explained that the mock drill was necessary because Indorama Fertilizer, as a new company, has been fully operational just over a year, and it comprises people from different organizations and countries with different operational mindsets.

"So based on that mindset, we had to bring everyone to imbibe the Indorama way --- that is the prime objective of our mock drill," he said. He noted that gaps discovered during the mock drill have been addressed



# HSE Outlook

Our Noble Ambassadors and Coordinators

Logistics	Olefins Plant			
				
<b>Innocent Kpeden</b> HSE Ambassador	<b>Eze Luke</b> HSE Ambassadors	<b>Jude Jaka</b> HSE Coordinator	<b>Ehwarieme Ovigwe</b> HSE Coordinator	<b>Bassey Offiong</b> HSE Coordinator

**Commercial Department**

				
<b>Tosin Adalumo</b> Safety Ambassador	<b>Monday Kari</b> Safety Coordinator	<b>Samuel Oluka</b> Safety Coordinator	<b>Stanley Erugo</b> Safety Coordinator	<b>Kolawole Mabadeje</b> Safety Coordinator

**Engineering Workshop**

				
<b>Bello Aminu</b> HSE Ambassador	<b>Udo Avajah</b> HSE Coordinator	<b>Ikem Okosa</b> HSE Coordinator	<b>Henry O. Eeh</b> HSE Coordinator	<b>Angus Onyejiaku</b> HSE Coordinator

**Polypropylene Plant**

				
<b>Eugene Viele Ledisi</b> HSE Ambassador	<b>Harrison Onyema</b> HSE Ambassador	<b>Ngozie Onyia</b> HSE Coordinaoor	<b>Felix O. Efosa</b> HSE Coordinator	<b>Chile Womadi</b> HSE Coordinator

**Fire Polyethylene Plant**

				
<b>Bashire Mohammed</b> HSEF Coordinator -Central Safety	<b>Charles Osuji</b> HSE Ambassador	<b>Joseph James</b> HSE Coordinator	<b>Beloved Nwechi</b> HSE Coordinator	<b>Ojo Caleb</b> HSE Coordinator

**Human Resources Dept.**


<b>Festus O. Nbakpone</b> HSE Ambassador

<b>Roli Igho</b> HSE Coordinator

**Security Dept.**


<b>Godfrey N. Zwalmark</b> HSE Ambassador

<b>Ibrahim Muhammad</b> HSE Coordinator

<b>Isaac Ibah</b> HSE Coordinator

*\*To be continued in the next edition*



# Points for Crime Prevention and Control in Our Country



**There is an increasing crime rate in our world today. In Nigeria, the federal and state governments are currently spending a significant portion of their annual budgets on crime prevention and control. Crime has affected the wellbeing of the populace. Crime in the world today is a call for serious concern by all. It has eroded the safety and security of our people as well as social order.**

**C** rime can be defined as the act of indulging in any activity that is not morally justifiable, or the violation of rules and regulation governing a particular group of people living in a society.

It includes armed robbery, murder, rape, fraud, food and drug adulteration, smuggling, human trafficking, kidnapping, drug abuse, internet scam, burglary, bribery and corruption, just to mention a few.

Crime prevention must entail the sensitisation of the citizenry, in training, seminar and constantly engaging the youth

in positive events that can keep them busy in a productive manner to enhance their wellbeing,

Crime prevention is the attitude directed at both reducing the threat of crime and improving social welfare, provision of social amenities and basic infrastructure that will influence the life of the citizens positively.

It is a collective responsibility of the government and individuals. On the part of the populace, complete adherence is required to keep and obey rules and regulations and to keep public order. This will go a long way in reducing the rate of crime and criminality in the society.

The Government should ensure adequate machinery in place to check violation through the installation of close circuit cameras at strategic locations, provision of good and functional equipment for law enforcement agencies. There is also need to create good welfare scheme for men of the Armed Forces, the Police and paramilitary arm forces; and updating them with the latest crime detection techniques.

