

Technopreneurs News



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....building productive economy, become a technopreneur



JOIN THE TRAIN OF TECHNO-ENTREPRENEURS, TRAIN AT FIIRO

On Saturday, 18th April, 2015, the Institute commenced the third batch of training on 3-month Certificate Course in Techno-entrepreneurs with 18 participants drawn from various academic and professional backgrounds. The desire to be their own “boss” and create employments for others was their motivation to enroll for the course. Over 70% of the participants stated that they got to know about the course through the Institute’s website and they will like to start their enterprises immediately after the training.



Dr. Gloria Elemo, DG/CEO FIIRO

Dr. (Mrs.) G.N Elemo, the Director-General/CEO of the Institute in her opening remarks, welcomed the participants to the Institute and thanked them for choosing the Institute for the training. She informed the participants that the course was designed based on the Institute’s experience of over 3 decades in technology transfer and entrepreneurship development. She further gave an insight into the expectations and benefits of the course. She said the training combines both the technical and management components of entrepreneurial skill to address the issue of unemployment, increase the percentage of entrepreneurs in the economy who will take advantage of the very high potential in diversified industrial raw material base in Nigeria to increase the national economic prosperity.

The DG/CEO enumerated some specific benefits of this programme to include:

- Opportunity to acquire two FIIRO technologies.
- Experience sharing by FIIRO successful entrepreneurs and opportunity for mentoring.
- Industrial Visit to factory of a practicing techno-entrepreneur.
- Fabrication of processing machinery and equipment at a discount.
- Preparation of bankable feasibility reports/business plans.
- Technical assistance, quality control and analytical services at a discount.
- Opportunity for project funding through Bank of Industry (BoI), Bank of Agriculture (BoA), NER-FUND, etc.
- Networking with and experience sharing with members of the National Association of Small and Medium Enterprises (NASME), National Association of Small Scale Industrialists (NASSI), National Association of Chambers of Commerce, Industries, Mines and Agriculture (NACCIMA), etc.
- Opportunities for direct interaction with officials of NAFDAC, SON, NEPC, etc.



Director General/CEO, Dr. G.N Elemo in group photograph with Batch 3 participants of Certificate Course in Techno-entrepreneurship and facilitators during the opening ceremony.

Dele Oyeku, the Deputy Director (Techno-entrepreneurship & Techno-economics), in his remarks encouraged the participants to form strong network within themselves and with past participants of the programme. He said the programme is a 14-Modular Course comprising:

- Module 1: Introduction to Entrepreneurship Concept
- Module 2: Business Opportunities Identification
- Module 3: Information Sourcing
- Module 4: Introduction to Marketing
- Module 5 : Business Law and Regulations
- Module 6: Personnel Management and Organization
- Module 7: Introduction to Productivity Improvement
- Module 8: Production Management and Quality Control
- Module 9: Books and Record Keeping
- Module 10: Introduction to Business Plan
- Module 11: Business Plan Preparation and Group Assignment.
- Module 12: Starting and Managing Business Venture.
- Module 13: Life \Skill Acquisition and Industrial Visit.
- Module 14: Special Project

The participants in response thanked the DG for finding time to address them and solicited the support of the Institute in securing loan facilities to start their businesses after the course.

ADDRESSING POTENTIAL ENTREPRENEURS AT IJAIYE/DAIRY FARM ESTATE MUSLIM COMMUNITY

As part of its social responsibility, the Ijaiye/Dairy Farm Estate Muslim Community, Opposite Agege Stadium, Agege, Lagos invited the Institute to make presentation on “Entrepreneurial Investment Opportunities available for Micro, Small and Medium Enterprises” on 15th March, 2015. The presentation was made by Mrs. Funmilayo Karim, an Assistant Chief Executive Officer (TET) assisted by Mr. Fola Akindoju and Mr. Kunle Ibikunle.



A group photograph after the presentation at Ijaiye/Dairy Farm Estate Muslim Community

The programme coordinator, Mrs. Funke Ogunse expressed the appreciation of the Muslim community to the Institute and promised to facilitate organization of similar programme with other Muslim communities and organizations in the nearest future. A mini exhibition was mounted to match the talk with reality.

FIIRO AT OUR LADY OF HOLY ROSARY CATHOLIC CHURCH, IKEJA.

The desire for gainful employment for the youth to provide food for the body while taking care of the food for the spirit prompted the leadership of Our Lady of Holy Rosary Catholic Church, Ikeja to invite the Institute to make presentation on “Entrepreneurial Investment Opportunities available for Micro, Small and Medium Enterprises” on 18th April, 2015.



Mr Adeleke A.O making the presentation at Our Lady of Holy Rosary Catholic Church, Ikeja

Mr. Adeleke A.O, a Principal Scientific Officer (TET) made the presentation on behalf of the Institute; he was assisted by Mr. Kunle Ibikunle who mounted a mini exhibition to the delight of the participants. The participants were highly elated; most of them signified interest in training on some of the technologies developed by the Institute as presented to them by the presenter. Engr. L.I Onu, Deputy Director (PDD) facilitated the programme, encourage the church to sponsor some of the participants for full training at FIIRO.

