

Market Development Program for the Niger Delta (MADE) II

Edo State Investment Portfolio (ESIP)

Inception Study Market Assessment Reports

ANNEXES – Vol. II



Edo
State



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Acronyms

₦ or N	Naira
ABP	Anchor Borrower's Programme
ACGSF	Agricultural Credit Guarantee Scheme Fund
ADP	Agricultural Development Programme
AfDB	Africa Development Bank
AFEX	Africa Exchange
AFWN	Africa Fashion Week Nigeria
ALC	Andela Learning Community
ATL	Above the Line
BCCIMA	Benin Chamber of Commerce, Industries, Agriculture and Mining
BMPPro	Banke Meshida Professional Make-up
BOI	Bank of Industry
BOS	Balance of Systems
BTL	Below the Line
CACS	Commercial Agriculture Credit Scheme
CBN	Central Bank of Nigeria
CNN	Cable News Network
DFI	Development Finance Institutions
DFID	Department for International Development
DMB	Deposit Money Bank
DRE	Decentralised Renewable Energy
DStv	Digital Satellite Television
EDC	Entrepreneurship Development Centre
EE	Energy Efficiency
ESIP	Edo State Investment Portfolio
ET Hub	Edo Tech Hub
EU	European Union
FADAN	Fashion Designers Association of Nigeria
FAFIN	The Fund for Agricultural Finance in Nigeria
FCMB	First City Monument Bank
FDI	Foreign Direct Investment
FGN	Federal Government of Nigeria
FMARD	Federal Ministry of Agriculture and Rural Development
FtF	Feed the Future
GAP	Good Agricultural Practices
GDG	Google Developers Group
GDP	Gross Domestic Product
GEMS	Growth and Employment in States, Nigeria
GSM	Global System for Mobile Communication
GVE	Green Village Electricity
HCDC	Human Capital Development Centre

HiDef	High Definition
HOT	House of Tara
HQCF	High Quality Cassava Flour
ICT	Information Communication and Technology
IEA	International Energy Agency
IFC	International Finance Corporation
IFDC	International Finance Development Corporation
IMPRIN	Initiative for Migrant Protection and Reintegration in Nigeria
IOM	International Organization for Migration
IoT	Internet of Things
KPIs	Key Performance Indicators
KW	Kilo Watts
LFDW	Lagos Fashion and Design Week
LFW	Lagos Fashion Week
LGA	Local Government Area
LVMH	Louis Vuitton Moet Hennessy
M4P	Markets for the Poor
MADE	Market Development Programme in the Niger Delta
MDS	Modern Day Slavery
MFB	Microfinance Bank
MFB	Micro Finance Bank
MINC	Make-up in Nigeria Conference
MNO	Mobile Network Provider
MSME	Micro, Small and Medium Enterprises
MSMEDF	Micro, Small, Medium Enterprise Development Fund
MUA	Make-up Artist
MW	Mega Watts
NACCIMA	Nigerian Association for Chambers of Commerce, Industry, Mines and Agriculture
NAN	News Agency of Nigeria
NBS	National Bureaus of Statistics
NCAC	National Council of Arts and Culture
NCAN	National Cashew Association of Nigeria
NEPA	National Electric Power authority
NEPC	Nigerian Export Promotion Council
NGBA	Nigerian German Business Association
NIPC	Nigerian Investment Promotion Commission
NIRSAL	The Nigeria Incentive Based Risk Sharing System for Agricultural Lending
NITDA	National Information and Technology Development Agency
NSIA	Nigeria Sovereign Investment Authority
OPM	Other People's Money
PFI	Participating Financial Institution
PHCN	Power Holding Company of Nigeria
PIND	Partnerships Initiative in the Niger Delta
PSH	Peak Sun Hours
PV	Photo Voltaic

R&D	Research & Development
RE	Renewable Energy
ROI	Return on Investment
SABC	South Africa Broadcasting Corporation
SHF	Small Holder Farmers or Style House Files
SHS	Solar Home System
SME	Small and Medium Enterprises
SPO	Special Palm Oil
SPV	Special Project Vehicle
SSPE	Small Scale Processing Equipment
SWOT	Strengths Weaknesses Opportunities and Threats
TPO	Technical Palm Oil
USAID	United States Agency for International Development
VLD	Village Level Dealer
VPC	Veterinary Pharmaceutical Companies
W	Watts
WTO	World Trade Organisation

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Team Leader:	Adam P. Saffer
Agriculture:	Md. Rubaiyath Sarwar (Lead) Busuyi Okewo Idris Rufus
Entertainment:	Marshall Bear (Lead) Chidi Ukwu
ICT:	Talia Dweck (Lead) Hanson Johnson
Fashion:	Snow Ogunjimi (Lead) Folake Ikumapayi
Renewable Energy:	Tinyan Ogiehor (Lead) Adam P. Saffer
Wholesale/Retail:	Sheriff Mohammed (Lead)

CHAPTER I AGRICULTURE AND AGRIBUSINESS ASSESSMENT

1.1 Introduction and Executive Summary

The purpose of this assessment is to determine if, within the agricultural sector in the Edo State, there are suitable opportunities for ESIP to facilitate further investment, increase incomes, and/or generate new jobs for the State's vulnerable population. The objective of this assessment is to chart a course for ESIP to identify and pursue investment and employment related initiatives in the agribusiness sector in Edo State that will serve as viable and aspirational alternatives to illegal emigration, and likely human trafficking. The assessment methodology used included secondary source desk research, key informant interviews with a broad cross section of public and private sector agricultural and agribusiness stakeholders, and meetings with potential farmers, farming conglomerates, equipment manufacturers, input suppliers and agro-dealers, and off-takers for further processing and/or export. For more detail on the overall MADE II and ESIP projects, the overall objectives and key performance criteria, and the Markets for the Poor (M4P) research and assessment methodology utilised, please refer to Chapter 1 of the consolidated ESIP Inception Study Main Report.

This assignment was undertaken to chart a course for ESIP to identify and pursue investment and employment related initiatives in the agribusiness sector in Edo State that will serve as viable and aspirational alternatives to illegal emigration, and likely human trafficking.

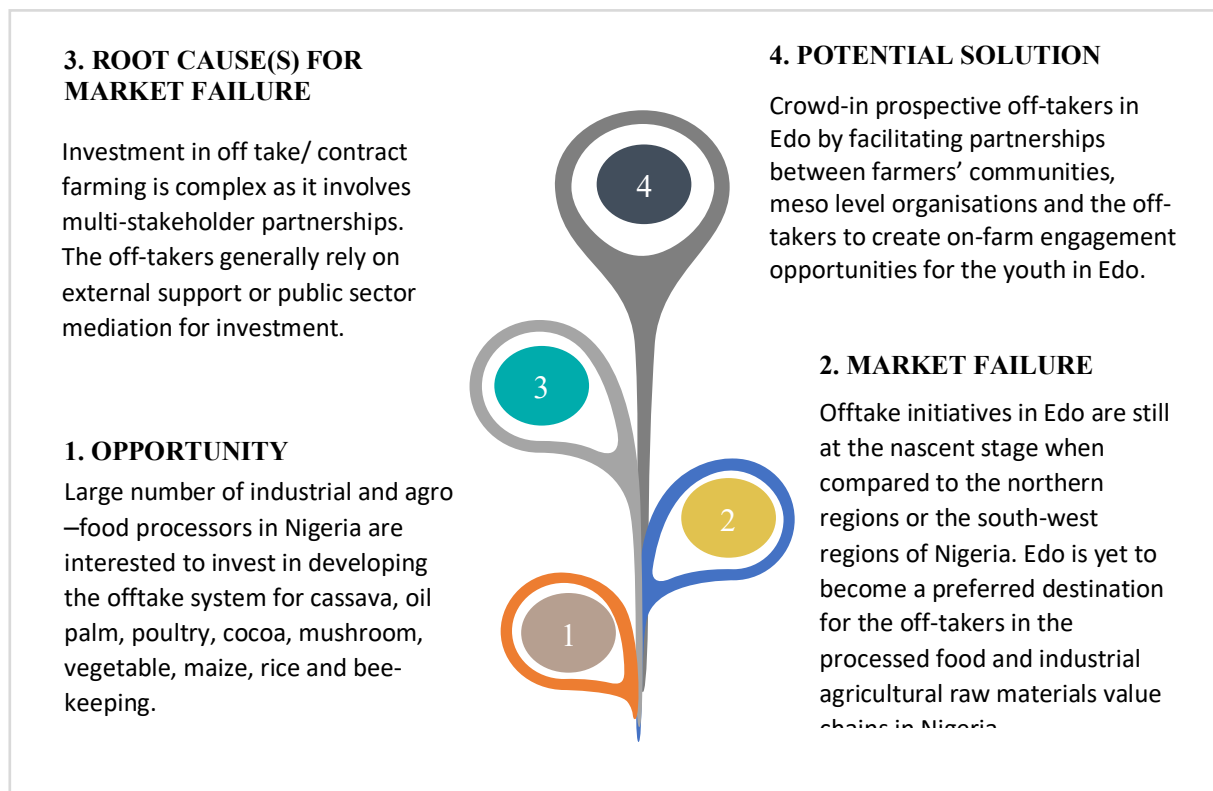
The market systems analysis shows that the demand for off-take of cassava, oil palm, cocoa, rice, maize has and continues to increase in Nigeria. Several macro-economic factors and policies are contributing to this growth. On the forefront, the devaluation of Naira has made the importation of industrial raw materials like starch, HQCF, ethanol costlier. This coupled with the fact the CBN is offering support through specialised financial schemes like the Anchor Borrower's Programme (ABP), means that the large scale processors are increasingly interested to invest in developing or expanding their local off-take system. The processors are also investing in upgrading and expanding their processing capacity. Commodity Exchange companies are investing to develop the logistics and transportation systems for aggregation of the commodities. The favorable fiscal and financial policies of the government have also created demand for locally processed food products in Nigeria.

Despite the fact that the Edo State Government is trying to attract investors through trade incentives that includes cleared land, investment from the off-takers is yet to take off in Edo. For Edo to leverage on the growing and evolving market opportunity, it is essential that the support services system for off-takers is conducive. The farmer's communities need to be organised in groups, coops, or some kind of clusters and need to be trained on Good Agricultural Practices (GAP). They will need affordable access to quality inputs at the last mile. They will also need access to crop protection materials, machinery, and extension services to increase farm productivity and profitability to consistently meet the off-takers' requirements.

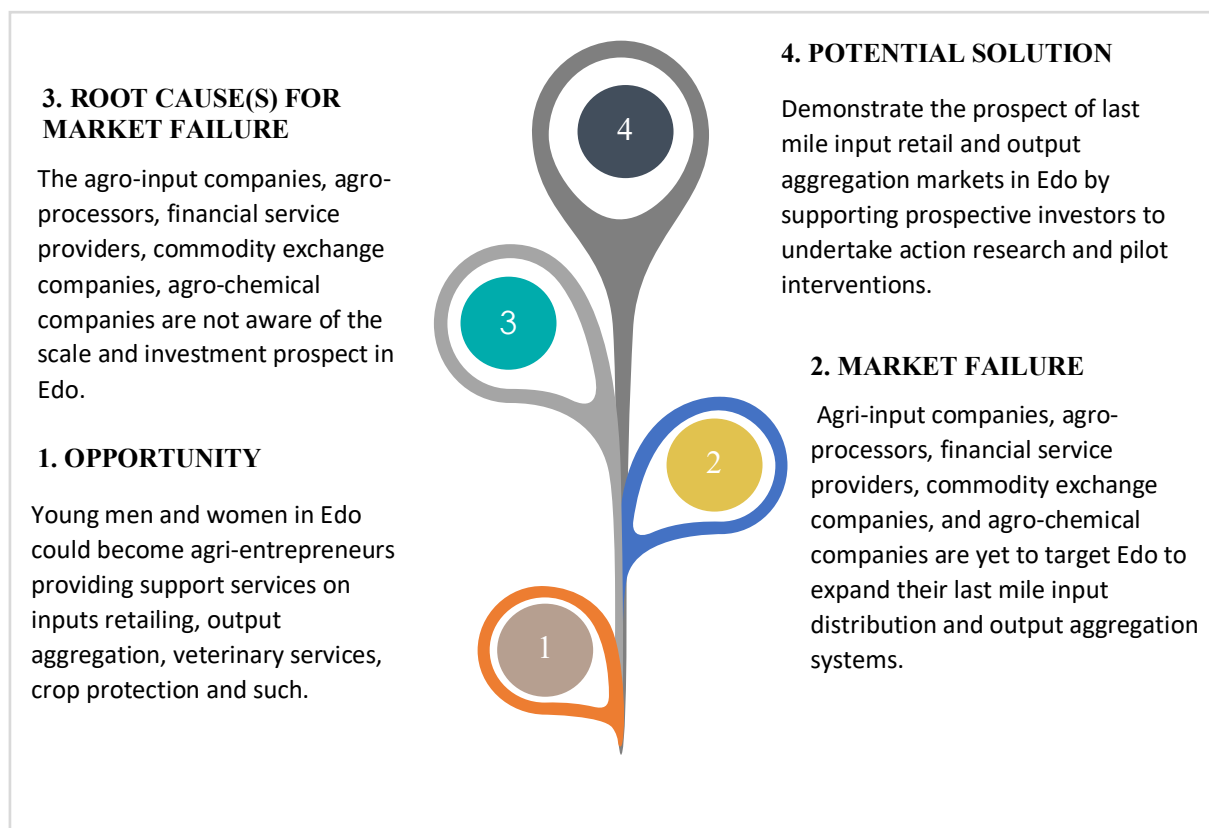
The last mile input supply, extension system, and output aggregation systems in Edo state are weak because of limited engagement of the private sector in developing the system. Discussions with the private sector processors and aggregators revealed that the demand for inputs in Edo has been traditionally low. Farmers employ low input-low output farming practices and primarily serve the local market. For the off-take system to become viable, the input supply systems and the extension services systems need to be improved.

In this context, partnership with off-takers could create the demand that would energise and align all of the relevant stakeholders, including input companies, harvest and aggregation service providers, and the local farming community. Given the demand identified, it will also likely result in more land being made available for new entrants – be they farmers, processors, input dealers, storage facilities, etc. Figure 1 illustrates the market opportunity, market failure, the associated root cause for market failure and prospective solution for ESIP to promote off-take of agricultural produce in Edo. Figure 2 illustrates the market opportunity, market failure, the associated root cause for market failure and prospective solution for ESIP to develop the input and the output aggregation systems for agriculture in Edo.

Systemic Constraints and Prospective Solution for the Promotion of Out-grower schemes in selected value chains in Edo



Systemic Constraints and Prospective Solutions for the Development of last mile agro-input retail and output aggregation systems in Edo



The vision of ESIP in the agribusiness sector in Edo in this context would be to create a vibrant agribusiness investment climate characterised by an increasing number of off-takers investing in Edo and driving value chain growth by promoting good agricultural practices which would create more jobs for the young men and women in production, processing, input supply and the output aggregation system along-side machinery manufacturing and rental services, storage facilities, and transportation/logistics. In line with the market opportunities to achieve the vision, we recommend two broad-based intervention areas for ESIP:

- (i) Provide support to early stage out-grower schemes being driven by experienced agro-processors who want to expand their sourcing strategy to take advantage of Edo's agricultural advantages in select crops.
- (ii) Provide support to input supply companies and existing input dealers to extend their services (and points of sale) to last mile farmers. Similarly, support the establishment of commercially viable last mile aggregators/agents to help link last mile farmers to the market. If and where possible, last mile services could also be expanded to include machinery rental services, crop insurance protection, extension services, and other material and service needs.

The interventions of ESIP in the out-growing market systems of selected value chains are expected to create more jobs for vulnerable young men and women in the backward (input supply, machineries rentals) and forward market linkage activities (processing, marketing). According to stakeholders, engagement in non-mechanised farming activities is not aspirational to today's youth. However, some of the value chains, for instance, poultry, mushroom, and bee-keeping, are expected to crowd in a large number of new entrant youth in the production function. Youth are also expected to be engaged in the services sector related to spraying, harvesting, land preparation, and extension of agricultural information.

We expect that the interventions will influence the farmer's communities, public sector agencies, NGOs, and relevant business membership organisations to adapt to supporting the off-takers and the agro-input suppliers and dealers in Edo. This will in turn create and sustain demand from the off-takers and stimulate the growth and development of a vibrant agro-input retail market in Edo State which will work as the foundation for jobs and income for young men and women in the food and industrial processing value chains. In our study, we identified 10 prospective 'lead firm' partnership opportunities for ESIP to stimulate the off-take of cassava, cocoa, rice, poultry, mushroom, bee-keeping and oil palm from Edo state. We have also identified three prospective 'lead firm' partnership opportunities to develop the input market system. In this respect, we anticipate the MADE II team to work seamlessly with ESIP in leveraging and scaling the interventions already taken and underway from MADE I. Combined together, these interventions are expected to benefit at least 10,000 farm households (includes both existing and new farmers), and create at least 20,000 new jobs across backward and forward market activities in the selected value chains. Table 1 summarizes the partnership opportunities for ESIP and the probable impacts of these partnerships.

Summary of Partnership Opportunities for ESIP in the Agribusiness Subsectors

Subsector	Partnership Opportunity	Probable Impact
Cassava	Partnership with Elephant Group to develop cassava contract farming systems for HQCF	420 farm households are expected to directly benefit from the scheme. Each farm household is expected to employ 10 labours per hectare. This will generate employment for at least another 8,000 agricultural labours in Edo. The company is expected to add another 300 hectares of land in the next production cycle. Furthermore, if the scheme proves to be successful, they plan to bring more farmers under out-grower's schemes for HQCF production. The company also envisions to expand into rice outgrowing and processing in the next production cycle in 2019.
	Partnership with Guinness to ensure offtake from 600 cassava outgrowers as pilot run to ensure the raw materials for their Ethanol Processing Plant in Edo	This intervention is expected to directly benefit 600 farmers immediately from improved production and income. This impact will trickle down to as many as 6,000 farm labours, assuming each farmer employs on average 10 labours.
	Partnership with Greenland Trust as an Off-taker for Garri Processing	As many as 150 farmers are directly expected to be involved to supply cassava tubers to Greenland. These farmers will benefit from improved yield through adaption of GAP. Additionally, these farmers are expected to benefit about 1,500 farm labours. Greenland is expected to engage 500 small scale garri processors in several phases. The scheme will demonstrate the prospect for improving cottage based garri processing system to serve high value consumer market across Nigeria.
Oil Palm	Partnership with OKLAN to set-up offtake agreements with farmer's cooperatives for crude oil palm	Oklan envisions to set-up 10 small scale processing plants to procure crude palm oil. The scheme is expected to reach about 300 small scale oil palm producers in Edo through the farmer's cooperatives.
	Partnership with MGG Wells for off-take of crude palm oil	The partnership will demonstrate the benefit of small scale processing equipment (SSPE) to serve the institutional market for Crude Palm Oil. It will on the process create further demand for SSPEs in Edo.
Mushroom	Partnership with Akomz Farms and Foods for mushroom contract farming	The intervention is expected to create 500 mushroom producing enterprises in Edo. It will help establish the backward and forward market linkages for mushroom

		production and thus attract potentially more off-takers and mushroom producers in Edo.
Cocoa	Partnership with AFEX for cocoa off-take	The cocoa farmers in Edo state will benefit from AFEX's engagement as they plan to support the farmers to get access to finance, invest in crop protection, and improve production quality, harvesting and processing methods. The intervention will incentivise farmers to adapt GAP. It is expected to directly benefit at least 500 farmers. It will indirectly benefit a large number of labours in the collection centres, warehouses, and those involved in the logistics and transportation activities.
Apiculture	Partnership with Sahel Foods to establish an apiculture off-take system in Edo	The intervention could demonstrate the possibility of large scale apiculture in Edo. It could also demonstrate the scope of partnership between apiculture off-takers, local NGOs and big estates and plantation companies like Okomu. The intervention is expected to facilitate creation of 400 apiculture enterprises in Edo State.
Poultry	Partnership with Thrive Agric and Ofunirems Ltd. to establish a crowdfunded small scale poultry production system in Edo	The intervention will help create 160 small scale poultry farms in Edo. This will demonstrate the business model for crowdfunded small scale poultry farms.
Input Supply	Scale-up MADE 1 interventions on GAP, promotion of crop protection materials, equipments and improved quality seeds for cassava, cocoa, oil palm	This intervention will help improve the productivity of the farmers through increased adaption of GAP, crop protection materials and equipment, improved quality seeds. ESIP is expected to leverage on the MADE -1 partnerships with Syngenta, SARO, Candel.
	Partnership with Novus Agro and Notore Seeds to strengthen the last mile input distribution system	The intervention will facilitate development of the last mile input distribution system by strengthening the network between input companies, input distributors, last mile input retailers in Edo State. It will facilitate creation of last mile input shops that could also work as output aggregators and extension agents for the farmers.

1.2 Sector Overview

Definition of the Sector

Davis and Goldberg (1957) in their work on analysis of food systems defined the concept of agribusiness as - *“The sum of all operations involved in manufacture and distribution of farm supplies, production operations on the farm, and the storage, processing, and distribution of farm commodities.”*¹ The definition is relevant for this study since it allows us to analyse the agribusiness sector as “...specialized interdependent system of agents that operate in interconnected industries.”² The interconnectedness of different systems or market systems within agriculture and its significance in evaluation of the opportunities and barriers in creating scalable and sustainable jobs for Edo’s young men and women is further elaborated in section 2.2 and section 2.3.

Overview of Promising Agribusiness Subsectors in Edo State

Findings from the key informant interviews and the review of secondary literature show that cassava, oil palm, and cocoa are the dominant agricultural crops in Edo State. The agricultural sector’s growth is being fuelled by the large number of food, beverage and fast moving consumer goods (FMCG) manufacturing companies investing in Edo, and more generally across Nigeria. Edo is a breadbasket of agricultural productivity with fertile soils and excellent climactic conditions. Furthermore, imported raw materials have become costlier due to recent devaluation of Naira. Additionally, initiatives funded by the government, such as the Anchor Borrower’s Programme (ABP), managed by the Nigeria Incentive Based Risk Sharing System for Agricultural Landing (NIRSAL) under the Commercial Bank of Nigeria (CBN), is also crowding in large investors who are interested in developing a sustainable outgrower/off-taker production system. We also identified interest amongst the large scale processors to establish off-taking programme for locally cultivated rice and vegetables. The demand for cassava processed into starch and other derivatives is growing extremely quickly. We were not able to identify similar opportunities in maize or yam.

We found that production of poultry in Edo is not sufficient to meet local demand, and as a result, poultry (both frozen meat and live chicken) is being imported from other south-south and south-west states. Low production of poultry has driven out prospective processors of poultry meat to other states, including but not limited to Oyo State. Off-takers who are interested to invest in poultry are primarily focused on farms with an average flock size of 1,000-2,000 birds. However, in Edo, small scale poultry farming is much more common but widely dispersed, forming a market

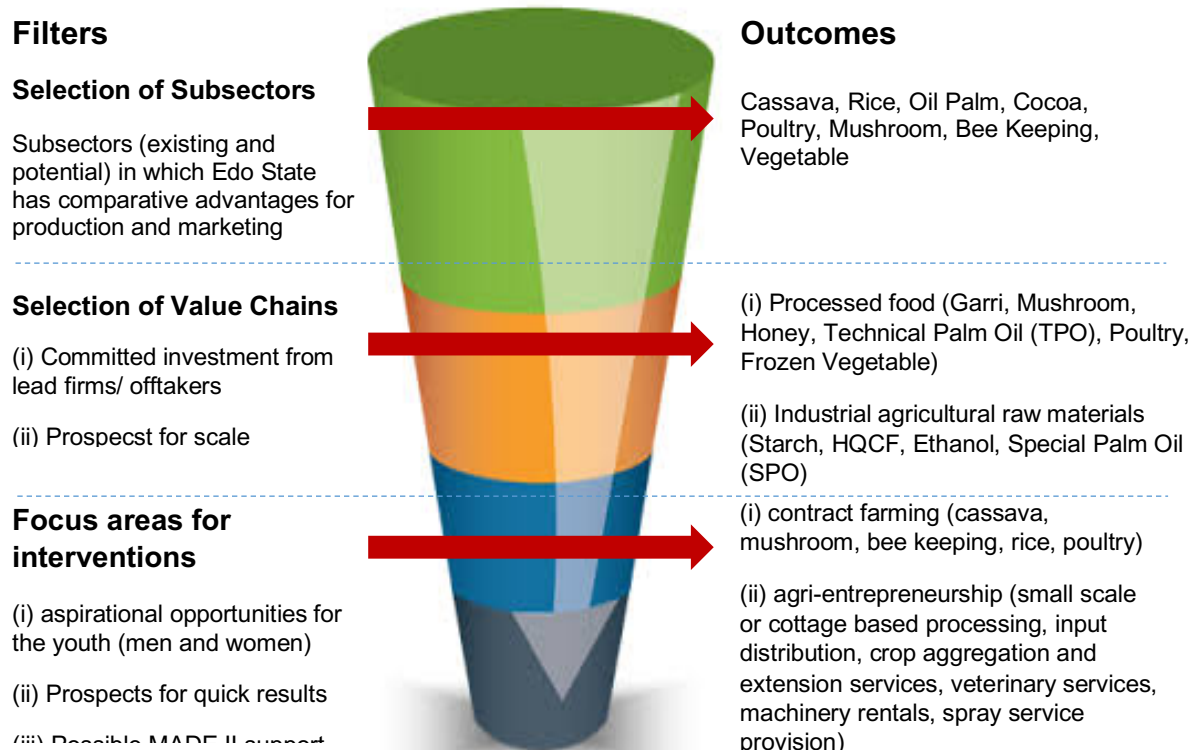
¹ J.H. Davis, R.A.A. Goldberg Concept of agribusiness

Division of Research, Graduate School of Business Administration, Harvard University, Boston (1957), p. 136

² Zylbersztajn, Decio Agribusiness Systems Analysis: Origin, Evolution and Research Perspectives, Universidade de Sao Paulo, Sao Paulo, Revista De Administracao, p. 115 (2017)

system that is tailored to serving local needs. Structuring and organising the small scale poultry system could provide jobs to both young men and women in farming as well as veterinary service provision and aggregation but this requires further field assessment to establish the viability and fit with the MADE/ESIP programme. We have identified processors of bee honey and wax who are interested in developing a commercial beekeeping scheme in Edo, as well as prospective investors in developing a mushroom cluster. These are therefore listed as prospective value chains for ESIP.

Sector, value chain and intervention areas of focus for ESIP



Based on the investment intentions and commitment of key stakeholders in the sector, we can classify two types of value chains relevant for ESIP intervention: (i) processed food (garri, mushroom, honey, edible palm oil, frozen poultry, frozen vegetable) and (ii) industrial agricultural raw materials (starch, HQCF, ethanol, crude palm oil).

Within these two value chains, when considering aspirational opportunities for Edo's youth (men and women), prospects for quick impact results, and qualification for MADE II support, we can define contract farming and agri-entrepreneurship as the two most promising market systems for investment by ESIP. Figure 3 above shows the filtration process that was used to derive our conclusion on prospective interventions. **Annex 1** provides a summary of the sector dynamics that justify their applicability and promise for ESIP.

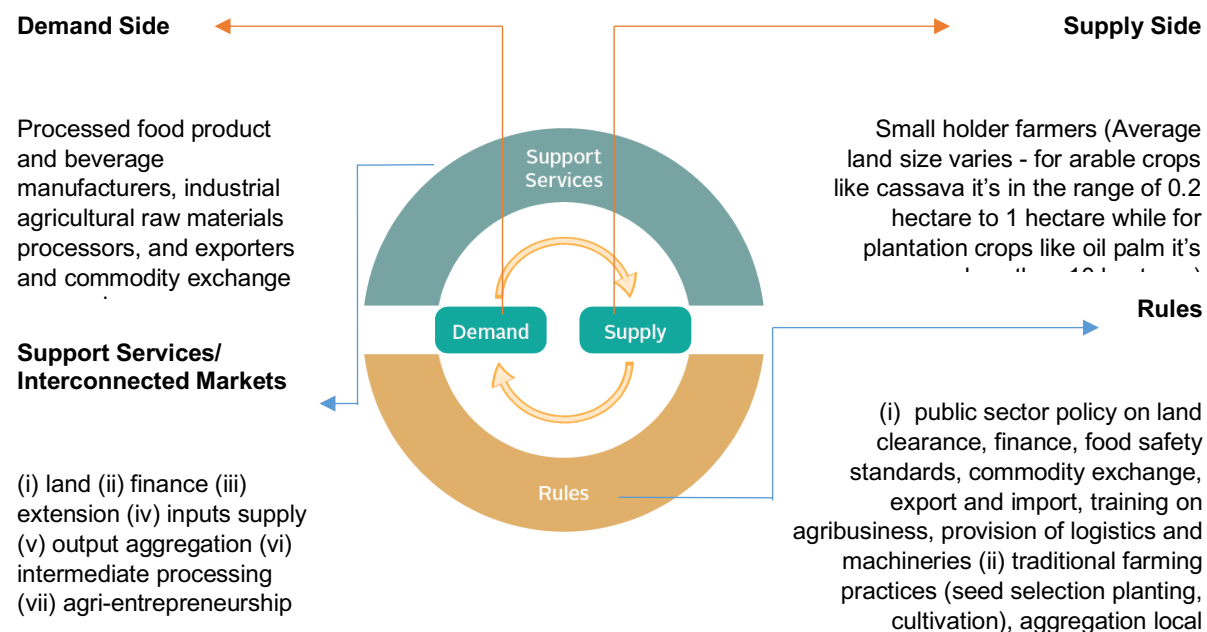
Market Systems Analysis

Structure of the Market System

The supply side of this market system comprises small holder farmers and the demand side comprises commercial off-takers. The off-takers include processed food product and beverage manufacturers, industrial agricultural raw materials processors, and exporters and commodity exchange companies. Based on the findings, we can determine several key support services that are influencing the demand for and supply of agricultural produce for the processed food products and the industrial raw materials and commodity exchange industries in Edo State. These are (i) land clearance, (ii) finance, (iii) extension, (iv) inputs supply, (v) output aggregation and (vii) intermediate processing. The demand for and supply of agricultural produce for off-take is

governed by both formal and informal rules and policies. The formal policies include the government's policies related to land clearance, agricultural finance, commodity exchange, export and import, food safety standards, training of the young men and women for integration in the agribusiness subsectors, provision of logistics and machineries. The informal rules include the traditional practices related to seed selection, planting and cultivation practices, aggregation, local processing and consumption of the produce.

The market systems for processed food and industrial agricultural raw materials and commodity exchange market systems



The Core Market System

We can determine several key distribution processes and channels through which the products move from the farm gate to the buyer or the end consumer:

- (i) ***Direct outgrowing or contract farming:*** In this system the off-taker engages its own staff to organise the farmers. The off-taker provides all the inputs and aggregates the produce cultivated by their contracted growers. The off-taker also undertakes training for the farmers so that they are able to produce as per their specification. While this system is more efficient in ensuring quality and on time supply, it is also expensive upfront for the off-taker who finances the crops at the beginning of the season and doesn't get paid until harvest. The price at the farm gate for the farmers (if they compare to the market price) is reduced to first pay back the off-taker for the inputs received. This makes the farm gate price lower than the market price at the time of the harvest which increases the risk of side selling to the highest bidders if not strictly supervised. As a consequence, this model is not widely practiced. Off-taking companies seem to prefer using local agents or aggregators to manage the system, which is explained further in this section.
- (ii) ***Contract farming via a common platform like the Anchor Borrower's Programme (ABP):*** Under this system, NIRSAL/CBN registers the farmers for an off-taker who guarantees to purchase the crop(s). NIRSAL/CBN supplies the input to the farmers through an input depot. Farmers procure the inputs by transacting through the bank loan provided to them by CBN/NIRSAL. This bank loan is deposited into an account against the registered farmer's name. The off-taker then pays the farmer through the farmer's account. This system is beginning to gain momentum and it is expected to be a dominant force in stimulating outgrower's schemes for processed food and industrial agricultural raw materials in Edo. We have identified several companies that are on the process of initiating the ABP in Edo State. Elephant Group envisions to engage 420 cassava farmers in 840 hectares land. They will be offtaking cassava for production of HQCF. Other off-takers include Halia Yakum (engaging 50 rice farmers in 100 hectares land in Ilushi), and Elsong (engaging 250 farmers in 500 hectares land in Ovia North). Sahel Foods have secured agreement with Okomu Oil Palm Company to set-up about 8000 bee-hives in 8,000 hectares of rubber plantation in Edo State owned by Okomu. These bee hives are expected to be managed by about 400 bee keepers who would be trained and developed by Sahel Foods.
- (i) ***Sourcing via a service provider or through own agents or aggregators:*** In this channel, the off-takers engage a contractor, or an NGO, or a consulting company to manage the outgrower scheme. This is similar to channel 1, as the company is investing

on the inputs and training the farmers, with the purchase price being discounted at the farm gate to account for the previous investment by the company. However, the off-taker has higher control of the system due to engagement of the local agents or service providers who supply it to their processing facilities, outside Edo State. The system is specifically suited for companies that do not have local presence in Edo. We have found companies sourcing cassava, oil palm, cocoa through this system. Guinness have engaged TechnoServe Nigeria to manage a contract farming system involving 600 farmers as a test run for the ethanol plant that is being established in Edo. Africa Exchange (AFEX) is a large commodity exchange company that procures commodities from farmers through an organised system involving full time staffs stationed with the communities. AFEX is undertaking a scoping mission to engage 400 - 500 cocoa farmers in Edo.

- (ii) ***Sourcing from the traders or aggregators in the market:*** In this system, the off-takers procure directly from the local traders or aggregators instead of the farmers. The advantage of this system is that the off-takers do not have to invest on developing the farmer's capacities by providing them inputs or extension services neither do they have to guarantee off-take. However, the system is susceptible to the inefficiency of the local aggregation system that relies on farm level informal aggregation and processing which does not guarantee on time supply of the produce as per the required specifications. Nevertheless, as it is relatively cheaper to manage and there is no concern of side selling, the system dominates the trade among mid-scale processors and off-takers. We found this system being present in cassava, oil palm, poultry and vegetable subsectors.