Both the government and individuals should create jobs. There should be flexible economics policies to attract investments. Small scale businesses should be

encouraged. Unemployed youths should be engaged in meaningful developmental activities.

Scholarship programmes should be extended to indigent students in communities. Access to soft loans for viable businesses should be less bureaucratic.

All hands must be on deck to ensure our society is free from various forms of social vices so that our communities can be peaceful. Everyone should be well informed about the activities of miscreants operating in any particular community. Since they are not ghosts and they live and operate within the communities, their activities should be reported to the law enforcement agencies.

Government should provide a research centre where collective and individual ideas are harnessed for technological development which will further better our society and encourage investors to come to our land. This will create employment opportunities and reduce idleness thereby occupying the spare leisure for the youths from engaging in criminal activities.

Government should develop strategies and a policy to reward youths with excellent attitude and having a potential

for national growth and promotion. This will encourage others towards a positive thinking and reduce negative influence among the youths.

Local products should be patronised and given more support than foreign goods. This will boost the citizen's creativity and development of the country. Sports should be taken into more consideration; this will absorb the undesired urge of evil imagination among the youth.

Politics of hatred should be discouraged. There is need for politics without bitterness, politics of unity and common purpose. In many communities, politics of bitterness brings a lot of crime, especially among the youths.

Active youth population should be a part of development planning and policy making. Social empowerment program should be put in place in all towns and villages. Accurate census should be encouraged to enable government to plan and cater adequately for everyone.

With all these points if properly implemented, our society can be a place of bliss, delight and peace.



# INDORAMA-ISRA Partnership: Increased Crop Yield Makes Senegalese Farmers' Happy!

**In Senegal, as in most West African sub-region countries, increasing agricultural productivity remains a major challenge for farmers. There are different ways to generate growth in agricultural production, but one has to know how to determine the best and most appropriate way to guarantee a satisfactory result. Thus, beyond the high-performing varieties, mechanization and irrigation, we have fertilization, that is better quality fertilizers use that guarantees better yields.**

**T**o this purpose, INDORAMA has developed Granulatr Urea (GU) to better meet farmers' needs for quality fertilizers, a guarantee of increased agricultural productivity. It's therefore to evaluate the effectiveness of the new product that the partnership

between INDORAMA and the Senegalese Agricultural Research Institute (ISRA) was born in November 2016.

Director General of ISRA, Dr. Alioune Fall and and the General Director of ICS-Indorama Mr. Alassane Diallo sealed this partnership that has produced impactful result for

Senegalese farmers. The President of Corn Farmers Federation, Madam Mina Diaité was excited at this partnership between Indorama and ISRA.

It's within the context that corn experiment trials have been set up in the peasant environment in Nioro at Kaolack Region.

The objective was to access, at different doses, the comparative effect of INDORAMA granular urea compared to prilled urea marketed; and already the fruits hold the promise of flowers. The results are encouraging and this for the happiness of African farmers and Senegalese in particular. Despite the late installation of the trial, the results show that:

- Plots treated with INDORAMA granular urea have for the most part reached maturity, unlike those having received prilled urea.
- At equal dose, corn ears are significantly larger on the granular urea-treated plots compared to prilled urea treated plots.



In addition, it should be remembered that INDORAMA granular urea has other beneficial advantages such as:

- better quality to the recommended international standards.
- low moisture and easy handing and application.
- easy to store and not forming lumps.
- easy to mix with other fertilizers.
- granules with homogeneous and regular size.

Ultimately, Indorama granular urea has beneficial comparative advantages, as evidenced by the first satisfactory results obtained from the tests conducted by ISRA as part of its collaboration with INDORAMA. Thus, Indorama granular urea contribution to agricultural productivity in Africa and Senegal in particular is a major factor in agricultural development.

Madam Mina Diaité, President of the Corn Farmers Federation (middle) poses with Indorama's Josias Toviho and others in Senegal.