FINANCIAL INDEPENDENCE AND MULTIPLE STREAM OF INCOME

Financial independence, need for multiple stream of income and the need to plan for the unforeseen circumstances due to the unpredictability of paid jobs in Nigeria were the motivation for the Young Morning Star Society of Christ Anglican Church Elere Agege to invite the Institute to make presentation on “Entrepreneurial Investment Opportunities available for Micro, Small and Medium Enterprises” on 25th April, 2015 during the annual meeting of the society at Frontline Guest House, Oshodi, Lagos. Mr. Akindoju A.F, a Scientific Officer (TET) made the presentation on behalf of the Institute.



Mr Akindoju A.F responding to questions from members of Young Morning Star Society of Christ Anglican Church.

Mr. J.O Oderinde, Deputy Director (Finance) who is also a member of the Young Morning Star Society, facilitated the programme. During his remarks, he encouraged members of the society to arrange for an industrial visit to the Institute in order to have first-hand knowledge about the activities of the Institute. The President of the society while speaking on behalf of members commended the efforts of the Institute on developing appropriate technologies suitable for economic empowerment and promised that the society will schedule a working visit to the Institute.

AGRO-PROCESSING TECHNOLOGIES FOR WOMEN ENTREPRENEURSHIP DEVELOPMENT

Women are the bedrock of the society, as such they must be well empowered through appropriate entrepreneurship programme in areas of their natural strength and interest which is mostly agro-processing

for the rural women. This was the summary of a presentation on “The Role of Women in Agriculture and Solid Minerals Value Chains Business” made by Mrs. Funmilayo Karim, an Assistant Chief Executive Officer (TET) during the official launching of Quintessential Women Business Association at Ilupeju, Lagos on Thursday, 14th May, 2015. During the programme, Mrs. Meroyi A.K mounted a mini exhibition displaying some FIIRO products and publications.



Group photograph to celebrate the launching of Quintessential Women Business Association

The President of the association commended the efforts of the Institute at developing appropriate technologies suitable for women economic empowerment and promised that the association will work with the Institute on women entrepreneurship development programme most especially agro-processing because women are more attracted to agro-processing enterprises.

CHIEF (MRS) YEMI ONADIPE OLATUNJI VISITS FIIRO

In quest for Agro-processing technologies, Chief (Mrs.) Yemi Onadipe Olatunji, a former banker, member of the Presidential Committee for Cassava Initiative, presently a farmer visited the Institute on Thursday, 28th May, 2015. She was received by the Director-General/CEO of the Institute Dr. (Mrs.) Gloria Elemo who took time to familiarize her with the activities of the Institute. A technical team comprising Mr. Dele Oyeku (Deputy Director- Techno-entrepreneurship & Techno-economics Division), Dr. (Engr.) Bola Asiru (Deputy Director- Prototype Equipment Design and Specification), Engr. Felix Ajuebor (Deputy Director, Production Services) and Mrs. Ololade Banwo (Secretary) was constituted by the DG/CEO to address the agro-processing concerns of Chief (Mrs.) Yemi Onadipe Olatunji in the areas of palm fruits processing into palm oil, palm olein, palm kernel oil and so on.

She also sought the assistance of the Institute to source market for her products.

The visitor was taken round some of the pilot plants, workshops and laboratories relevant to her areas of interest after the meeting with the technical team who allayed all her fears regarding her requests.

Chief Onadipe described the visit as fulfilling and an eye opener to other investment opportunities that are available at the Institute especially for export.



Dr. G.N Elemo and Chief (Mrs.) Yemi Onadipe Olatunji flanked by: L-R Dr. (Engr.) Bola Asiru, Engr. Felix Ajuebo, Mr. Dele Oyeku and Mrs. Ololade Banwo

WINNING ENTREPRENEURS AT ANGLICAN CHURCHES, IJEBU

On Sunday, 31st May, 2015, FIIRO stormed Ijebu-Ode to win entrepreneurs in two Anglican churches upon invitation by the Anglican Church leadership in the manner of “Come to Macedonia”. The two churches where presentations on “Entrepreneurial Investment Opportunities available for Micro, Small and Medium Enterprises” were made are The Epiphany Church, Erunwon-Ijebu-Ode and Cathedral Church of Our Saviour, Ita-Olowajoda-Ijasi, Ijebu-Ode.

Mrs. Funmilayo Karim made the presentations on behalf of the Institute in both churches; she was assisted by Mr. Fola Akindoju and Mrs. Tosin Awotedu who mounted mini exhibition on FIIRO products and publications.



Very Rev. P.R Oludipe and youths of the Cathedral Church of Our Saviour in a group photograph with staff of FIIRO after the presentation

Over 500 participants were in attendance in both churches. Questionnaires on expression of technology of interest were administered to participants during the two programmes. Ven. Femi Osikomaya of the Epiphany Church and Very Rev. P.R. Oludipe of the Cathedral Church of Our Saviour prayed for the leadership of the Institute and blessed the facilitators.