Support Services

Inputs Supply

Quality assured inputs (seeds, fertilizer, agro-chemicals) do not reach the farmers in the last mile in Edo State through an organized and structured input distribution system. Farmers at the last mile either have to travel long distances to the centres or townships to procure inputs or wait for their local weekly markets where mobile input vendors participate. This can be attributed to the fact that the input distribution system in Nigeria in general has evolved to respond to the large scale initiatives on fertilizer and seeds distribution by the Federal Government of Nigeria (FGN) and the development partners. The FGN's schemes on distribution of subsidized fertilizer and seeds (for instance the Growth Enhancement Support Programme) required engagement of agro dealers who are able to trade in bulk and manage large scale distribution of the inputs to the farmers. Even though the subsidy scheme has now been replaced by the Presidential Fertilizer Initiative (PFI); the system continues to depend on large scale dealers and distributors.

The government's schemes work as the institutional market for the private sector agro input companies. Lately, CBN's Anchor Borrower Programme (ABP) has also created a large institutional market for the private sector agro input companies in Nigeria. Their resources are thus heavily directed towards their engagement in the government's schemes. Otherwise, they follow the investment and the interventions from the development partners in Nigeria.

The development partners, alongside the Federal Government of Nigeria (FGN) have so far concentrated in the Northern States in Nigeria than in the South. According to the International Fertilizer Development Centre (IFDC), the soil in the south is comparatively more fertile than in the north and as such the demand for fertilizer is higher in the north than in the south. This attracted the government and the development partners to focus their interventions on agro-input distribution in the north. Programmes that intervened in developing the agro-input distribution network, especially in the Northern States in Nigeria includes, the USAID FtF Nigeria Inputs Project, DfID funded PrOpCom Maikarfi, USAID Funded DAIMINA, BMGF-AGRA Funded National Agro Dealers Project. According to IFDC, the most successful engagement has so far come through Notore Seeds, a private sector seeds distributor in Nigeria, which looked beyond the government's distribution systems and developed about 3,500 last mile seeds sellers (called village promoters) across Nigeria. Notore Seeds is currently in the process of developing a branded agricultural inputs shop for fertiliser, seeds and chemicals. They are willing to invest in Edo State and extend their village promoters network by connecting them to their branded input shops.

During our field investigation, we found several other private sector initiatives that are aimed at tapping the last mile market for agro-inputs. Novus agro, a Lagos based agri -tech company, has about 305 last mile input retailers (called field facilitators) in 26 states. These field facilitators aggregate demand for inputs from the farmers in their communities and pass it back to Novus. Novus then creates a basket with the inputs ordered and sends it to the field facilitator through Nigerpost for them to distribute. Novus has a dealership agreement with two agro-input companies (Syngenta and SARO) for distribution of their inputs. The company also uses the field facilitators to aggregate inputs for off-takers or commodity exchange companies in Nigeria. Novus earns commission from both input distribution and commodity aggregation. To address the challenge of financing commodity aggregation at the last mile, the company has now engaged local merchants who finance the field facilitators of Novus to aggregate commodities as per orders received by Novus from the buyers. The commission is split between Novus, the local merchant and the field facilitators. The local merchants have higher share of the commission as they finance the procurement in the last mile. The company is willing to invest in developing similar model for input distribution. The model is further discussed under the section on recommendations in this report.

Fiyah Global, is another agri-tech company which is investing in developing input distribution network. The company is contracted by West African Cotton Company Limited (WACOT) to set-up branded input shops for herbicides and pesticides marketed by WACOT. Fiyah Global has so far developed two such branded shops for WACOT in the North. Fiyah Global is interested to

scale the model in Edo State but they want to understand the market potential and undertake a feasibility study before making any investment.

In short, we conclude that the last mile input distribution network in Edo State is weak and yet to be tapped through an organized system. To address this challenge, while ESIP could leverage on the investments being made by the private sector companies like Novus, Nore and Fiyah Global, it can also potentially leverage on the interventions undertaken by MADE and PIND. MADE has partnered with several agro-input companies (Syngenta, SARO, Candel, Contec) to strengthen the retail distribution network in the Niger Delta. The programme has also worked with Syngenta to develop local Spray Service Providers (SSPs) in Niger Delta. The Foundation for Partnership Initiatives in the Niger Delta (PIND) is implementing similar intervention on GAP in partnership with agro-input companies.

Output Aggregation and Intermediate Processing

In the formal contract farming system, outputs can be aggregated in various ways. For example, directly by the off-taking company, by the group of farmers participating in the scheme with a centralised collection point, or by third party agents, traders, and local aggregators. Sometimes local traders who procure directly from the farmers at a local market place, then sell to distant markets outside of state. There are also traders who come in from other states to procure and transport the outputs for sale back in their home state.

Some traders procure product that has already been processed by the farmer (e.g. Garri or Fufu) while others procure the whole fruit and process it at a local mill (e.g. oil palm). Farmers also sometimes sell through cooperatives (cocoa and oil palm) to merchants and processors. However, formal and organised farmers organizations like cooperatives and associations are not common in Nigeria, and as a result, most farmers sell to local traders. Traders and agents who focus on aggregation are almost always informal micro-enterprises and mostly poor. There are not that many young men and women actively engaged in output aggregation as it is neither lucrative nor aspirational. ESIP's intervention on output aggregation is expected to be focused around the formal system involving large companies directly procuring from the farmers either through their own staffs or through their local agents.

Access to Finance

Formal and large scale processing off-takers require significant investment to create or establish farmer groups, train the farmers, provide inputs, supervise production, aggregate, transport, process, package, and store the output. Farmers also require financing and insurance as they shift from traditional low-input and low-output production systems to more intensive commercial farming systems. Fortunately, the agricultural financing system in Nigeria is quite dynamic and vibrant. While CBN-led schemes like the ABP dominate the market, private equity financing is also gaining traction.

- (I) *CBN Schemes:* CBN operates several financing schemes for farmers, large off-takers or agribusiness companies, cooperatives, input companies and the states. The Agricultural Credit Guarantee Scheme Fund (ACGSF) guarantees credit facilities extended to farmers by banks. The guarantee is up to 75% of the amount in default net of any security realised. The scheme was launched in 1979. The Commercial Agricultural Credit Scheme (CACS) offers single digit interest rate of 9% to large scale agricultural enterprises with an asset size of N50m. The state governments are also eligible for CACS for on-lending to farmer's cooperative societies and other areas of agricultural development.

Of the different schemes operated by CBN, the Anchor Borrower's Programme (ABP) is the most relevant for ESIP. Launched in 2015 and managed by NIRSAL, ABP aims to

support large scale commercial off-takers to invest in outgrowers' scheme at the grassroots level for selected crops. It aims to reach about 225,000 farmers across Nigeria. The scheme is available for the following selected crops- (i) Cereals (**Rice, Maize**, Wheat etc.) (ii) Cotton (iii) Roots and Tubers (**Cassava**, Potatoes, Yam, Ginger etc.) (iv) Sugarcane (v) Tree crops (**Oil palm, Cocoa**, Rubber etc.) (vi) Legumes (Soybean, Sesame seed, Cowpea etc.) (vii) Tomato (ix) Livestock (Fish, **Poultry**, Ruminants etc.). The participating Financial Institutions (PFI) of ABP include Development Finance Institutions (DFIs), Deposit Money Banks (DMBs) and Microfinance Banks (MFBs). The fund is provided under the N220 billion Micro Small Medium Enterprise Development Fund (MSMEDF) of CBN. The PFIs borrow at 2% interest rate from CBN and lend at a maximum of 9% interest rate per annum. The loan is provided to Small Holder Farmers (SHF) who are organised in groups or cooperatives of 5 to 20 farm households. Large scale integrated processors work as the anchor and reach an agreement with the SHFs to off-take the harvested produce at an agreed price. The scheme can be availed by the private sector as well as the states. As of April 2017, the programme disbursed N33.3 billion to 146,557 farmers in 21 states³. The programme is insured by the Nigerian Agricultural Insurance Corporation (NAIC).

Apart from the ABP, NIRSAL operates several other funds for agricultural development. These include: (i) Primary Production Financing Products, (ii) Agricultural Mechanisation Financing Products, (iii) Agricultural Input Financing Products, (iv) Irrigation Financing Products, (v) Aggregation and Storage Financing Products, (vi) SME Financing Products, (vii) Processing Financing Products, and (viii) Agro Commodities Wholesale and Retail Financing Products.

- (II) *Private Equity Financing:* Sahel Capital manages the Fund for Agricultural Finance in Nigeria (FAFIN), which is sponsored by the Nigerian government via the Federal Ministry of Agriculture and Rural Development, the German government via KfW Development Bank, and the Nigeria Sovereign Investment Authority (NSIA). In 2017, Sahel Capital had the final close of its maiden fund at \$65.9 million with additional funding from the African Development Bank (AfDB), CDC Group, Dutch Good Growth Fund (DGGF), and Nigeria Sovereign Investment Authority (NSIA). Since FAFIN's launch in 2014, Sahel Capital has assessed over 100 companies and elected to invest in four indigenous high growth companies. Through these investments in the dairy, edible oils, poultry and cassava value chains of Nigeria, FAFIN reported creation of 500 new jobs - 50% of which are occupied by women and youth - and improved the lives of over 1,000 small holder farmers and their families by supporting innovative business incentives and outgrower schemes. With the additional capital raised, Sahel Capital aims to invest in 9 – 10 additional companies which would create over 4,000 more direct and indirect jobs, and further uplift the lives of over 36,000 smallholder farmer families across Nigeria⁴. It should be noted herein that none of the schemes financed by FAFIN are in Edo State, although there is potential for Edo State farmers to supply FAFIN firms with raw materials (e.g. cassava and palm oil).

³ Premium Times (2017) "Anchor Borrowers' Programme: Farmers repay N7 billion", 04-05-2017. Available: <http://www.premiumtimesng.com/business/business-news/230352-anchor-borrowers-programme-farmers-repay-n7-billion-cbn.html> [Accessed 15th May, 2017]

⁴ <http://sahelcp.com/sahel-capital-closes-fund-agricultural-finance-nigeria-fafin-65-9-million/>

- (III) *Microfinance:* There are about 20 CBN accredited Micro Finance Banks (MFBs) in Edo State. There are also various non-CBN accredited MFBs in Edo. A study on microfinance bank's support to agricultural lending in Edo State shows that about 54.9% of the loans were disbursed to livestock farming (worth N64.6 million) which was followed by crop farming (30.5%) valued at N35.9 million⁵. The report concluded that the percentage allocation of lending in agriculture was minimal due to uncertainty in production and inability of farmers to provide collateral. The report also concluded that the MFBs provided both individual and group loan methods, with the group method being highly preferred because of its better repayment and minimal loan default rate. The mean loan volume for farm loans in Edo State is reported to be N1.17 million.

During our field investigation, we interviewed LAPO Microfinance, which is one of the largest MFBs in Edo State. LAPO was supported by the PropCom Maikarfi project to create an agricultural input retail loan. LAPO is providing loans to farmers in cassava, poultry, pigry, fisheries, plantain and oil palm value chains. In oil palm, they provide finance for harvesting machines. They are planning to invest N2 billion into the maize value chain across Nigeria. For cassava, they are financing inputs (machines, cassava grater). LAPO strongly prefers to provide finance to the farmers based on a tripartite agreement between the off-taker, farmer and LAPO. They finance 80-85% of the farmers supplying to Africa Exchange (AFEX). AFEX has proudly reported a 98% repayment rate. LAPO also provides individual loans based on risk assessment. The start-up loan size is typically N200,000. For grain production, they provide short term loans (6 months) at 5% monthly interest rate. In Edo State, LAPO currently has about 3,500 farmer borrowers, most of whom are reported to be men.

We conclude, that finance will be a major determinant for ESIP's ability to crowd in both large scale off-takers and farmers. Since ESIP has limited time to start-up its interventions, it needs to leverage on the existing schemes and existing deals on the books or underway in Edo State. These might include new or expansion projects under the ABP or with microfinance banks like LAPO – to start-up a cassava processing plants or extend or scale up its volume through better mechanisation. Working within a tripartite agreement with an established off-taker will ensure the risks associated with sustainability and effective coverage of the loan schemes are mitigated since ESIP will be investing in schemes which are at matured stage and are at the point of disbursement. ESIP's value addition in this context will be to ensure that the off-takers are able to manage their operations in an inclusive process which creates sustainable jobs for Edo's vulnerable population.

Land Lease and Clearance

⁵ <https://www.omicsonline.org/open-access/analysis-of-microfinance-banks-support-to-agricultural-lending-in-edostate-nigeria-2332-2608-1000211.pdf>

The Edo State Government has been clearing up land for agriculture in a bid to attract investors, especially agro-industrial complexes like food processors. According to the Edo State Government's Letter of Development Policy to the World Bank (2015), the government provided 50,000 acres of land for rice production in Edo North under a public private partnership in 2014. It was cited in the report that the government was also reviewing applications from prospecting investors to clear 250,000 hectares of land for palm, cassava, rice and rubber plantation⁶. In 2017, the government cleared 2,500 hectares of farm land for farmers for the plantation season of 2018⁷. Edo State Government's land clearance activity is also tied to the CBN/NIRSAL ABP facility. Land clearance for commercial agriculture has thus become one of the major drivers of growth in agriculture in Edo State. Land clearance under private initiatives is also being undertaken but it is very expensive. For instance, Omoregei Farms, which offtakes cassava to process starch and ethanol, has come up with a scheme to bulldoze and clear land for communities who then will grow cassava under an offtake/contract farming type of arrangement. According to Omoregei, it costs about N250,000 to clear a hectare of land in Edo. The effect on the soil based on the type of clearance methods used (e.g. bulldozing versus cutting and mulching) has not been studied for Edo, although common knowledge states bulldozing is more detrimental as it removes the top layer of soil which contains most of the nutrients.

Similar to the financial schemes, the land clearance schemes involve bureaucratic processes and are also reported to be politically driven. The impact of land clearance with regards to creating jobs and expanding agricultural production in Edo is however well established. ESIP should leverage on the existing plans and schemes for land clearance and partnerships with off-takers who have received new land from the government in recent years to establish outgrower's schemes in Edo.

Extension Services

The Agricultural Extension Department under the Federal Ministry of Agriculture and Rural Development (FMARD) is mandated to undertake extension services in the field. The department has a field extension service division which is tasked to facilitate and promote the involvement of private sector-based agricultural extension delivery in Nigeria. However, we did not find any such initiative involving the private sector and the field extension services division in Edo. Findings suggest that the programmes tend to bypass the public extension system because of the bureaucracy involved and work directly with the private sector to build their capacity to deliver extension services to the farmers. As explained earlier, the extension system under the out-growers' schemes are usually managed directly by the off-takers who provide the inputs and the necessary training to the farmers. Our findings show that many of the off-takers who are about to initiate out-grower's schemes in Edo have not developed fully prepared and costed plans to set-up and deliver extension services to ensure their out-grower farmers use the right inputs and farming methods. ESIP in this context can add value by providing support that builds on MADE

⁶ <http://documents.worldbank.org/curated/en/897111468099837527/pdf/RAD1623918282.pdf>

⁷ <https://www.vanguardngr.com/2017/12/edo-clears-2600-hectares-land-2018-planting-season/>

l's experience in improving on-farm practices and productivity especially in cassava, cocoa, oil palm and poultry value chains.

Policies and Rules

The devaluation of Naira has directly impacted the market for agriculture and agribusiness in Nigeria. The impact of devaluation of Naira on agriculture is captured in details in a 2017 report commissioned by PIND and MADE. The report concludes that the devaluation has increased demand and price for cassava, rice and palm oil in both industrial and processed food markets. As per findings presented in the report, the devaluation has also increased export competitiveness of cocoa produced in Nigeria. The report however underscores that the growth in demand and price of these commodities has not favoured the small holder farmers in the value chains because of the increase in cost of inputs, especially fertilizer, seeds and crop protection materials which are dependent on import. The outgrowing schemes in this context can play a positive role to channel the benefit to the small holder farmers as the cost of the inputs in such schemes are borne by the out-growers.

As we explained earlier in this report, the financing policies and scheme (for instance the Anchor Borrower's Programme) of the Central Bank of Nigeria is playing a significant role in attracting agro processors to invest in outgrowing schemes in Nigeria and in Edo. The Edo State Government has also embraced a pro-out-grower policy to attract investment, especially for cassava, maize and rice value chain. The Edo State Government has initiated the Agripreneur Project under the Accelerated Agriculture Initiative. Under this initiative 5,000 hectares of farmland is expected to be cultivated. As per published reports, in 2017, 1,000 hectares of land was cultivated which provided employment to 200 youths in the state. In 2018, about 2,000 hectares of land was cleared and prepared to be brought under the project.⁸ The Agripreneur Project intends to work with off-takers and aggregators so that the newly rehabilitated farmers have an assured market. The government has been looking for off-takers for maize, cassava and rice.

The land ownership system in Edo has a direct implication on the off-taker's ability to expand area under coverage. The land in Edo are communal land and the Oba of Benin (the traditional ruler of Edo) has the right to allocate the land to a person or a community. Some of the off-takers have requested ESIP to support the land clearance process. It is essential that ESIP reviews the land ownership system in Edo in details. It is also important that ESIP reviews the environmental policy regarding land clearance since it is associated with the risk of deforestation.

⁸ <https://www.vanguardngr.com/2018/02/agripreneur-project-edo-govt-calls-maize-cassava-rice-off-takers/>

The land ownership system does not favour entitlement of women. The farms are thus mostly owned by men. However, the women play a critical role as farm labour, processors and traders of the raw produce as well as the processed products and by products. This is particularly evident in cassava value chain where 70% of the traders are reported to be women. ESIP's interventions are thus expected to create more jobs and increased income for the women in the forward market linkages of the value chains rather than in the production function.

The interventions of ESIP in the out-growing market systems of the selected value chains are expected to create more jobs for the young men and women in the backward (input supply, machineries rentals) and the forward market linkage activities (processing, marketing). According to stakeholders, engagement in non-mechanized farming activities is not aspirational to the youth. However, some of the value chains, for instance, poultry, mushroom, bee-keeping are expected to crowd in large number of vulnerable young men and women in the production function. Youth are also expected to be engaged in the service provision related to spraying, extension of agricultural information. In short, the impact of ESIP's interventions on the youth will be multifaceted and as such the prospect for creating jobs and income for the youth will be higher if the project activities are designed to address the opportunities and systemic barriers for growth across different value chain functions and the support service systems related to the value chains.

Review of Systemic Barriers restricting the Market Players to Respond to the Growth Opportunities

There are large number of industrial and agro-food processors in Nigeria who are interested to invest in developing the offtake system for cassava, oil palm, poultry, cocoa, mushroom, vegetable, maize, rice and bee-keeping. Edo state is yet to benefit from this opportunity as much of the investments in the offtake systems are taking place in the northern regions or in the south-west regions of Nigeria. The offtake system requires complex partnerships involving farmers, farmer communities, local agents, aggregators, input suppliers, financial service providers and the off-takers. The engagement of the development partners in the northern regions and in the south-west regions meant that the risks and investments associated with initiating the system were shared between the off-takers, the state governments and the development partners. The off-takers continued to build on this momentum by investing in processing facilities in those regions. In this context, external facilitation from development partners and the Edo state government is essential to crowd-in prospective off-takers to invest in Edo state. This will facilitate development of the local scale agents (NGOs, cooperatives, local aggregators, extension service providers) for offtake, reduce the social, financial, logistics and infrastructural entry barriers for the off-takers.

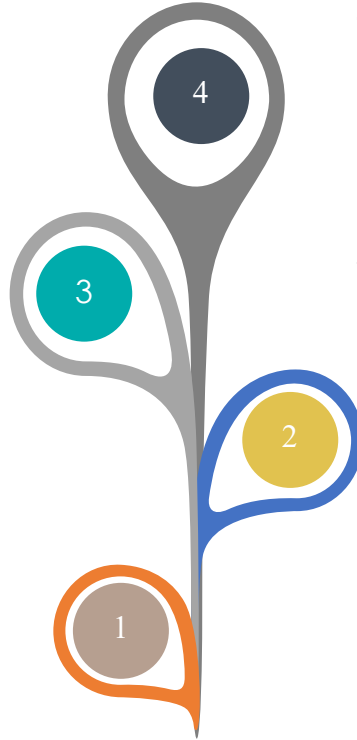
Systemic Constraints and prospective solution for promotion of out-grower's schemes in selected value chains in Edo

3. ROOT CAUSE(S) FOR MARKET FAILURE

Investment in off take/ contract farming is complex as it involves multi-stakeholder partnerships. The off-takers generally rely on external support or public sector mediation for investment.

1. OPPORTUNITY

Large number of industrial and agro –food processors in Nigeria are interested to invest in developing the offtake system for cassava, oil palm, poultry, cocoa, mushroom, vegetable, maize, rice and bee-keeping.



4. POTENTIAL SOLUTION

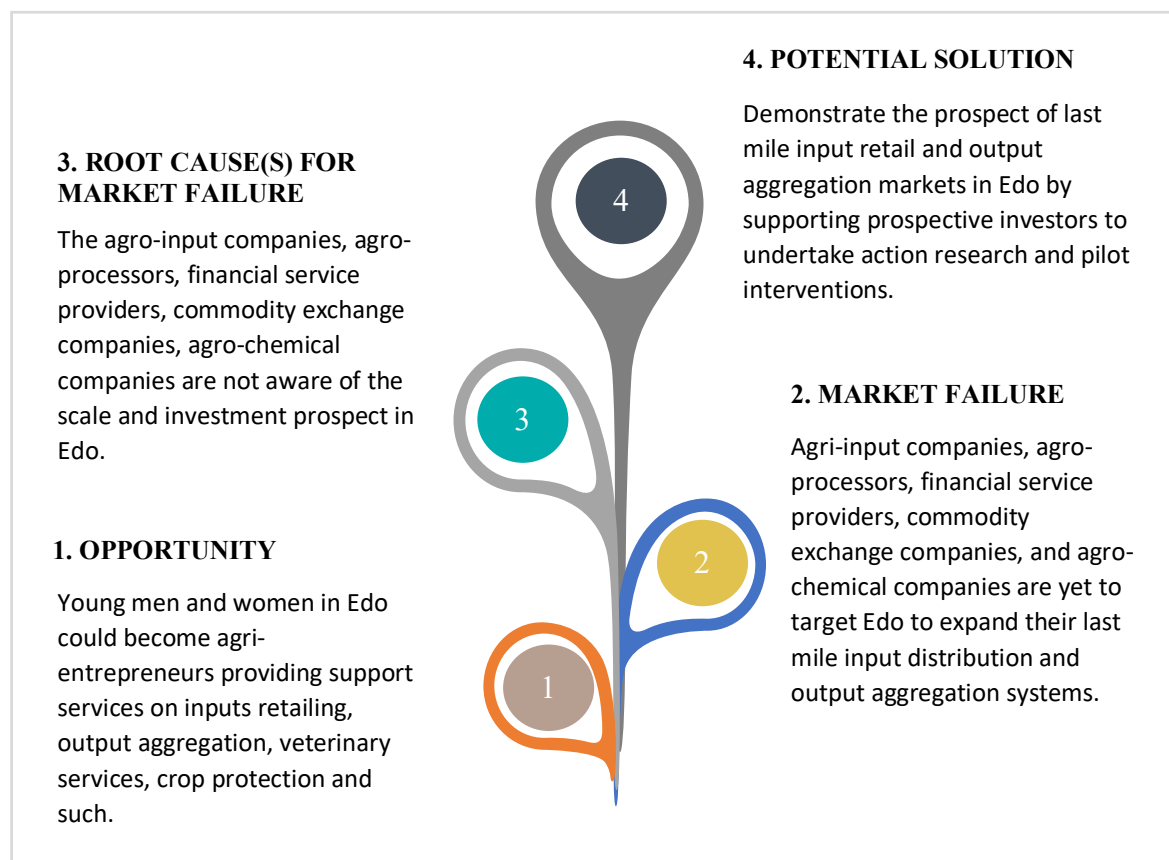
Crowd-in prospective off-takers in Edo by facilitating partnerships between farmers' communities, meso level organisations and the off-takers to create on-farm engagement opportunities for the youth in Edo.

2. MARKET FAILURE

Offtake initiatives in Edo are still at the nascent stage when compared to the northern regions or the south-west regions of Nigeria; Edo is yet to become a preferred destination for the off-takers in the processed food and industrial agricultural raw materials value chains in Nigeria.

The growth in production of the arable and tree crops and the livestock will stimulate further growth in demand for inputs, machineries, local processing, packaging, transportation, extension and such. This would require the input companies, machineries fabricators, packaging solution providers, transportation and logistics service providers to invest in developing last mile channels that can reach the farmers and facilitate their uptake and usage of the inputs, machineries and such. The feasibility for offtake will be affected if the market for inputs and support services fails to grow since the farmers will not be able to achieve the productivity and quality at which marketing to the off-takers will become commercially viable and profitable for the farmers. Our findings show that the agri-input companies are yet to invest in Edo to develop their distribution and retail system. They have followed the interventions from the government and the development partners and invested in the Northern region. The market potential for input distribution and retail in Edo is not assessed and established. In this context, ESIP can play a vital role by expanding the interventions undertaken by MADE 1 and PIND on promotion and demonstration of GAP which works as a catalyst to create demand for inputs and subsequently attract investment from the input companies to set-up their local input distribution and retail system. ESIP could also undertake interventions together with agri-tech companies which are working on innovative channels for input retail and output aggregation.

Systemic Constraints and prospective solution for engaging youth in non-farm value chain activities



Key Market Actors and their Possible Roles in ESIP

ESIP will have to partner with a mix of public and private sector actors to growth in the agribusiness sector in Edo state. Table 2 below summarises the actors who would be key for ESIP for its interventions:

Key market actors and their possible roles in ESIP

Type of Actor	Specific Organizations	Roles in ESIP
Processed-food, beverage and fast moving consumer goods, agricultural commodity exchange companies	<ul style="list-style-type: none"> - Elephant Group - Greenland Trust - MGG Wells - Oklan - Akomz - Guinness - Temcor - Akomz farms and foods - AMO 	Based on interest and willingness to invest, some of these companies will be the prospective partners for interventions by ESIP. They are expected to invest on piloting and scaling the offtake arrangements to create jobs and income opportunities for the youth in Edo. ESIP should be open to

Type of Actor	Specific Organizations	Roles in ESIP
	<ul style="list-style-type: none"> - Sahei Foods - AFEX 	invite and engage other such companies which are interested to invest in developing the offtake system in Edo.
Agri-input, agro-chemical companies, technology based agri-businesses	<ul style="list-style-type: none"> - Novus Agro - Notore Seeds - Fiyah Global - WACOT - MADE 1 Partners (SARO, Sygenta, Candel) 	Based on interest and willingness to invest, some of these companies will be the prospective partners for interventions by ESIP for the agri-entrepreneurship intervention. They are expected to invest on piloting and scaling the interventions to create jobs and income opportunities for young men and women in the support services provision for agriculture in Edo. ESIP should be open to invite and engage other such companies which are interested to invest in developing the offtake system in Edo.
Public sector agencies	<ul style="list-style-type: none"> - NIRSAL - ADP - Edo State Agripreneur Programme - EdoJobs Project 	<p>NIRSAL will be a key strategic partner, although not a direct and contracted partner since most of the prospective off-takers are already participating in the Anchor Borrower's Programme or are in final stage negotiation with NIRSAL. NIRSAL will be one of the key scale agents to crowd in more off-takers to Edo as ESIP intervention matures and demonstrates the results.</p> <p>ESIP needs to have regular discussion and dialogue with the ADP to leverage on ADP's interventions or to ensure that the interventions of ESIP are not overlapping. Similarly, ESIP needs to have dialogue and regular communication with the Edo State Agripreneur Programme and EdoJobs project as the activities undertaken by these projects have high relevance to the proposed ESIP interventions in the agribusiness sector in Edo State.</p>

Type of Actor	Specific Organizations	Roles in ESIP
Business Organisations Membership NGOs/ Consultancies	<ul style="list-style-type: none"> - NACCIMA - BCCIMA - H2A Consulting - Talented Women Farmer's Association (Benin) 	<p>BCCIMA could help ESIP identify the prospective clusters, select or register prospective farmers for the engagement in new offtake initiatives and undertake the training activities. Talented Women Farmer's Associations could also provide similar service. H2A consulting could provide agri-entrepreneurship training. These organisations are expected to be contracted out by the partner companies for the interventions. As such they will not be direct partners of ESIP.</p>
Other Donor Funded Projects	<ul style="list-style-type: none"> - PIND - Propcom Maikarfi - GEM 	<p>ESIP can leverage funding from GEM project. The project has mandate to intervene in similar interventions and is interested to expand its coverage in Edo State.</p> <p>Propcom Maikarfi and PIND has intervened in input distribution, machinery fabrication for processing. ESIP can build on their learning for the interventions on agri-entrepreneurship.</p>

SWOT Analysis for Market Systems Interventions to Achieve the Intended Impact of ESIP

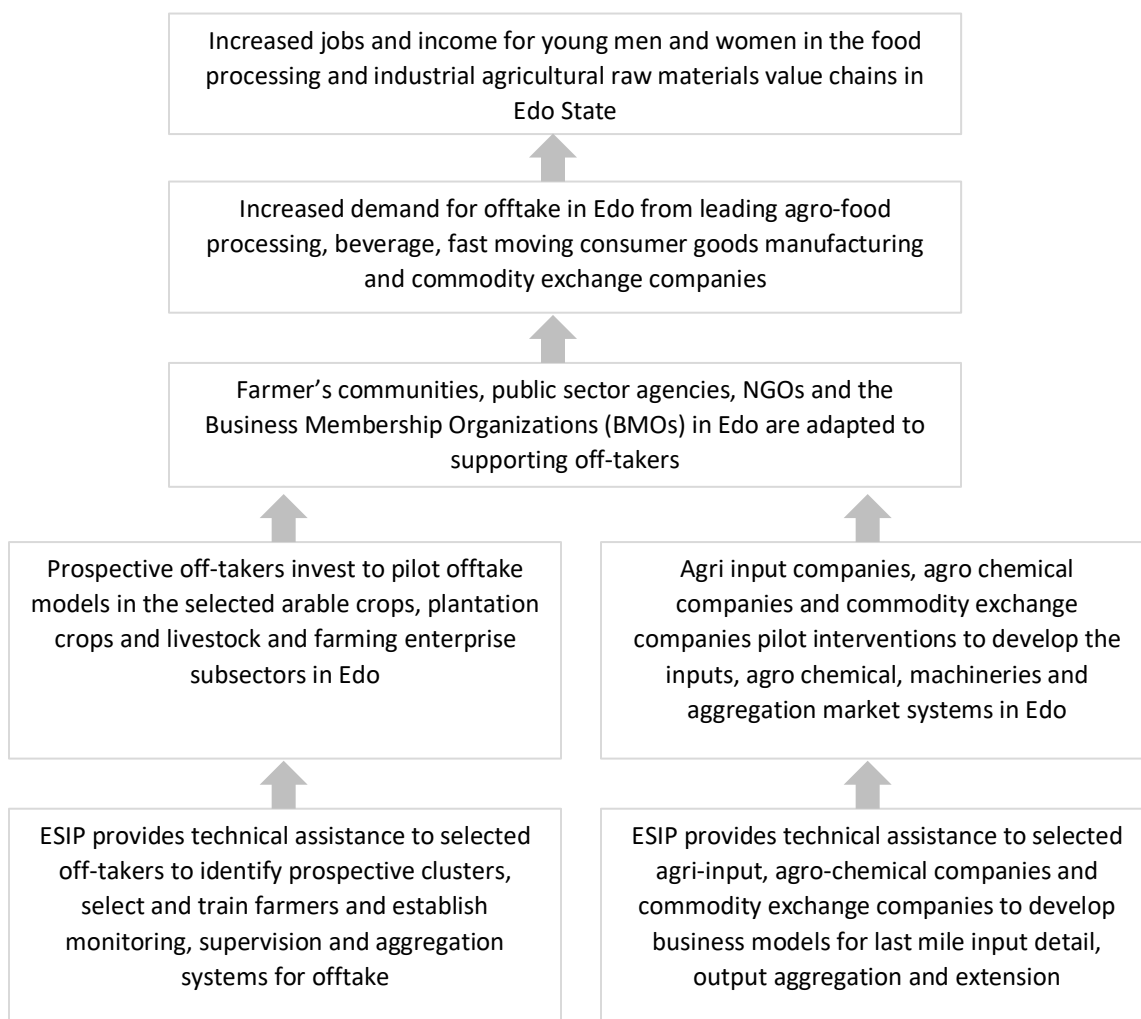
This SWOT analysis show the capability of ESIP to deliver the intended impact of jobs and increased income for the young men and women in Edo State in Nigeria by intervening in the agribusiness sector.

Strengths <ul style="list-style-type: none">- ESIP can build on the existing partnerships and networks of MADE 1, especially for agri-entrepreneurship interventions on Spray Service Providers (SSPs) for oil palm, village livestock dealers for poultry, and spray services for the cocoa value chain which is affected by discounted price due to poor quality of the produce and there is a demand for spray services to mitigate this.- The MADE agribusiness team has a good foundation and expertise on managing market systems interventions; they are also highly knowledgeable on the sectors, have the network with the relevant public and private sector organisations, and can start interventions quickly.	Opportunities <ul style="list-style-type: none">- There are several prospective off-takers who are either scoping the prospect of offtake in Edo or are interested to invest in Edo. ESIP can leverage on these prospective investments.- The Edo State government is actively pursuing the agenda of facilitating offtake for several value chains, including cassava, maize and rice. These are expected to positively facilitate the programme's interventions.- The financial market system is vibrant and dynamic; the project can build on this system to make it more inclusive and driven towards creating sustainable jobs for the young men and women in Edo.
Weaknesses <ul style="list-style-type: none">- The interventions are highly sensitive to the agricultural calendar. ESIP agribusiness interventions need to be rolled by July 2018. The project thus does not have much time to negotiate partnership agreements and activities with the prospective partners.- The programme has about 21 months since inception. This means the programme has limited time to do action research or pilot. Given the target to increase income and create jobs for large number of young men and women, the programme will have to invest prudently on opportunities that offer the highest prospect for scale.- The programme has limited funding window; this means it has to prioritize intervention, pull funding from other projects and be lean on its investment strategy.	Threats <ul style="list-style-type: none">- The commodity market is highly vulnerable to international market trends; global shift in trends can have major impact on the prospective impact and be a set-back for ESIP. It is therefore essential that ESIP intervention portfolio is well spread out across different commodities.- The offtake system involves different public and private sector actors and the farmer's communities who need to work together and build a relationship of trust for the system to work; ESIP should engage personnel who have experience in managing such systems so that the risks are controlled.