# Monkey Pox

## How to prevent it

**Monkey Pox, a rare viral zoonosis transmitted disease from animals to humans, was discovered in Bayelsa and some other States in the South- South region of Nigeria.**

### Keys Facts

- Monkey pox is a rare disease that occurs primarily in remote parts of Central and West Africa, near tropical rainforests.
- The monkey pox virus can cause a fatal illness in humans and, although it is similar to human smallpox which has been eradicated, it is much milder.
- The monkey pox virus is transmitted to people from various wild animals but has limited secondary spread through human-to-human transmission.
- Typically, case fatality in monkey pox outbreaks has been between 1% and 10%, with most deaths occurring in younger age groups.
- There is no treatment or vaccine available although prior smallpox vaccination was highly effective in preventing monkey pox as well

### Transmission

Infection of index cases results from direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals. In Africa human infections have been documented through the handling of infected monkeys, Gambian giant rats and squirrels, with rodents being the major reservoir of the virus. Eating inadequately cooked meat of infected animals is a possible risk factor.

Secondary, or human-to-human, transmission can result from close contact with infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials. Transmission occurs primarily via

droplet respiratory particles usually requiring prolonged face-to-face contact, which puts household members of active cases at greater risk of infection. There is no evidence, to date, that person-to-person transmission alone can sustain monkey pox infections in the human population.

### Signs and symptoms

The incubation period (interval from infection to onset of symptoms) of monkey pox is usually from 6 to 16 days but can range from 5 to 21 days. The infection can be divided into two periods:

- the invasion period (0-5 days) characterized by fever, intense headache, lymphadenopathy (swelling of the lymph node), back pain, myalgia (muscle ache) and an intense asthenia (lack of energy);
- the skin eruption period (within 1-3 days after appearance of fever) where the various stages of the rash appears, often beginning on the face and then spreading elsewhere on the body. The

face (in 95% of cases), and palms of the hands and soles of the feet (75%) are most affected. Evolution of the rash from maculo-papules (lesions with a flat bases) to vesicles (small fluid-filled blisters), pustules, followed by crusts occurs in approximately 10 days. Three weeks might be necessary before the complete disappearance of the crusts.

### Treatment and vaccine

There are no specific treatments or vaccines available for monkey pox infection, but outbreaks can be controlled. Vaccination against smallpox has been proven to be 85% effective in preventing monkey pox. Monkey pox is a self-limiting disease.

### Prevention

Preventing monkey-pox expansion through restrictions on animal trade. Restricting or banning the movement of small African mammals and monkeys

### Reducing the risk of infection in people

During human monkey-pox

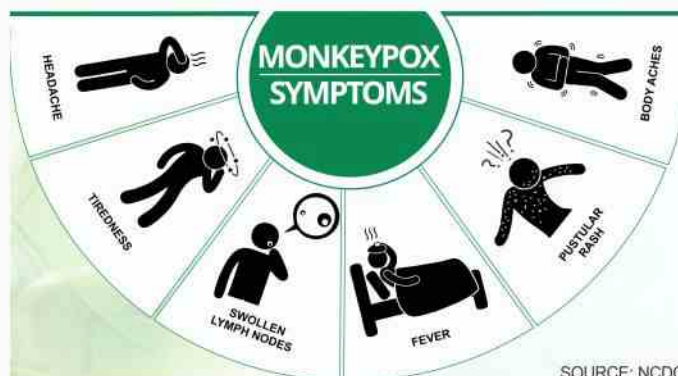
outbreaks, close contact with other patients is the most significant risk factor for monkey-pox virus infection. In the absence of specific treatment or vaccine, the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.

Reducing the risk of human-to-human transmission. Close physical contact with monkey-pox infected people should be avoided. Gloves and protective equipment should be worn when taking care of ill people. Regular hand washing should be carried out after caring for or visiting sick people.