Ven. Femi Osikomaya and some members of the Epiphany Church in a group photograph with staff of FIIRO

The participants, mostly youths, were full of praises to the Institute for the awareness created on the Institute’s activities and promised to turn up for training at the Institute both in groups and as individuals.

PHOTO NEWS



Mrs. Sade Ayoade, Assistant Director (NAFDAC) in group photograph with Batch 3 participants of Certificate Course in Techno-entrepreneurship and facilitators on 31st May, 2015



Mr. Duro Kuteyi, the Managing Director – Spectra Food Limited in group photograph with Batch 3 participants of Certificate Course in Techno-entrepreneurship and facilitators on 9th May, 2015



Mr. Raymond Adenuga, Deputy Manager, Bank of Industry in group photograph with Batch 3 participants of Certificate Course in Techno-entrepreneurship and facilitators on 16th May, 2015



Mr. Olu Akinwe, Senior Principal Trade Promotion Officer, Nigeria Export Promotion Council (NEPC) in group photograph with Batch 3 participants of Certificate Course in Techno-entrepreneurship and facilitators on 23rd May, 2015.



Batch 3 Participants of Certificate Course in Techno-entrepreneurship during an Industrial visit to Spectra Foods, Lagos on 6th June, 2015.

PROFILES OF THE BATCH 3, 2015 TECHNO-ENTREPRENEURSHIP TRAINING PARTICIPANTS

PROFILE OF MRS VICTORIA OLURINMADE



I am Mrs Victoria Olurinmade, I hail from Irepodun Local Government in Kwara State. I hold an Advance Diploma in Application Software from City & Guilds London. I retired from the defunct Power Holding Company of Nigeria Plc. after a meritorious service of about 22years in the Billing Operations Department of the Company. I am currently one of the Directors of Rehobothsheba Nigeria Plc, an agro allied Company. I have been hearing about FIIRO and the opportunities to acquire various skills as an aspiring entrepreneur but could not enrol because of the nature of my work then. Immediately I retired from active service last year (2014), I inquired through the institute website and phone calls on when the next training program will be coming up. My motivation to enrol for this course is my company's plan to set up a cassava processing factory and I believe that the skill I am going to acquire from this course will go a long way to assist us in this proposed endeavour.

PROFILE OF KAZEEM OLADIMEJI ADESHINA



My name is Kazeem Oladimeji Adeshina, 51 years old and a graduate of Business Administration from the

University of Lagos. I worked for 30years as a civil servant with Power holding Company (former NEPA) and was disengaged in October, 2013 just after the privatisation program of the Federal Government. After retirement, I was on the lookout for business opportunities and spent lot of time online and it was from there I learnt about the Techno entrepreneurship training at FIIRO. My main objective of attending the course is to pick up sufficient skill to create and market products that will meet the needs of the teeming population of Nigerians

PROFILE OF EBOH UCHECHUKWU KYRIAN



My names are Eboh Uchechukwu Kyrian, I am a chemical engineering graduate of the Federal University of Technology, Minna, Niger-state. I hail from Ideato-south LGA of Imo state, but was born and bred in Lagos. I am a Christian, single, very fluent in Igbo and English, my hobby is reading but I am unemployed, I got to know about techno-entrepreneurship course through a friend. What inspired me to enrol for the course was the dissatisfaction with job pay offer, I want to be independent, I want to create jobs and finally become successful financially. My aspiration after the course is to start my business immediately, manage it well, try to expand my business, create more jobs and become a great industrialist.

PROFILE OF OKORIE CHARLES NGOME



Okorie Charles Ngome is an ICT manager at Bhojsons PLC, and Technical Director at IONS WORLD Nigeria Enterprises. Ngome holds a B.Tech Physics degree from the Federal University of Technology, Owerri. In the course of his career, he has attended several training programmes and refresher courses. He holds the following professional certifications A+, MCSE, CCNA and CCNP. He has over 20 years work experience in the teaching profession, Instrumentation Engineer and Computer Specialist. He is passionate about renewable energy and energy efficiency. He is currently undertaking an online course provided by Energy University to satisfy this craving. He is Secretary General of his Secondary School Old Boys Association and Town Union. He is very active in Church activities, happily married to Ijeoma Okorie (Mrs) and they are blessed with five lovely children. Due to his passion and desire to improve his God given entrepreneur skills, he did several online searches to identify training programmes that would meet his outlook, time schedule and budget. After diligent comparison, FIIRO was his number one pick. He wishes to go into vegetable farming with the aim of marketing to the middle and upper income earners. He looks forward to exploring the soap production technology and the plantain flour technology developed in FIIRO to establish small and medium size enterprises.