Vision for Inclusive Growth and Theory of Change

The vision of ESIP in the agribusiness sector in Edo is to create a vibrant agribusiness investment climate characterised by an increasing number of off-takers investing in Edo and driving value chain growth by promoting good agronomic practices which will create more jobs for the young men and women in production, processing, input supply and the output aggregation system alongside machinery manufacturing and rental services, and transportation and logistics. Figure 5 illustrates the theory of change for ESIP interventions for the agribusiness sector in Edo State.

Theory of Change for ESIP Agribusiness Interventions



1.3 Recommendations

In line with the market opportunities to achieve the vision, we recommend two broad intervention areas for ESIP:

- (iii) Provide support to early stage out-grower schemes being driven by experienced agro-processors that want to expand their sourcing strategy to take advantage of Edo's agricultural advantages in select crops.
- (iv) Provide support to input supply companies and existing input dealers to extend their services (and points of sale) to last mile farmers. Similarly, support the establishment of commercially viable last mile aggregators/agents to help link last mile farmers to the market. If and where possible, last mile services could also be expanded to include machinery rental services, crop insurance protection, extension services and other material and service needs.

The intervention activities, scale and scope and prospective impact will vary between the subsectors and for the different prospective partners within the subsectors. The following framework explains the strategic action plan for implementation of the interventions.

INTERVENTION I: FACILITATE EARLY STAGE OUTGROWER'S SCHEMES TO DEVELOP THE BUSINESS SUPPORT SYSTEM THAT IS ESSENTIAL TO SUSTAIN AND SCALE

1: Partnership with Elephant Group to develop cassava contract farming systems for HQCF	
Readiness	High and Immediate
Justification	Elephant Group is a large Nigerian business conglomerate. It deals with commodity imports (fertiliser, rice, crude palm oil) and exports (sesame, cashew). The company is investing heavily on developing a consumer food product brand for cookies and swallows which will be made of HQCF that the company will process from cassava directly sourced from outgrowers in Edo State. The company is participating in the CBN/NIRSAL Anchor Borrower's Programme (ABP) and through the Edo State government, has secured 840 hectares of land for cassava production. As many as 420 farmers (2 hectares each) will be engaged to produce cassava for Elephant Group which will be processed in four existing processing plants (3 in Edo and one in Lagos). They plan to extend the pilot stage coverage to 1,150 hectares of land. The company says they will consume most of the processed HQCF for its own products while the rest will be sold to industrial buyers from whom they have confirmed orders. The company has partnered with H2A Consulting to manage the scheme. The farming is expected to begin in June 2018. ESIP can leverage the investment by supporting Elephant Group to set up the local aggregation and supervision team and to train the farmers on GAP. This will contribute to the scheme's effectiveness and pave the way for accelerated expansion in the next crop production cycle.
Prospective Impact	420 farm households will directly benefit from the scheme. Each farm household is expected to employ 10 labours per hectare. This will generate employment for at least another 8,000 agricultural labours in Edo. Each processing plant will create another 30-40 full time jobs.
Impact on Women	Much of the labour on the farm land are expected to be women. Each processing plant will employ about 20-40 women for peeling. The daily wage rate for this job is expected to be N1,500-2,000.
Support from ESIP	ESIP's support would be on engaging Short Term Technical Associates(STTAs)/ contract farming specialists who could support Elephant Group to strengthen their field supervision system and develop semi-processing units for the produce before it is transported to the processing facilities. ESIP could also support Elephant Group to undertake demonstration and GAP training for the farmers so that they are able to increase their productivity.
Role of the Partner	Elephant Group is expected to manage the full scheme as per their agreement with NIRSAL under the ABP. They will ensure offtake and processing. They will provide data on the total investment made, farmer's production, productivity, farm gate prices, jobs being created at farm and at the processing facilities. Elephant Group is expected to invest on recruiting 4-5 field supervisors who could undertake the field supervision and semi-processing of the produce. Elephant Group will also organize the farmers and undertake the GAP training and demonstration for the farmers as per agreement with ESIP.
Prospect for Scale	The company is expected to add another 300 hectares of land in the next production cycle. Furthermore, if the scheme proves to be successful, they plan to bring more farmers under outgrower's schemes for HQCF production. The company also envisions to expand into rice outgrowing and processing in Edo. This will provide unique opportunity for ESIP to scale the outgrower's scheme.

Next Steps	The immediate step for ESIP is to discuss and agree the partnership activities with Elephant Group and the budget. ESIP's contribution in the partnership is estimated to be around GBP 25,000 which will account for the STTAs, the GAP training for the farmers and the demonstrations. It is expected that Elephant Group will retain the supervisors and sustain the semi-processing units once ESIP support is withdrawn after the first production cycle/offtake. Elephant Group can continue to use the GAP training module for new farmers added to the scheme.
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2: Partnership with Guinness to ensure offtake from 600 cassava outgrowers as pilot run to ensure the raw materials for their Ethanol Processing Plant in Edo

Readiness	High and Immediate
Justification	Guinness is one of the largest breweries in Nigeria. The company currently depends on Ethanol exported from South Africa. It is in the process of forging a partnership with an ethanol processor in Edo. The plant is expected to be operational in 2020. In anticipation of the processing plant's need for substantial amounts of raw cassava, Guinness has engaged TechnoServe, an international non-profit, to initiate an outgrower scheme Ovia North in Edo State. Currently 600 farmers are enrolled against the targeted 1,100. The targeted growers are all vulnerable small holder farmers (SHF). Guinness is looking for an off-taker for the produce as it has no use for it until the processing plant is operational. Guinness expects to process 16-20 million litres of ethanol per annum once the processing plant is in operation.
Prospective Impact	Similar to the Elephant Group intervention, this intervention is expected to directly benefit 600 farmers immediately from improved production and income. This impact will trickle down to as many as 6,000 farm labours, assuming each farmer employs on average 10 labours).
Impact on Women	Most of the labourers on the farms are expected to be women. Furthermore, Guinness has consented to select and engage vulnerable young men and women from Edo for the scheme.
Support from ESIP	ESIP will support Guinness to secure an off-taker for the scheme. Besides, similar to the Elephant Group intervention, ESIP may also support Guinness on (i) recruiting 4-5 field supervisors (both men and women) who can undertake the field supervision and also undertake semi processing for the produce before they are transported to the processing facility and (ii) to undertake demonstration and GAP training for the farmers.
Role of the Partner	Guinness is expected to facilitate ESIP to forge a partnership with TechnoServe which is managing the scheme. Guinness will provide technical advisory inputs on the operations of the scheme and the scalability. TechnoServe is expected to manage the scheme as per their agreement with Guinness while ensuring that the off-taker engaged by ESIP has full cooperation to off-take from the farmers as per agreement facilitated by ESIP.
Prospect for Scale	Guinness has the prospect to scale the intervention to engage 500 additional farmers. Furthermore, in the long run, the intervention is expected to crowd in other brewery companies in Nigeria to initiate off-take schemes in Edo.
Next Steps	ESIP should undertake a joint meeting with TechnoServe and Guinness to finalise the support activities and the budget for the activities. ESIP should also talk to the prospective off-takers that were identified during the course of this study (this includes but is not limited to Greenland Trust, Oklan, Sahel Capital, and Psaltry) and link them up with Guinness/ TechnoServe for offtake of the produce.

3: Partnership with Greenland Trust as an Off-taker for Garri Processing

Readiness	High and Immediate
Justification	<p>Greenland Trust leased a processing facility from the Agricultural Development Programme (ADP) of Edo State to process garri and market it as a branded product to the supermarkets and stores. They have a processing capacity of 1 ton per day and require 4 tons of cassava tuber per day. This sums up to about 1,560 tons of cassava per year. They are also in the process of leasing another processing facility in Edo Central (Eirrua). Currently they are operating in Ogun State. To support the processing facility(ies) in Edo, Greenland is leasing 50 acres of land to produce cassava on their own. The company however needs an additional 120-150 farmers to source from to ensure the supply of 1560 tons of cassava per year (assuming each farmer produces on one-hectare land and the average yield is 10 tons/ha).</p> <p>While this offers an opportunity to engage 120-150 farmers as suppliers to Greenland, the company has proposed an innovative scheme to train and develop about 500 local women as high quality garri processors and purchase their production to be sold in markets in Lagos and Abuja. Their plan is to engage 150 processors in Edo South, 150 processors from Edo Central and 200 from Edo North. The company proposes to procure 25 tons of garri every week. The company will employ 11 canvassers in the three districts to aggregate the garri. They will package it centrally in Benin City. The intervention offers an excellent opportunity to improve the traditional garri processing market systems, which is primarily operated by women.</p>
Prospective Impact	As many as 150 farmers are directly expected to be involved to supply cassava tubers to Greenland. These farmers will benefit from improved yield through adaption of GAP. Additionally, these farmers are expected to benefit about 1,500 farm labours. Greenland has proposed to engage 500 processors in several phases. Our assessment shows that they are targeting to source 50kg garri from each processor a week. This will provide gross income of N13,000 per week to the processors. Furthermore, the scheme will initiate a transformation of the low value added traditional garri processing market systems. This will trickle down more benefit (income) to the processors and the farmers.
Impact on Women	All the processors are expected to be women. Furthermore, much of the farm labours in the outgrower's scheme are expected to be women.
Support from ESIP	ESIP could support Greenland Trust to first secure and offtake from 150 suppliers of cassava. This might require engagement of a local NGO as a service provider or co-facilitator which can undertake the selection process. Simultaneously ESIP should support Greenland Trust for the selection and training of local garri processors. ESIP can also support the NAFDAC registration process for Greenland Trust for marketing of the produce. Part of the support could also be provided on launching and marketing the product which will enhance the capacity of Greenland Trust to expand its sourcing base of processors.
Role of the Partner	Greenland Trust would ensure off-take from the 150 cassava producers at a guaranteed price. Greenland Trust would undertake GAP training and demonstration for these farmers. However, this activity will not be needed if they are off-taking from the producer engaged by Guinness through TechnoServe. Greenland will provide further training to the garri processors as needed.
Prospect for Scale	The intervention will demonstrate the prospect for local scale high quality garri processing and can crowd in more companies to invest in this. Greenland Trust itself will be able to scale and engage more processors if they are able to secure the market for the processed garri and also ensure the quality of the processed garri sourced from the households.
Next Steps	Greenland Trust has submitted a proposal to ESIP. ESIP should sit with Greenland Trust and discuss the field engagement plan, targets, key

	performance indicators and the budget. ESIP should aim to begin the intervention by July 2018. The intervention is expected to cost ESIP about GBP 25,000 of which 15,000 is to be spent on engaging the 150 cassava producers and 500 processors. The rest will be used to support Greenland Trust's launch and marketing of the locally processed garri. Greenland Trust is expected to top up the fund with an additional GBP 25,000 for the field activities. This does not take into account the investment already being made by Greenland Trust in their own processing facility or the investment to be made for procurement, branding and marketing of the garri. The MADE II M&E team should also work with Greenland Trust to further evaluate these data during the contracting stage.
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4: Partnership with OKLAN for to set-up offtake agreements with farmer's cooperatives for oil palm	
Readiness	Moderate and mid-term
Justification	OKLAN serves the Nigerian consumer market for native food products in USA, UK and the EU. They supply to Addes Food in UK which is one of the largest wholesale African food stores in the UK. Other buyers include Horizon Bibs in Texas, Market Place in Georgia, and African Charles in New York. The company supplies both finished and raw food products. The company directly procures from the farmers in Oyo State and Osun State and processes the products in Ibadan State. They employ several farmers' cooperatives to source their raw materials. They employ about 105 women to do the intermediate processing. The company intends to procure crude palm oil, fresh plantain, cassava, okra, watermelon. They are specifically interested to source garri from Edo State. They plan to source 23 tonnes of garri per month and are exploring the possibility of establishing a processing facility in Edo State. OKLAN is also interested to off-take oil palm from Edo and set-up 10 small-scale processing facilities that can supply about 30 tonnes of crude palm oil per week. We conclude that the investment on oil palm will provide more return for ESIP in comparison to the demand for garri. In fact, OKLAN can off-take the garri from Greenland Trust. Our recommendation is thus to partner with OKLAN for sourcing processed oil palm in Edo.
Prospective Impact	OKLAN will require about 120 tonnes of oil palm per month. They plan to engage farmers' cooperatives from about 10 villages for this purpose. This can potentially reach about 300 small scale oil palm producers in Edo. Furthermore, OKLAN can secure bank financing to set-up 10 small scale processing facilities for oil palm processing which will create further jobs in the oil palm processing value chain in Edo.
Impact on Women	The oil palm traders and processors are usually women. The investment is thus expected to exclusively benefit the women in the oil palm value chain in Edo.
Support from ESIP	Firstly, ESIP can support OKLAN to source processed garri from Greenland Trust. Secondly, for oil palm, ESIP can support OKLAN to engage with local farmer's cooperatives and set up the small-scale processing facilities and establish off-take arrangements with the farmer's cooperatives. Each Small Scale Processing Equipment (SSPE) costs about N900,000. The partnership is thus expected to leverage at least N9million which is equivalent to about GBP18,000. On this account, the prospective investment from ESIP is expected to be in the

	range of GBP15,000-20,000 in the form of support to set-up the off-take arrangements with the farmers which would require supervision, training and field monitoring for the first cycle.
Role of the Partner	The role of OKLAN in the partnership will be to invest in the SSPEs, support the farmer's cooperatives with training on GAP and on crop protection, and mechanise harvesting to reduce waste. OKLAN will also ensure the off-take as per agreement with the farmer's cooperatives.
Prospect for Scale	The project can first be piloted with 4-5 villages and then be scaled up to 10 villages in the next season. If the model works, ESIP can potentially demonstrate it to other prospective off-takers of oil palm to adapt similar models for off-take of oil palm in Edo.
Next Steps	ESIP needs to discuss the details with OKLAN, including their projected demand for crude palm oil. ESIP needs to work with OKLAN to determine the clusters of engagement, the budget and cost sharing arrangements and ultimately, the activity plan. This intervention, which includes setting up the SSPEs, could take some time. Thus, ESIP needs to discuss with OKLAN about the right approach to initiate and fast track the off-take from the oil palm producers in Edo.

5: Partnership with Temcor for Starch Processing

Readiness	Needs further assessment
Justification	Temcor is a commodity development and investment company founded in 2013 and based in Lagos. They started trading in 2015 with solid minerals, including zinc and lead. They also have investments in mining activities in the North. Temcor is now looking to diversify and is considering renting a space within an existing HQCF facility in Edo to process starch for the growing local and industrial markets.
Prospective Impact	The prospective impact of the intervention could not be assessed at the time of this study. Temcor is expected to get back to ESIP about their total requirement. According to the MADE agribusiness team, there are several HQCF processors in Edo State who could rent space/capacity for starch production. The intervention can thus potentially address the low capacity utilisation issue of HQCF processors which affects off-take from the cassava farmers.
Impact on Women	The impact on women through this intervention needs further assessment.
Support from ESIP	Support from ESIP is subject to the assessment and further review of intervention activities and impact.
Role of the Partner	To be determined based on the assessment of the prospect and the intervention activities and impact.
Prospect for Scale	If successful, the intervention could crowd in other prospective starch processors to rent existing HQCF facilities for starch processing.
Next Steps	Undertake further discussion with Temcor, assess their demand/ requirement, discuss with prospective HQCF facilities in Edo about their interest and define the viability of the investment and its impact as per ESIP's mandate.

6: Partnership with Akomz Farms and Foods for Mushroom Contract Farming

Readiness	Depends on Akomz having a confirmed buyer for the mushroom
Justification	Akomz is a food production and marketing company which deals with button mushroom production and processing. They are interested to engage communities for production of oyster and shitake mushrooms. The company has been in discussion with several prospective buyers which includes Nestle. Nestle requires about 15 tons of dried mushrooms for oyster sauce production. To supply this, Akomz is exploring the scope to engage about 500 mushroom

	producers. Each producer is expected to produce about 1.7 tons of dried mushroom per week. The net income for the producers is expected to be about N200,000 per cycle of 60 days. Akomz will provide the spawns, provide training to the producers, and will guarantee off-take directly from the producers.
Prospective Impact	The intervention could facilitate the creation of 500 enterprises directly. This is expected to be highly aspirational, especially for the young men and women in Edo.
Impact on Women	At least 50% of the targeted enterprises are expected to be women.
Support from ESIP	Akomz expects support from ESIP to select and train the first batch of mushroom producers. In this regard, a local NGO could be engaged to facilitate the selection and training of the prospective mushroom producers. The producers will require seed financing to begin the production. ESIP could provide support to Akomz to secure financing from CBN CACS, ACGSF or LAPO microfinance under tripartite agreement.
Role of the Partner	Akomz will arrange for the trainers and provide on-site supervision support to the mushroom producers. Akomz also plans to invest in a dryer (at a cost of approximately USD10,000). Akomz will also ensure off-take, collection, and transportation of the produce to the factory.
Prospect for Scale	The intervention could potentially create a precedence of mushroom farming in Edo. Mushroom farming is youth centric and if sustained it can crowd in the spawn producers and off-takers in Edo thereby ensuring more jobs for the young men and women in Edo.
Next Steps	ESIP needs to undertake further discussion with Akomz to determine whether they have assured buyers. The intervention is contingent to Akomz having long time sustained orders. Furthermore, ESIP needs to determine other prospective off-takers and buyers for mushroom to ensure a wider base of demand for the mushroom producers to be engaged in Edo.

7: Partnership with AFEX for Cocoa Off-take	
Readiness	Moderate and mid-term
Justification	Africa Exchange (AFEX) is a multinational commodity exchange company which was launched to address last mile commodity aggregation, logistics and warehouse challenges by creating a sustainable spot market. AFEX creates a group of 600-800 farmers around a 20-35 km radius. They have an employed staff member stationed within the community to manage and monitor the farming and off-take arrangements. The farmers are registered in an Enterprise Resource Planning (ERP) software. AFEX then creates a collection center which is leased from the state government or from one of the Agricultural Development Programmes in the state. Farmers who are closer to the warehouse bring their produce directly to the warehouse while other farmers bring it to the collection center. AFEX also employs village aggregators who are third party franchisers who collect from the farmers. AFEX pays the farmers centrally from Abuja. They are currently developing a mobile banking system. AFEX also supports the farmers access credit from LAPO microfinance. About 80-85% of their farmers have loans from LAPO and they have 98% repayment rate. Commodities primarily traded by AFEX are maize, rice, soybean, and sorghum (for local market) and ginger (for export market). AFEX is exploring the scope to set-up a warehouse in Edo state to source cocoa from around 500 farmers.
Prospective Impact	The cocoa farmers in Edo state will benefit from AFEX's engagement as they plan to support the farmers to get access to finance, invest in crop protection, and improve production quality, harvesting and processing methods. The intervention will incentivise farmers to adapt GAP. It is expected to directly benefit at least 500 farmers. It will indirectly benefit a large number of labours in the collection centres, warehouses, and those involved in the logistics and transportation activities.

Impact on Women	The intervention will benefit female headed cocoa farms as well as those engaged as labour in the support services.
Support from ESIP	AFEX is still at the exploration stage. They will likely need ESIP's support in identifying the production cluster, registering the farmers, setting up the warehouse and collection centres, and training the supervisors to be placed within the communities. ESIP could engage a local co-facilitator to support AFEX accelerate this process and engage the farmers in the activities. ESIP's contribution in this regard would be to ensure integration of the young men and women in Edo in AFEX's cocoa off-take scheme.
Role of the Partner	AFEX will register the farmers, set-up the warehouse and collection centre, and train the farmers. AFEX will set-up the last mile aggregation system by employing community level supervisors. AFEX will ensure off-take at guaranteed price.
Prospect for Scale	AFEX will be able to gradually expand their sourcing capacity across Edo. Furthermore, this will potentially crowd in other off-takers for cocoa in Edo who could work with the local NGO co-facilitator who would build their capacity for such services through the engagement in the AFEX interventions.
Next Steps	ESIP needs to undertake a design workshop with AFEX to define the targets, activities, investment requirements and milestones. The intervention still needs to be fully chalked out and the potential return for the farmers and the number of jobs that are expected to be created need to be measured. ESIP also needs to identify a prospective local NGO that can support the intervention implementation process for AFEX.

8: Partnership with Sahei Foods for Apiculture Offtake	
Readiness	High and Immediate
Justification	Sahei Foods is an export oriented agribusiness company based in Lagos. The company processes honey for the retail as well as export market in Nigeria. They also process the wax for the cosmetics industry. Sahei Foods have come to an agreement with Okomu in Edo to set-up 8,000 bee hives in 8,000 hectares of Okomu rubber plantation. The intervention can prospectively engage 400 beekeepers in Edo. Sahei foods is on the process of securing N250,000 for each beekeeper through the Anchor Borrower's Programme (ABP).
Prospective Impact	The intervention will directly create jobs for 400 young men and women in Edo.
Impact on Women	At least 50% of the prospective beekeepers are expected to be women.
Support from ESIP	ESIP could support Sahei Foods to select and train the right candidates (young men and women) to participate in the programme. ESIP in this regard could engage the Talented Women's Farmer's Association in Benin which is already organizing bee keepers. ESIP could also support Sahei to secure the funding from the anchor borrower's programme by facilitating Sahei to pitch to the local NIRSAL branch. ESIP could support Sahei to recruit full time supervisors for the first 6 th month of production so that the newly engaged beekeepers are mentored on the job.
Role of the Partner	Sahei would engage and train the prospective beekeepers, as well as facilitate the requisite seed funding for the beekeepers. Sahei would also ensure supervision and on-the-job mentorship of the beekeepers. Finally, they would guarantee off-take of the wax and honey as per the agreement.
Prospect for Scale	The intervention could demonstrate the possibility of large scale apiculture in Edo. It could also demonstrate the scope of partnership between apiculture off-takers, local NGOs and big estates and plantation companies like Okumo.
Next Steps	ESIP needs to sit with Sahei to further access and determine the impact or net return for the beekeepers, the investment requirement, and the activities. ESIP could also undertake discussion with the local NGO to assess their willingness

	and capacity to support Sahei Foods. ESIP and Sahei needs to jointly meet the NIRSAL in Benin City and seek their approval for funding.
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9: Partnership with MGG Wells for Off-take of Oil Palm	
Readiness	High and Immediate
Justification	MGG Wells is a commodity trading company based in Lagos. It was established in 2016 and is currently supplying PZ, a multinational FMCG company, along with 7 other clients. They have an order to supply 500 tons of oil palm every month but the company is only able to source 125 tons a month. This is primarily because of dysfunction in the aggregation system since the clusters from where MGG is currently sourcing are dependent on cottage based manual processing. Currently MGG Wells is working with 20 aggregators in Ondo, Edo, Akwa Ibom and Imo state. 70% of their off-take is from the communities and the rest is from Okomu. MGG Wells can directly benefit if they are linked to the SSPEs that have already been established in Edo State with support from MADE. There are about 20 SSPEs in Edo.
Prospective Impact	The intervention will demonstrate the impact of SSPEs on supporting the farmers and the crude palm oil traders in ensuring supply to the off-takers as per their demand. This will incentivise further usage and demand of the SSPEs and improve the processing and marketing systems for Crude Palm Oil.
Impact on Women	The crude palm oil aggregators are all women. The intervention will directly benefit them by facilitating increased demand from off-takers like MGG Wells.
Support from ESIP	Support from ESIP will be minimal. ESIP needs to link MGG Wells to the clusters in Edo where the SSPEs are set-up and support the contract growing/off-take agreement.
Role of the Partner	The role of MGG Wells will be to ensure off-take as per an agreement facilitated by ESIP.
Prospect for Scale	If successful, the intervention can crowd-in other such commodity trading companies which have been founded in recent years as a result of increased demand for crude palm oil in Nigeria.
Next Steps	ESIP needs to detail the scope of engagement in discussion with MGG Wells. Most importantly, ESIP needs to assess whether the existing SSPEs will be able to supply as per the needs and expectations of MGG Wells.

10: Partnership with Thrive Agric and Ofunirems Ltd. to establish a crowdfunded small scale poultry production system in Edo.	
Readiness	High and Immediate
Justification	<p>Better access to formal and informal markets to ensure offtake of produced poultry is a major challenge limiting poultry (broiler) production/outgrower programmes in Edo State. There are several channels for offtake of poultry products – this could be direct into live poultry markets for home consumption or medium to large scale processing establishment for onward sale as frozen packaged poultry.</p> <p>ESIP intends to work with Thrive Agric to implement a pilot poultry out grower scheme in Edo. Thrive Agric will undertake a co-facilitator role which will involve supporting small scale poultry farmers to produce, aggregate and offtake poultry utilising a controlled, out grower production model. The scheme is expected to also involve dissemination of information on good poultry practices utilising the Nigeria Agricultural Enterprise Curriculum (NAEC) designed to support the management of small scale poultry enterprise. Ofunirems Limited is interested in</p>

	<p>establishing a small to medium scale poultry processing unit (250 birds per hour) in Edo, institutionalising a supply-chain relationship with clusters of small-scale poultry keepers. Ofunirems wishes to off take about 40,000 birds a month (assuming 20 days of operations a month).</p> <p>Thrive Agric crowdfunds investments for smallholder farmers and provides it to them in the form of inputs, tech-driven advisory and access to markets. The company has worked with over 1,000 farmers directly and 2,800 farmers indirectly. It has extension agents present in 11 states and the Federal Capital Territory (FCT). 40% of the profit is shared with the farmers and 40% with the investors. Thrive Agric takes the remaining 20%.</p>
Prospective Impact	<p>The benefits for small-scale poultry farmers in Edo (new farmers and existing farmers) is that they will have access to market/offtaker, poultry inputs and information. The processing enterprises will in turn get steady supply of high quality poultry outputs for their processing units, effectively increasing the productivity and eventual profitability of these associated smallholder poultry farmers. The pilot/demonstration is expected to create 10 clusters of 4000 birds per cluster (i.e. a total of 40,000 birds), directly benefiting at least 160 poultry farmers making N60 per bird every 6 weeks. Also, it will indirectly benefit a large number of labourers in the input supply and transportation activities.</p>
Impact on Women	<p>50% of the smallholder poultry farmers will be women. The intervention will also directly benefit women in the distribution and retail trade of live and frozen chicken.</p>
Support from ESIP	<p>ESIP will use its best efforts to carry out the intervention. This includes;</p> <ol style="list-style-type: none"> Provide relevant information on poultry production by small holders in Edo. Cost share on the preliminary mapping exercise to identify and aggregate the pilot group of small scale poultry farmers who will be clustered by Thrive Agric for production of the pilot flock size, and live and frozen chicken distributors in Edo State. Support Thrive Agric with information and exposure to the NAEC for poultry which will be utilised in conducting preliminary training for the pilot group of farmers Support with field monitoring personnel to actively engage pilot group of farmers to ensure adherence to Thrive Agric policies and practices with respect to poultry production, record keeping and adherence to best production practices
Role of the Partner	<p>Assist farmers with quality input sourcing and financing to support production clusters with a minimum target of 2000 birds per cluster. ESIP envisages that the production of every 500 birds will involve at least 2 farmers. Poultry aggregation and supply business model to avail a larger pool of small scale poultry farmers access to processors/institutional off takers.</p>
Prospect for Scale	<p>If successful, the intervention can crowd-in other smallholder farmers, processors and institutional off takers.</p>
Next Steps	<p>ESIP needs to detail the scope of engagement in discussion with Thrive Agric and Ofunirems.</p>

INTERVENTION II: FACILITATE DEVELOPMENT OF LAST MILE INPUT SUPPLY, OUTPUT AGGREGATION, CROP PROTECTION, EXTENSION AND MACHINERIES RENTAL SERVICES

This intervention will primarily leverage on the MADE interventions around SSPEs, spray service providers for crop protection, and veterinary livestock dealers. ESIP should scale the existing partnership agreement with the likes of SARO, Syngenta, and Candel to scale the interventions for the oil palm, poultry and cocoa value chains. In addition, we have identified three prospective scopes that need to be further explored before any funding commitments could be made. These are explained below:

- (i) Support to Novus Agro to scale field facilitators in Edo for last mile input aggregation:** The agritech company already has about 300 field facilitators in 26 states in Nigeria. Novus works as a national dealer for agri-input companies like Syngenta and Saro. The field facilitators aggregate demand from the farmers and send back the demand for different types of inputs to Novus. The company then creates a product basket for the field facilitators and send those back through Nigerpost. Facilitators take 50% of the margin while Novus takes the rest.

Novus is also working as an aggregation agent. In 2017, they had demand to aggregate commodities worth around 25 billion Naira. They were able to supply only 225 million of this because of a lack of ability and capacity to gather the off-take from the farmers. Novus is interested to scale their field facilitator model in Edo for both input distribution and commodity aggregation. ESIP needs to discuss and review the prospective scale-up model, the number of jobs that can be created, and the investment that needs to be made in this regard.

- (ii) Support to Fiyah Global to assess the prospective demand for inputs in the last mile:** Fiyah global is an agritech company which offers farmers registration for the Anchor Borrower's Programme. They have also invested in the agri-input supply and distribution business. In the north, they have set-up two branded franchise outlets for WACOT, which is one of the largest agri-chemical companies in Nigeria. Fiyah Global wishes to undertake market research to assess the prospective last mile market demand for agri-inputs in Edo. They could use the information to influence WACOT to invest in setting up a franchise outlet in Edo. ESIP could then work with Fiyah Global to set-up village level promoters who can detail the inputs from the franchise shop at the last mile.

- (iii) Support to Notore Seeds to scale their village promoter model in Edo:** Natore Seeds worked with Propcom Maikarfi to successfully test the model of village promoters to retail agri-inputs. The company is willing to partner with ESIP to scale the model in Edo. However, there is a concern related to the ownership of the company and the British Government which needs to be further discussed with DfID before taking any action with Notore Seeds.

Concluding Remarks

The agribusiness sector in Nigeria is vibrant and growing thanks to concerted intervention and investment from the Federal Government of Nigeria (FGN), the development partners and the private sector agribusiness companies. The findings show that Edo state is well poised to benefit from the growth and the investment specially because of the increased demand for offtake by the industrial and food processing companies. In this report, we have discussed and explained some of the opportunities for interventions that we identified during our field investigation. There are several other opportunities which were identified but could not be assessed during the field investigation. As per reports, closure of cashew processing plants in Vietnam has opened up the export market opportunity for Nigeria. Nigerian exporters are targeting \$3 billion in export earnings per annum. The Central Bank of Nigeria (CBN) is supporting the exporters through the Export Stimulation Fund. The fund is expected to enable the exporters acquire processing plants and technology. The Federal Ministry of Agriculture and Rural Development (FMARD) has targeted distribution of three million seedlings to assist cashew farmers in 2018. ESIP should undertake discussion with the National Cashew Association of Nigeria (NCAN) to determine whether and how Edo State could benefit from the growth in cashew export.

There are several start-ups that are working on crowdfunded agriculture. This includes FarmCrowdy. These start-ups can have direct impact on attracting the youth in agriculture; especially in poultry, fisheries, mushroom, bee-keeping. However, we were not able to assess the prospect for scale for the crowdfunded investments. ESIP should undertake a review of the scale prospect before deciding on the next course of action. The Presidential Fertilizer Initiative (PFI) is expected to have a direct influence on the demand and supply of fertilizer in Nigeria. ESIP should assess its impact on the cost of the outgrower's schemes as well as on the uptake of GAP by the small holder farmers in Edo. Land clearance in Edo can crowd in large number of small holder farmers as well as outgrowers in Edo State. We were not able to assess the land ownership system and the political, social, economic and environmental aspects of land clearance in Edo. It is advisable that ESIP undertakes a study on the land system which can inform the next steps and the interventions for ESIP.

CHAPTER II ENTERTAINMENT SECTOR “NOLLYWOOD” ASSESSMENT

2.1 Introduction and Executive Summary

The entertainment sector in Nigeria is on an upward trajectory with the Film and TV industry – also known as Nollywood -- leading the way in terms of its contribution to GDP and job growth. The Nigerian Export-Import Bank estimated that in 2014 Nollywood generated as much as \$590M in annual revenue while the Ministry of Finance estimated the overall film/TV sector workforce at around 1.2m people.

There appears to be an insatiable demand for films and TV shows with African-themed content in Nigeria, throughout the African continent and among Nigeria's large global diaspora population. Nollywood products can be viewed on multiple platforms – satellite TV, Internet, mobile devices and cinemas -- as the traditional DVD/CD market declines in significance due to unchecked piracy and Nigeria's cross over from analogue to digital signals. In 2018, Africa Magic, alone, requires 70,000 hours of original media content for 15 TV series and 40 feature-length made for TV movies. This translates into an estimated N9.9B (\$27.3) in wages paid to film crews.

The classic B-format Nollywood film will continue to enjoy audience demand and because of their popularity the producer will be able to diversify markets from a sole reliance on the sale of DVD/CD to include purchase under license agreements satellite TV channels (e.g. Africa Magic) and multiple streaming platforms (e.g. iROKOTv). Yet, most producers -- in the Asaba cluster for example -- choose to expand their film business by further penetrating the direct to DVD/CD market with existing products. Their business model is to contain costs further and while they may still be able to make a profit from ever tightening margins they are not going to be the Nollywood job creators ESIP seeks to support.

The job creators will be found among producers who are pursuing a market diversification strategy, a feasible strategy in today's Nollywood. The satellite TV, digital download/streaming platforms and cinema buyers all seek original Africa-themed media content across a broad range of genres for broadcast to their subscribers and movie going audience. These distributors are willing to pay better prices for a premium film or TV show provided Nollywood producers can “up their game” and meet the test of better story-telling (scripts, directing, acting) told in a more cinematic way (picture, sound, editing). This will require them to change their business model from a large number (10-12 films/year) of low budget (N2-3M/film) films to a smaller number (5-7 films/year) of higher budget (N5-8M) films.

Producers who choose to transition from the “old” to the “new” Nollywood of few better films for a diverse market will face a number of market system constraints. There is a shortage of qualified crews with the skill sets to deliver on the creative process (e.g. “above-the-line” directors, actors and cinematographers) and make a quality product (e.g. “below-the-line” set designers, sound and lighting technicians, editors etc.). The market system functions of information on job opportunities and the re-skilling of existing crews, attracting and training job ready new entrants are inadequate: film schools and academies offer expensive, long format courses mainly targeting “above-the-line” skills at a time when more competency based short format courses for “below-the-line” skills are needed and missing; and the informal word-of-mouth apprenticeship type system for “below-the-line” crews can't keep pace with producer requirements.