Reducing the risk of animal-to-human transmission. Efforts to prevent transmission in endemic regions should focus on thoroughly cooking all animal products (blood, meat) before eating. Gloves and other appropriate protective clothing should be worn while handling sick animals or their infected tissues, and during slaughtering procedures.

### How to avoid being infected

- Avoid eating monkey meat for now.
- Cook all animal products thoroughly.
- Avoid body contact with an infected person.
- Say no to unnecessary touching like handshakes.
- Maintain very high index of suspicion.
- Health officers must use protective devices, such as hand gloves.
- Report to the hospital if you have fever with rashes.
- Wash your hands regularly.
- During slaughtering of animal, avoid contact with the animal's fluid



SOURCE: NCDC





Group Photograph with PENGASSAN Zonal Officials

## PENGASSAN Comrade Innocent Ugwunta Re-elected Branch Chairman!

**Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN), Indorama Eleme Petrochemicals Limited (IEPL) branch has successfully conducted its election, which returned Comrade Innocent Ugwunta as Chairman. The election held on Saturday, 9th September, 2017 at Vee Hotel, Trans Amadi, Port-Harcourt also saw the emergence of the following: Comrade Amadi Titus, Vice chairman; Comrade Alex Domale Fubara, Secretary; Comrade Charles Okwakpa, Treasurer and Comrade Fineman Ebikwa, Financial Secretary.**

**O**ther persons who were elected were Comrade Nicholas Mmabim, Publicity secretary; Comrade Bassey Offiong, Industrial Relations Officer (IRO); Comrade Orji Okonkwo, Assistant Secretary, Comrade Joy Nwanosike, Woman-in-Pengassan (WIP) and Comrade Masa Toro, Auditor.

PENGASSAN Port-Harcourt Zonal Chairman, Comrade Azubuike .M. Azubuike in his address at the event, said the last IEPL PENGASSAN election was full of wrangling which resulted to some people ending up in hospitals. He therefore congratulated the effort of the out-going executives towards making sure that the association was reunited and also ensured that free and fair election was conducted.

"Today we have come here and enjoying peaceful atmosphere. Let me say that we are proud of you. It is a credit to the leadership of the IEPL branch of PENGASSAN. I congratulate

you all on this achievement," he said. According to him, "part of the policies of the national president is to ensure autonomy of branches. Like any other policy, it will succeed or fail depending on those implementing it. I want to say that the policy of autonomy has succeeded in Indorama branch.

"What we do in national is to make sure that the

management gives the local leaders the respect that they deserve. They can manage their problem independently, without interference from the national body. I'm proud to tell you that the president is proud that the autonomy is working in Indorama".

Speaking on behalf the newly elected executives, Comrade Ugwunta promised that they will

endeavour to give the best of their leadership quality in carrying out their functions as the newly elected executives towards making sure that a greater success is recorded by the end of their tenure. He pleaded for the support of all members, insisting that the success of the association depends largely on both individual and collective efforts. #



The newly elected Executives of PENGASSAN, IEPL Branch.





Group photograph of the Civil Department staff at the Sendoff party for **Mr Vijah Dhar** (in traditional attire) |

## Tears of Joy as Vijay Dhar Bows out of Indorama-Nigeria

It was with mixed feelings that staff and contractors of the Civil Department of Indorama-Nigeria organised a send-forth party to bid farewell to their boss, colleague and friend, Mr. Vijay Dhar -- the Head of Department -- who retired from the company after seven years of meritorious service.

The event which took place on September 7, 2017 at Indorama Recreation Club (IRC) was special in many respects and attracted some top executives of the company, one of them being Mr. PS Bajwa, head of Fertilizer operations.

Mr O.P Badhwarj of Civil Department in his opening remark x-rayed the good feelings and experiences they have had with Mr Dhar as a boss and friend which led to achieving great success in the department.

"Mr Dhar has been with us for seven years and he is leaving us not for bad but with memorable feeling and experiences.