PROFILE OF MANASSEH ABUMERE ADEOLA



Abumere is an indigene of Edo State; he is currently the General Manager of TGC Business Services Limited, a transport and Logistics organisation in Ikeja, Lagos, who is directly saddled with the daily operational risk and financial management of the company. A banker and accountant by profession with over ten years cognate experience having worked in various financial institutions before leaving for private practise

towards the end of year 2008. Abumere holds Master in Business Administration (MBA); a Bachelor of Science (BSc) in Accounting, Higher National Diploma in Banking (HND), PGD Cert. of Proficiency in Information System Management, professional certificates from Nigerian Chartered Institute of Bankers and a Michael Jordan award in Treasury Management. In the financial sector, he trained and functioned as a Risk & Control manager, Financial & Treasury manager, Business Development manager and a Management Information System (IT) manager having held many middle and senior management positions as heads of various strategic business units. He was one time the acting Head of Dept - Banking and Finance: Osun State Polytechnic, Lagos Study campus, Ojo, from inception until his resignation in 2000 as a result of expanded economic responsibilities and career demands. Abumere has written many Product Papers and Credit Policy manuals which are still being used by some of the organizations he worked. He was a technical member for the setting up of CBN CRMS and technical Member of the Credit Bureau Committee (Credit Risk Mgrs Association). He is presently attending a Certificate Course in Entrepreneurship Studies with the Federal Institute of Industrial Research, Oshodi (FIIRO). He has attended various workshops both local and international and has won so many awards and is currently a member of the Institute of Economics, member of the Institute of Financial and Investment Analysts, Institute of Chartered Accountants of Nigeria (ICAN), Chartered Institute of Bankers of Nigeria (CIBN); Nigerian Institute of Management (NIM); and Credit Risk Managers.

My Introduction to FIIRO - Certificate Course in Entrepreneurship Studies

I was introduced to the Federal Institute of Industrial Research, Oshodi (FIIRO), Certificate Course in Entrepreneurship Studies through my consistent and earnest internet searches. Precisely, my first knowledge of the program was a week after the initial advertised commencement date. My immediate call to FIIRO customer service corrected that the date of the program has been shifted to May 4, 2015. This to me was a supernatural intervention because I am able to fully participate in this stream without delay, so much that I have never been late or missed a class since its inception.

What Inspired my Enrolment?

Although the various economic activities and exposures enumerated in my previous and current employments promote experience which has positively impacted my commitment and dedication to providing value added services, my earnest yearn towards self-actualisation and real fulfilment in my natural flair for Agricultural activities, with special bias in preservation and processing. This got me researching for a competent institution and partner that will proactively prepare and equip with the critical success tools and mitigate the realities of the industry challenges.

My Aspiration after the Program

Ordinarily my natural flair is for Cassava and fish produce and I believe that my growing up and place of birth contributed a great deal in influencing and creating my vision. Already, a corporate brand names '**Nature's Pride**' or '**Indulge Foods**' are already submitted for the required search with the Corporate Affairs Commission for possible incorporation, which will pilot the face of this aspiration. I also have been involved in so many other self-development exercise which have guided some of my recent travels, intended and researches into these area of my core interest. My aspiration going forward is to set up a socially responsive, efficient and optimally operated Cassava and Fish processing plants in Uromi, Edo State because of the nearness to raw material, cheap labour and lower cost of infrastructural properties, easier access to market, etc. Prudent management will however guide the strategic implementation stages into three phases:

1. Short/Immediate Stage
 - a. 1tons/day Semi Mechanised Garri Processing Plant
 - b. 200/day Semi Mechanised Fish Processing Plant
2. Medium Term (after 6 – 12mths)
 - a. 1tons/day Semi Mechanised Garri Plant
 - b. 1tons/day Cassava Flour Processing Plants.
 - c. 500/day Semi Mechanised Fish Processing Plant
 - d. Minimum of 10 Hectares of hybrid Cassava farm
3. Long Term (after 12mths)
 - a. Min of 2tons/day Semi Mechanised Garri Plant
 - b. Min of 4 tons/day Cassava Flour Processing Plant
 - c. Min 500/day Semi Mechanised Fish Processing Plant
 - d. Min of 50 Hectares of hybrid Cassava farm

These new economic responsibilities will warrant my ongoing plan to relocate to Uromi because I will be taking personal responsibility for the day to day management of these outfits whilst also be ably assisted by other carefully selected experienced and dedicated support staff.

PROFILE OF JUDE OZIOKO



My name is Jude Ozioko, an indigene of Nsukka Local Government Area of Enugu State. I am a graduate of Civil Engineering from Enugu State University of Science and Technology in Enugu State. I am a passionate, enthusiastic and innovative young mind with the vision of imprinting in the sands of time these qualities earlier mentioned. I currently work with a real estate firm which has little or no direct link to my course of study. Typical of a private firm: threats of termination of employments, complaints of incompetence etc; this aroused me into thinking of alternative sources or multiple sources of income should the unexpected happen. I gradually started a research on cassava flour production. I discussed the idea with a friend of mine whom we both finished from the same secondary school who was unemployed then. He brought up the painting idea and that he could successfully run that business since he had previously worked in a paint industry. We went into separate researches to come up with ideas I could fund and he would run since he was not doing anything at the time. We met on several occasions at my office then we didn't see for about 6-8 months. Our path crossed again and we refreshed our earlier conversations on business ideas but by then he already had a job that was not giving him much time. He then mentioned FIIRO in Oshodi that I should look it up, that he came to FIIRO for enquires. I attended the food week organized last year, tried enrolling for the Techno-Entrepreneurial class last year but was constrained by my school programme and doubts on if I was ready to be an entrepreneur.