Producers will have to upgrade their (mostly outdated) equipment (camera) at a time when the costs of imported digital cameras have increased due to the devalued Naira. There is no purpose-built yet basic infrastructure for film production which could offer film producers a controlled and cost-effective filming location at a time of escalating costs especially in Lagos. Film finance is hard to come by and it will be a difficult nut to crack in the short term. However, if producers would make use specialised services – lawyers, financial planners, social media promoters – they could contain costs without sacrificing their vision or the marketability of their products.

Jobs in Nollywood are an ideal fit for ESIP's target group of unemployed and underemployed youth in Edo state. There are few barriers to entry level jobs and there are many career options for those who persevere and prove themselves. This report identifies a number of interventions ESIP could pursue in the short and longer term that are good for Nollywood and for Edo state and its youth.

On-Line Platform for Information, Education and Jobs: By strengthening the market functions of skills development and information, this intervention will result in, over a two-year period, a more formal pathway to jobs for Edo state residents who aspire to careers in Nollywood and/or other sectors such as advertising and music videos where the same skill sets are in demand. Subscribers of the platform will be able to choose from a broad range of on-line and/or face to face courses ranging from screenwriting to directing and from camera operation to animation. The courses will be taught by working Nollywood professionals and will combine practical competency based learning with internships on a film set.

Action: ESIP will select a Nollywood entrepreneur with existing plans to launch an on-line platform as a business opportunity. ESIP will enter into a cost share agreement with the “lead firm” to accelerate the site's launch and share in first year operating costs in exchange for an initial and dedicated focus in Edo state. Revenues from fee paid subscriptions are expected to cover operations costs from year 2.

Justification: This proposed intervention would address these constraints: *target audience sensitisation* to create awareness, interest, and demand for Nollywood jobs from Edo's vulnerable population; *affordable skills training* to create job ready Edo youth with the right mix of technical know-how and practical experience; and *linkages* between job seekers and employers.

Expected Results: A rough estimate of investment, capacity building and jobs created over the two-year period of ESIP are as follows:

- 25,000 subscribers pay a one-time subscription fee of N5,000, which equals N125M (\$346k).
- 1,000 subscribers pay an additional N20,000 for bespoke training which equals N20M (\$55k).
- 2,000 persons (< 10% of all subscribers) will leverage their learning and on-the-job training into 100 days of paid work on film sets at N8,000/day or N1.6B (\$4.4M) over a period of two-years.

Mini Film Village: All producers seek ways to contain costs without sacrificing their vision or the marketability of their products. This is especially true for Lagos-based producers who have seen their costs escalate because of higher wages, the high cost of living and time wasted in Lagos traffic. There is an opportunity for Edo state to develop a convenient, versatile, production hub to leverage Edo's creative community while offering Nollywood a time and money saving alternative by producers.

Action: ESIP will facilitate a public/private partnership to build and operate a mini film village for use by producers with these basic features: a variety of controlled filming locations, adaptable interior spaces for easy set-up, reliable power supply and cabling. The public sector would set-aside the land, tender and award a private company the license to build and operate the mini film village. ESIP's first action will be to get expressions of interest from the Edo state government and private companies in partnering on the mini film village concept. Once interest is confirmed, then ESIP will assess the attractiveness of Benin City as a lower cost production alternative and the commercial viability of the mini film village.

Justification: As Nollywood continues to grow, the lack of suitable locations for film and TV production is becoming more and more apparent. If ESIP could facilitate the development of an affordable and acceptable location, there is little doubt that producers in and outside of Edo state would quickly utilise it, bringing both investment and jobs, along with the associated income multipliers to Edo state.

Expected Results: In the first full year of operation (4th qtr. 2019), facility's target would be:

- 10 films at N12M totals N120M (\$330K) spent in Edo State.
- 50% of a production budget is paid in wages to below the line crews equals N60M (\$165K)
- 10 films with an average shooting schedule of 15 days each equals 150 days.
- 15 below-the-line crew's/film times 150 day equals 2,250 person days of paid work.
- 50% of BTL crew new entrants from Edo State (1,125 person days) paid an average wage of N8,000/day equal N9M (\$25K).

Producer Linkages to Specialised Services: Nollywood producers face a dilemma in how to contain costs while simultaneously upgrading their business model. Producers who are making the transition from producing many/low budget films direct to the DVD/CD market to producing fewer/higher budget films for distribution in the newer digital/streaming/cinema viewing markets listed their needs as follows: better trained crews, access to better equipment, negotiate better deals with A-list talent and distributors, target marketing using social media, and manage their limited capital to obtain better terms for film finance (e.g. equity or debt).

Action: ESIP's role will be to facilitate business linkages between producers and qualified service providers by taking the following actions: assess producer demand and willingness to pay for services; survey relevant equipment suppliers and specialised service providers for their interests in targeting producers in Edo State and the Asaba cluster; assist producers individually or through their associations to attract the interest of specialised service providers; and finally assist specialised providers to frame attractive offers for producers.

Justification: Producers who choose to expand their film business by further penetrating the direct to DVD/CD market will find themselves fighting a losing battle against pirates. While they may still be able to make a profit by containing costs to preserve slender margins they are not going to be the job creators ESIP seeks to support. The job creators will be found among producers who are pursuing an expansion strategy by adopting a new business model.

Expected Results: With ESIP taking the lead in facilitating business linkages this intervention could be launched at any time. An estimate of expected outcomes follows:

- 40 producers spend an additional N1M/film or N40M (\$109.7K);

- 40 producers make an average of 10 films over a two-year period or 400 films;
- Total additional spend of N40M x 400 films = N1.6B (\$4.4M);
- 50% of additional spent of crew wages = N800M (\$2.2M).

Longer Term Intervention Ideas: This research identified two intervention concepts that would be good for Nollywood and Edo state but would require longer lead times to study their feasibility, design, and then deliver. Tax-based film finance incentives offered to producers by the Edo state government could be a game changer in attracting more Nollywood investments and jobs in the state. Community cinemas targeting lower income consumers with ticket prices at no more than N500/ticket could create additional revenue streams for films first released in Nigeria's big cities.

Introduction to the Team

The DAI/MADE 2 team engaged the services of two consultants – Marshall Bear and Chidi Ukwu -- to undertake research in the entertainment sector for its promise as a creator of jobs for Edo youth and investments in Edo state.

Marshall Bear is knowledgeable about M4P approaches to economic development and a past consultant to the MADE project (and other DFID support programs in Nigeria and elsewhere). He is also knowledgeable about film production. He recently produced and sold into distribution (2016) a feature film entitled *Burning Bodhi* starring Kaley Cuoco (Penny, in *The Big Bang Theory*), Sasha Pieterse (Alison DiLaurentis, in *Pretty Little Liars*) and Oscar-nominated actress Virginia Madsen (Maya in *Sideways*)

Chidi Ukwu is a storyliner and producer of content for Radio, Television, Film and New media. His Abuja-based communications and media production outfit has worked extensively with development, public and private sector entities to meet media/communications goals with turnkey solutions, and is currently making content for popular mass media markets. Chidi is also Creative Director at 2 Masks & a Griot Theatre Company (2MG) and until 2007, was Senior Producer with the BBC World Service Trust, where he produced content on cross-cutting issues reaching millions weekly in the region. He is a Nigerian Film Institute Actor of the Year and also teaches Acting, Speech and Voice.

At the start of the research, we knew little about the Entertainment Sector in Edo state other than it is not considered a major production hub of media content, like Lagos, Asaba or Kano. Our research confirmed this assumption. While there are filmmakers from Edo state who are acclaimed Nollywood filmmakers -- Lancelot Imasuen and Kabat Esosa Egbon to name two -- they are more active in Lagos and internationally than in Edo. Edo resident, Peddie E. Okao (Prolens Movies) is a notable filmmaker and entrepreneur who shoots all of his films in Edo state.

We learned that Edo people have creativity in their blood owing to a rich tradition of artisan crafts. Although it is impracticable to know how many Edo residents are already in Nollywood careers, we suspect there may be many as a number of people interviewed for this research in almost all locations visited, were from Edo. While we could speculate that there is a huge number of young Edo women and men who aspire to careers in Nollywood, we could only find scant and anecdotal evidence to support this speculation.

Our research methods focused first on understanding Nollywood – its opportunities and constraints – by interviewing key industry players who operate in Lagos, Benin and Asaba. **Annex A** to this report lists all the people we interviewed and their affiliations. Once we had a better understanding on how Nollywood works, we set about asking and answering two questions: 1) What could Edo state and its people offer to Nollywood to attract more investment and create jobs, and 2) What could ESIP do to facilitate the growth and competitiveness of Nollywood that would be more inclusive of Edo state and its people.

Our report closely follows the research methods we used. It starts with a short overview of Nollywood's past and up to the present. This is followed by a descriptive analysis of all the functions and types of players that make the industry tick. From there, the report examines the factors that are driving change in Nollywood and how these drivers could create opportunities for

more jobs and investment in Edo state. The report continues with an assessment of potential ESIP interventions relative to their fit with ESIP/MADE 2 goals. The report closes with descriptions of interventions we think are best aligned with ESIP's goals and can feasibly achieve desired impact in the two-year period.

What started by accident in 1992, when Kenneth Nnebue, a Nigerian trader based in Onitsha (Anambra state), decided the videocassettes he purchased from Taiwan would sell better with something recorded on them, has become a wonder and a behemoth of sorts. Kenneth shot a film called "Living in Bondage" about a man who achieves power and wealth by killing his wife in a ritualistic murder, only to repent later when she haunts him. The film sold more than 750,000 copies, and prompted legions of imitators. Today, Nigeria's film industry – "Nollywood" -- is one of the country's success stories. In 2009, Nigeria surpassed the US to become the second-largest film industry in the world, after India, in terms of volume of movies produced.

While hard data on Nollywood is difficult to find, Nollywood insiders estimate that there are between 1,000 and 2,500 films produced in Nigeria on an annual basis. A report by the Nigerian Export-Import Bank estimated that Nollywood generated as much as \$590M in annual revenues in 2014 alone. Iroko Partners, a Lagos-based digital media distribution and research firm, estimates the industry earns around \$800M in revenues on an annual basis.⁹

The rise of digital media and the Internet in Nigeria is transforming Nigeria's entertainment and media landscape. According to Richard Topham, senior market analyst for SES (a leading Satellite operator based in South Africa), "Out of 25.1 million terrestrial TV homes in Nigeria, 10.1 million (40 percent) of them are analogue while 15 million (60 percent) are digital."¹⁰ The pace of digital migration has been slower than expected – partly because of the cost to government and partly because of the lack of locally manufactured set-top decoders – but the trend is clear. In the near future, Nigeria will join the ranks of countries which have made the switch to digital media. MultiChoice, a South African firm, launched its Digital Satellite Television (DStv) pay service in the mid-1990s. Today, DStv is one of Nigeria's most popular pay-TV stations with over 4.4 million subscribers¹¹ and, as will be discussed in the next section of this report, the biggest buyer of media content.

Nigerians in general are very Internet savvy. As of January 2014, Nigeria was home to nearly 56m Internet users,¹² a figure that has more than doubled since 2009. The mobile device penetration in Nigeria is higher than its internet penetration. There is currently an estimated 152 million active mobile (GSM) lines in Nigeria.¹³ This means that an increasing percentage of Nigerians are viewing media content like film, TV and music via streaming platforms. iROKOtv is Nigeria's largest web-based streaming service with a catalogue of over 5,000 Nollywood films,

⁹ Oxford Business Group, Report on Media & Entertainment, Nigeria 2015, page 217,

¹⁰ Business Day, Judith Akiyode-Lawanson, reporting May 1, 2018

¹¹ Reference March 14, 2017 article in PageOne, a Nigerian on-line news site.

¹² Data published by the International Telecommunication Union, the UN's arm for information and communications technology

¹³ http://www.ncc.gov.ng/index.php?option=com_content&view=article&id=125&Itemid=73>

plus other viewing channels. A subscription fee of \$5/month gives the subscriber access to free content. Traffic dictates revenues so the greater the traffic the more money is earned through advertising dollars.

The re-emergence of the cinema culture is also transforming Nollywood. There are around 200 screens across the country with most concentrated in the affluent areas of Lagos, Abuja, and Ibadan¹⁴, and owned by cinema chains (e.g. FilmHouse, Genesis, Silver Bird). Ticket prices average around N1,500 (\$4)/ticket and can go as high as N3,000 (\$8)/ticket for the opening weekend of a highly anticipated Nollywood film. According to Moses Babatope, Group Executive Director/COO, FilmOne, “the Nigerian box office market is expected to gross at least ₦5 billion (\$13.8M) in 2017, with Nollywood movies bringing in 40% or ₦2 billion (\$5.5M) of the amount [and, with first run Hollywood movies bringing in 60% of box office receipts].”¹⁵ Nollywood films produced for cinema release have never before generated such robust box office receipts: revenues have ranged from a high of N1B (\$1.4M) for *The Wedding Party Part I&II* to an average return of about N54M (\$150K) for the *Last Flight to Abuja, Isoken and a dozen others*.¹⁶

Today, there are two Nollywood’s: the “old” and the “new”. The great majority of the “old” Nollywood films are made on extremely low budgets – between ₦3 – 6M (US\$ 8,300 – 16,600) – and are released straight to the DVD/CD market, where they are distributed in Nigeria and throughout Africa. These films are generally shot, produced and edited for release in a short time frame, from 6-14 days. Production is clustered in Asaba, Lagos and Kano, with only a small number of films produced in Edo state. While the average quality of most Nollywood films is generally low by international standards, these video-format “B movies” are vibrant and inventive, fusing traditional voodoo and magic with urban romance stories that are driven by a narrative that is strongly rooted in the African oral storytelling tradition. These films are made wildly popular by millions of film viewers in Nigeria as well as the large global diaspora population across all of Africa and beyond.

The “new” Nollywood has grown in lock-step with the emergence of new distribution channels including cinemas, made-for-TV movies and episodic TV (long format – 260 episodes to short format, 26 episodes and less) and on-line streaming platforms (e.g. iROKOTv, YouTube, etc.). While small in volume compared to “old” Nollywood, these are much more sophisticated and higher quality productions with budgets ranging from ₦15m (\$41.5K) to ₦100m (\$277K). They comprise well-written stories on both epic and more temporary “slice of life” Nigerian themes, star “A” list actors, and are directed and photographed by Nigeria’s top creative talent. Lagos serves as the production hub for “new” Nollywood. Domestic audience demand, while small in comparison to the fans of the “old” Nollywood, is growing quickly for productions made for release in cinemas in Nigeria’s growing box office market.

Nollywood faces many on-going challenges. Piracy in the DVD/CD market continues to be a thorn in the side of producers, who are capturing only a fraction of the overall revenues generated by DVD/CD sales.¹⁷ Financing for filmmakers – including the more established ones -- is hard to come by and expensive. Most local banks consider film production a risky investment and there are few other commercial sources of funding.¹⁸ The devaluation of the Naira has increased the

¹⁴ The Story Behind Nigeria Cinema, 27 March 2018, Stears Business

¹⁵ Pulse.ng 14 August 2017. Hollywood box office hits represent 60% of all revenue.

¹⁶ https://en.wikipedia.org/wiki/List_of_highest-grossing_Nigerian_films

¹⁷ Meet “Nollywood”: The second largest film industry in the world, Jake Bright, Fortune, June 24, 2015

¹⁸ Click on this link for information on Nigeria’s Bank of Industry Film Fund: <https://www.boi.ng/boinollyfund/>

costs of imported digital cameras and other film related equipment with the effect of increasing production costs and slowing down the transition to higher quality productions. Cinema owners who rent space in shopping malls pay their rents in US dollars, further adding to the escalation. Nigeria's limited power and transport infrastructure also means that film sets must be powered by diesel generators, which have to be placed far enough away for the noise to not be picked up by microphones. There is essentially no purpose built infrastructure for film production¹⁹ which could offer film producers a controlled and cost-effective location to shoot. Consequently, producers must build their own sets for every film/series or rent locations at a time of rising prices especially in Lagos, the main production hub in the country.

Despite these challenges, Nollywood's growth shows no signs of slowing down, especially with Nigeria's large (c. 185 million) and increasingly urbanised (projected to be 52% by 2020) population, and a growing middle class.²⁰ The transformation to digital/Internet distribution and the continued popularity of Nigerian stories in Africa and globally is further driving the growth of the industry. By most accounts, Nollywood is one of the country's major private sector employers after agriculture, with the Ministry of Finance estimating the overall film/TV sector workforce at around 1.2m people in total in 2013.²¹ Nollywood's continued growth will provide more and better jobs with the unique characteristic of having very low barriers to entry (e.g. passion and patience are the two major criteria for entry) for young women and men who aspire to careers in the entertainment sector.

The prospect of continued job growth in both the "old" and "new" Nollywood is the reason why entertainment was chosen as a sector of interest for the Edo state Investment Program (ESIP). This report will show how Edo state can capture its share of future Nollywood jobs and investments for its young women and men in the short term (the initial two-year timeframe of ESIP) and beyond.

The next section of this report is an analytical overview of the Nollywood market system, its structure and dynamics. This analysis sets the context for an assessment of opportunities and related challenges for Edo state to expand its participation in the entertainment sector. The report closes with a description of prospective interventions that include potential partners, implementation strategies, expected results, and short term action plans in line with ESIP's overall goals, measurable objectives, and available resources.

¹⁹ Tinapa Studios, a \$450M studio/resort complex near Calabar, is now a ghost town, 10 years after its opening. Click on this link for the reasons why it failed: <https://www.vanguardngr.com/2017/05/tinapa-nigerias-450-million-white-elephant/>

²⁰ <http://www.worldometers.info/world-population/nigeria-population>

²¹ Report on Media and Entertainment, Oxford Business Group, 2015, page 219

2.2 Nollywood Market System Analysis

This analysis focuses on “Nollywood”: the production and distribution of made-in-Nigeria film and TV products for a diverse mix of audiences who are reached through multiple distribution and viewing channels. This analysis does not include live performances -- theatre, comedy clubs, music concerts – because the workforce required for these live events is small in comparison to jobs in film and TV production. However, the jobs created by the growth of Nollywood have multiple end uses in the employ of advertisers, corporate brand managers, architectural and real estate firms.

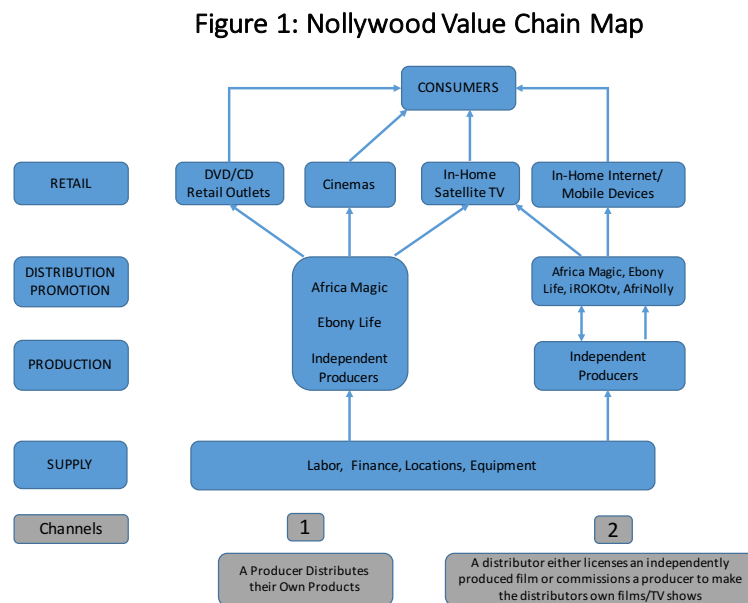
Structure of Nollywood:

Figure 1 below, *Nollywood Value Chain Map*, delineates two basic channels which link Nollywood producers to their consumers:

- Channel 1 shows that the same firm produces and distributes/promotes its products which reach consumers by either DVD/CD sale through retail shops, cinemas, or satellite TV.
- Channel 2 shows that the functions of production and distribution/promotion are performed by different firms whose products reach their consumers by DSTv, Internet and mobile devices.

Consumers: Nollywood stories are popular across audiences of all ages, ethnic groups, and demographics, be it in Nigeria, the African continent or diaspora populations across the globe. Consumers can be segmented into two broad categories: those who are price conscious and those who are quality conscious.²² Price conscious consumers of media content spend less inside and outside the home. They are likely to own a TV set and a

CD/DVD player; a smaller percentage will subscribe to the basic satellite TV package; and still yet a smaller percentage will have access to the Internet and have downloaded video streaming apps. Quality conscious consumers enjoy a more diverse range of media content from a wider range of viewing platforms. They are more likely to own a flat screen HiDef TV, a set top decoder,



²² This distinction is subjective. There is no data on entertainment consumption in Nigeria that we were able to find.

subscribe to a premium satellite TV package, and attend cinemas to see both Nollywood and Hollywood productions.

Supply Channel 1:

DVD/CD Market: This had been the sole market for all independent Nollywood producers until DVD/CD pirates significantly eroded producer revenues. For every legitimate DVD copy that is sold by the producer, another 5 to 10 copies are sold by pirates.”²³ Pirated Nollywood films can be found throughout Africa, in the Caribbean, and China. While dwindling, the DVD/CD market still serves a large segment of Nollywood film consumers either because they can’t afford a subscription to satellite TV or they do not have reliable access to the Internet.

Cinemas: Cinema owners acquire films by entering into a license agreement with the producer – a small independent or a large company like Ebony Life TV - who retains ownership of the film. It is unlikely a cinema will acquire the film for cinema release unless it meets three minimum criteria: the film includes popular A-list stars, it meets quality standards (e.g. running time, production values) and the producer invests in the film’s promotion leading up to the premiere. The standard revenue sharing model between the cinema and the producer is 50% sliding to 40% (e.g. week one the royalty is 50% in the first week, 45% in week 2, and then 40% in week 3 and beyond it is 40%).²⁴

Satellite TV: DStv, the biggest satellite entertainment provider in Nigeria, offers its consumers in-home entertainment for an initial set-up fee ranging in price from N19,900 (\$55) – N44,900 (\$124) and a choice of entertainment bundles ranging in price from a low of N1,900 (\$5.25)/month for a basic package to a high of N14,700 (\$40)/month for a premium package. Africa Magic, a collection of pay-TV entertainment channels that focuses on African programming²⁵ is the single largest producer of African themed media content for satellite TV in Nigeria. Ebony Life TV, the brainchild of Mo Abudu, is Africa’s first global Black TV network and, second behind DStv as a producer of premium and original shows.

Both Africa Magic and Ebony Life TV are positioned in channels 1 and 2: Africa Magic produces about 10% of its original content on its own (channel 1) whereas it commissions 80% and purchases under license 10% of its content from independent production companies (channel 2). All Africa Magic films are made for TV. Ebony Life TV produces, commissions and licenses

²³ “Nigeria's entertainment industry eager to make pirates part of sea change”, The Guardian, quoting a World Bank study.

²⁴ Click on this link for a description of the producer’s net return for ticket sales:

<http://niyiakinmolayan.com/2018/04/04/the-real-truth-about-cinema-earnings-in-nigeria-naz-onuzo/>

²⁵ Africa Magic is a brand owned by M-Net, a subsidiary company of MultiChoice.

original media content (both channels 1 and 2) for distribution on its DStv channels while also producing feature films for release into cinemas (channel 1).

Supply Channel 2:

Internet/Mobile Devices: There is an abundance of sites for streaming or downloading on-line Nigerian entertainment content such as Nollywood films, popular TV series, and comedy shows. Among the most popular for their general acceptability, public appeal and ease of use include YouTube, AfriNolly, iROKOTv, Nollyland, and Video Moja, although there are over a dozen more sites.²⁶ The basic business model for these distributors is to purchase under license from an independent producer popular content that can attract advertising revenue and can build their subscriber base. More traffic and hits on the site translates into more advertising revenue which in turn means more revenue for the distributor and content producer.²⁷

Nollywood Market System Functions and Players

Figure 2: Nollywood Market System provides a visual picture of the overall Nollywood market system: the supply and demand of film/TV products at its core, the support functions (upper part of figure) and the rules (lower part of the figure). The key players in the core of the system have already been introduced: producers located anywhere in Nigeria but concentrated in three geographic clusters - Lagos, Kano and Asaba and the buyers and licensors of media content across different retail viewing platforms. What follows next is a brief description of who performs the functions that support and influence supply and demand of film and TV products. This brief run-down of who performs what function sets the context for our analysis of factors driving change the the market players with whom ESIP/MADE 2 could partner to create more Nollywood jobs and investments in Edo state.

Supporting Functions:

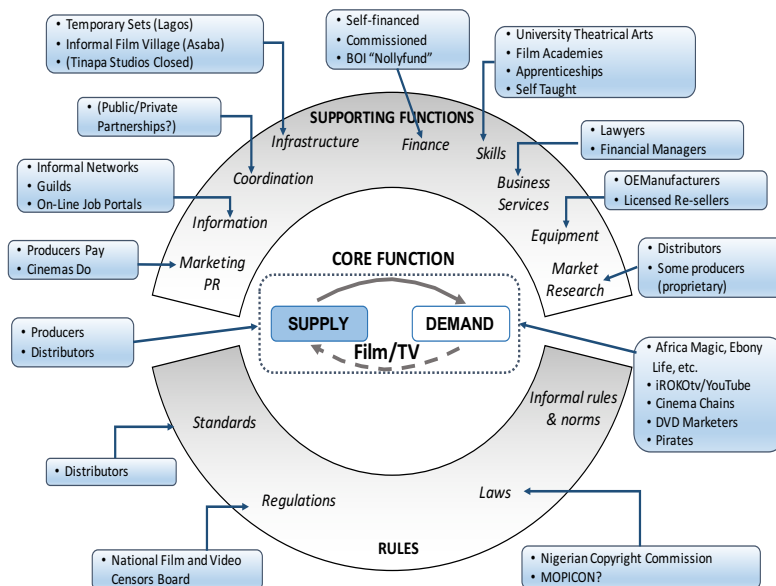
Finance: Commercial banks are hesitant to lend for the obvious reasons of high risk and the absence of immovable collateral. Most equity investors would rather place their bets on real estate and the oil services sector rather than on entertainment products, especially in the context of weak Government enforcement against pirates of intellectual property. In 2015, the Bank of Industry (BOI) launched its "NollyFund" program for the purpose of giving financial support in the

²⁶ 3rdPlanetTechies, <https://www.3ptechies.com/watch-african-nollywood-movies.html>

²⁷ Ikponmwosa Odiase, the producer of the film "Conscripted" has a deal with iROKOTv and reports the revenue split of 80% producer and 20% iROKOTv.

form of loans to film producers²⁸ which we learned has been bogged down by internal wrangling and in-fighting in Nollywood and government red-tape.

Figure 2: Nollywood Market System



Skills: Production of media content requires a lot of creative people with a diverse mix of skills and these skills have many different applications beyond the production of film and TV shows to include any number of employers – advertisers, musicians, real estate firms, government departments – who need products that combine video and sound.

In film/TV there are two categories of crew: above the-line²⁹ (ATL) refers to the

product's creative influencers – the screenwriter, director, actors, cinematographer and the producer; while below-the-line (BTL) refers to those responsible for making the product – project manager, gaffer (lighting), grip (holding, moving, elevating the camera operator), lighting, sound, set design, costume design, hair and make-up and a range of other skill sets.

Above the line talent prepare for their careers by attending Nigeria's diploma giving and licensed film schools³⁰ and/or film academies some of which are licensed to award diplomas.³¹ In May 2018, *Africa Magic* will launch its "Talent Factory" which aims to expand Nigeria's pool of creative influencers by offering an intensive 1 year course for a small group (20 participants) of talented women and men destined to become future screenwriters, producers, photographers and editors.

²⁸ In 2006, "Project Nollywood" (₦100 million (US\$781,000)) was launched by the Nigerian Government, in conjunction with Ecobank. In 2010, the Nigerian Government launched "Creative and Entertainment Industry" Intervention Fund (₦30 billion (US\$200 million)), financed by the Bank of Industry (BOI) in conjunction with NEXIM followed, in 2013, a smaller new grant of ₦3 billion (US\$20 million)

²⁹ The "line" refers to the line in a production budget that separates the creative from the production crews.

³⁰ Del-York Creative Academy, Lufodo Academy of Performing Arts, the Royal Art Academy, PEFTI Film Institute and the HD Film Academy being considered the top five.

³¹ Benin Film Academy, a partnership between Igbinedion University, Okada, Edo state and Lancelot Imasuen's Project 101, offers short format courses (3 – 6 months) in screenwriting, directing, acting, photography, editing, animation, special effects.

Below-the-line (BTL) crews are mainly trained on-the-job as apprentices of department heads while other crew members such as hair and make-up and costume design enter film production from other careers where they have developed their skills and work experience.

Market Research: Nollywood is a data desert! Distributors compile audience data and guard it closely for their own competitive advantage. There is no subscriber-based private provider of “Nollywood” data, nor is there a public sector source of data on audience numbers or consumption of entertainment products.

Business Services and Equipment: The “old” Nollywood producers do everything themselves: they self-finance their films, own their production equipment, find and negotiate all deals with actors and crew, distribute and promote their films, account for and manage their finances, and quite possibly fight their own legal battles. The “new” Nollywood production companies outsource business services and rent higher end equipment to keep costs down and deliver a quality product required by media content buyers such as Africa Magic, Ebony Life TV, Internet based distributors and cinemas.

Infrastructure: There are no purpose-built studios (sound stages and other facilities) in Nigeria.³² Asaba-based producers have deals with rural villages nearby Asaba city to recreate the rural settings of their films. They build additional low-cost sets to capture specific scenes as dictated by the script. Africa Magic leased vacant land in a housing estate on the outskirts of Victoria Island/Lagos to shoot *Ajoche*, a 260-episode drama which recently premiered on Africa Magic’s showcase channel. Africa Magic constructed all sets and warehouses to hold equipment and ran all the cabling underground from the generator to the sets. The infrastructure, while basic, provided Africa Magic a controlled set without the background noise and logistical challenges of modern day Lagos.

Coordination: This system function is weak. Past internal strife within “Nollywood” regarding government sponsored film funds or the failure of a public/private partnership to deal with the threat of pirates, are two relevant examples of the absence of coordination. Nollywood guilds and associations could play important roles in coordinating industry stakeholders to advance the industry but these bodies do not appear to see coordination as their primary role.

Information: Information flows in the “old” Nollywood -- on jobs, technology, trends -- is exclusively based on informal networks. When a film is financed and ready to go into production, then word gets passed on through the producers favored cinematographer and other department heads to BTL crews to canvas them for their interest and availability. Information in the “new” Nollywood is more formalised. Africa Magic, Ebony Life and other media content buyers get the word out to

³² Tinapa Studios was part of a multi-million resort development in Calabar, Rivers state, but it was shuttered in 2011.

actors either directly or through their talent managers.³³ They are likely to have data bases on past revenue earnings of actors and of course performance evaluations of directors, cinematographers and line producers (budget management).

Marketing/PR: Social media is being increasingly employed by both “old” and “new” Nollywood producers to get the word out about the release of their films. The quality and reach of these campaigns varies from producer to producer. Cinemas require a producer to allocate funds – a minimum of N1.5m (\$4,100) from their budgets -- to allow the cinema houses, using their own PR professionals, to promote the film a few weeks prior to its release.

Rules of the Game:

For the most part, Nollywood is self-regulated. Buyers of content determine what gets made based on their understanding of their audiences. Producer decisions on costs for talent and crew are based on accepted market norms. Unlike Hollywood, guilds do not have the power to negotiate rates for their members with producers; most A-list actors negotiate their

own deals. The National Film and Video Censors Board regulates the type of content that is allowed to be broadcast in Nigeria. The Nigeria Copyright Commission manages/enforces the World Intellectual Property Organization treaties ratified by the Government of Nigeria. This is hoped to have some effect on addressing the problem of DVD piracy. Legislation designed to regulate Nollywood – the Motion Picture Practitioners Council (MOPICON) – remains to be put into law, a process that is at least 10 years old. MOPICON is a flashpoint for industry insiders, some of whom endorse its vision for Nollywood and government’s role in that vision while others who don’t.

TEXT BOX	
Are there wages to be earned in Nollywood?	
Yes! It’s HUGE.	
Converting 70,000 hours of media content required by Africa Magic, alone, into person days of <u>paid</u> employment for both above-the-line and below-the line crews looks like this:	
TV Series of Different Formats	15 series x 100 crew/series = 1,500 crew members 1,500 crew x 200 days (avg.) in production = 300,000 person days
Made for TV Movies	40 movies x 80/crew/movie = 3,200 crew members 3,200 crew x 30 days (avg.) in production = 96,000 person days.
Paid Wages	300,000 + 96,000 = 396,000 pa x N25,000/day (avg.) = N9.9 B = \$27.3 M

Dynamics of Nollywood

³³ Temple Management Company is investing in producing their own films both as a commercial venture but also as a vehicle to showcase the talent that they manage.

The foregoing discussion on how Nollywood is structured today sets the scene to further analyse Nollywood dynamics; in other words, the factors driving change in Nollywood's growth and competitiveness, in both Nigeria and on the global stage. The analysis will identify points in the market system where ESIP/MADE 2 could leverage to increase the participation of Edo state and its residents in the growth of Nollywood. This analysis will, in turn, lead to a presentation in Section 3 of recommended interventions ESIP/MADE 2 could employ to create more jobs and investments in Edo state for its residents with career aspirations in Nollywood.

Drivers of Change:

Demand: Every sign points to the continued growth of Nollywood as demand for media content appears to be insatiable in Nigeria, the African continent, among Nigeria's large diaspora population and, more recently, for a global audience of movie goers.³⁴ In 2018, Africa Magic requires 70,000 hours of original media content with for 15 TV series of both long (260 episodes) and short (26 episodes) formats and 40 feature-length made for TV movies for broadcast on its 7 channels on DSTV.³⁵ This is in addition to purchasing under license independent films. Ebony Life is another significant producer/buyer of Nigeria made media content estimated at 5,000 hrs. over the next five years or about 1,000 hrs. per annum.³⁶ Ebony Life is also a producer of feature films for release in cinemas in Nigeria. The production of all this media content in different entertainment formats and of varying quality (e.g. acting and production values) translates into thousands of jobs and billions in Naira wages paid by both "old" and "new" Nollywood producers (see Text Box).