Through this period, our department has worked as a coherent team, weathering many challenges and achieving enviable heights under his watch. If we endeavour to enumerate his achievements so far, an endless list will most likely surface," he said.

"His resignation came as a surprise to virtually all of us because we desire he stays more because of his professionalism and leadership qualities. We wish him the best of outcomes and success in future endeavours as he moves forward. Deservedly, this send-forth has been put together by Civil Department for him; to say very big "Thank You Sir" ...We all will surely miss you," Mr. Badhwarj said.

Dr. Jossy Nkwocha, Head of Corporate Communications said the event was indeed a unique one, pointing out that it was the first of its kind in the complex. He said it was the first time a uniform was worn for a send-forth party. "It shows the

kind of happiness and unity that exist among the staff and contractors of civil department," he noted.

Dr Nkwocha also added that it was also the first time that a special music was composed for a celebrant, and a video documentary made to honour him. "Am not sure that these have been done for any other retiring staff," he stated.

While giving his tribute to the celebrant, Mr Gabriel Oluka described him as a mentor. "He has taught me a lot. Having worked with him for seven years, I have learnt so many things from him. The legacy he is leaving behind will continue to speak for him as he returns to his country," he said.

Mr. Cosmas Berebon described him as a father-figure. "He is just like a father to me. He has given me pieces of advice that have helped me overcome many challenges. He is caring and very loving. Am going to miss him dearly," he said.

Mr Christopher Onah described him as a friendly and passionate leader: "He is a leader that understands when his subordinates need attention or assistance. He is very understanding." Other staff of the department spoke in the same vein, and prayed for God's guidance and blessings for Mr Dhar in his future endeavours.

Speaking on behalf of contractors, Mr Cyril Okoroji of Certain Provider company, described Mr Dhar as a disciplinarian. "His leadership qualities were evident in everything, especially in getting everyone to do the right thing all the time. He guided both his workers and all of us the contractors who do civil contracts. That is why he achieved a lot within a short period of seven years," he said. The party came to a close with presentation of gifts to the celebrant, sumptuous entertainment and group photographs.



# Colleagues Bid Farewell to Anand Saxena as He Retires!

It was an atmosphere of heartfelt feelings and outpouring of emotions as friends and colleagues of retiring Mr. Anand Kumar Saxena organised a mini party in his honour to bid him farewell on 11th August, 2017 at the Indorama Recreation Club (IRC).

Speaking during the gathering as the chairman of the occasion, Mr. Vinay Kumar Singh said Mr. Saxena joined Indorama Eleme Petrochemicals Limited in the year 2007 and was until his retirement in charge of the Crane operations, Forklift maintenance and Hydrogenating operations.

He said Mr. Saxena is a very hard working man who is

generally loved by local staff and expatriates. "We all love him because he tries to work with everyone with understanding. He is also very peaceful." In a deluge of tributes, colleagues and friends described his performance and achievements as a notable foot print and a legacy they will emulate to improve productivity in the company. They said he is caring.

For instance, Mr. Ernest Ugorji described him thus: "He is just like water which has no enemy. He does not like quarrelling with anybody and if he has any issue with anyone, he does not retain it for too long. I wish him God's protection wherever he may go from here", he said.

In the same vein, Mr. Mbaga Joseph said: "When I started

working with Mr. Saxena, we never understood each other, but as time went on, our relationship became like that of a father and a son. He was ever willing to pass on whatever knowledge he has to his subordinates. He doesn't keep anger. He is someone that believes that everybody should have a fair share in everything. I wish him all the best".

Mr. Namso Daniel who also worked with Mr Saxena noted his friendly and hard-working disposition. "I know him as a friendly and hardworking man. He does not get tired of working. He makes sure he meets his target and he will not rest until he has finished his work. He is really hard working," he said.

Another subordinate Mr Sunday Okon described him as a father-figure: "He worked

with us as a father. He advised us and corrected us whenever we made mistakes and helped us to improve on our work. He also solved our problems. His retirement was really a shock to us. He is very caring and loving. We're going to miss him a lot," he said.