Whether I was ready to leave paid employment to venture out in something I have never had a previous knowledge. Would it be wise to enroll in a course with #60,000 plus #7,500 registration considering the responsibilities I had to carry and not utilize the knowledge like I did with a previous course I enrolled in the same year? FIIRO worsened the situation by increasing the fee to #65,000 and that made me reluctance to enroll. I came to the last class with some money which I would hold unto if I was not satisfied with the class but before the end of the class I had a change of perspective, that there is a difference between an entrepreneur and a business owner. All the while, I had wanted to be a business owner not an entrepreneur. I just wanted to do buying and selling probably to the elite and middle-class that would hype my ego but I had a change of perspective and would really want to use my single status building a legacy that would be a going concern i.e. that would continue after my time here on earth, leaving my prints in history. I have been a pessimist with a temperament that easily gives up on an idea if I don't follow up with fire as described in my class in the Human-Entrepreneurial Anatomy lecture. I have done a lot of research on my passion but have dowsed it with my fear of limited capital and failure but today I am convinced that if I venture into this, I would impact on Nigeria and the world at large. I hope FIIRO won't let me down in this vision and aspiration of mine especially encouraging aspiring starters like me when setting up and after training mentorship. I was advised against this few days before I enrolled and I wouldn't want to prove the person right. So I look forward to great future filled with possibilities and potentials. Thank you.

PROFILE OF ABIOSE ADELAJA ADAMS



My name is Abiose Adelaja Adams, I am a graduate of University of Ibadan with a Bachelor of Science degree in Microbiology. But ever since I left school, I have worked as a journalist for the past 10 years. In 2004, I undertook for the Reuters Foundation course on International News in London. In 2005, I also trained in Berlin Germany on Multimedia and Online Journalism, at the International Institute of Journalism, Berlin. In 2006, I was part of the peer to peer training on Science Journalism. The two year programme ended with a certification in Science Journalism Course which I obtained from World Federation of Science Journalists, Quebec, Canada. Also in 2008, I obtained a certificate in Environmental Reporting after attending a 2-month course at the International Institute of Journalism, Berlin Germany. I have also attended covered several international conferences of the United Nations such as the Global Ministerial Health conference in Mali, UN Climate Change Conference, Nairobi, Kenya and World Conference of Science Journalists, London. I currently work with an online medium, www.icirnigeria.org as an Editor of Lagos operations. I learnt about this course on October 14, when as a certified Science Journalist, I came to the Institute to cover the event. During my interview of the Scientist and their research outcomes, I found an awesome opportunity. When I was writing the article about the RUTF, especially, I asked the researcher, why is there no one meeting the need of Nigerians? Intuitively, I found myself beginning to say, I can do this. I can help solve the problems of unemployment in the country. Prior to this time, I had floated a science magazine. I have always wanted to be a business owner and help build lives of younger generation. It is this drive that made me take the bold step of enrolling for the course so I could learn it the proper way from an accredited institution and experts. My plan after this course is to set my company rolling. I have a proposal for the company. In February (2015), I acquired 2 plots of land at Imodi Ijasi, near Ijebu Ode. My aim is to meet nutritional needs of Nigerians through the technologies. I will take up at FIIRO. It will create wealth thus contributing to solving Nigeria's unemployment problems. Thus my plan for the farm is for the cultivation of cassava, maize, soya and plantain. To the end of being a manufacturer of Ready to Use Therapeutic foods (RUTF), Plantain Flour, Soyi-Ogi and Soy biscuits.

PROFILE OF IFEANYICHUKWU OSAKWE



Ifeanyichukwu Osakwe is an academic coach and an aspiring entrepreneur. His entrepreneurial flair stems from a childhood dream of owning a large conglomerate. This nurtured desire led him to conduct a series of searches for available entrepreneurial programs. He stumbled on FIIRO techno entrepreneurship program during an online search. He is keen on adopting one of FIIRO's technology and commercializing it immediately after the end of the training program. He holds a bachelor's degree in mechanical engineering from the University of Agriculture, Umudike. He currently lives in Ogun State.

PROFILE OF AKOR IGNATIUS OGUCHE



My name is Akor Ignatius Oguche, a native of Dekina Local Government Area of Kogi State. I was educated at Federal College of Education Okene and the National Open University of Nigeria. I am a trained teacher and accountant. Since graduating in the year 2005, I have spent the last 10 years of my career in the education, financial services and building/construction sectors of the nation's economy, gathering rich expertise and experience in child & adolescent management, unconventional marketing, business and operations management, project management & administration, among others. Although **"Nigeria & the Globe"** was my maiden published work, I still have to my credit over thirty unpublished works which include but not limited to educational, fictional, religious and entertainment books.