Distribution Channels: Nigeria's commitment to achieving a high rate of cross-over from analogue to digital signals is disrupting the older forms of film distribution. The "old" Nollywood producers must rethink their distribution strategies in the context of the steadily declining DVD market to include satellite TV, on-line streaming and cinema release. Africa Magic will continue purchase under license "old" Nollywood "B-Format" films for its Epic Channel but it will pay better prices for higher quality products for broadcast on its Showcase and other channels for subscribers of its premium package. Films for release in cinemas is available to producers of all kinds provided they 'up their game' and budget for marketing and PR.

Risk Mitigation: No one has yet devised an algorithm that can predict an audiences' response to a film or TV show. Big budget productions with A-list actors continues to be one way producers mitigate their risks and even then, there is no guarantee of success. Both "old" and "new"

³⁴ African themed films may be at the start of appealing to a cross-over audience of many millions of moviegoers with the release in 2013 of *"Half of a Yellow Sun"* (a UK/Nigeria co-production), the showcasing of Nollywood films at international film festival including Toronto Film Festival (The Wedding Party) and Pan African de Cannes (Hilda Dokubo's Asawana)

³⁵ Interview with Busola Tejumola, General Manager Production/Africa Magic and Caroline Oghuma, Public Relations Manager, Multi-Choice Nigeria.

³⁶ Interview with Uzoma Onwuchekwa, Executive Director, Ebony Life TV.

Nollywood producers in Lagos, Asaba, Kano and Edo allocate as much as 50% of their overall production budgets to cast popular actors. Popular genres such as historical dramas, romantic comedies, sci-fi thrillers, action, family-friendly can be another way to mitigate risk. Yet, film is like fashion: what's popular today can change overnight. Sequels, prequels, re-makes of older films is another way to mitigate risk, and this is now starting to happen in Nollywood. Producers must contain costs but without sacrificing the quality of their products so that they can release their films in each and every available distribution channel.

Human Capital: Industry insiders report that they already face a shortage of talent above and below the line.³⁷ The informal networks of finding below the line crews and then training them on-the-job simply can't keep pace with the demand.³⁸ The new digital, streaming and cinema platforms are raising the bar of quality and this means the re-skilling of existing crews to get the most out of existing equipment and mastering the use of newer equipment (camera, sound, lighting). Young women and men in Edo state who aspire to careers in Nollywood can get in one of three ways: 1) know someone in the industry, 2) self-promote using social media platforms (e.g. Instagram posts), or 3) graduate from a university or film school. The first two options are hit and miss: one might not have contacts in the industry and/or skilled at self-promotion. The 3rd option – attending a film school/academy – may not be available to Edo youth for two reasons: the expense is beyond their means and they may not have enough schooling to meet the entrance requirements.

Film Finance: The “old” Nollywood producers can earn enough income to make their next movie but not much more. There appears to be very little evidence that film producers can secure “OPM” – Other People's Money³⁹ – in the form of equity, with some possible exceptions on debt financing (e.g. the BOI backed “Nollyfund”). Is there a role for Federal and State Governments in Nigeria to stimulate more investment in Nollywood, as it does for other growth sectors, without trying to pick winners? In the USA, Federal and State-based tax incentives are critical components of a producer's financing plan. Federal tax rules allow equity investors in a film to shelter their income by the amount of the funds invested according to their tax bracket. This results in tax savings. State-based incentive programs result in a tax rebate. For example, for every taxable dollar invested in a film production in the State, the State will reimburse the tax paid, plus a sum of money over and above the tax paid⁴⁰, provided the producer meets all local content rules.

Infrastructure: The high cost of everything in Lagos – crews, hotels, locations, food, etc. – is cause for Lagos based producers to find alternative lower cost locations. The development of a modest, purpose built “film village”, similar to the one Africa Magic built to film *Ajoche* on the

³⁷ Interviews with Feemo Production (James Omokwe, Onyi Okoroji, Jemila Akinwale) and Anthill Studios (Niyi Akinmolayan)

³⁸ Christopher Ozoemena, owner of De-Kross Productions and an Asaba based producer.

³⁹ Dayo Obisan, Managing Director of Greenwich Asset Management, Ltd is attempting to create an asset class backed by Nollywood (film libraries, cinemas and other assets) that could leverage private capital for Nollywood producers. This is still a work in progress.

⁴⁰ Tax rebates range in amounts from 20% to 35% of all taxable spend in the state.

outskirts of Lagos⁴¹, would likely attract production companies to the location. This type of infrastructure project could be suitable for a public/private partnership. The government's investment in land and services (power, water) could be compensated by more investment in the state and related income multipliers and revenues from leasing the site to a private company. The private company could generate site rentals from production companies while also bundling together other services (such as equipment rentals) for added revenue streams.

Equipment: For the most part, the equipment the “old” Nollywood producers own (camera, lighting, sound, etc.) is outdated and unable to get them the quality in picture, sound, lighting that is required by digital/cinema viewing platforms. Access to better equipment that producers can either rent or buy would enable them to increase quality without breaking their budgets. There may be an opportunity to work with international equipment manufactures like Sony, Canon, Black Magic and/or their authorised dealers in developing a platform for them to sell and/or rent their older camera models - still a significant upgrade to producers - at discounted prices.

Business Services: As more producers make the transition from the “old” Nollywood of low budget films made for the DVD/CD market to the “new” Nollywood of producing films for release through multiple distribution channels, they would certainly benefit from the help of professional service providers. For example, in negotiating more favorable deals with actors and distributors, in promoting their films using social media or in managing their finances and accounting for their costs in a more efficient, accurate and transparent manner. The idea of outsourcing services may require a change in mindset of the “old” Nollywood producers but the incentives to make this shift are quite apparent.

Summary: Nollywood films with their stories rooted in African culture and its oral storytelling tradition are likely to remain wildly popular. The main challenge faced by the “old” Nollywood producer is distribution, given the scourge of piracy and disruptions of digital media and the Internet. Their high volume/low margin business model will need to change to position their films in multiple markets. The savvy producers are combating pirates by investing more in their own DVD/CD distribution networks. This is costly and will likely squeeze production budgets at a time when producers must also think about diversifying their markets to satellite TV, mobile streaming apps and for release in cinemas. This will require them to “up their game” and increase their production budgets to get the production values (more coverage, better sound, lighting) required for distribution into these channels.

The filmmakers of “new” Nollywood face a different challenge. Can the films they produce (bigger budgets, better production values) generate enough revenue from multiple markets (cinema ticket

⁴¹ It is informative that DSTv considered the investment in building a film set for this one production to be worthwhile enough to use and tear it down after the shoot.

sales, licensing deals with TV and streaming platforms⁴² in Nigeria and abroad) to yield them a profit. This has yet to be determined empirically. The Wedding Party (1 & 2), which generated N1B (\$2.8M) in box office revenue, is a watershed moment in the history of Nollywood. It has spurred on more investment into film production by more companies to emulate *The Wedding Party* business model. When the box office leads, with all the fanfare associated with it, it will open additional revenue streams for TV, DVDs and streaming in both domestic and foreign markets.

Leveraging Nollywood Growth for Jobs and Investments in Edo State

Where in the Nollywood market system could ESIP/MADE 2 intervene to support sector growth that is inclusive of more jobs and investments in Edo state.

- Jobs/Income: There are few individual barriers to entry for careers in Nollywood other than one's creative passion (writing, drawing, photography, sound, lighting, acting, computer skills), a realistic wage expectation and perseverance to pursue their aspirations. Producers already face shortage of more and better trained crews as they up their game to diversify their markets and products. Entry level wages start at around N5,000/day for a production assistant and can go as high as N8,000/day for crews with knowledge of camera operation, lighting and sound. Once new entrants have proven themselves on a production set, wages can increase up to N20,000/day. A new entrant who works at becoming job ready and, once in, at honing their skills – by reading, further study, production experience -- can earn N40-50,000/day in above-the-line jobs.
- Investment: Beyond the few Nollywood producers who are active in Edo state,⁴³ there is currently very little investment in film/TV production in Edo state as compared to neighboring Asaba or Lagos, the center of the Nollywood universe. Edo could position itself as a lower cost filming location for producers, especially Lagos and Abuja based producers, who are facing escalating costs of production due to higher wages, higher cost of living and time lost in navigating the congestion of the city. With a modest public sector investment in a mini-film village, Edo state could attract new investment conservatively estimated at N120M (\$330K) when producers choose to film in Edo instead of higher cost locations.

⁴² There are two types of streaming/download deals: Transactional Video on Demand (TVOD) is pay per view from the likes of iTunes or Amazon; Subscription Video on Demand (SVOD) is from subscription based services like Netflix, Amazon Prime.

⁴³ Peddie A. Okao (Prolens Movies), Lancelot Oduwa Imasuen (Filmmaker/Cultureactivist), Kabat Esosa Egbon (Filmmaker) and a few others.

- **Women:** There are no barriers to entry in Nollywood that discriminate against women. Women that are currently in the sector are typically in roles such as stylists, hair and make-up, yet at the same time, industry insiders tell us that women are uniquely suited to careers in editing and animation because of their manual dexterity and patience. The on-line platform can categorise subscribers by gender and/or incorporate a function that directs platform resources (e.g. information, training, trends, jobs) to women. The platform can also easily categorise and/or target subscribers by location (e.g. the LGAs in Edo State known to be more vulnerable to human trafficking).

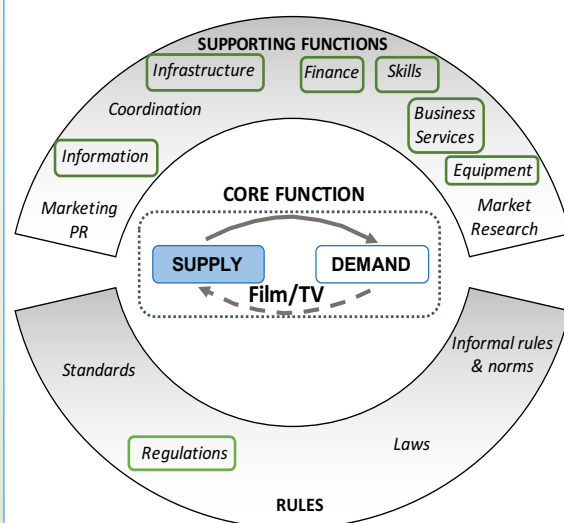
Figure 3 identifies potential opportunities where ESIP/MADE 2 could feasibly unblock system wide constraints that would benefit both Nollywood and Edo state in the short and longer term.

Supporting Functions: The proposed intervention *On-Line Platform for Information, Education and Jobs* (see section 3.2.1 below) would overcome information constraints (where and when are the jobs?) and create affordable training opportunities for young women and men to prepare themselves for these jobs. By combining skills development and information this intervention could result, in two-year period, in a more formal pathway to jobs for Edo state residents who aspire to careers in Nollywood and/or other sectors like commercial advertising and music videos which are big users of these very same skills.

The lack of purpose built yet basic infrastructure (modeled after the set Africa Magic created for the production of *Ajoche*) is a constraint felt by producers -- especially Lagos based -- who must go further outside of Lagos to find conducive filming locations. This adds cost to the already escalating costs of production in terms of wages, accommodations, catering and time lost in Lagos traffic. The proposed intervention for private/public partnership to build/operate a *Mini-Film Village* located in the surrounding areas of Benin City could result in more Nollywood investment and jobs in Edo state by producers who seek alternative and lower cost filming locations (see section 3.2.2 below).

Constraints/Opportunities
Skills: Upgrade needed industry wide. Link Edo residents to low cost/high quality training taught by working professionals.
Information: Informal networks unable to keep pace with demand for labor. Link Edo residents to the latest information on training & career opportunities in Nollywood.
Infrastructure: Costs of production are increasing especially for Lagos based producers. Encourage a public/private partnership with the Edo State Government to create a mini film village to attract more productions in the State.
A network of community cinemas could tap a potentially large cinema going audience in small towns and rural areas.
Equipment & Business Services: Producers for the mass market use outdated equipment and are unschooled in doing deals with "new" Nollywood distributors. Encourage producers to group together to get better deals from equipment dealers & business services providers.
Finance: This is a tough nut to crack. Explore the feasibility of Federal and State tax-based incentives for producers seeking equity finance.

Figure 3: Leveraging Nollywood for Jobs and Investments in Edo State



“Old” Nollywood producers who want to adopt or transition to the “new” Nollywood business model (fewer films for multiple markets) will need the support of specialised services (lawyers, financial management, social marketing). The proposed intervention on *Producer Links to Specialised Business Services* (see section 3.2.3 below) aims to facilitate access and use of critical services producers which will, in turn, could create more jobs for better skilled production crews inclusive of Edo residents who take advantage of the on-line learning opportunity.

Two proposed interventions designed to unblock constraints to film finance and reaching a cinema going audience in thousands of Nigeria’s small towns/rural areas will require more lead time to design interventions based on good analysis. The provision by the Edo state government of *tax-based film finance incentives* for producers could be a game changer in the industry and attract significantly more Nollywood investment and production jobs in the state. However, this intervention would require a close assessment of both Federal and Edo state tax regulations (circled in Figure 3 above) to examine the feasibility of this intervention/ The re-emergence of the cinema culture could attract investors to create a chain of community cinemas – another investment in infrastructure -- to take Nollywood films down-market.

2.3 Recommendations

Intervention One: On-Line Platform for Information, Education and Jobs

The Opportunity: The “old” Nollywood producers can no longer solely rely on informal networks and on-the-job apprenticeships to crew more productions as well as improve quality to capture premium prices paid by digital distributors and cinemas. The “new” Nollywood producers and their distributors also face talent shortages across the board (e.g. above and below the line) to meet increasing demand for media content across all genres. Film schools and academies focus almost exclusively on the skill sets that drive the creative process of a film/TV show from concept to completion such as screenwriting, directing, acting, photography and editing. Unlike above-the-line talent, there is no formal pathway for below-the-line crews (e.g. camera operators, lighting and sound design, costumes, hair and make-up, animators, special effects) to become job ready for careers in Nollywood. There is a disconnect between the demand for below-the-line crews and the supply by job-ready individuals. This intervention aims to address this labour market failure.

The Proposed Solution: An on-line platform for information, education and jobs could link Edo youth who aspire to start and/or enhance their careers in Nollywood with producers who need more and better skilled crews. This on-line platform – an innovative concept already in the final planning stage by a few Nollywood entrepreneurs – would bundle together a number of functionalities of existing platforms into one platform:

- an on-line learning academy such as www.Lynda.com or www.Udemy.com;
- merit based learning platforms such as www.sololearn.com;

- a live chat service such as www.slack.com; and
- a search engine for job listings such as www.Vconnect and www.Fiverr.com.

With this combination of functionalities, the platform could fill critical information and skills development gaps in the industry. It would do so by bringing together and actively engaging job seekers, educators and Nollywood employers at a cost within the reach of many thousands of young people who aspire to careers in entertainment but either can't afford or qualify for entrance into film schools/academies. Among its key features would be:

- a *streaming platform* containing courses across all filmmaking skill sets in video format;
- a *mentorship live chat* service which would enable students to access a tutor at any given time plus a *live call* feature for easy one on one communication between tutor/mentor and student;
- an *online forum/community* for students to mingle and discuss topics of varying interests;
- a *Points/Reward system* for accomplishing tasks in forums and course works could be used to unlock exclusive resources, extra courses and to build rank in leaderboard charts;
- short format face-to face courses (3-5 days) with working professionals;
- a *Blog* page for updates on new courses, free resources, and many more live feed items;
- paid internships on production sets; and
- a *job search engine* which would link prospective companies and graduated students upon completing their course syllabus.

Figure 4: Formal Pathway to Nollywood Jobs for Edo Youth (below) shows how this intervention would create a more formal pathway for thousands of young people who aspire to careers in Nollywood (job seekers, left hand side) and prospective employers (employers, right hand side). The pathway is like a funnel. It is open to anyone willing to subscribe to the platform which takes them through a filtering process that allows them to self-select based on their engagement, performance, and aspirations. The best performers would be placed in paid internships on a film set where they can start building their resume and prove themselves to their future employers (see anticipated outcome below).

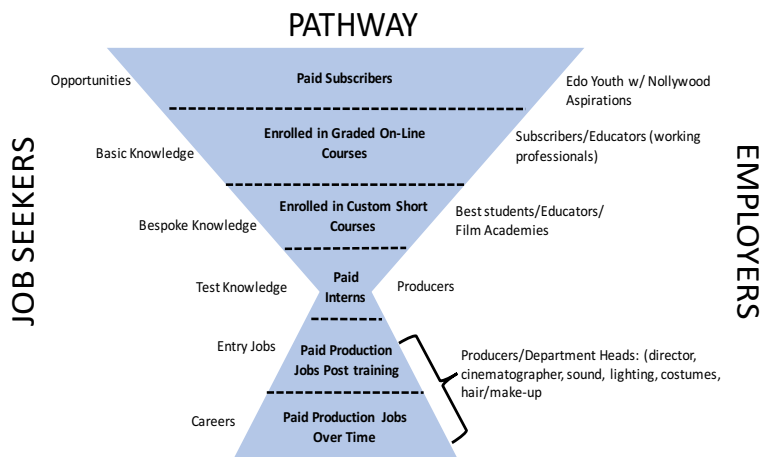
The platform would be subscriber based with prices pegged to different service bundles. For an example, N5,000 (\$14) for a monthly or N50,000 (\$138) for a yearly subscription. Limited free course videos would be available to a non-member as a trial package.

ESIP involvement in this intervention would include the following actions over the two-year project period:

- Confirm commitment of one lead firm to trial and launch this on-line platform in Edo State.
- Work with the lead firm to develop a financially self-sustaining business plan for this initiative (willingness to pay, capital required, operating costs, promotion strategy, revenue streams).
- Confirm the readiness of key stakeholders to be actively engaged with the platform:
 - working professionals pre-record video instructions and/or serve as mentors/tutors;
 - production companies agree to set-aside crew jobs for interns on a cost/share basis;
 - film schools/academies create space in their schedules for new short format courses.
- Explore the interest of potential funders – venture funds, banks and donors – to co-invest or contribute in some way to this venture.

- Enter into a partnership agreement with the lead firm spelling out roles, responsibilities and cost sharing arrangements.
- Work with the lead firm to formulate a launch strategy for maximum exposure;

Figure 4: Formal Pathway to Nollywood Jobs for Edo Youth



- Monitor the performance of the on-line platform against a set of measures to include
 - the commercial viability of the on-line platform
 - the improved functioning of the labor market for Nollywood; and
 - the jobs and income for Edo youth.

The Justification for the Solution: When it comes to getting in and staying in the sector, “who you know” is equally if not more important than “what you know.” This is

especially true for the below-the-line crews because they are not organised into unions or guilds which typically perform this labor market function. This proposed intervention would address three labor market system constraints simultaneously:

- Target Audience Sensitisation: This starts with public messaging about the opportunities in Nollywood jobs to create awareness, interest, and demand from Edo’s vulnerable population.
- Skills Development: Key stakeholders – educators, producers, distributors, government – need to coordinate between themselves to insure that new entrants are trained, and existing crews are re-trained, with the right skills and attitudes to contribute to Nollywood’s future growth and competitiveness. Courses need to have the right mix of technical know-how and practical experience to fast track young people into careers.
- Linkages: There are no structured platforms with sufficient information to link job seekers with prospective employers at scale with respect to jobs in demand, filming locations, wages paid and for how long.

Anticipated Outcomes/Impact: Our theory of change is simple: When Edo’s youth learn about the growth of Nollywood and resultant demand for various types of skills, they will self-select and subscribe to the platform as a means of entry. Similarly, when producers learn that there is a platform where they can select from a large pool of trained and tested “below the line” job-ready crews, instead of relying on personal referrals from their current employees, they will also engage and start hiring. With Nollywood already confirmed as an aspirational sector, the key assumption behind this theory of change is that once a new entrant is in the industry then market forces (demand and supply) will take over.

Our rough estimate in terms of investment, capacity building and jobs over the two-year period of ESIP, to be further validated during the intervention design stage, are as follows:

- 25,000 subscribers pay a one-time subscription fee of N5,000, which equals N125M (\$346k).
- 1,000 subscribers pay an additional N20,000 for bespoke training which equals N20M (\$55k).
- 2,000 persons (< 10% of all subscribers) will leverage their learning and on-the-job training into 100 days of paid work on film sets at N8,000/day or N1.6B (\$4.4M) over a period of two-year period.

It is also important to note that the skills and experience Edo youth acquired through the on-line platform can also be leveraged and applied to paid assignments (consulting/advisory) or permanent jobs in other sectors such as advertising companies, corporate brand managers, architectural and real estate firms.

Who could MADE/DAI partner with? The ideal partner for this intervention would be a private company owned by a Nollywood entrepreneur with a commercial vision for this service and the bandwidth to make it happen. Filmmaker Niyi Akinmolayan⁴⁴, owner of Anthill Productions, an editing and animation house, and dedicated blogger on all things Nollywood (<https://niyiakinmolayan.com>), is in the final planning stages. The website design is nearly complete and the training videos will be filmed starting in June. Discussions on this subject were also held with filmmaker James Omokwe who has piloted a similar concept but had to set it aside due to the pressures of other commitments.⁴⁵

The finance required to launch the platform is estimated at around N16,000,000 (\$40K) to cover the development of all online systems (website, blogs, payment) all offline systems (curriculum design with working professionals, filming master classes) and mobile applications (Android and IOS). This figure also includes stipends paid to teachers in year one and marketing and promotion costs in advance of the platform's launch.⁴⁶ ESIP could support these up-front costs by providing a grant to the lead firm on a cost-sharing arrangement. The on-going costs of keeping the platform current, membership promotion and fixing bugs as they occur are expected to be covered from subscription fees.

90-day Action Plan: The ESIP team, with the support of Nollywood consultant Chidi Ukwu, would need to take the following actions to bring intervention from concept to reality:

1. Follow-up with the two prospective lead firms to determine their capacity, readiness and commitment to drive this platform as a viable business in partnership with educational bodies, producers and ESIP/MADE.

⁴⁴ He directed The Wedding Party 2 and just wrapped on another feature film *Chief Daddy* for a December 2018 release.

⁴⁵ His production company, FEEMO, completed in May 2018 a year-long shoot of Ajoche for Africa Magic.

⁴⁶ See Anthill Creative Academy proposal

2. Enter into a partnership agreement with the lead firm selected for this intervention including financing arrangements.
3. Work with the lead firm in developing a business plan to confirm its ability to covering on-going operating costs from subscription fees alone.
4. Generate interest and commitment from the other contributing stakeholders to the on-line platform to include film academies to host face-to-face training, producers to host interns, and commercial firms wishing to advertise on the site.
5. Implement the marketing and promotion plan to create and build traffic on the platform.
6. Go live!

Intervention 2: Mini Film Village

The Opportunity: Producers of media content do not and cannot price their products to reflect their costs. The price of a cinema ticket is set regardless how much the film cost to make. Africa Magic and/or Ebony Life will pay better prices to license premium content, whether the film's budget was N10M or N50M. The companies who pay for advertising on iROKOtv's streaming platform seek to place their ads alongside content that resonates with their target group, again regardless of the cost of the film.

As such, all producers seek ways to contain costs without sacrificing their vision. This is especially true for Lagos-based producers who have seen their production costs escalate because of the high cost of living, which is manifested in a number of ways: crew wages, accommodation, locations, logistics, and food catering throughout the production, not to mention the amount of time that is lost in traffic.

With its much lower cost of living, Edo state could be an attractive alternative production location for all producers, and especially for those that are Lagos-based. The opportunity for Edo state is to develop a convenient, well designed, versatile, low-logistics production setting that will leverage Edo's creative and aspiring community and be seen as a time and money saving alternative by producers.

The Proposed Solution: The proposed solution is a "mini film village" located in the surrounding areas of Benin City with these basic features:

- Variety of controlled, rural outdoor scenery in one area, with access to townships for urban scenes and supplies;
- Adaptable interior spaces for easy set-ups;
- Technical and electrical infrastructure; and
- A reliable power supply.

Africa Magic set up its own "mini film village", similar in features to those listed above, to produce the 260-episodic series, *Ajoche*. When filming was finished, this "mini film village" was

disassembled, the infrastructure removed, the lease paid off, and the vacant land restored to its original condition... essentially a vacant lot awaiting development in a housing estate in the outskirts of Lagos. This purpose-built but temporary shooting location illustrates the value production companies place of shooting locations and the lack thereof.

The concept of a mini film village would require a feasibility study against a set of specifications that would attract Lagos (and Abuja) based production companies to shift some of their filming locations to Edo state. The study would identify suitable locations, the capital required to construct the facility, and a financially viable operating model that would return a profit after aggregating all of its construction and operating costs. The study would also assess if Benin City is indeed a lower cost alternative to Lagos vis-à-vis acceptable accommodations, catering, crew wages, ease of movement, and local access to the ancillary and troubleshooting services which can be found in abundance in Lagos.

This mini film village is conceived as a public/private partnership: the Edo State Government would allocate land and prepare tender documents for a build and operate procurement; the partnering private company, perhaps a real estate development or management company, would be responsible for obtaining the operating license from the State and managing the facility. The feasibility study would identify other possible ownership structures with or without Edo State Government's involvement.

It would take about 9 months for ESIP to complete the feasibility study, identify the appropriate ownership structure, and assist the appropriate Edo State Government agency (assuming a public/private partnership is the preferred model) in preparing the tender documents. It would take another 2 months for the Edo State Government to manage the tendering process and finally select the winning bidder. The construction of the facility itself should not involve much time and while it is being built, the operator could be promoting the facility and booking commitments to shoot at the facility. Therefore, in our view, the village would not be operational until 15 months from inception.

The Justification for the Solution: Nollywood continues to grow rapidly, each and every day. The lack of suitable locations for film production is becoming more and more apparent. If ESIP could facilitate the development of an affordable and acceptable location, there is little doubt Nollywood, including producers in the Asaba cluster, would quickly utilise it, bringing both investment and jobs, along with the associated income multipliers, to Edo state. It is worth noting that we are not talking about a Hollywood studio with multiple sets, sound stages, editing suites, accommodation, cafeterias, etc. The accents are on “mini” and “village” but with sufficient infrastructure to support basic needs such as reliable power, underground cabling, and alternative scene setting locations.

Anticipated Outcomes/Impact: The theory of change for this intervention is not “*If you build it they will come.*” The ghost town that is Calabar’s Tinapa Studios today is a reminder not to repeat the same mistake. Our theory of change for this intervention is rather, “*If you build it and it is*

operated as a private sector led enterprise then they will come provided the mini film village located in Edo state offers producers a cost saving incentive to use the facility.”

Once in operation, the mini film village would lead to much more Nollywood investments in Edo state and jobs for Edo state residents, especially when the On-Line Platform (see above) delivers on its promise to prepare more Edo youth for Nollywood jobs. In the first full year of operation (4th qtr. 2019), a conservative target for the facility would be:

- 10 films at N12M totals N120M (\$330K) spent in Edo State.
- 50% of production budget paid in wages to below the line crews⁴⁷ equals N60M (\$165K)
- 10 films with an average shooting schedule of 15 days each equals 150 days.
- 15 below-the-line crew's/film times 150 day equals 2,250 person days of paid work.
- 50% of BTL crew new entrants from Edo State (1,125 person days) paid an average wage of N8,000/day equal N9M (\$25K).

When in full operation, the mini film village could host 2 or even 3 times this number of films using a similar set of assumptions on production budgets and shooting schedules.

Who could MADE/DAI partner with? ESIP's most likely public sector partners could be the appropriate agency of the Edo State Government or the Oba of Benin and his affiliated organisations. The likely private partner could be a real estate development/management company with facilities management expertise or even a construction, marketing, or even oil and gas services company as successful Nigerian entrepreneurs are always looking to diversify their investments. The increasing number of venture capital and private equity firms might also take an interest. The Congress of Edo Movie Practitioners (CEMP), an organised group of Edo based filmmakers, is yet another possible private sector partner that could be interested in this initiative.

90-day Action Plan:

1. ESIP will need to get an expression of interest from both the government and a private sector partner as the basis for moving forward with this intervention.
 - Discuss, further, the concept with the Edo State Government, possibly starting with the Governor, to find the right POCs and generate interest, approval to proceed, or better yet, full buy-in to public/private partnership;
 - Prepare a brief prospectus on the concept – design specifications, demand, investment, and ROI – to attract the main sponsor/ operator/ investor in the project, be it one company or a consortium.
2. With expressions of interests confirmed, ESIP would need to undertake a comprehensive feasibility study for such an intervention could be contracted and completed within a 90-day period.

⁴⁷ Source James Omokwe, filmmaker and producer on Africa Magic's TV series *Ajoche*.

Intervention 3: Producer Links with Specialised Business Services

The Opportunity: The vast majority of Nigeria’s film producers, the stalwarts of the “old” Nollywood, do just about everything by themselves. In other words, they self-finance their films, own the production equipment, find and negotiate all deals with the actors and crew, distribute and promote their films, account for and manage their finances, and quite possibly fight their own legal battles. The “old” Nollywood producers are adept problem solvers; after all, they are the pioneers who took Nollywood from its accidental origins in 1992 to the behemoth it is today. And, yet, their traditional high volume/low margin business model is under threat for two main reasons: 1) piracy and 2) Nigeria’s transition from analogue to digital signal. Piracy squeezes margins -- for every legitimate DVD that is sold another 5-10 are sold by pirates. Furthermore, digital migration erodes traditional markets as consumers shift their viewing platforms from DVDs/CDs to satellite TV, mobile devices and cinemas.

Producers face a dilemma in how to contain costs while simultaneously upgrading their business model. Producers can choose to fight DVD/CD pirates in an attempt to re-capture lost revenues, which has proven to be difficult globally. Alternatively, they can improve the quality of their products, focus much more on positioning their films in the digital/streaming/cinema viewing markets while also downgrading revenue expectations from the DVD/CD market.

This is the strategy being adopted by the owner of De-Kross Production’s Christopher Ozoemena, a 20- year veteran of the Asaba cluster with many films to his credit. He has been reluctant to enter the digital/streaming market because he doesn’t yet know how to negotiate mutually advantageous deals with A-list actors, with digital TV channels or with streaming channels like iROKOTv. He’s also reticent to explore these type relationships because of stories he has heard about other producers getting cheated. Mr. Ozoemena reports that there are another 20-30 producers working in the Asaba cluster who want, like him, to make a shift to the “new” Nollywood business model. While we did not interview specialised service providers for this report, a Google search shows that Nigeria has a number of camera equipment resellers, entertainment attorneys, social media marketers and financial planners in support of the “new” Nollywood. So specialised services for Nollywood exists but the Asaba cluster producers don’t know about them and how they could help them succeed.

This intervention aims to overcome an “information” constraint by linking the “old” Nollywood producers to specialised service providers – equipment dealers, entertainment attorneys, financial planners, social media marketers – so that they can focus on implementing their changing business model and create the jobs the youth of Edo (and the country) need.

The Proposed Solution: Nollywood producers who wish to adopt or transition to the “new” Nollywood business model of making fewer but better quality (higher budget) productions expressed an interest in outsourcing a number of business functions including:

- Access to better equipment (rental or sale);
- Make better deals with talent to reduce, for example, up-front salaries in exchange for profit sharing;
- Target limited promotion budgets to reach their audience more efficiently (e.g. through the use of social media);
- Negotiate favourable licensing deals with digital/Internet distributors; and
- Manage/leverage their capital to obtain better terms for film finance (e.g. equity or debt).

Figure 5: Specialised Business Services for Producers correlates with a producer's choice of business strategy with a bundle of fee-paid specialised business services they may or may not consider using and paying for to implement their strategy.

Current Markets/Products (lower left quadrant): Producers in this quadrant squeeze production budgets further to make up for lost revenue (e.g. spend N2M for a N3M film) and/or invest more in controlling DVD/CD distribution by using their own sale agents. Producers in the segment are unlikely to spend money on specialised business services choosing instead to do it themselves or possibly learn from other producers in their network.

New Markets/Current Products (upper left quadrant): Producers have an incentive to upgrade the quality of their films: Africa Magic is reported to purchase under license Nollywood films at prices ranging from about N358K (\$1,000) to N1.4M (\$4,000)⁴⁸ based on their quality (good storytelling with good picture, lighting, sound); iROKOTv is likely to generate more paid advertisements and subscription fees with a diverse mix of quality films (again good storytelling with good picture, lighting, sound) which is shared between iROKOTv and the producer.⁴⁹

Producers who pursue new markets with their traditional stories will find that they can't get the quality of picture they need with their outdated

Figure 5: Specialised Business Services for Producers



⁴⁸ Source Emeka Amakaze, director in the Asaba cluster.

⁴⁹ The producer of "Conscripted" reported the producer's share of 80% of revenues in a recently completed deal with iROKOTv.

cameras and so will be interested in making deals with equipment suppliers with better cameras and related equipment. They will also find themselves unprepared – and therefore interested in purchasing professional services -- to either understand and/or negotiate contracts with the legal teams representing Africa Magic, Ebony Life TV or iROKOTV or how to employ social media strategies they must pay for when releasing their films in cinemas.

New Products/Current Market (lower right quadrant): Films are like fashion: they come, they go and may even return. The producer who employs this expansion strategy will want to produce a more diverse mix of traditional Nollywood themed stories which are better written and are told in a more cinematic way (e.g. once again, good storytelling with better directing and picture quality.) This producer will seek better screenwriters while at the same time optimising the use of existing equipment. Since the business model remains high volume productions for sale in the DVD/CD market they are unlikely to be users of specialised business services.

New Products/New Markets (upper right quadrant): This diversification strategy is adopted when the producer of the “old” Nollywood business model adopts the “new” Nollywood business model. This comprises producing fewer, bigger budget films per year for the higher end satellite TV and digital markets (new products, new markets). Producers in this category will ask: “how can I make a N7M production look like a N15M film and make sure I’m not being cheated by the big distribution companies.” These producers are the ones most likely to be motivated to outsource a range of services, from equipment rentals to professional services of different types. Some producers have already decided to go this route.⁵⁰

ESIP’s role will be to facilitate business linkages between producers and qualified service providers. The key actions ESIP will take include the following:

- Survey the volume and value of demand for specialised services of different types from active producers in Edo State and the Asaba cluster;
- Survey relevant equipment suppliers (e.g. camera and related equipment) and specialised service providers (e.g. entertainment lawyers, financial managers, social media experts) for their interests in targeting producers in Edo State and the Asaba cluster.
- Link buyers and suppliers of specialised services by performing a number of activities:
 - Assist producers individually or through their associations to attract the interest of specialised service providers;
 - Assist specialised providers frame attractive offers to these producers;
- Monitor the performance of this business linkage initiative against a set of measures to include:
 - the type, volume and value of transactions between producers and service providers;
 - a qualitative assessment of the performance of this service market from the perspective of both buyers and suppliers; and
 - additional job growth inclusive of crews from Edo State.