In tears of joy, Mr Saxena responded to the tributes: "I feel so emotional with the warm wishes from all of you – my friends and colleagues. Indeed, I feel emotional today with all the warm wishes I have received from you all. I wish you all well also. I promise to keep in touch with you people wherever I may go from here" he assured.

The gathering was garnished with presentation of gifts to the celebrant, group photographs and entertainments.



Colleagues and friends at the sendoff party for Mr Anand Saxena (in traditional attire)





## Indians in Indorama-Nigeria Celebrate Diwali in Grand Style!

**Saturday, 21st October, 2017 was a very happy day for all Indians working in Indorama-Nigeria operations in Port Harcourt. They and their families celebrated Deepavali, which is one of the major festivals in India and celebrated by billions of people across the world. It's usually five days of celebration. It is called the Festival of lights!**

Deepavali is celebrated to kindle the lights of wisdom in every heart. It's all about the return of Lord Rama with his wife Sita and Brother Lakshman from 14 years of exile.

The essence and significance of Deepavali are interesting. Lord Ganesha and Goddess Lakshmi are worshipped together on this auspicious day. Goddess Lakshmi is considered as the deity of wealth and Lord Ganesha is considered as the emblem of removal of obstacles, knowledge and intelligence.

This day is all about the festival of lights. Light brings more happiness and joy (simplest form of gratitude). People decorate and light up their homes and shops, wear traditional dress, exchange sweets, visit family and friends and fire the crackers.

The celebration of Deepavali here in Indorama was electrifying. It's always an immense pleasure to celebrate any kind of festivals due to limited resources and limited access outside. Deepavali has a huge significance for the Indians residing inside, as the festival is celebrated across the country by all religion.

The employees club of Indorama celebrated this festival with all the Indian families within the premises, as the employees are away from their home country, town and village. The club invited every employee and their family members residing inside the premises to celebrate the Deepavali event in a grand style.

The club committee lined up interesting activities, games, raffle draw and lucky draw

followed by special prizes, feast and dance competitions.

To continue the "party spirit" the Club included unique and exciting game for: Kids, Bachelor, Ladies, Gents and Couples. It was indeed very interesting and enjoyable for everyone. It was a night to remember.

Diwali is a blockbuster celebration and it brings more positivity among the employees. Apart from sharing Diwali celebration, and some ideas like gifts and games, it also makes the employees' minds to be more peaceful and pleasant. Thus the club committee celebrates the Deepavali festivity in a grand manner and made the day quite memorable.

**T**he festival got its name from the row (Avali) of clay lamps (Deepa) the Indian lights inside and outside their home to symbolize that their inner lights protect them from spiritual darkness.





1. Excited **Mr. Olunta Nwoshia Oluche** of Security Dept (right) with his daughter Miss Uduluma Peace during her traditional marriage with **Mr. Christian Agbagbuo** (left) on July 1, 2017 at Oluche's compound in Igbo-Etche, Rivers State.

2. Women-In-PENGASSAN (WIP), IEPL branch after their Thanksgiving held at Glorious Family of God Church, Rumuodara, PH on June 11, 2017. Comrade Joy Nwanosike (1st left) is their chairperson.

3. **Mr. Clement Ngokanya** of CES Mechanical Dept and his wife **Abigail** dedicated their son **Olesaden Joshua** at Anglican Church of the Holy Spirit, Aleta Parish, Eleme on Sept.3, 2017.

4. Good God! **John Gomba** of Engineering Dept. and his wife Peace, dedicated their first born **Miss Grace Obarianasemi**, after nine years of marriage, on October 1, 2017 at Commonwealth Covenant Church, Agbonchia, Eleme.

5. 6. 7. Happy Indian nationals in Indorama-Nigeria and their families having fun during the Diwali celebrations on October 21, 2017.





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