I presently work as the Senior Accountant of Muslac Techno Company Limited, a building & construction outfit with its headquarters in Abuja, the Federal Capital Territory of Nigeria. While growing up so many years ago, I discovered that Agriculture was the most untapped sector of our economy as a nation, with the potential to gainfully employ more than two-thirds of the country's population, while generating mouth-watering, amazing and monumental foreign exchange for our economy far above any other resource we have got. With this in mind, I decided to work gradually towards becoming an agropreneur with special focus on two major economic and exportable crops: cassava and oil palm. I chose to massively cultivate these crops in commercial quantity and process them into fine produce for both domestic and international consumption. I know I have not yet gotten all it takes to make this happen, so I must work towards achieving this goal by following every government's policy on agriculture and agriculturally-related television/radio programs. At some point last year, I stumbled on the cassava-sorghum bread initiative of FIIRO through a program I watched on TV, but I was very keen to know more about it. In the course of watching another TV program last year on which the MD of Bank of Industry (BOI)- Mr. Rasheed Olaoluwa was a guest, he mentioned two places in Nigeria where the BOI could support anyone interested in cassava processing to acquire domestically fabricated equipment from. He mentioned FIIRO and PRODA in Enugu. This re-ignited my interest in FIIRO and I immediately went online to search for their website on Google, and I found it. I began exploring the entire website, and to my surprise, I stumbled on very interesting information and resources, among which included information on the Techo-Entrepreneurship Course set to begin in March of 2015. As soon as I saw this, I told myself, "This is it. This is what I have been looking for – the kind of training needed to help me realize my goal". After studying the benefits of the course on the FIIRO website, among which include the acquisition of one or two technologies developed by FIIRO out of over 50 commercially proven technologies available at the Institute by participants, the joint development of a Bankable Feasibility Report/Business Plan to be jointly developed with the participants by the Institute's team of experts using UNIDO COMFAR III Expert, Opportunity for project funding through Bank of Industry, Bank of Agriculture, NERFUND, etc., Industrial Visits to viable practising techno-entrepreneurs,

opportunity for mentoring by practising entrepreneurs, networking with National Association of Small and Medium Enterprises (NASME), National Association of Small Scale Industrialists (NASSI), National Association of Chambers of Commerce, Industry, Mines and Agriculture (NACCIMA), and so on, I told myself it was the real deal. I have since enrolled in the 12-week course, and as at the time of writing this piece was in Lagos participating in the training program. While I look forward to completing my course at FIIRO in a successful fashion, I look even more forward to practicing as a techno-entrepreneur eventually by primarily and basically tapping into the cassava and oil palm value-chain on full-time basis.

PROFILE OF AIYEWUMI OLUWOLE



My name is Aiyewumi Oluwole, a graduate of mechanical engineering with specialization in production, who has always had the passion for not just a self sufficient job, but opportunity to also lift graduate out of the already saturated unemployment market in the country. I presently work as a safety supervisor in a facility management firm. I got notice of the techno - entrepreneurship program due to my constant search for an enlightened environment where i could acquire additional knowledge about entrepreneurship, especially in the area of production, marketing and business management. I am inspired to enrol for this course because i know FIIRO to be an industrial research institute that has many years of experience of the Nigeria industrial business climate, i believe i could benefit from the wide experience of research officers of the institute with regards to areas such as consultancy services, business ideas, loan sourcing, NAFDAC approvals, affiliation with other research institutes. I do hope that the knowledge I will acquire from this program

will be most helpful to me, as i desire to set up a small scale production firm (God willing) after my course with FIIRO.

PROFILE OF FADIYA, GABRIEL ADEDAYO



MR. FADIYA, GABRIEL ADEDAYO, hails from Ifaki-Ekiti in Ido/ Osi Local Government Area of Ekiti-State Nigeria, a graduate of The polytechnic Ibadan in Electrical/ Electronic Engineering and a German and Chinese trained Engineer who worked with First Foundation Engineering Company, Opebi, Ikeja Lagos; as a service Engineer and resigned after attaining the position of a manager-Engineering in January 2014, after Twelve (12) years of meritorious service. He is a co-managing partner/ co-founder of FGA Integrated Technologies Ltd, a company that specializes in the business of sales and services of Biomedical and Hospital equipment. The quest for diversification and establishment of a small and medium scale industry arouse his desire to go through the FIIRO Website from where he discovered the Techno Entrepreneurship course. At the end of this course, he hopes to be equipped with sound production knowledge, entrepreneurship and quality control skills. Gabriel Adedayo is married with children.

PROFILE OF OGBEIDE AIGIOMAWU



My name is Ogbeide Aigiomawu I am a project manager. I got to know about fiirro from the internet I was browsing and trying to get information concerning cassava processing machines and i decided to visit the institution in order to make further inquiries, upon getting there i was informed about the techno entrepreneurship course and decided to get enrolled for it. I came there with the intention of just getting specific information only to find that there was a whole load of technical information out there and by enrolling i would be putting myself in touch with not just one organisation but a whole host of others who would be useful in actualising my dreams. And i hope to go into Garri processing once i am done with the course.