⁵⁰ De-Kross Productions, Asaba Cluster

The Justification for the Solution: Producers who choose to expand their film business by further penetrating the direct to DVD/CD market with existing or new products will find themselves fighting a losing battle with pirates. While they may still be able to make a profit from ever tightening margins, they are not going to be the job creators ESIP seeks to support. The job creators will be found among producers who are pursuing one or both of these two strategies: new markets and/or new products.

These are the producers who have adopted or are transitioning to the “new” Nollywood business model: discovering better ways to produce the same or different stories for distribution in multiple markets including release in cinemas. Asaba and Benin City based producers acknowledge that they will need the assistance of specialised services – lawyers, financial managers, social media experts – to accelerate their successful entry into new, higher premium markets and optimise the returns from their added investments in bigger budget and better quality films. These producers are the job creators ESIP should support and this intervention is designed for this purpose.

Anticipated Outcomes/Impact: The theory of change for this intervention is: *If the “old” Nollywood producers change their business model and make strategic use of specialised services, then they can produce more (and better) films for multiple markets thereby creating more ATL and BTL jobs inclusive of Edo youth provided they are job ready and know where the jobs are.* This theory of change reflects the combination of two proposed ESIP interventions in Nollywood: producers who seek more and better trained crews and job ready Edo youth who aspire to jobs and careers in Nollywood.

With ESIP taking the lead in facilitating linkages between producers, specialised service providers and skills development (e.g. the on-line platform), this intervention could be launched at any time. An estimate of expected outcomes follows:

- 40 producers spend an additional N1M/film or N40M (\$109.7K);
- 40 producers make an average of 10 films over a two-year period or 400 films;
- Total additional spend of N40M x 400 films = N1.6B (\$4.4M);
- 50% of additional spent of crew wages⁵¹ = N800M (\$2.2M).

Who could MADE/DAI partner with? Because this intervention is about facilitating linkages between many producers and many specialised service providers, it does not lend itself to a “lead firm” partnership model. A logical partner could be a producer’s association to survey membership interest/demand for specialised services and coordinate the deal-making process with service providers. Producer associations that do exist tend to be more focused on advocacy than member services. So, even if a producer’s association did come forward (unfortunately we were unable to arrange an interview with the Association Movie Producers in Nigeria) too much of ESIP’s time would have to be devoted to association strengthening, an activity that is precluded in the short timeframe of this program.

The key questions for ESIP to consider are these: Can ESIP perform this facilitation function? Does MADE have a track record of performing this function in its current program portfolio?

90-day Action Plan

1. Explore lead firm options as outlined above.
2. Gather information from equipment dealers and service providers on their interest in targeting Nollywood producers.
3. Gather more information from producers motivated to outsource value adding services.
4. Follow-up with Africa Magic, Ebony Life, iROKOTv on the quality requirements for acquiring and/or commissioning more content made by “old” Nollywood producers.
5. Identify and short list producers and service providers as the basis for entering into partnerships.

High Impact/Long Term Interventions

In the course of our research, we identified two intervention concepts that would be good for Nollywood and Edo state but would require longer lead times to study their feasibility, design, and then deliver. These concepts are briefly described below:

Film Finance Incentives: Every independent producer is self-financed. Equity finance in film doesn't exist at the moment for any number of reasons chief of which is the unpredictability of getting the money back. There are a number of tools which can be used to mitigate the investor's risk chief among them is public sector incentives typically positioned in their tax regimes. Tax rebates work this way: for every taxable Naira spent in the State, the government repays the tax paid plus an amount over and above the tax paid. In exchange for the tax rebate, the producer must employ at least 75% of all crew from State residents and use the available services within the state (security, transportation, etc.). Given the sub-optimal state of the country's tax system, the next step would be to explore the feasibility of a tax-based film incentives with an expert in tax reform issues.

Community Cinemas: The cinema culture in Nigeria is resurging with modern cinemas being opened around the country by competing providers (Silver Bird, Genesis, FilmOne, Kada in Benin City). These cinemas target the growing middle class who are willing to pay between N1,500 – 3,000K/ticket. Insiders in the film business tell us that there is an exciting business opportunity to go down-market to small towns and rural communities where ticket prices can't exceed N500/ticket. With this infrastructure in place, distributors of feature films will have another stream of income for their products while other producers without the budgets to create high-end products for box office release would have a ready market. This will require research on the feasibility of this cinema model as to the volume of sales – tickets and concessions – that would be required.

CHAPTER III INFORMATION COMMUNICATIONS TECHNOLOGY (ICT) ASSESSMENT

3.1 Introduction and Executive Summary

The purpose of this assessment is to determine if, within the Information Communication Technology (ICT) sector, there are suitable opportunities for ESIP to facilitate further investment, increase incomes, and/or generate new jobs for Edo state's vulnerable population. The objective of this assessment is to chart a course for ESIP to identify and pursue investment and employment related initiatives that will serve as viable and aspirational alternatives to illegal emigration, and likely human trafficking. The assessment methodology used included secondary source desk research, key informant interviews with a broad cross section of public and private sector renewable energy stakeholders, and meetings with potential manufacturers, off-takers and consumers. For more detail on the overall MADE II and ESIP projects, the overall objectives and key performance criteria, and the M4P research and assessment methodology utilised, please refer to Chapter 1 of the consolidated ESIP Inception Study Report.

Young people who leave Nigeria's Edo state in search of economic opportunities abroad often fall victim to human trafficking. Incentivising them to stay in Edo state instead of searching for opportunities abroad requires the creation of appealing and lucrative job opportunities at home. The information communication technology (ICT) sector, which currently makes up 11.35% of Nigeria's gross domestic product (GDP) and is quickly growing, can provide an attractive avenue for vulnerable youth employment in Edo state. Unlike other sectors that require several tangible inputs, the ICT sector allows products and services to be built from any location, with the sole prerequisites being sufficient power and internet connectivity. As the ICT sector becomes a larger part of the Nigerian economy, the supply of skilled ICT labour is unable to keep up with the growing demand. The goal of this report is to recommend ways in which ESIP/MADE II can facilitate investment and engage Edo's youth to fill this gap in the ICT labour market, thereby boosting the growth of the sector both nationally and in Edo state.

The Current State of Nigeria's ICT Sector

ICT products and services are in high demand in Nigeria for several reasons. First, Nigeria is becoming more digitally connected; it has more than 90 million mobile data subscribers and 92.3 million internet users.⁵² The growth in individual ICT users has resulted in an expansion of both the consumer ICT industry as well as the demand for ICT products and services within other industries. Across sectors, ICT tools and techniques are enabling greater efficiencies, improving operations, and allowing businesses to reach new markets. As multinational companies expand into Nigeria, the number of actors in the ICT sector is increasing, including those among the largest industry players. These companies, such as Google, Dell, and IBM, are looking to hire locally to address their ICT skills requirements. Large indigenous actors, such as Andela and iROKO, are sprouting up in response to the demand for ICT products and services as well. Finally, small and medium-sized businesses in Nigeria are embracing the use of ICT. These businesses are looking for local labour to fill their needs instead of looking abroad, where labour is typically more expensive and not in tune with the Nigerian context.

⁵² <https://www.statista.com/statistics/183849/internet-users-nigeria/>

Currently, the majority of skilled ICT labour is found in Lagos, the center of Nigeria's ICT ecosystem. Nationally, the demand for ICT products and services across almost all industries is increasing faster than the supply of skilled labour. A major reason for this discrepancy is that existing secondary and tertiary institutions teach outdated ICT curricula that focus on computer science theory and programming skills that are not in demand by the market. To learn relevant and applicable skills, ICT professionals are trained through external coding schools or online trainings at an added cost. Once properly trained, they have little trouble finding job opportunities, whether through freelancing, part-time or full-time work.

The federal government has played an important role in both restricting and creating incentives for the ICT sector's growth. The National Information Technology Development Agency (NITDA) is mandated to write and implement policies and guidelines that regulate the sector and facilitate its growth. For example, NITDA is hoping to enact a local content law requiring companies, both national and international, to produce ICT products and services in Nigeria using Nigerian labour. But, because ICT is a relatively new sector, core policies are still in development, and those that have been enacted into law are not yet fully or consistently enforced. Overall, the federal government recognises ICT's contribution to the economy and plans to increase investment in the sector by more than \$50 billion in the coming years.

Opportunities and Challenges in Edo State

The ICT sector in Edo state, specifically in Benin City is small, fragmented, and lacks physical infrastructure. However, Edo state does provide incentives for ICT growth. The State Government has created an enabling environment for the sector with few regulatory restrictions. The state's large youth population coming out of its five key universities produces graduates interested in careers in ICT. Finally, the low cost of living and labour means that Edo state can offer a less expensive alternative to Lagos for companies in search of affordable labour. The challenge is that Edo state does not currently have a strong technology community, nor are there enough formally trained ICT professionals to fill current vacancies in the market. With respect to Edo's most vulnerable population (e.g. rural households, school leavers, unemployed, returnees, etc.), there is very little awareness about the ICT sector and what it has to offer.

Recommendations

The recommendations below outline opportunities for ESIP to help Edo state become a go-to supplier of skilled ICT professionals. If successful, Edo state would grow to become a secondary technology community (to Lagos) that provides quality and affordable ICT products and services. This development would incentivise youth to stay in Edo state to pursue jobs in the growing and expanding ICT sector, a career path that connects individuals to opportunities worldwide.

To achieve this vision, this report recommends three possible interventions that aim to train youth in necessary ICT skills, connect them to job opportunities, and improve the technology community in Edo state. All three of these recommendations leverage partnerships with local, national, and international technology companies. While we recommend three interventions, this report provides a deeper analysis of the first recommendation (a platform to provide technology hub services), as this approach has the highest potential for impact and can be easily coupled with the other two interventions.

Recommendation 1: Build a platform to provide technology hub services in Benin City

ESIP should explore the creation of a center providing technology hub services in Benin City. This would consist of a physical space in a central location where various partners can conduct ICT trainings for youth, providing them skills that are in high demand in the market (e.g. frontend and backend web development and app development) and connecting these trained professionals to

job opportunities. Sabihub, a Benin City-based organisation that currently manages a ‘virtual’ technology hub, is well-positioned to manage this space. With support from ESIP, tech hub services would leverage the existing technology ecosystem, consolidating disparate actors and attracting external partnerships to support its growth, including but not limited to Andela, Code Academy, Facebook, and Google. If implemented, this report predicts it would connect at least 2,200 youth to job opportunities during the MADE II project period.

Recommendation 2: Partner with the Andela Learning Community

ESIP has an opportunity to formalise a partnership with the Andela Learning Community (ALC), a programme that focuses on building the capacity of African technology leaders and developers. It is run by Andela, a leading international technology with a regional office in Lagos, Nigeria. ALC has offered to conduct trainings, provide online support, host ICT community events, and mentor new ICT professionals. Furthermore, ALC hold regular Career Fairs that connect technology firms looking for skilled ICT professionals with recently-trained ALC graduates. Andela has also offered to continue building partnerships with companies such as Google to enhance their offering to potential participants. This recommendation does not require that ESIP set up a physical space since Andela is able to provide most of its support virtually. A risk of this approach is that, without a physical presence, ESIP and ALC will have a harder time convening people and attracting the interest of the target audience.

Recommendation 3: Build the capacity of Sarutech’s Code Academy

ESIP has an opportunity to expand the reach of a local ICT training company in Benin City, Sarutech, through their Code Academy. Although the Code Academy is relatively new, they provide training on appropriate ICT skills and have at their disposal a roster of trained technology instructors. After training is complete, Sarutech works with recent graduates to get them on-the-job experience by creating small engineering teams that provide various freelance solutions to Nigerian startups. Graduates who are interested in being entrepreneurs will have access to mentors who have tackled similar challenges in the past. Sarutech also uses a speakers programme that brings in successful entrepreneurs, software developers, and investors into the classroom to talk about their career paths.

3.2 ICT Sector Overview

The Information Communications and Technology (ICT) sector in Nigeria is a large contributor to the economy as the demand for ICT services permeates throughout every industry. In 2017, the ICT sector made up 11.35% to Nigeria's GDP, a huge jump from 1% of GDP in 2001. In the last decade, the tech industry in Nigeria has grown at a rate of 34% each year and has not shown signs of slowing down.⁵³

ICT Sector Expansion

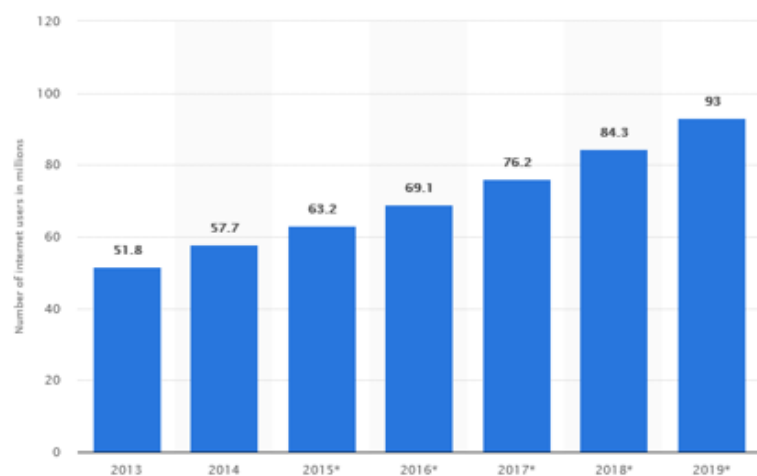
Various indicators represent the potential for the expansion of the ICT sector in Nigeria. As the population becomes increasingly digitally connected, the understanding of the benefits of ICT and the demand for ICT products and services throughout industries increases.

Nigeria is increasingly becoming digitally connected. There are more than 90 million mobile data subscribers, representing 48% of the population.⁵⁴ As mobile phone become more affordable and service providers extend to hard-to-reach areas, this percentage increases. Smartphone ownership has also been on the rise. In mid-2016 approximately 30% of Nigerian mobile subscribers owned smartphones.

Internet connection is rising in time with phone ownership. Nigeria is the largest internet market in Africa by volume. See the graph "Number of internet users in Nigeria from 2013 to 2019 (in millions)" for the growth rate of users.⁵⁵ Interestingly, of the 92.3 million internet users, 99.9% used mobile data to access the internet. This is a trend that will be further unpacked in Chapter 2. Finally, Nigeria is well connected with international bandwidth including five submarine fibre-optic cables. This service is targeted in select areas. While there is high international connectivity, domestic fibre-optic infrastructure remains low, especially in more hard-to-reach areas.⁵⁶

Concentration in Lagos

Graph 1: Number of internet users in Nigeria from 2013 to 2019 (in millions)



⁵³

<http://www.mondaq.com/Nigeria/x/691392/Corporate+Tax/TECH+STARTUPS+UNDERSTANDING+THE+ICT+TAX+REGIMES>

⁵⁴ <https://oxfordbusinessgroup.com/overview/switched-growing-ict-uptake-and-robust-state-support-point-technology-sector-expansion-0>

⁵⁵ <https://www.statista.com/statistics/183849/internet-users-nigeria/>

⁵⁶ Ibid 2

While expanding, the ICT sector is concentrated to specific areas in Nigeria. The tech community is mostly centered in Lagos, which houses the majority of the mid-large tech companies and startups. Lagos, and Abuja to a smaller extent, are the main places that attract talent as well. Despite increasing internal and external pressure to expand ICT services, due to the fragile economic conditions and lack of tech infrastructure, the sector has had limited expansion in the Niger Delta and in Edo state specifically. While ICT professionals may be trained in other parts of the country, job opportunities and the supportive tech community in Lagos attract them to the city to better connect with the ICT market, domestically and internationally.

“When you think of ICT in Nigeria you think of Lagos. ICT is Lagos.”

Edward Esene, Kinetic Associates

ICT Labour

The ICT sector and demand for ICT products and services in other industries is growing faster than the supply of skilled labour. As such, the number of trained ICT professionals cannot keep up with the demand for their services. The National Bureau of Statistics’ (NBS) employment survey shows that job vacancies are growing more in knowledge and technology intensive sectors.

University of Benin

In an interview with the Head of the Computer Science Department at the University of Benin, Dr. Imiavan noted that he is aware of the disconnect between the curriculum and the ICT skills in demand, but does not have the authority, nor resources to deviate from the current curriculum.

This highlights the skill gaps between the private sector and the labour market.⁵⁷ To corroborate this finding, 30 of the 31 interviews conducted in this research agreed that the demand of skilled ICT labour outweighs supply. A major reason for this discrepancy is that existing secondary and tertiary institutions are teaching outdated ICT curriculums that focus on computer science theory and programming skills that are not in demand. The only way for future ICT professionals to get trained in usable skills is to pay for external coding schools or be self-taught using online training options.

Uniqueness of ICT Sector

The parameters of the ICT sector that were addressed in this assessment focused on ICT products and services. This report does not examine IT hardware. Before proposing ways to expand the ICT sector outside of these recognised urban-based tech communities, it is important to understand the uniqueness of ICT as compared to most other industries. In the ICT sector, expansion solely relies on three main factors: talent, power, and internet connectivity. If there is stable power, access to internet and trained professionals, ICT services can be performed from anywhere and to anyone across the world. These inputs jumpstarted the tech ecosystem that currently exists in Lagos. Over time, Lagos has attracted every type of actor/practitioner in the ICT sector (see table below), creating a tech community that serves as a support system for tech startups, entrepreneurs and ICT professionals looking for jobs.

The table below shows the various types of actors in the ICT sector and the skills that are most in demand in the Nigerian market.

Table 1: ICT Sector and Skills

⁵⁷ DAI Youth Employment Assessment Draft (PIND)

ICT Sector	ICT Skills
<ul style="list-style-type: none"> • Tech Hub • Tech Startups • Private IT consulting firms (Nigeria based) • Telecoms (international and national) • Multinational ICT companies (Facebook, Google Microsoft) • Digital Marketing Firms • Data Analytics Firms • Freelancers • Tech incubators and Accelerators • Tech Training Institutions (Coding schools and Universities) • ICT Agency (Government) 	<ul style="list-style-type: none"> • Web Frontend Developers • Web Backend Developers • Graphic Designers • Content Developers (Social Media) • UI/UX Designers • Android Developers • IT Project Managers • Business Developers for startups • Data Entry - Data processing • Data Scientists (data analytics) • AI/Machine Learning • Blockchain

3.3 Nigeria ICT Market System

Main ICT Actors

The number of actors in the ICT sector in Nigeria is increasing and the main actors are changing as more and more multinational companies expand to Nigeria. Indigenous actors are also sprouting up as the demand for ICT services and products grow throughout various industries. According to InfoGuide Nigeria, the top 20 technology companies, including mobile network providers (MNOs), that dominate the market are included in Table 2.⁵⁸

Of these 20 companies, 12 are indigenous to Nigeria, while the remaining eight are multinational companies that have expanded there in response to the market. Eight of the companies are ICT services providers, five are mobile operators, three are hardware producers and two are mobile money and online payment providers. Finally, one company, Galaxy Backbone, is owned by the federal government.

The mobile sector is dominated by four operators: MTN Nigeria which hold the largest share at 44% of total subscribers, Globacom (21%), Airtel Nigeria

Table 2: Leading Technology Companies

- MTN Nigeria
- Globacom Nigeria
- Airtel
- 9Mobile
- Google Nigeria
- IBM Nigeria
- MainOne
- Zinox
- Ericsson Nigeria
- iPNX
- Interswitch Nigeria
- Omatek
- Galaxy Backbone
- Huawei
- DataFlex
- Chams Plc
- ETranzact
- iROKO Partners
- Cloudware Technologies
- Sidmach

⁵⁸ <https://infoguidenigeria.com/technology-companies-nigeria/>

(20%), and Etisalat Nigeria (15%).⁵⁹ In real terms, the telecommunications sector contributed N 1,663 billion to GDP in the fourth quarter of 2016, or 9.1%.

Although more than half of the listed companies are indigenous to Nigeria, approximately 80% of the ICT market is controlled by foreign brands. The preference for foreign ICT products and services has meant that a large portion of revenue does not stay in the country. According to the National Information and Technology Development Agency (NITDA), within the last five years, the country would have spent N120 billion on importing foreign technologies.⁶⁰

While not a major contributor to the economy at this point, the start-up community, mainly in Lagos, is also growing and attracting external funding. In fact, in comparison to other countries in Africa, Nigerian startups have raised the most amount of funding during the early stage. Specifically, in 2016 in Nigeria, startups attracted a total of \$109.37 million.⁶¹ Indigenous companies, such as Andela iROKO and Flutterwave, have played a large role in attracting global investors, such as Facebook and Google.

Supply and Demand of ICT Labour

ICT labour is the key input in the ICT market. As noted above, the demand for ICT labour significantly outweighs the supply. This means that once properly trained through coding schools or online trainings, ICT professionals have little trouble finding job opportunities, whether through freelancing, part-time or full-time work.

There are several reasons why ICT products and services are in high demand in Nigeria. First, regardless of the sector, be it research and development (R&D), quality control, market analyses, distribution, marketing and promotion, sales, customer relationship management, or any other aspect of running an organisation, ICT tools and techniques are becoming increasingly impactful. For example, a craftswoman looking to sell her handmade goods beyond her village can use digital marketing to promote her crafts as well as expand her reach and sales through an e-commerce platform.

On a larger scale, an agricultural distributor can use a digital tracking system to keep tabs on all crops bought and sold and then use data analytics to determine those most in demand. In short, demand for ICT services today is coming from all sectors, and as the benefits of integrating ICT services into businesses become more apparent, the demand increases. Second, large international tech-enabled companies that have expanded to Nigeria are looking to hire locally to address their ICT needs. As such, these companies are investing in training and internships to build their own ICT workforce. Third, the cost of utilising ICT products and services is rapidly decreasing making applications affordable for almost any scale of business, especially when the service provider can be situated in a far lower cost environment like Nigeria.

⁵⁹ <https://oxfordbusinessgroup.com/overview/handful-mobile-operators-dominate-nigerias-rapidly-expanding-telecoms-sector>

⁶⁰ <https://guardian.ng/technology/nigerias-ict-market-loses-billions-as-foreign-firms-control-80-share/>

⁶¹ <https://qz.com/1137474/facebook-google-mest-opening-tech-hubs-in-lagos-nigeria/>

Table 3: Segment of table from Niger Delta Youth Pathways Programme analysing the supply and demand factors of labour in the ICT Hubs in Nigeria⁶²

Labour Demand Factors	Existing market demand	<input type="checkbox"/>
	Potential to generate income in short term	<input type="checkbox"/>
	Potential to leverage existing private sector dynamism	<input type="checkbox"/>
	Anticipated increased investment	<input type="checkbox"/>
Labour Supply Factors	Alignment with types of employment appealing to youth	<input type="checkbox"/>
	Potential to leverage existing skills delivery mechanisms	<input type="checkbox"/>
	Potential to build off of existing youth's skills base	<input type="checkbox"/>
	Vulnerable populations and gender mainstreaming	<input type="checkbox"/>
	Alignment with youth's career interests	<input type="checkbox"/>

Trends in the ICT Sector

There are certain trends in the ICT sector in Nigeria that affect market dynamics. These trends both enable and inhibit the sector's growth.

- Among youth there is a large interest in learning ICT as demonstrated by demand for education in tertiary institutions. ICT is viewed as an appealing sector to youth offering flexibility, portability, and income generation potential on their own terms. For example, in the University of Benin alone, while there are 3,000 computer science majors, more than 10,000 students are taking classes in computer science annually. Therefore, generating demand and attracting youth to the sector will not be a major barrier to implementation.

- The majority of software engineers in Nigeria prefer to freelance their services instead of being employed in full-time positions. This enables them to jump from job to job and increase their incomes instead of being locked into one salary.

“Building capacity in basic computer skills will not change anything. We need to train people in higher level skills, so they are connected to good job opportunities.”
- Mr. Kelechi Nwankwo, Nigerian Communications Commission

As advancements in technology have increased in Nigeria, basic computer skills, such as mastering the Microsoft Suite, are no longer sufficient in guaranteeing employment in the ICT sector. To compete in this market, ICT professionals must have expertise beyond basic computer use, such as front end and back end

web development (i.e. HTML, CSS, JavaScript), Android and IOS app development, and digital marketing to name a few.

- Due to outdated curricula and a lack of funding, the formal academic sector has proven obsolete in growing the ICT sector. Those interested in working in ICT are learning the necessary skills informally, whether through third party coding schools, online trainings, and/or informal knowledge sharing and partnerships being developed at tech hubs. In this sector, having a degree is not a prerequisite for getting a job, nor has it ever been (e.g. Steve Jobs, Bill Gates).
- More and more small and medium sized businesses in Nigeria are embracing the use of ICT to help leapfrog their businesses' revenue. This increases the demand for ICT products and services that in turn demand ICT labour. As these are local businesses, they are looking for local labour to fill that role, instead of looking abroad where labour is

⁶² DAI Youth Employment Assessment Draft (PIND)

more expensive and not in tune with the context in which they are operating in. This means that from the labour perspective, Nigerian ICT professionals do not have to compete on the international market for work based in Nigeria.

- Similar to other markets across the world, the ICT sector in Nigerian has moved away from PCs, instead using smartphones and tablets for internet access. As noted above, smartphone penetration is increasing in Nigeria (30% of mobile subscribers in 2016). This number will continue to increase as several companies, both Nigeria (Solo) and international (Huawei) are also developing low cost smartphones that are more affordable for a large portion of the population.
- Finally, as described in detail below the Nigerian government, both at the federal and state level are working toward supporting the growth of the ICT sector through policies and incentives.

Government Influence on the ICT Market

The federal government has played an important role in both restricting and incentivising growth in the ICT industry. Because ICT is a relatively new sector, core policies are still in development and those that have been enacted into law are not yet fully enforced or at least not consistently. Below are a few important government actions that have impacted or will soon impact the sector:

- National Information Technology Development Agency (NITDA) - Under the NITDA Act in 2007, NITDA was established to “create a framework for the planning, research, development, standardisation, application, coordination, monitoring, evaluation and regulation of Information Technology practices, activities and systems in Nigeria.” Since its inception, NITDA has focused on organising training workshops for government staff and officials as well as educators. It has also built ICT infrastructure, including providing computers, space, power and internet at educational institutions. From a policy perspective, NITDA is mandated to write and implement policies and guidelines that will regulate and incentivise ICT growth. For example, under the NITDA Act, specific types of ICT companies are heavily taxed (GSM service providers and all telecommunications companies; cyber companies and internet providers; Pension managers and pension related companies; Banks and other financial institutions; and Insurance companies). Currently, NITDA is working with GIZ to publish the first draft of the country’s ICT policy, which, once finalised, this will guide the ICT sector moving forward. Finally, within NITDA, the Office for ICT Innovation and Entrepreneurship (OIIE) focuses on addressing barriers that are inhibiting entrepreneurs, as well as creating an enabling environment to foster innovation and entrepreneurship across the country⁶³.
- Pioneer Status - In 2016, the federal government announced that it would enact tax incentives to boost employment in the ICT industry. These incentives, which were created under the Nigerian Investment Promotion Commission (NIPC), target companies that have achieved Pioneer Status; including startups looking to attract investment. The incentives include a three-year tax holiday, tax-free dividends, tax losses write offs that, if incurred during the tax holiday, can be put against future profits earned, and capital allowances. While this helps those companies that achieve Pioneer Status, the requirements to get to that point are prohibitively high for most startups. For example, startups are required to show capital expenditures totaling at least N 10 million. As a result, the benefits of Pioneer

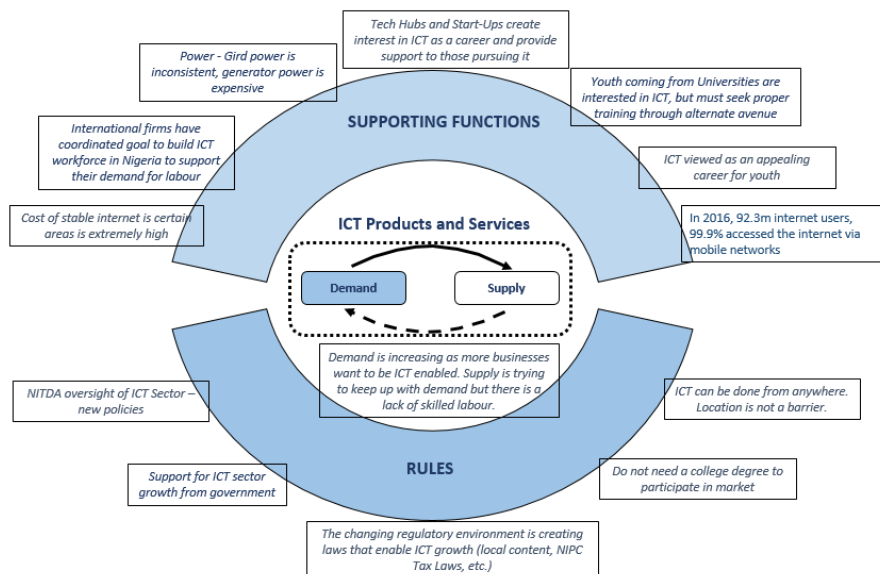
⁶³ <http://ictinnovation.gov.ng/about-oiie/>

Status are only realised by the very few who are trying to expand their businesses in Nigeria.⁶⁴

- **Local Content Law** – The main goal of NITDA in 2018 is to enact a local content law requiring ICT companies, both national and international, to produce products and services in Nigeria, using Nigerian labour. This strengthens the local economy and currency, by forcing foreign direct investment (FDI) to operate in Nigeria and make all transactions in Naira. While this law has not been enacted, it has become apparent that companies using local content are being lauded by the government and media.⁶⁵
- **Promotion of Investment** - The Nigerian government has recognized the growth if the ICT sectors and its potential to have an even greater impact on the economy. Therefore, according to the Nigerian Investment Promotion Commission, the government is planning to increase ICT investment in the country by more than \$50 billion in the coming years. Currently most of this investment is coming from telecommunications firms, which reached more than \$35 billion.⁶⁶

Figure 1 captures the major trends, supporting functions and rules discussed in the previous chapters.

Figure 1: ICT Market System



3.4 ICT Market in Edo State

"There are no opportunities here in technology. If I want a tech job, I have to move to Lagos."

⁶⁴

<http://www.mondaq.com/Nigeria/x/691392/Corporate+Tax/TECH+STARTUPS+UNDERSTANDING+THE+ICT+TAX+REGIMES>

⁶⁵ <https://newtelegraphonline.com/2018/01/ict-local-content-devt-major-focus-2018/>

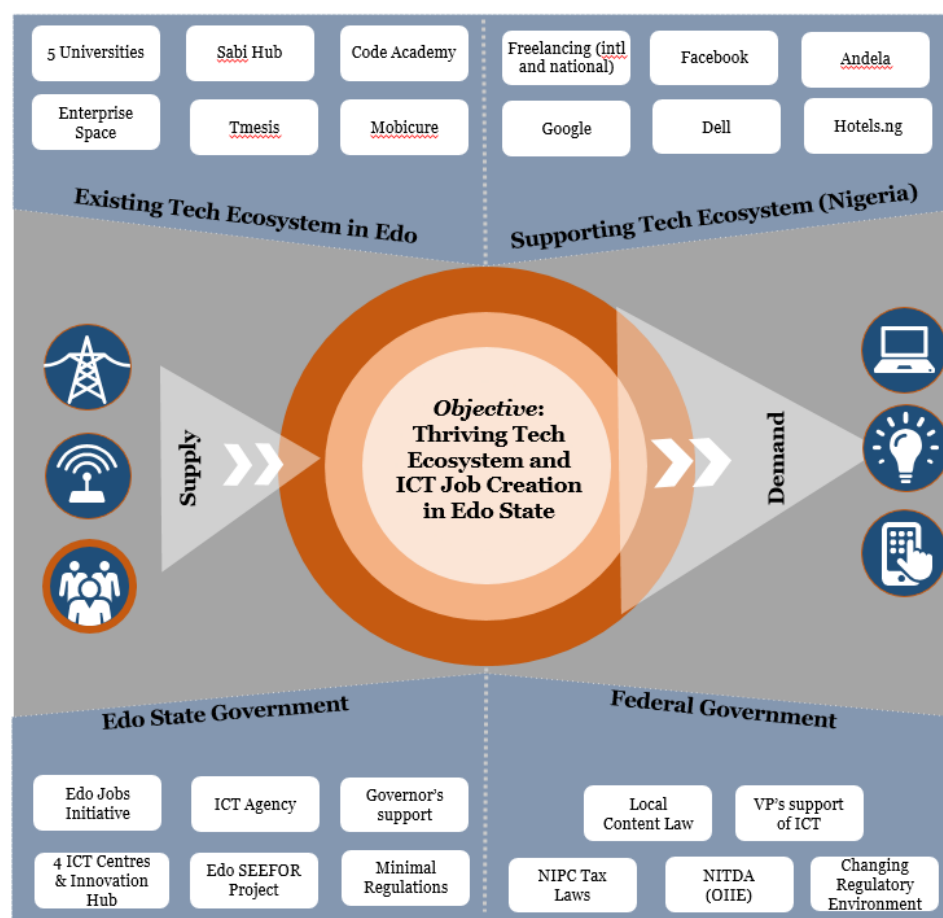
⁶⁶ <https://www.invest-nigeria.com/nigeria-targets-50-billion-ict-investment-2018/>

The heart of the tech community in Edo state resides in Benin City. Figure 2 displays the ecosystem within the state and the surrounding tech community that currently contributes to or has the potential to contribute to Edo state's growth. In Benin City, there are 3-4 small tech hubs/companies that dominate the market, although each hub only employees 2-3 people and does not have access to physical space. Those working at the hubs are mostly paid through freelancing services. There is also a large youth population interested in ICT coming out of the 5 main universities in Edo, but most of these graduates who want to pursue a career in ICT end up leaving Edo and moving to Lagos. A summary of the key players in the ICT sector Edo state is included in the Table 4.