PROFILE OF IBRAHIM ZAKARI SHIYA



My name is Ibrahim Zakari Shiya and was born in Shiya Village of Baruten Local Government Area of Kware State. On 13th October, 1958. I attended L.E.A primary school kaiaama between 1965 and 1971, Government Secondary School Ilorin from 1972 to 1976, Kwara State College of Education, Oro-Ilorin from 1979 to 1891 and the University of Ilorin from 1982 to 1986. I did my NYSC in Ogun State in 1981 after my NCE Programme. I took up appointment as an education officer with the federal ministry of education in 1987 and was posted to F.G.G.C Yola to teach Islamic studies. In 1992, I was reposted to F.G.G.C Bida where I became the H.O.D social sciences from 2000 to 2012 and the acting vice-principal special duties between 2013 and 2015. Presently I am with the federal inspectorate service of the federal ministry of education, Minna office in Niger State.

It was my passion for entrepreneurship that led me to know about FIIRO during which I came across an article about entrepreneurship, the FIIRO written by one Rasheed Subomi in one of the national dailies in 2007. This article enlightened me about the activities of FIIRO. Since then, I have been searching for more information on FIIRO, RMRDC, Shongai Centre and NBTI. It was during the cause of the search on the internet that I saw the advert on techno entrepreneurship training programme. It is my aspiration to become a successful world class industrialist through the production of good quality products that will meet international standard and contribute my quota to economic development of Nigeria with the view to putting its name in the list of 20 industrial giants of the world.

PROFILE OF ISA MUHAMMAD GALADIMA



I am known and called ISA MUHAMMAD GALADIMA. I was born on the 19th day of July 1961 in Gbara, the ancient capital of the defunct Nupe Kingdom which reigned from 1531 A.D till the coming Fulanis in the 19th century. Gbara is in the present day Mokwa L.G.A of Niger State, Nigeria. I started my Islamic education in the late 60s attended Jimanle Primary School from 1970 – 1976, proceeded to Government Teachers' College, Suleja and taught for one year at Gazhe Primary School between 1981 and 1982. I bagged National Certificate in Education at College of Education, Minna in 1985 and taught Islamic Studies at Federal Government Girls' College, Bida from 1989 – 1992. Between 1989 and 1992, I studied at Usmanu Danfodiyo University, Sokoto where I graduated with B.A, Ed. (Islamic Studies). From F.G.G.C, Bida I was posted to Federal Government College, Rubochi, Abuja. From Rubochi I was posted to F.G.G.C Kaba, Kogi State, later to Federal Government Academy, Suleja and Finally

to Federal Government Girls College Bauchi, where I retired voluntarily from active service in 2007. Since my retirement, I am into fish processing and marketing at various points in Abuja. I got to know about Techno Entrepreneurship course through my former colleague and friend, Mallam Zakari S. Ibrahim who just informed me early in this month of May 2015. At the end of the course, if given the financial empowerment and the relevant equipment, I would process fish for both local and international consumption.

INDUSTRIAL PROFILE ON FRUIT JUICE PRODUCTION

INTRODUCTION

Fruit juices are produced from raw fruits. Fruit has been defined as the ripened ovary of the flower, with or without other associated parts. It can be classified broadly into two, namely; juicy and pulpy fruits. Juicy fruits include: orange, lemon, lime, tangerine, tangelo, pumelo, and so on while pulpy fruits include pineapple, mango, pawpaw, banana, cashew, guava, breadfruits, avocado pear and so on. Standard Organization of Nigeria (SON) defines fruit juice as the unfermented but fermentable natural juice intended for direct consumption obtained by a mechanical process from sound, matured fruits preserved by physical or chemical means. The juice may be turbid or clear (as in the case of clarified juice). Fruits are grown abundantly in many parts of Nigeria but most of these fruits are lost after harvesting. To reduce post harvest losses of fruits, the Federal Institute of Industrial Research Oshodi has developed and perfected process technology for fruit processing into fruit juices (clarified and unclarified; carbonated and uncarbonated), fruit concentrates, fruit wines, fruit cordials, fruit purees, fruit pastes, fruit chutney, fruit flakes & candies, dehydrated fruits and so on from Nigerian fruits with the overall objective of conserving foreign exchange, stimulating industrial development, creating employment and reducing poverty.



MARKET INFORMATION

There are enormous demand for fruit juices in Nigeia because fruit juices are served at occasions such are naming, wedding, burial, house warming, seminars, workshops, and so on. The national demand for fruit juices is estimated in excess of 550million litres while current supply is less than 25% of the demand. Popular brands of fruit juices in Nigerian markets are: Frutta, Edge, 5 Alive, Chivita, Fumman, Dansa, Fan juice, Chi Exotic, Lloyd's fruit squeeze, Dudu, Cy-way natural drink, etc. Common packagings are tetra pak, can, bottle (plastic and glass) and pouches. The average retail price per L Tetra pak juice is N220.00 while that of 50cl (500ml) in similar pack is N100.00.

RAW MATERIALS

Major fruits grown in Nigeria are: Orange, Mango, Cashew, Tomato, Pineapple and Banana, Guava, Water melon and Pawpaw. The common preservatives used in fruit juice production include citric acid, sodium benzoate and sodium metabisulphite while sugar or other alternatives could be used as sweetener. Table 1 shows production outputs of fruits in Nigeria in relation to some other Countries in the world.

Table 1: Production Outputs of Fruits in Nigeria in relation to some other Countries ("000Tones), FAO STAT, 2010

Year/ Country	Nigeria	South Africa	Ghana	Egypt	France
1999-2001	8,962	5,097	2,457	7,037	11,274
2003-2005	9,450	5,771	3,075	8,083	10,315
2007	9,799	5,994	3,941	9,356	9,313
2008	9,502	6,172	4,045	9,601	8,502
2009	9,502	5,967	4,270	9,804	8,984

MACHINERY AND EQUIPMENT

The major machinery and equipment for production of fruit juices are: Juice Extractor, Pasteurizer, Homogenizer, Hydraulic press, Juice crusher, Filling machine, Filter press, Stainless steel storage tank, Weighing machine and other accessories.

FIIRO has designed and fabricated complete process line machinery and equipment for fruit juice production available at micro, small and medium scales. The Institute can deliver the complete process line on turn-key basis within six weeks of commissioning by the investor/entrepreneur. The cost however, depends on the capacity which could vary from 1,000L/day to 5,000L/day.



FIIRO Small Scale Fruit Juice Plant

PRODUCTION TECHNOLOGY

Production of fruit juices includes the following simple unit operations:

Fruit selection

Wholesome fruits are selected for processing

Washing

Selected fruits are thoroughly washed in treated water

Weighing

Washed fruits are weighed accurately

Peeling/Trimming/Crushing

The fruits are carefully peeled/trimmed/crushed to reduce their sizes to facilitate extraction.

Extracting

Fresh juice is pressed out of the fruits by means of juice extractor.

Formulating

Extracted juice is carefully formulated in line with specifications.

Mixing

The formulated juice is blended thoroughly with the preservatives and other additives.

Filtering

The juice is filtered appropriately.

Filling

The juice is filled into the desired packaging material.

Pasteurization

The juice is subjected to heat treatment to destroy micro-organism, prevent fermentation and inhibit undesirable enzyme activities.

Cooling and Packaging

Pasteurized juice is cooled at room temperature, labeled and packaged in cartons ready for sales.

PRODUCTION PROGRAMME

Production programme for a small to medium scale fruit juice plant is shown below:

Production Days/Annum	-	300	
Production Volume/Day	-	5,000L	or
15,150 Bottles (33cl)			
Production Volume/Annum	-	1.5million	L or
4,545,000 Bottles (33cl)			

Projected 5- Year Production Plan

Year	Quantity (L)	Quantity (Bottles, pcs)
1	900,000	2,727,000
2	975,000	2,954,250
3	1,050,000	3,181,500
4	1,125,000	3,408,750
5	1,200,000	3,636,000

LABOUR REQUIREMENT

The required manpower for successful operation of this venture consists of both skilled and unskilled personnel. These consist of the production, administrative/account and marketing personnel. Staff matters, finance/account, store management, security, purchasing and other administrative functions are handled by the administration/account division, while the production division takes charge of production. Marketing activities are the responsibilities of all the staff especially the marketing division staff. About fifty (50) personnel are required for the project to take off.

TOTAL INITIAL CAPITAL INVESTMENT

Initial Fixed Capital	N19,781,000.00
Initial Working Capital	N9,466,670.00
Pre-production Expenses	N1,448,440.00
Contingencies	N1,280,383.50
TOTAL	N30,888,053.50

NB: The initial fixed capital includes factory building, machinery and equipment, generator, project vehicle, office furniture and equipment and bore hole.

PROFITABILITY INDICATORS

Return on Investment (Year 1)	75.8%
Return on Equity (Year 1)	189.4%
Net Profit to Sales	16.4%
Gross Profit to Sales	11.5%
Profitability Index	3.4
Breakeven Point (Year 1)	34%
Payback Period	1.4Years
Net Present Value @ 25%	N19,640,690.00

EDITORIAL TEAM

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Kayode Edun
Kachi Aaron
Kunle Ibikunle

ANNOUNCEMENTS

1. The 4th Batch of the 3-month Certificate Course in Techno-entrepreneurship begins 15th August, 2015; Please register now. Limited spaces available.
2. Technology Transfer Trainings hold on: Cassava Flour (July, 01-03); Instant Pounded Yam Flour (Jun 22-26); Bread & Confectioneries (Jun 15-19; July 06-10); Fruit Juice Production (Jun 08-12; July 13-17); Zobo Drink (Jun 24-26; July 29-31); Smoked Fish (Jun 24-26; July 29-31); Plantain Flour (Jun 15-19; July 6-10).

From the Editor

The editorial team is looking forward to you reading the next edition of Technopreneurs news. Please look forward to "Industrial Profile on Plantain Flour Production" in the next edition of the e-bulletin.



FOR FURTHER ENQUIRIES, PLEASE CONTACT:

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