- Computer Science student at the University of Benin

One major benefit of the ICT sector in Edo state is that the state government is extremely supportive of its expansion. Not only is there a separate ICT Agency within the state government, but the Edo state Jobs Initiative has invested in building ICT Centers across the state to house ICT professionals. However, these Centers are not operational yet. The Governor is also in support of ICT and has ensured that there are few state-enforced regulations on the sector. Lastly, he is currently working with the Nigerian Communication Commission to improve access to telecommunications infrastructure in the state.⁶⁷

Figure 2: Edo State ICT Ecosystem



⁶⁷ <http://www.punchng.com/ncc-to-boot-ict-development-in-edo/>

Table 4: Main ICT Actors in Edo State

Universities	Five of the seven universities in Edo state offer a degree in Computer Science (University of Benin, Ambrose Alli University, Amsual Adegboyega University, Idahosa University, and Igbiniedion University Okada). These universities offer computer science theory, but do not necessarily teach the skills needed in the market.
Edo Jobs	Edo Jobs is a state-run skills development programme that trains individuals in certain sectors and then matches them with jobs. As of April 2018, they had trained 800 people and matched 60-70% of graduates with jobs. Currently Edo Jobs teaches basic ICT skills, but they want to increase their capacity to train software developers.
ICT Agency	The Edo state ICT Agency is responsible for developing and enacting regulatory policies in the ICT sector. They also conduct ICT trainings in partnership with local tech hubs, such as Sabi Hub.
Sabihub	Sabihub is a community of Technology entrepreneurs, addressing the issue of unemployment through civic engagement, collaborative platforms and use of technology. Sabihub offers mentoring, incubation, meet ups and training programmes for youths and SMEs in the community.
Sarutech/Code Academy	Sarutech is an ICT product and service provider that develops websites, software, and mobile apps for a variety of clients both local and international. They have built apps across sectors including tailors, poultry farms, fish farms, hospitals, schools, law firms and transport companies. Sarutech recently launch Code Academy to train student in ICT skills and connect them with job opportunities
MOBicure	MOBicure is a social enterprise focused on addressing health challenges in Nigeria through mobile technology. MOBicure's flagship product is OMOM, a mobile platform for expecting mothers and mothers of young children that provides specific health information and medical expertise.
Enterprise Space	Enterprise Space is an innovation hub that works as an incubator and accelerator for startups and small businesses in Benin City. The goal is to help these businesses set up business models and get them access to funding.

See Table 5 below for a cursory SWOT analyses of the ICT sector in Edo state.

Table 5: Edo State ICT SWOT Analysis

Strengths	Opportunities
<ul style="list-style-type: none"> State Government had created an enable environment for ICT growth with few regulatory restrictions The current Governor's progressive agenda prioritises growth in the ICT sector 	<ul style="list-style-type: none"> Tech entrepreneurship/ICT employment increasingly perceived as viable and appealing career by youth The youth population is interested in learning tangible ICT skills not taught in secondary schools and universities and are

<ul style="list-style-type: none"> • Large youth population stemming from five key universities in Edo state • Cost of living and therefore labour is much lower than in Lagos – the current center of ICT in Nigeria 	<ul style="list-style-type: none"> • seeking out opportunities to learn those skills • Government has built four ICT Centers throughout Edo and an Innovation Hub in Benin City that could be used for sector growth • ICT has transformative potential and can unlock growth in other sectors (such as agriculture, entertainment and retail) • Alignment with flexible, non-traditional types of employment such as project-based freelance work from a remote location is appealing to youth.
Weaknesses <ul style="list-style-type: none"> • Poor infrastructure – the cost and availability of power and internet connectivity are not consistent throughout the state and accessing grid electricity is expensive and unreliable. • Minimal existing ICT network in Edo • The ICT support network that helps professionals find freelancing opportunities does not exist in Edo thus causing people to turn to Lagos. • Lack of industry-informed ICT skills training programmes. Universities are not teaching the latest ICT skills that are in demand. • There are no mid-large size ICT firms based in Edo state. • Fragmented ecosystem with actors often operating in isolation. 	Threats <ul style="list-style-type: none"> • As ICT jobs can be done remotely, there is no guarantee that trained professionals will stay in Edo to build out the ICT community. • It will take years before universities are ready and able to teach the skills needed in the market. • While the current State Government is supportive of ICT, this could change in the next election, possibly leading to regulatory restrictions that limit sector growth. • Other areas in Nigeria are trying to develop an ICT sector as well, increasing the competition for Edo state.

3.5 Future Vision of Edo State's ICT Sector

The above SWOT analysis gives an overview of the opportunities and barriers to growing the ICT sector in Edo state. If successful in our approach, we envision Edo state to be a supplier of needed skilled ICT professionals to others, either directly or indirectly, to address to meet demand for labour. Edo would then be considered a secondary tech community to Lagos that provides quality and affordable ICT products and services. In the first few years, given Edo state's current presence in the sector, growth will come primarily through remote

"ICT businesses can run from anywhere if there is reliable power and internet. The physical space is irrelevant so if the cost for rent and labour is five times cheaper in Benin City why wouldn't I run my business here...The problem is expansion. If I could grow my business, it would be so hard to find talent to work for my company. It would take me months to find affordable developers. That's why we need to train people."
- Dr. Charles Akhimien, Founder and Director, MOBicure

contracted/freelance contracts, as well as from demand by local businesses in Edo. Small businesses will get the ICT support they need with lower startup costs, both operationally and in terms of labour. After 5 years, the vision is for larger national and international companies to expand their footprint into Edo state, thus increasing the demand for labour and the overall investment in the market. Once the reputation is built, supported by the availability of expertise of ICT professionals, external firms will be more attracted to enter or expand their presence in Edo state.

One key support system that must be leveraged to achieve this vision is the international technology ecosystem. Large international firms are in operation in Lagos and are invested in improving the market to support their own growth and the tech community as a whole. Companies such as Google, Facebook, Andela and Hotels.ng have programmes that work toward this vision through trainings, events, etc. with the ultimate goal of creating talent that can address the gap in the ICT labour market.

A more functional market system producing skilled ICT professionals in Edo would quickly be absorbed by the demand in the marketplace. It could then connect those professionals to opportunities within Nigeria and internationally. This growth requires systemic changes, some of which are already underway, such as favorable government policies that do not bottleneck growth in the ICT sector, but rather encourage it through tax waivers and infrastructure support. A second systemic change that will take years to implement and is therefore not a major focus of ESIP is changing the national computer science curriculum in tertiary institutions to reflect those skills that are in highest demand in the market.

3.6 Recommendations

In this section the team has chosen to select and fully analyse the feasibility of one intervention that will enable various strategic partnerships to grow during implementation. This is because we believe this approach has the highest potential for impact. With that said, this intervention will require significant time and resources. Therefore, the team also included two smaller scale interventions that build off components of the larger one. The three interventions are:

1. Build a technology hub services center in Benin City
2. Partner with the Andela Learning Community
3. Build the capacity of Sarutech's Code Academy

Recommendation 1: Build a technology hub in Benin City

Throughout our research, it quickly became clear that there is a need for a platform to provide tech hub services in Edo state to serve as a central place and space for hatching new ideas, products and services as well as creating new ICT professional in the ecosystem. Access to tech hub services will leverage the existing tech ecosystem and attract external partnerships to support its growth. The hub will serve as a centralised space where the ICT community can thrive and catalyse expansion in the sector in Benin City at first and eventually throughout Edo state. The center will also house ICT trainings in the skills that are in most demand in the market as well as regularly outreach to remote rural communities. While the creation of a tech hub services platform is the main recommendation, there are several avenues of partnership that can and will be pursued to support any requisite infrastructure and enhance the skills of its users. These

partnerships are explained in detail and in order of viability in this section. Key steps and considerations in, and rationale behind, building a tech hub services facility are listed below. This section then outlines the revenue model, proposed timeline, and potential impact of the center. The end goal is to build a tech community outside of Lagos that will attract investment and employment opportunities to the state.

Key Steps and Considerations:

1. Stakeholder Meeting - Bring the various stakeholders together for a one-day workshop to understand what each partner wants the center to offer and what they are willing to contribute to its growth. The stakeholders will include the exiting tech community in Benin City, the relevant Edo State Government representatives (Edo Jobs and ICT Agency), and possible external partners that have showed significant interest in expanding to Edo (e.g. Andela, Google, Hotels.ng, Facebook). The outcome of the workshop will become the backbone of the facility.
2. Development Plan - Based on the workshop, ESIP will put together a detailed development plan for the center including the roles and responsibilities of various partners.
3. Physical Space – As needed, ESIP will then identify a physical space to house the center. The space must be open and big enough to hold at least 100 people with working spaces and 200 people for events. The space *must* have strong and stable power and internet. Possible options are included in Table 6 below:

Table 6: ET Hub Space Options

Code Academy – Code Academy is a coding school in Benin City run by a small software development company called Sarutech. They have a large floor in a building in Benin City, near Ring Road. The space requires some improvements, but has the basic infrastructure for a tech hub.

University of Benin Tech Labs – The Computer Science Department at the University of Benin has access to four labs in a new (2017) building on campus. As of now the labs are empty and not being used because the Department does not have sufficient funding. The Head of the Department is willing to provide the space rent free if we can pay for furniture and amenities. He also requested that relevant coding classes are taught to the students. The issue with this approach is that the University would have oversight of ET Hub and may set restrictions on who can use it or what can be done out of the Labs.

Edo Jobs ICT Centers – The Edo Jobs Initiative has informed us that they have worked with an unnamed external partner to build four ICT Centers (3 in Edo South and 1 in Edo Central). According to our contacts, the Centers are fully stocked with computers, power, and internet and are now looking for a partner to run those centers. The issue with leveraging one of these centers to pilot the ET Hub is that we are unclear of the amount of government oversight and restrictions will fall upon the partner(s) operating the center.

Edo Jobs Innovation Hub – The Edo Jobs Initiative also informed us that they are building an Innovation Hub in Benin City, close to the University of Benin. It is said to be the “largest innovation hub in Africa”. We are unaware of the status and timeline for the Innovation Hub and have similar concerns with government oversight.

New Space – ESIP can look for a new space to house the tech hub services center. This will ensure autonomy and control over the specifics of the space, but the startup costs will be higher.



Code Academy



University of Benin Labs (bottom floor)

4. Sabihub Management - Empower Sabihub with the support of others in the Benin City tech community to manage center as well as attract participants to the coding school and connect users to potential job opportunities. While small, the tech community in Benin City is cohesive and passionate about building up the state's ICT capacity. Sabihub is the leader of this effort and has been most successful in building partnerships with the state government and the private sector to achieve this goal. Not only do they have the capacity to handle the management necessities of providing tech hub services, but their existing partnerships can help kick start the hub's ability and success to connect ICT professionals to the existing market. In the startup phase, Sabihub will be supported by AfriLabs, a tech hub based in Abuja. AfriLabs, the founder and implementer of Hub-in-a-Box, will provide mentorship to the center during its inception and capacity development and management support. A copy of Sabihub's capabilities statement was left with the MADE II management team.

Status: We have had two meetings with Sabihub and they are extremely interested in playing this role. They have been looking for a physical space to manage since they were founded and want to build on their existing partnerships with the companies below and the state government.

5. Partnerships - As mentioned, once the basic infrastructure and management team are in place, the center can leverage the relationships built during the inception and workshop phases to build the capacity of ICT professionals and the platform itself. Furthermore, these same partners can help in building awareness of and interest in Edo state's growing tech community. Below please find a list of possible partnerships and their predicted value-add to the center in order of viability and potential impact.

- *Andela Learning Community (Andela)* – ALC, a programme run by Andela, is a network of people across Africa dedicated to learning how to develop technology to solve humanity's problems. It was created in response to the fact that the world is not producing enough developers to build the ideas that there is capital to fund. Andela's mission is to power the global tech revolution by building a corps of African technology leaders and developers. The Andela team has offered to partner with ESIP to run the ALC programme out of Edo state. They start by open-sourcing knowledge and resources so that ICT professionals can become job-ready certified developers. This is done through providing online support, hosting ICT community events, conducting trainings in ICT skills

in demand in the market (front end and back end web development and Android app creation), and providing mentorship to participants.

Status: We have been in constant communication with Andela. They have agreed to provide the support outlined above as well run the Career Fairs described below. A copy of Andela's corporate capabilities as well as a detailed description of Andela's proposed partnership with ESIP was left with the MADE II management team.

- *Google Developers Group (GDG)* - The Google Ecosystem team has offered to expand the GDG in Edo state. "GDGs are local groups of developers who are specifically interested in Google products and Application Programme Interfaces (APIs). Each local group is called a GDG chapter and can host a variety of technical activities for developers." Google supports and recognises GDG chapters but doesn't own or manage them. The Google Ecosystem Team supports GDG through organising and funding meetups, growing knowledge through trainings and coaching, providing recognition to GDGs and offering general support to help the GDG community grow. Once the center has been set up, the GDG community can thrive in the growing tech community.

Status: We have met with the Google Ecosystem team and they are willing to expand GDG and participate in the center.

- *Facebook Developer Circle (Facebook)* – Like GDG, the Developer Circle is a programme "designed to create locally organised communities for developers. These communities are meant to educate and provide a forum for discussion and knowledge sharing around topics that are top-of-mind for developers in a particular market. The goal is to have developers learn from each other, and benefit from the products, services and best-practices that Facebook has established".

Status: We have met with a Programme Manager at Facebook who has agreed to expand the Developer Circle into the tech hub services center. She is especially interested in partnering with ESIP in Edo to build their relationship with the state government.

- *DigiClan* – DigiClan is a group of digital media professionals (3,000 members as of September 2017) who have come together to build one community to share latest trends and insights, connect with fellow digital marketers and leverage joint opportunities. They also conduct trainings in digital marketing and are hoping to expand their trainings to Edo. The founder has been working with the Edo state Governor's wife to set up a hub where these trainings could take place. The goal of the hub is to train digital marketers and then connect them to the marketing freelance community. At this point, there has been minimal follow up so the hub is on hold.

Status: If ESIP establishes ET Hub, DigiClan is willing to support the digital marketers based in that hub through trainings and job creation.

- *Growth and Employment in States, Nigeria (GEMS):* GEMS is a World Bank and DFID funded programme supported by Nigeria's Federal Ministry of Trade and Investment and focused on job creation and economic growth outside of the oil sector. The programme targets six economic sectors including ICT and aims to create at least 100,000 in those sectors. As part of this mandate, GEMS is funding the creation of innovation hubs in six geo-political zones.

Status: If GEMS' funding is extended for one year GEMS is interested in partnering with ESIP as a funder and/or a provider of full stack web development training.

Dell Academic Alliance Program

Dell's Academic Alliance program was built to respond to the problem that many university curricula across the world cannot keep up with the speed of changes in the tech community and the ICT skills needed to contribute to that community. As such, there is a gap between what is needed and what is taught. This program takes a training of trainers approach to bridge that gap. They offer four courses focused on current ICT skills for university professors. The professors then share this knowledge with students who can support the growing ICT ecosystem. They also gain access to Dell's curricula, library and network of ICT professionals. As of now, Dell has trained three professors at the University of Benin and has offered to expand to other universities in Edo State in partnership with MADE II. Although ESIP's approach to training operates outside academic institutions, the Academic Alliance Program could serve as a beneficial complementary program that could impact the national computer science curriculum long term.

Partnership and Learning Opportunity - Digital Jobs initiative in Kaduna State:

The World Bank Digital Development Unit with support from the Rockefeller Foundation has launched a Digital Jobs initiative to "help increase employment for disadvantaged youth and women in Kaduna by catalysing ICT for economic opportunity creation." They are currently evaluating proposals from implementations firms execute the following approaches: 1) Job Matching and Facilitation, 2) Digital Skills Development, and 3) Digital Entrepreneurship Support. Like ET Hub, the programme seeks to leverage partnerships with the existing tech community in Kaduna and connect trained ICT professionals to the market. Although this initiative is in a different state and the KPIs are significantly lower (180 youths, 30% women) the approach of training and connecting ICT professionals to the job market is in line with ESIP's tech hub services approach. Therefore, it is important to connect the two programmes to understand the barriers and opportunities to success during the implementation process.

6. Conduct ICT Trainings – As noted above, training is an essential component of building both the center and the tech community in Edo state more broadly. To accomplish this goal, ESIP will work with Code Academy, a coding school based in Benin City and run by Sarutech. Sarutech will provide the basic curriculum that focuses on skills that are in high demand in the market. They will also implement the trainings with their existing skilled coding teachers. These training will be enhanced by the partners listed above who will provide access and mentorship for trainings in certain programmes (i.e. GDG will support trainings in google products). Finally, trainings in hard coding skills will be coupled with trainings in soft skills as well. This may include, but is not limited to business planning, communications, financial management, time budgeting, working with clients, etc.

7. Connect ICT Professionals to the Market- The last and most important step is to connect these newly trained ICT professionals to employment opportunities. The below avenues can serve as a starting point.

- *Freelancing* – The easiest and faster way to connect trained ICT professionals to the market is through online freelancing opportunities.

Freelancing websites that employ ICT professionals based in Nigeria include but are

"You can't just train the youth, you need to connect them to a network of jobs, so they can use the skills they have developed."

- Toju Onaiwu, Edo SEEFOR Project (formerly ICT Agency)

not limited to: CodeMentor.io, Upwork, Freelancer.com, and Fiverr. There will also be demand for freelancing work, whether included in these websites or not, from Nigerian grown businesses looking for affordable labour in-country.

- *ALC Career Fair* – After ICT professionals complete the training programme, Andela can organise an ALC Career Fair that exposes them to opportunities in international companies, small and medium businesses and startups that are in search of ICT skills. In the past, the career fair has been extremely successful at getting newly trained professionals connected to the market.
- *HNG Internship Programme (Hotels.ng)* – Starting in 2016, Hotels.ng, an online travel agency within Nigeria, has run the HNG internship programme. The programme lasts three months and targets new and junior-level developers who want real-life experience in software development to get them career ready. The programme is open to all and provides weekly tasks that whittle down the pool of interns based on their results. Once interns make it a certain round they are paid a stipend (N 5,000 per week) from Hotels.ng and their external funding partners. While the internship is competitive, 100% of those who complete the programme have received jobs with various companies.

Status: Hotels.ng has offered to extend the internship to Edo state after ICT professionals have been training in basic software development skills. They also provide executive level mentorship to those competing in the internship programme.

- *Hub Services Consultancy* – Once the center is known as a place that can provide quality ICT products and services, businesses in the community across various sectors will start to demand services to enhance their performance (e.g. website design, the design and implementation of social media campaigns, e-commerce platforms, etc.). There will be a core staff at center consisting of 2-3 people from Sabi Hub that can do this work, but their main role will be to connect requests to recent graduates who have the desired skills. These graduates can either rent space in center, as applicable, or work remotely. In this sense, the center serves as the convener. After it establishes a reputation in Benin City, businesses based in Lagos will also seek out ICT professionals in Edo state as the cost of labour and therefore the service provided will be lower than what they are currently paying.

“To get a good graphic design in Lagos you have to spend N200,000 minimum. In Edo, everything is cheaper so if we can create the talent you can get the same quality of graphic designer for half the cost.”
- Ized Uanikhehi, Founder, DigiClan

Table 7: Tech Hub Services Key Success Factors

- Financial self-sustaining with both commercial and social goals
- Independent private sector management
- Connection to and support from the national and international tech community
- Basic level of computer literacy of target beneficiaries
- Minimal restrictions if not direct assistance in the sector’s growth from the state and federal government to create an enabling regulatory environment
- Edo State Government support to the development of the facility (e.g. land, tax breaks, promotional and marketing assistance, etc.)

- After completed training, participants' must have their own personal laptops. Laptops will not be provided.
- Ability to cover startup costs for the first few months (rent, power and internet as applicable)

Tech Hub Services Revenue Model:

That are multiple revenue models that can be pursued simultaneously to ensure that the facility stays in operation during and after the close of MADE II.

- Coding School Fee – While trainings offered by external partners (i.e. Google, Andela, Facebook, etc.) will be free of charge for participants, the core training offerings that will be in operation year-round will cost participants a small fee. This fee will contribute to the operational costs of the coding school and the center as well as pay the instructors.
- Group Consultancies and Freelancing – Once trained, individual ICT professionals and groups of ICT professionals will get connected to freelancing and contract work for their products and services. If they choose to use Edo's tech hub services as a work space, an alternative to space rental is to charge those individuals and groups a percentage of the revenues earned on each assignment.
- Space Rental – Space rental is a key component of the revenue model as there are few large spaces in Benin City with stable power and internet. If a physical location is required, the center could fill this void and collect revenue through the renting the space in the ways described in the table below:

Table 8: Space Rental Options

Large Event Space Rental - As the majority of the center will be open space, it will serve as a great venue to host tech and non-tech events. The external partners listed above have already expressed interest in hosting events in the hub once established.

Small Business/ Start up Rental – Small businesses and startups that do not want to rent out a separate space to conduct operations, can rent out sections of the facility to host their businesses. This rent can be charged on a daily, monthly or quarterly basis. Not only will they have access to power and internet, but they will be able to collaborate with the tech community of other ICT professionals working out of the space.

Hot Desks – While those enrolled in the coding school will have access to the center free of charge, individual ICT professionals that want stable power and internet to complete freelancing work can rent a hot desk at a daily, monthly or quarterly rate.

Note: We have yet to find a partner that is willing to pay the initial startup cost including rent, power, and internet during the first few months. One option is for ESIP to fund for the first few months. Another is to request the support from NITDA OIIE as they have covered infrastructure costs for ICT space in the past. Once the facility is up and running, the revenue from the avenues described above will be able to cover this cost.

Chart 1: Tech Hub Services TIMELINE

Implementation Steps	Year 1, Q1	Year 1, Q2	Year 1, Q3	Year 1, Q4	Year 2, Q1	Year 2, Q2	Year 2, Q3	Year 3, Q4
Tech Stakeholder Meeting								
Business Plan								
Find Space	100 can use the space at one time							
Empower Sabi Hub and local tech partners	25 indiv. from local tech community							
Integrate External Partners								
Conduct Trainings		300 trained	300 trained	300 trained	400 trained	400 trained	400 trained	400 trained
Connect to Market			300 w/ job opp.	300 w/ job opp.	400 w/ job opp.	400 w/ job opp.	400 w/ job opp.	400 w/ job opp.
Impact (40% women)		100 increase d income	300 increase d income	350 increase d income	375 increase d income	400 increase d income	425 increase d income	450 increase d income

Based on these projections, the team aims to connect 2,200 people with job opportunities. Below is the projection of the breakdown in types of jobs.

- Freelancing – 1,470 (67%)
- Part-Time – 600 (27%)
- Full-Time – 100 (5%)
- Start-Up – 30 (1%)

Table 9: Monitoring & Evaluation Metrics (Tracking will be a key responsibility of Sabi Hub)

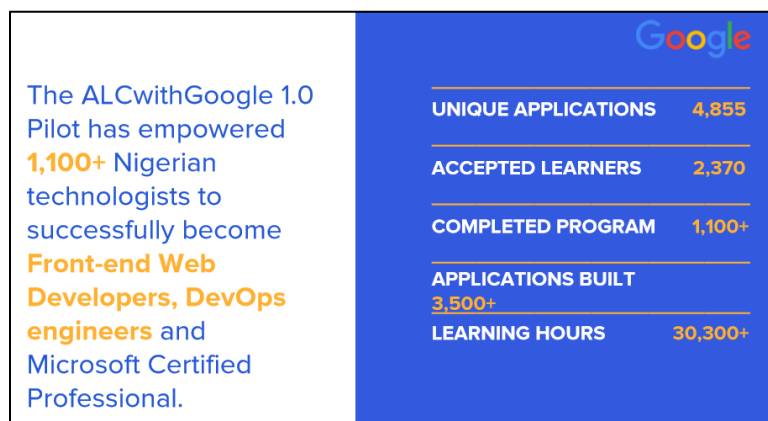
- Number of people connected to job opportunities (not necessarily employed, but attended career fairs, created freelancing profiles, etc.)
- Number of people that joined GDG, Facebook Developers Circle, HNG internship, and/or ALC
- Number of people using center services for work opportunities
- Number of people engaged with the center (includes users, trainees, staff, partners, etc.)
- Number of people with new job opportunities (disaggregated by freelancing, part-time, full time, startup)
- Percentage of increase incomes for those with new job opportunities

Potential for Scale:

After its creation, the tech hub services center will serve as a space to not only to train, create and attract ICT talent, but also as a space where national and international companies seeking ICT professionals can come to get affordable labour. This will lead to further investment in the ICT sector in Edo state as it will be seen as a secondary tech community to Lagos (but the costs of running businesses are significantly lower). The center as described is seen as the pilot phase. After attracting external partnerships in Year 1/Q1, and then proving that the facility can reach at least 300 individuals by Year 1/Q2, we can establish another tech hub in a second region in Edo state. For this intervention, we suggest using one of the government built ICT Centers in Central Edo.

Recommendation 2: Partner with Andela Learning Community

Of those described in recommendation 1, Andela has proven to be the most viable and enthusiastic potential partner. Although relatively new (founded in 2014), the Andela and the ALC programme have shown incredible reach in its programming. An example of this reach is



displayed in the slide below, in which Andela partnered with Google to train software engineers in Nigeria. As described in recommendation 1, the Andela team is willing to expand the ALC programme to Edo state and then connect those who complete the programme with job opportunities through the ALC Career Fair. They have also offered to continue building partnerships with companies such as Google to enhance their offering to potential

participants. The logistical elements of executing this programme are a little more difficult without a tech hub as the base for programming, but Andela has operated in communities without a hub in the past. It does therefore not preclude expansion, but rather that extra effort is needed to recruit potential participants. In line with the findings of this inception study, Andela has found that participants are attracted to their programme because of the benefits of what an ICT career has to offer. Specifically, brand value, the desire to be self-employed in the face of increase youth and graduate unemployment, and the online nature of ICT work that enables flexibility and independence.

While ESIP would provide the logistical support to this programme (i.e. helping students find stable power and internet and venues to host events and the career fair), Andela is be committed to fully supporting participants involved in the programme. See an excerpt from their mission below:

“At Andela, we’re not filling a single role -- we’re connecting supply and demand for top global technologists. The demand for top technical talent is not going to run dry, and so neither will Andela’s efforts to invest in growing the tech talent ecosystem across Africa. In practice, this means arming learners across the continent with the frameworks, resources, and knowledge they need to own and advance their own learning...We firmly believe that by investing in communities of talent, we benefit ourselves, our partners, and the futures of hundreds of thousands of learners. As the global demand for cutting-edge talent increases to support the advancement of the technology industry, traditional approaches to recruiting and poaching the current base of top developers will not suffice. Andela is committed to developing a pipeline of millions of talented technologists who will accelerate human advancement through technology.”

Recommendation 3: Build the capacity of Sarutech’s Code Academy

A key component of any recommendation is ICT training. Both of the above interventions integrate training as a means of building the capacity of youth interested in ICT so that they develop the skills that are in demand. This recommendation focuses on training at its core. It uses the existing training infrastructure set up by Sarutech through Code Academy and expands its reach. Although Code Academy is relatively new, they are teaching the appropriate skills and have trained teachers that can act fast if demand for their services increase. Sarutech has also started building out support for graduates after the training, including a speaker series and a mentorship network.

Curriculum:

Sarutech has developed a comprehensive curriculum that covers all the aspects of how to build a website and mobile and desktop applications. They offer a total of 12 courses, with each course lasting for one month. Students have options to take any of the courses individually or enroll in the whole year of courses to get a diploma in full stack application development. Below is an outline of what is taught in each of the courses.

Table 10: Code Academy Curriculum

Module 1 - Frontend Web Design	Module 2 - Wordpress Web Development	Module 3 - Custom Web Development (PHP, MYSQL)	Module 4 – Javascript
<ul style="list-style-type: none"> • HTML5 • CSS3 • Bootstrap • Introduction to Templating • Theming 	<ul style="list-style-type: none"> • Introduction to Wordpress • Building Dynamic Websites with Wordpress • Building Ecommerce Websites with Woo-Commerce • Developing Wordpress Themes • Customising Wordpress Themes 	<ul style="list-style-type: none"> • PHP • MySql • Bootstrap (Advance) • Building Admin Dashboards • Introduction to MVC Framework using Laravel / Codeigniter • Implementing Custom Features: Emailing, SMS, Calendar, Chat • Sample Projects: Online Directory Website 	<ul style="list-style-type: none"> • Javascript Fundamentals • JavaScript with PHP • Ajax • Javascript Animations • JQuery • Local and Session Storage • Todo Mobile App

Module 5 - Advance Web Development (JS Stack) <ul style="list-style-type: none"> • Node.js • Express.js • Mongo.db • Socket IO • Build your own API • Mailers, Delayed Jobs, Webhooks • Sample Projects: Real Time Chat, Kickstarter Clone, Trello Clone 	Module 6 - Angular JS: Frontend Framework (Advanced) <ul style="list-style-type: none"> • Introduction to Angular 4 • Components • Services and Observables • Directives • Pipes, Promises, Dependency Injection • Angular CLI 	Module 7 - Building Progressive Web Apps <ul style="list-style-type: none"> • Unit Testing • Responsive Images and Design • Service Workers • Offline Quickstart • Auditing with Lighthouse • PWA Architectures • Fetch Api, Indexed Db • Web Push and Notifications • Web Payment Integration 	Module 8 - Ionic Native Mobile App Development <ul style="list-style-type: none"> • Learn to build Mobile Apps with Ionic Framework • Target: Android Native Features and deploy to Google Play Store • Target: IOS Native Features and deploy to App Store
Module 9 - Electron Desktop App Development <ul style="list-style-type: none"> • Desktop Apps using Electron.js • Target Project: School Management Software 	Module 10 - C# Desktop App Development <ul style="list-style-type: none"> • Learn how to build Desktop Apps using C-Sharp Target Project: Point of Sale and Inventory Software 	Module 11 - Web Development Tools <ul style="list-style-type: none"> • Github and Git • Use POSTMAN for RestAPIs • Using Chrome Console • Gulp.Js Build System • Deployment and Heroku • Sample Projects: Yelp Clone, Ecommerce Site 	Module 12- Cloud Computing and Hosting <ul style="list-style-type: none"> • Introduction to Cloud Computing • Introduction to Linux Shell • Ubuntu Deep-drive • CentOS Deep-drive • Using Amazon Web Services Instance • Using Digital Ocean Droplets

Note: As of now, the cost of these courses range from N 1,000 to N 5,000 depending on complexity. This cost structure will need to be refined depending on the structure of the partnership.

Post-Training

After training is complete, Sarutech works with recent graduates to get them on-the-job experience. This is done by putting them into small engineering teams to solve various freelance projects requested by startups. Those who do well are able to work with the startups directly. Graduates that are interested in being entrepreneurs will have access to mentors who have tackled similar challenges in the past. Sarutech also uses a speaker programme that brings in successful entrepreneurs, software developers, and investors into the classroom to talk about their career paths.

This portion of the intervention can be enhanced by the partnerships described in the tech hub services recommendation. Partners such as Andela and Hotels.ng can work with these graduates to connect them to job opportunities. ESIP could help facilitate these partnerships.

Another large component of ESIP's role is to expand the reach and capacity of Sarutech to run Code Academy. They need to attract more students coming from the various universities through

a targeted marketing approach and then be able to manage an influx of students through the training and the subsequent post-training programme.

CHAPTER IV RENEWABLE ENERGY ASSESSMENT

4.1 Introduction and Executive Summary

The purpose of this assessment is to determine if, within the renewable energy sector, there are suitable opportunities for ESIP to facilitate further investment, increase incomes, and/or generate new jobs for Edo state's vulnerable population. The objective of this assessment is to chart a course for ESIP to identify and pursue investment and employment related initiatives that will serve as viable and aspirational alternatives to illegal emigration, and likely human trafficking. The assessment methodology used included secondary source desk research, key informant interviews with a broad cross section of public and private sector renewable energy stakeholders, and meetings with potential manufacturers, off-takers and consumers. For more detail on the overall MADE II and ESIP projects, the overall objectives and key performance criteria, and the M4P research and assessment methodology utilised, please refer to Chapter 1 of the consolidated ESIP Inception Study Report.

Lack of energy has long been linked to economic stagnation and other social problems including unemployment and youth unrest. Nigeria, the most populated country in Africa, has one of the worst energy crises in the world with about 96 million nationals lacking access to electricity. There are weak expectations that the energy crisis in the country will improve despite several attempts by the government to overhaul the entire industry- first in 2005 and then in 2013.

Across the energy generation to distribution spectrum, Nigeria's power infrastructure performs dismally. The country only generates an average of 4,500MW which is dismally low compared on a per GDP basis; with an installed capacity to transmit 5,300MW (but much of this is lost due to weak capacity of the transmission grid which is badly in need of an upgrade); and loses about 46% of energy during the distribution of energy to end users. Despite these challenges, there are expectations that these power sector challenges will be solved soon. Therefore, advances in various types of alternative energy solutions, particularly from renewable energy sources such as solar, biomass, wind, hydro-electricity, have the potential to address the energy challenges that Nigerian states face.

The efforts in the renewable energy sector in Nigeria have been greatly impacted by international development organizations who have helped catalyse the industry in various ways. Notable amongst the efforts of international donors are the work by UK DFID's Solar Nigeria Programme⁶⁸, where in its social component, Solar Nigeria, has helped used solar to electrify 175 schools and 11 clinics in Lagos, 34 clinics in Kaduna and 3 general hospitals in the insurgency affected Borno State. DFID, through Solar Nigeria, has also influenced the private sector development of solar companies by offering grants to 24 solar organisations ranging from solar retailers (with prospective distribution plans to scale), wholesalers, manufacturers, MFBs and even a financial service support firm. These grants were issued to support the expanded distribution of solar products in Nigeria, increase stock capacity of these organisations and to enhance sales. The grants were not meant for operating expenses. From the organisations that received these grants, various positives have come out. Notable amongst them are: The grants came at the time

⁶⁸ <https://guardian.ng/energy/solar-nigeria-programme-to-provide-13m-pounds-in-support-of-solar-power-generation/>

when the recession was at its worst and the currency instability was at its worst. Most companies attested to the fact that if not for the DFID grants, they would have had to close down. Lastly, the Solar Nigeria Programme also supported commercial-type solar activities in the Commerce & Industrial space with a pilot project in Kano State of Nigeria. One notable project which was supported is the provision of partial grants to Rumbu Sacks Industries (makers of prayer mats) to install a 73KW solar PV system on their roof space to augment their energy needs and reduce dependence on refined fuel to power their generators in the day. This system has proven to be successful as the management of Rumbu Sacks is seeking to add an additional 300KW of solar PV to its roof space. The intervention is expected to, by year 2020, ensure improved welfare outcomes for more than 2.8 million people using domestic solar photovoltaic (PV) systems, with 190,000 school pupils and 4.7 million clinic patients benefiting from public institutions with PV systems, create more than 3000 jobs and ensure greater effectiveness of DFID's other health and educational sector intervention in Nigeria.⁶⁹

Another RE support project by international development partners is the work by Partnerships Initiative for the Niger Delta (PIND) working with ColdHubs to pilot a 15KW solar PV in containerised forms to power cold storage containers and help store farm and animal produce in Niger Delta communities of Nigeria. In the Niger Delta and most parts of Nigeria, 45% of food spoils mainly due to lack of cold storage. Perishable food especially fresh fruits and vegetables start to deteriorate as soon as they are harvested because they are cut off from their source of water and nutrition. They lose weight, texture, flavor, nutritional value and appeal. Cooling significantly slows down the rate of deterioration, thereby increasing the storage life of the produce.

ColdHubs⁷⁰, is a “plug and play” modular, solar-powered walk-in cold room, for 24/7 off-grid storage and preservation of perishable foods, with the help of PIND and other partners like All-On, ColdHubs is able to expand rapidly across the Niger Delta, with Edo State being one of the Niger Delta states.

In Edo state, which is the focus of this study, the government of the state is committed to improving the business enabling environment to attract further investment into the state. Therefore, several initiatives are underway to boost the state's economy across several sectors. However, to thrive, this economy boosting programme requires energy as one of the basic requirements.

The purpose of this report is to determine if there are suitable opportunities within the renewable energy sector for Edo State Investment Project (ESIP) to facilitate investment, increase incomes, and/or generate new jobs for Edo State's vulnerable population.

This report outlines the findings of a recent scoping exercise conducted by the Edo State Investment Project and proposes interventions to address the opportunities and challenges identified.

Findings

The following are the key finding from the scoping exercise:

⁶⁹ <https://devtracker.dfid.gov.uk/projects/GB-1-203674>

⁷⁰ <http://www.coldhubs.com/>

- Three renewable energy solutions hydro-electric, biomass and especially solar are the most viable in the short-term to medium term.
 - Solar energy- harnesses radiant light and heat from the sun using semiconductor materials.
 - Hydroelectric energy- derived from the movement of water which produces kinetic energy which can be harnessed into useful forms of energy.
 - Biomass Energy- conversion of plant and animal waste into useable energy forms using an anaerobic digester.
- The Edo state government is invested in improving the economic environment in the state and is therefore committed to improving the state's infrastructure, including power, to achieve that. Awareness about solar energy is high in the state. However, significant input will be required on both the supply and demand sides for the solar market to take off.
- Renewable energy by itself is not sufficient to drive economic activity in the state but will serve as a catalyst for the rapid growth of other industries such as the entertainment, fashion and agricultural industries.

Recommended Interventions

1. The most viable intervention identified is the **electrification of local markets in Benin City** through renewable energy sources. Five viable market cluster that have potential to be electrified either through energy generated from solar or biomass have been identified. The proposed intervention is such that the solar companies, using investor funding will make use of the roof space of the existing markets to install solar PV array. There will be an installed grid to all shops of the market and the meters will be provided to all shops with load optimized for efficiency.

For markets that have high food and animal waste content and with the availability of land within the market, anaerobic bio digesters can be constructed to also provide energy from biomass. Once set up in each market, Individual shop owners will have consistent electricity supply, pay for electricity consumed and will have no need for fossil fuel powered generators.

The electrification of these shops will allow owners to have consistent, reliable electricity supply and which can in turn generate more revenue for the owners in terms of longer trade hours, longer shelf lives due to refrigeration, less waste, and increased foot traffic.

2. Support the electrification of other economically viable sectors of Edo state such as agriculture, fashion, technology and entertainment. Renewable energy on its own will not help create a lot of permanent direct jobs, but it's inclusion to meet the energy requirements in other sectors as listed above, will improve income, increase productivity and in turn create more jobs as those sectors improve. This report highlights the possible ways renewable energy can impact these sectors.

ESIP's Role

While the Edo State Investment Partnership (ESIP) cannot be involved in the direct funding of renewable energy solutions, ESIP still has a role to play in priming all stakeholders for easy collaboration to achieve the goal of electrifying market places. Additionally, ESIP will be involved in other stakeholder specific support as listed below:

- Cross cutting support

- Facilitate the coordination and registration of a legal special purpose vehicle binding all partners/ stakeholders together for the long haul.
- Lead in the creation of a multi- stakeholder engagement forum for all interested parties
- Providing strategic insights to all players
- Government support
 - Provide technical assistance on ways to improve the business enabling environment for investment
 - Build capacity of government officials to engage with developers and financiers
- Solar Developers
 - Provide strategic insights to identify viable electrification opportunities within Edo state
 - Provide linkages to capable financier interested in investing in the RE space or Edo state
 - Support in the development of strong business plans
 - Supporting awareness creation efforts that increase government and consumer knowledge on the benefits and availability of solar solutions.
 - Provide TA to support the marketing strategy
- Financiers
 - Create links to capable financial institutions that are interested in funding RE projects
 - Provide required due diligence for RE projects to aid financial institutions understanding of project viability and profitability.

It is important to note that while renewable energy is increasing being recognized as a critical ingredient to improving the local economy of Edo, there remain a myriad of national policies and regulation that must be addressed to create a conducive enabling environment for renewable energy investment in the state. These go beyond the influence of the Edo state government and thus, will require a broad-based nation wide marketing and advocacy campaign.

It is also important to highlight that from amongst the major renewable energy sector players in Nigeria interviewed in this study, when asked to place Edo state in their order of investment location priorities, it was never mentioned as one of their top 5 sites. Not surprisingly, the economic hubs of Lagos, Abuja, Port Harcourt, Kano, Kaduna and select South Eastern states came before Edo as their next target locations for expansion.

4.2 Renewable Energy Sector Overview

Background on the energy situation in Nigeria

Since the beginning of the 21st century, concerns about climate change, energy security, and the immense energy deficit in many regions, including sub-Saharan Africa, have led to increased interest in renewable energy as a substitute for traditional fossil fuels. The International Energy Agency (IEA) estimates that by 2020, RE sources will account for 26% of the energy generated as compared to 2012 when it only constituted 13%.⁷¹

Renewable Energy (RE) is defined as “energy derived from natural processes (e.g. sunlight and wind) that are replenished at a faster rate than they are consumed.”⁷² Therefore, energy that is generated from solar, wind, geothermal, hydro, and some forms of biomass are all considered RE sources.

The Energy Crisis in Nigeria

With a population of about 185 million⁷³, Nigeria is the most populous country in Africa. It is also Africa’s largest economy. It is estimated that approximately 96 million people in Nigeria lack access to electricity. These challenges are evident in all four sectors of the power value chain as described below.⁷⁴

Generation. Today, Nigeria has approximately 12,500MW of installed generation capacity, but due to maintenance issues, as well as gas, water and transmission constraints, an average of only 4,500MW of capacity is operational. Occasional increases in generation to approximately 6,000MW have been experienced but these cause further disruption in the currently inadequate transmission lines.

Primary energy source: The majority (85%) of installed capacity is fueled by gas. However, availability is low due to insufficient production, economic disincentives, inadequate infrastructure and frequent vandalism of gas pipelines.⁷⁵

Transmission: Nigeria’s transmission system has the capacity to transmit approximately 5,300MW but is often disrupted by system collapses and frequent forced outages. Currently, transmission capacity is higher than operational generation capacity, but transmission is soon to become a constraint as operational capacity increases.

Distribution: Nigeria’s distribution companies suffer significant losses, with ~46% of energy lost due to technical, commercial and collection issues. Incoherent and estimated billings by the distribution companies have resulted in widespread distrust by consumers.

The national electrification rate in Nigeria is approximately 40%, and only ~28% in the rural communities. Current estimates put Nigeria’s energy demand at 120,000MW.⁷⁶ To achieve universal access to electricity by 2030, 800,000 new Nigerian households will need to be electrified per annum.

⁷¹ International Energy Agency <https://www.iea.org/about/faqs/renewableenergy/>

⁷² IBID

⁷³ The World Bank Group, <https://data.worldbank.org/country/nigeria>

⁷⁴ IBID

⁷⁵ Nigeria Energy Baseline Report, Advisory Power Team, Office of the Vice President, 2017

⁷⁶ https://energypedia.info/wiki/Nigeria_Energy_Situation

On a more positive note, several significant reforms have occurred in Nigeria's power sector since the early 2000s, including the privatisation of both power generation and distribution. The power infrastructure formerly run by the National Electric Power Agency (NEPA) was privatised and transferred to the Power Holding Company of Nigeria (PHCN). PHCN was then further split into several independent and privately-owned power generation and distribution companies with one government owned and operated transmission company, the Transmission Company of Nigeria.

The major sources of energy to generate electricity in Nigeria are fossil fuels (natural gas and coal) and to a smaller degree hydro-electric plants (14%).⁷⁷ There are a total of 29 power generation plants, with only 4 being hydro-electric power plants.

There is a myriad of problems within the power sector that stem from a lack of political will, corruption, archaic infrastructure and limited investment in the sector. The power deficit has also been directly linked to a lack of productivity, economic stagnation, unemployment, and social (primarily youth) unrest. Experts have postulated that for the Nigerian economy to grow at a rate of 10%, the country's electricity generation and transmission capacity must reach 30,000 MW by 2020, and 78,000 MW by 2030. To therefore improve the economy's current GDP growth and reduce the current electricity supply gap, market interventions and fundamental power sector reform are vital.⁷⁸ However, all is not gloomy for Nigeria. According to the World Bank, Nigeria was recognized in the 2018 Doing Business report for the improvements the country has made in its business enabling environment. For instance, in terms of accessing electricity, Nigeria ranked 172 of 189 in 2018, up from 187 of 189 countries in 2015.⁷⁹

The degree of Nigeria's power crisis, which is finally being recognised throughout both the public and private sectors, is creating the impetus for renewable sources to become a top priority in the government's energy and electrification strategy. For example, in April 2018 in Kaduna, Blue Camel Energy launched their Solar Plant and Training Academy. Six weeks earlier, ASTEVEN Group opened its Renewable Energy Academy and Centre of Excellence. Further adding to the Decentralised Renewable Energy (DRE) investment portfolio are three ALL-ON projects. ALL-ON is an impact investor whose projects include Green Village Electricity (GVE), reputed as the largest mini-grid provider in West Africa; Lumos Global BV focusing on solar homes systems in the Niger Delta; and Cold Hubs, a solar powered cold storage food facility in the Niger Delta as well. It is also reported that cottage solar assembly plants are being established across the country which could be the precursor to local manufacturing of other components, including panels.

"From investments to new and evolving business models to new and improved technologies, to world class training centers, the DRE sector in Nigeria is on the rise. However, all these giant strides will be in vain if the government fails to create the enabling environment for the DRE sector to strive."⁸⁰ For example, the newly introduced 10% tariff on solar panels coming into the country has sent a strong signal to current and potential investors to be careful. ALL-ON estimates millions of dollars' worth of equipment that should have entered Nigeria by now has either been put on hold or is currently stuck in the ports accumulating grievous demurrage charges.

⁷⁷ Shaaban, M. & Petinrin, J.O. 2013. Renewable energy Potential in Nigeria: Meeting rural energy needs. Renewable and Sustainable Energy Reviews

⁷⁸ <https://www.lw.com/thoughtLeadership/lw-nigerian-power-sector-ops-and-challenges>

⁷⁹ World Bank. "Doing Business

2018." <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB2018-Full-Report.pdf>

⁸⁰ Off grid Business, Business Day, 05 May 2018

However, the lack of a reliable energy supply in Nigeria remains a hindrance to both economic growth and a deterrent for investors. A recent study by All-On emphasizes this constraint, estimating that 14.2 million households and 4 million SMEs have no access to grid energy in Nigeria. On the household level, those who do not have access to grid electricity largely replace conventional energy sources with biofuel and waste.⁸¹

Given these circumstances, the solar energy sector presents opportunities to not only expand access to reliable energy sources, but also to create employment opportunities. Per a recent NBS labor force survey, currently there are approximately 10,500 workers across the energy sector, about 0.01% of the total labor force⁸²

Still, the government aims to increase the share of renewable energy (See Table 3 for recent energy policies) and it has introduced various projects under the Renewable Energy Program. These include the NAIJA LIGHT Solar Electrification Program, Energy Efficient Housing Scheme, the Abuja Green City and Establishment of Renewable Energy Village. Donor and private sector actors such as DFID, African Development Bank, Asteven International, and Shell are supporting both the installation, maintenance and development of a qualified labor pool in the solar energy sector. Lumos, a Netherlands based start-up supported by both MTN Cellular and the Overseas Private Investment Corporation (OPIC), is providing off-grid solar powered kits to rural households, providing a mobile pay-as-you-go option for individuals otherwise without access to finance. The National Board for Technical Education (NTBE) is in the process of developing industry standards to guide their training programs, in conjunction with private sector and donor programs.

Renewable Energy in Edo State

Edo state, with a population of approximately 4 million⁸³, is best known as an agriculturally diverse state producing major cash crops like rubber, oil palm, cassava, rice and cocoa. Despite this and some oil production and mineral mining, it remains one of the lower states with respect to Internally Generated Revenue (IGR), ranked 5th out of 36 states. As a result, it also receives a higher portion per capita than most other states from the federal budget allocation department. Albeit cursory, the team's research concluded that Edo state has very little industrial activity and is suffering from high unemployment, especially in the rural areas.

The government of Edo state, led by Governor Godwin Obaseki, is committed to improving the business enabling environment to attract further investment. There are many initiatives underway to boost the state's economy across a multitude of sectors. These include but are not limited to an integrated Agricultural Produce City which will serve as a farm settlement, industrial park, export processing zone, agricultural processing hub, training center and commodities exchange center.⁸⁴ While most of these programmes are at the nascent stage, one of the foremost, and forthcoming, prerequisites will be the availability of reliable power, as well as transport, ICT, and other infrastructural needs.

A recent interview with the Chairman of the Edo state Strategic Planning Team, Prof Julius Ihonvbere, revealed that the government's objective is to make Edo state an important player in

⁸¹ GIZ. "The Nigerian Energy Sector: An Overview with a Special Emphasis on Renewable Energy, Energy Efficiency, and Rural Electrification." June 2015. <https://www.giz.de/en/downloads/giz2015-en-nigerian-energy-sector.pdf>.

⁸² Nation Bureau of Statistics. "Labor Force Statistics Vol. 2: Employment by Sector Report (Q3 2017).

⁸³ <http://www.edostate.gov.ng/edo-people/>

⁸⁴ PwC <https://www.pwc.com/ng/en/assets/pdf/promoting-economic-prosperity-fco-final.pdf>

energy generation in Nigeria.⁸⁵ Recently, Governor Obaseki took 10 World Bank executives to the 450MW Azura-Edo Power Plant which is now on stream. While not a DRE facility, it is illustrative of his commitment to attracting more investors to the state. This plant is said to produce 450-460 megawatts of power in the evenings which equates to between 10-12% of all the power that goes into the national grid.⁸⁶

Key Findings: Potential for RE solutions in Edo State

Nigeria in general has huge potential to scale up its power supply using a wide range of renewable energy forms including solar, hydro, wind, biomass and bio-gas. If properly harnessed, these natural resources could add enough energy to meet the country's needs for years to come. In Edo state specifically, solar, hydro and biomass were found to be the most abundant and readily available renewable energy sources.

Solar PV energy

The most popular form of renewable energy is solar energy, which harnesses radiant light and heat from the sun. There are several technologies that can be used depending on the purpose (e.g. electricity, hot water, drying/ processing etc.). The one of most relevant to Nigeria, and consequently Edo state, is solar photovoltaics (Solar PV) which captures radiant energy from the sun using semiconductor materials. The energy is initially captured in AC form (alternating current) and is then converted to DC (direct current) using an inverter. Solar PV can be installed as standalone off-grid units to power buildings, markets, and homes that have no access to the national grid or can be installed as alternative or complementary sources of power to augment the energy be provided by the grid. Furthermore, such installations can be viably scaled from individual home solar packs to captive solar for buildings (e.g. hospitals, schools, factories) to village sized "mini-grids".

Status of solar power in Edo state

- **National interest in solar:** In 2017, the Bank of Industry (BOI) announced that it will be investing 1 billion naira in providing solar solution to power micro to medium scale businesses in 6 states, including Edo state.⁸⁷ These funds helped set up a 50KW solar mini-grid installation at Obanyator, in Edo state, covering approximately 300 homes. As demand has increased, it is already due for expansion.
- **Good solar irradiance in Edo state:** The solar irradiance in Edo state is about 4,500-5,000 Wh/ms in comparison to Durban, South Africa,⁸⁸ with an irradiation of 3,800 to 4,000Wh/ms,⁸⁹ which has a thriving residential embedded solar PV generation system in place.⁹⁰ Edo state, with average of 4 good solar hours per day makes solar PV electrification viable when compared to global breakeven average of 3 hours of sunlight per day.
- **Existence of solar players:** There are already several leading solar players active in Edo state which points to sufficient demand and business opportunity. Despite the

⁸⁵ <http://www.nigeriaelectricityhub.com/2018/01/01/edo-now-a-power-generation-hub-with-azura-edo-solar-other-projects-government/>

⁸⁶ <https://www.vanguardngr.com/2018/05/988110/>

⁸⁷ <http://www.financialnigeria.com/boi-announces-n1-billion-solar-energy-fund-for-small-businesses-sustainable-photo-video-details-683.html>

⁸⁸ <https://solargis.com/maps-and-gis-data/download/south-africa>

⁸⁹ <https://solargis.com/maps-and-gis-data/download/nigeria>

⁹⁰ https://en.wikipedia.org/wiki/Solar_power_in_South_Africa

challenges faced by these players, there is a gradual adoption of the technology and a growing awareness of the options solar PV can provide.

Solar energy as a renewable energy source is readily adoptable in Nigeria because of the ease of scaling the technology and ready availability to technical know-how. Solar PV tech can be deployed with as small as 5W for the Solar Home Systems (SHS) to as large as 100's of MW for captive solar and solar farm projects.

The most common uses of solar PV technologies are for residential and retail businesses as an alternative to grid power supply – providing emergency backup or as a supplement to the grid.

The major limitations to solar are the high initial capital expenditure and the lack of affordable consumer financing alternatives. the typical payback period for a solar PV installation is on average around 3–5 years, depending on whether energy storage systems are included or not, and the life span of wearable components like the batteries.

Hydro-electric energy

This form of renewable energy is derived from the movement of water which produces kinetic energy which can be harnessed into useful forms of energy. The state has a lot of constant flowing water bodies like the Ikpoba and Ogba Rivers, that offers substantial potential for hydro-electric power. Most of these rivers, however, have a seasonal fluctuation in water level and flow which affects the size and viability of the hydro system used. At this juncture, more research needs to be done before hydro-electric power generation can be profitably installed in Edo. The state government recently announced that it is partnering with the UNDP and other donors to harness the state's water resources to generate power.⁹¹ This partnership will help provide feasibility study and actual implementation of hydro power for Ikpoba and Ovia rivers in Edo State. Timelines, capacity output and the cost of the investment are yet to be determined.

Biomass Energy

Biomass refers to organic material from plant, food, and animal waste⁹² that is converted to energy when the biomass is processed (burned or put in anaerobic digesters) to release its stored energy. Different forms of biomass include wood, agricultural crops, production and processing waste, leftover food, and animal & human waste. Given the large amounts of agricultural and animal waste in Edo state, there is current and sustainable material that could be converted to energy by bio-digesters.

Biomass (waste to energy) as a renewable energy source can be used in two main ways:

- Biomass to produce gas which can be bottled and used for cooking, and
- Biomass to produce gas which can be used by gas-powered generators to produce electricity.

For both uses, a steady supply of raw material (e.g. waste from food, animal and human excreta) is required. The main limitation here is the lack of a large and consistent supply of biomass production waste needed to generate energy.

⁹¹ <https://www.vanguardngr.com/2018/01/hydro-power-edo-dam-ikpoba-ovia-rivers-partners-undp/>

⁹² U.S. Energy Information Administration https://www.eia.gov/energyexplained/?page=biomass_home

Interestingly, small anaerobic digesters that generate only 5KW of energy can be relatively easily and cheaply set up and then expanded later to 1MW as needed.

In terms of economies of scale, biomass systems have been proven to be cheaper than solar PV systems from the 1MW system size and above. The only limitation, as stated above, will be the consistent supply of available waste to ensure continuous gas production.

The most common uses of biomass plants are on farms, markets, and agro-processing sites where there is a large amount of waste being produced on site (e.g. waste coming from rice and maize milling). The methane gas produced can be bottled and used for cooking especially in dormitories or locations where high-volume cooking is done.

The other major limitation to biomass is the high initial capital expenditure. The typical payback period for an average size biomass plant is around 3–4 years.

In summary, given that the major economic activity of the population in Edo is agriculture, the raw materials to produce energy from bio-waste presents an opportunity to be exploited. However, to date it has not become popular. The upfront costs are considered too large and the waste collection requirement too fragmented and complex. Where it might make sense is as part of a hybrid solution in combination with solar PV tech. As with hydro-electric power, further research needs to be done before this source of RE can be viably installed in Edo. This will include an analysis of the best rivers for hydro turbines and an assessment on the seasonal fluctuations in water flow to ascertain the potential volume of energy that could be generated along with the cost of the installation.

Upon review, it was determined that out of the 3 potential RE alternatives, the most feasible and readily applicable to Edo state is Solar PV. This, to a large extent, is due to its popularity, existing presence, costs, and versatility in terms of application.

A SWOT analysis of the Solar Energy sector in Edo State

Strengths

Peak sun hours: Peak sun hours (PSH) refers to the average amount of solar energy that is available in an area during a typical day and is a good indication of the potential for solar in a region. Regions with higher PSH, generally greater than 4 hours, are best suited for solar solutions. It is estimated that the state wide PSH for Edo is 4.5hours at 4.5/5.0KWh/m² solar irradiation.

State government interest: The government of Edo state is committed to improving the economic profile of the state and one of its focus areas is the energy sector. Recent activities by the government signal that energy is at the top of the government's agenda. Edo state recently signed an MoU with Siemens Nigeria to establish critical power infrastructure and produce 1,000MW over a 24-month period.⁹³ Similarly, another MoU to generate 5MW of electricity was signed with Ossimo power in 2017.⁹⁴

Operational solar players: The presence of leading solar players in Edo such as Satlex Nigeria Limited, De Compass Solar, Brightence Engineering, and Fonosson Electrical indicates that there is sufficient awareness to create demand to invest and reap a profit. However, inhibitors like the

⁹³ Nigeria Electricity Hub, <http://www.nigeriaelectricityhub.com/2017/02/05/edo-gov-partner-siemens-to-produce-i-000-megawatts-of-electricity/>

⁹⁴ Nigerian Television Agency, <http://www.nta.ng/news/20170316-generate/>

high initial capital cost is causing many potential customers to hold back on the purchase of solar PV until prices come down.

Awareness: Across the various stakeholders interviewed, interest in and knowledge of solar energy as an alternate source of power is increasing, especially as the lack of, and inconsistent supply of, grid power remains in place.

Weaknesses

RE Financing: As with all other Nigerian states, one of the key hindrances to the success of solar energy solutions in Edo is access to affordable finance for both customers and solar developers & sellers. For the latter, interest rates to purchase stock average 25% which makes it very expensive to the end user.

Security: Lack of adequate security measures to protect against vandalism and theft in the state can severely undermine the sustainability of any project.

Initial investment costs: The initial investment costs for solar energy installations is very high and benefits to the end users only actualise in the long term (3-5 years). This therefore serves as a disincentive to larger interest in solar energy as a practical alternative for power generation.

Land availability: All the RE solutions proposed have significant land use requirements. The government has yet to designate specific land for use in energy production, although several such deals are currently being negotiated.

Unfavorable federal policies for renewable energy: To encourage investments in the RE space, the federal government introduced special regulatory tariffs that will ensure a positive return on investment (ROI) for companies generating power using renewable sources of energy.⁹⁵ Sadly, this is not reflective in the industry as the recently introduced import duties on solar PV is proving a major blow to increase in the overall cost of solar purchase. This cost is translated to the customer further inhibiting the adoption of solar PV technologies.

Human capital: Edo state, and Nigeria in general, has an abundance of human capital, most of which can be classified as youth (between the ages of 18 - 29).⁹⁶ However, the level of literacy and technical know-how of this population is very weak. Therefore, finding skilled labour within the state to install and maintain RE systems will likely prove to be a challenge.

Opportunities

Energy Deficit: The energy deficit due to inadequate and debilitated infrastructure presents an urgent need to introduce alternative power generation solutions such as solar energy.

Scarcity of petrol products: The energy deficit in Nigeria from the grid greatly attracts the short-term quick alternative of using refined fuels for generators. However, availability of refined fuels occasionally experiences shortages in the country for various reasons. These reasons range from aggrieved worker's unions along different parts of the oil & gas value chain embarking on strikes hence limiting supply; to vandalisation of pipelines carrying distributed refined fuel content. Scarcity of these products suddenly and quickly increase demand of fossil fuel energy alternatives and the cost effect can be high in a relatively short period. The consistency in RE solutions and steady decline in prices globally make RE a preferred option over refined petroleum-based powered technologies.

⁹⁵ Latham & Watkins, <https://www.lw.com/thoughtLeadership/lw-nigerian-power-sector-opps-and-challenges>

⁹⁶ <http://www.youthpolicy.org/factsheets/country/nigeria/>

Large number of micro and small businesses: There is an increasing number of micro and small, largely informal, businesses and marketplaces that need more and more reliable electrification. RE serves as a viable alternative to meet their demand on the short-term.

Threats

National policies: National policies ranging from fiscal and monetary policies to importation policies affect the entire solar energy value chain. Current federal policies are not sufficient to encourage the rapid adoption and scale up of solar solutions. As mentioned earlier, a recent 10% duty on solar products imposed by the Nigerian Customs Service places undue burden on importers of solar products.

Supply chain and logistics networks: The local supply chain and logistics networks across Nigeria are very weak across several economic sectors and result in inefficiencies, delays and in some cases, non-delivery of products.

Economic recession: An economic recession such as that experienced in late 2016 -2017 had the effect of retarding the development of the solar market in Nigeria in general. The result was that many of the then existing and potential international investors and developers in the RE space exited the market, while those companies that remained were forced to reduce their risk by cutting back on and/or diversifying their operations.

Fuel subsidy: The Nigerian government subsidises the cost of petroleum products to the population. The effect is that consumers are not paying the true cost for their energy needs, which therefore undermines the ability to price solar energy offerings at their full cost.

Currency stability: Though now stable, it is worth mentioning that the country just came out of a recession which was mostly caused by a sudden instability in the value of the Naira to the Dollar. This caused a scarcity in obtaining Forex and a significant devaluation of the naira. As RE products are mostly imported, there was sudden increase in the costs attached to the purchase of these products.

Figure 1 An Edo State Solar Sector SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • High peak sun hours • Operational solar players • State government interest • Awareness 	<ul style="list-style-type: none"> • Human capacity • RE financing solutions • Initial investment costs • Security • Land availability
Opportunities	Threats
<ul style="list-style-type: none"> • Energy deficit • Scarcity of petrol products • Large number of small and micro businesses 	<ul style="list-style-type: none"> • National policies • Supply chain and logistic networks • Economic recession • Fuel subsidies • Currency stability

Stakeholder Analysis

Demand side: Potential Off-Takers in Edo State

The leading potential markets for renewable energy in the state are listed below:

Industrial: Large scale solar installations can be used to power large scale factories (for example the 73KW solar installation at Rumbu Sacks in Kano and the 40KW solar PV rooftop solar for L&Z Yoghurt factory also in Kano, both projects supported by DFID's Solar Nigeria Programme); plants and agricultural operations. As Edo is primarily an agricultural state, the provision of reliable and affordable energy across various agricultural processes (from planting and cultivation, through processing and packaging) is a top priority. Solar PV can be used in a hybrid form mixed with diesel generators as part of an industry's energy mix to bring down the long-term cost of energy.

Retail: The majority of businesses and market places in Edo state are hampered in some way by the lack of access to reliable power. Interviews with shop owners during the scoping exercise revealed that the lack of power resulted in shorter business hours for security reasons, spoilage of perishable goods, and inability to produce higher value finished goods. This market niche provides potential as energy can be sold to the consumers as a fee-for-service payment and can easily be paid for over a long period in instalments.

Public Sector: Nigeria's public sector is generally behind the times, with many processes that could be carried out electronically, still being performed manually due to the low capacity of personnel and a lack of power. Constant supply of power can be a first step in mitigating the energy dependent challenges. Some states like Lagos state, have moved their civil service secretariat to be powered using RE sources (solar PV in particular). Not only does this make the cost of administration cheaper, but there have been accounts of having a quieter premise to work without the sounds of blazing generators coming through the windows.

Private/Residential: On grid and off-grid communities remain the most dominant market for Solar PV solutions in the state. In the past, Arnergy Ltd (a national solar player) powered one of these communities (250 homes with a 40KW installation). To date, customer payments have been steady, and there is now a call to increase the grid capacity. With each home typically using 100-150W for lights and fans mostly, there are several residential areas throughout Edo that would benefit from such a system. While awareness of solar solutions is high in the residential areas surveyed, consumer appetite is weak due to the costs and lack of finance options. Interviews with existing solar developers focused on the household market highlighted the fact that many have had to venture into other sectors to remain financially viable.

Social: Social organisations such as religious and educational institutions also have significant energy requirements. In educational institutions, the lack of power influences the student test scores and retention. Providing consistent power to schools will help in multiple ways, from aid audio-visual learning, help with science and computer studies, a higher quality public-address system during assemblies, and the introduction of computer-based testing for children, to mention a few. For clinics and health centers, the impact is even higher as reliable power from RE can be used to power water boreholes to provide clean water, ease the wait time of patients by ensuring fans work, lights are on, and TVs can entertain. More reliable energy will empower the health workers with better illumination to work and deliver their services. Lastly, electricity will allow medical centres to maintain cold chain storage for medication, vaccines and blood as well as improve the quality of night time delivery and health emergency support.

Supporting Functions:

Banks: The ability of banks to grant loans to investors and consumers affects the rate of development of the solar market. Commercial banks like FCMB, Ecobank, and Sterling Bank have been most dominant in the solar PV for residential and light industrial space, while LAPO, the country's largest micro-finance bank, has been dominant in the SHS space. A consistent increase in the awareness of these institutions will impact lending in the sector and improve consumer finance options.

Investors: The growth of Edo state's solar market will largely depend on the ability to attract local and international investors that can fund large projects in conjunction with the state government. The state government therefore needs to build investor confidence to make significant contributions by creating an enabling environment. This can be done by creating tax break incentives for short periods for investors or the government securing long term partnerships with investors ensuring enough time for investments to be recouped and funds invested easily realised.

Availability of land: Solar farms have substantially higher space requirements than thermal power plants and this is one of the drawbacks of solar. Generally, 100 square foot of space is needed for every 1kW of solar panels. The availability of land in places with the highest demand can be a limiting factor. Interestingly roof space can be available for solar installations but the strength of existing roof space to support solar PV comes into question the older the roof is. For other RE forms like Biomass and Hydro, land is a key issue. In the case of biomass, available land space proximal to the source of waste is the major concern. For Hydro power, the turbines are limited to designated areas of rivers and this means there must be additional cost of conveying generated power to areas where the power is needed.

Mobile money infrastructure: In countries with more developed solar markets, mobile money infrastructure has enhanced and expanded the reach of solar products. This is because mobile money solutions can be used to create several payment schemes for different demographic groups and ensure the last mile remains in reach of solar companies. Nigeria's mobile money infrastructure is still in the nascent stages of development with enabling policies and technologies still severely inadequate. However, the need for improving this mobile money infrastructure and the policies changed continues to be a pressing need. Availability of mobile money payment solutions will aid in the distribution and revenue collection of solar PV tech solutions in the rural and remote locations.

Payment systems: In the absence of mobile money infrastructure, the reliance on cash-based payment systems is still very prevalent in Nigeria. This form of payment however has its disadvantage in terms of reach, cost of collecting money, and risk in collecting funds. However, it creates employment as agents, retailers and partners now must be scattered all over to aid in the money collection process.

Supply chain and logistics networks: Most of the solar products in the Nigerian market are manufactured internationally, imported into the country, and then distributed to different locations across the country. While some of the larger solar companies have established international supply chain networks, logistics within and outside the country remains challenging. The process of moving products from their point of entry to their final destinations in Edo state will need to be further examined and likely streamlined.

Universities and training centres: The Energy Commission of Nigeria has developed 6 research institutions for energy in 6 federal universities with the National Centre for Energy and

Environment in the University of Benin, Edo state being one of them. Despite this, the Benin University's research center suffers funding constraints and lacks research partners so is not living up to its true expectation of providing research in the energy sector. Of these 6 centers, the research center in Usman Dan Fodio University in Sokoto State focuses on solar technology and has a demonstration assembly plant which has been dormant for a while due to lack of operating funds.

Rules

Economic policies: National fiscal and monetary policies will affect the take-off of the solar market especially policies that affect forex availability, importation and tax just to name a few.

Security Policies: The implementation of state policies to ensure security of large installations will be required to prevent against vandalism and theft.

Government institutions (national and state): Involvement and buy-in of government institutions is essential to the long-term growth and sustainability in solar market. Government's support for more private sector and investment play into the RE market greatly impacts the volume of RE projects in the country and in turn the state.

Development agencies: International development agencies and non-governmental organisations, such as the United Kingdom Department for International Affairs (DFID) and USAID, are often instrumental in providing initial assessments, training, and funding support for solar projects. These funds help support ancillary services like improving logistics and supply, aiding marketing, supporting a payment collection solution, etc. which allows the developer to concentrate on the business of providing energy.

Educational Policies: Educational policy reforms will ensure that the work force and technologies needed are included as part of the curricula, with the right quality of up-to-date technical expertise in the RE sector are put in leadership positions.

M4P Markets Systems Approach

Systemic action:

This inception phase study of the ESIP project has investigated the potential of RE sector development in Edo state and its impact. During the project's implementation, it is hoped that it can provide a much-needed catalysis to boost the RE sector in Edo state. The key pathway to systemic action will be identification of industry potential, mapping key stakeholders, engaging key stakeholders, and supporting implementation of industry solutions in the RE sector for the state.

Sustainable change

The adoption of RE tech like solar for residential, retail and commercial/ light industrial use will mean less reliance on refined fuel powered generators and adoption of more sustainable energy forms. Furthermore, adapting sustainable financial models to fund RE solutions will significantly have an impact in the long term sustainable deployment of RE in Edo state and Nigeria.

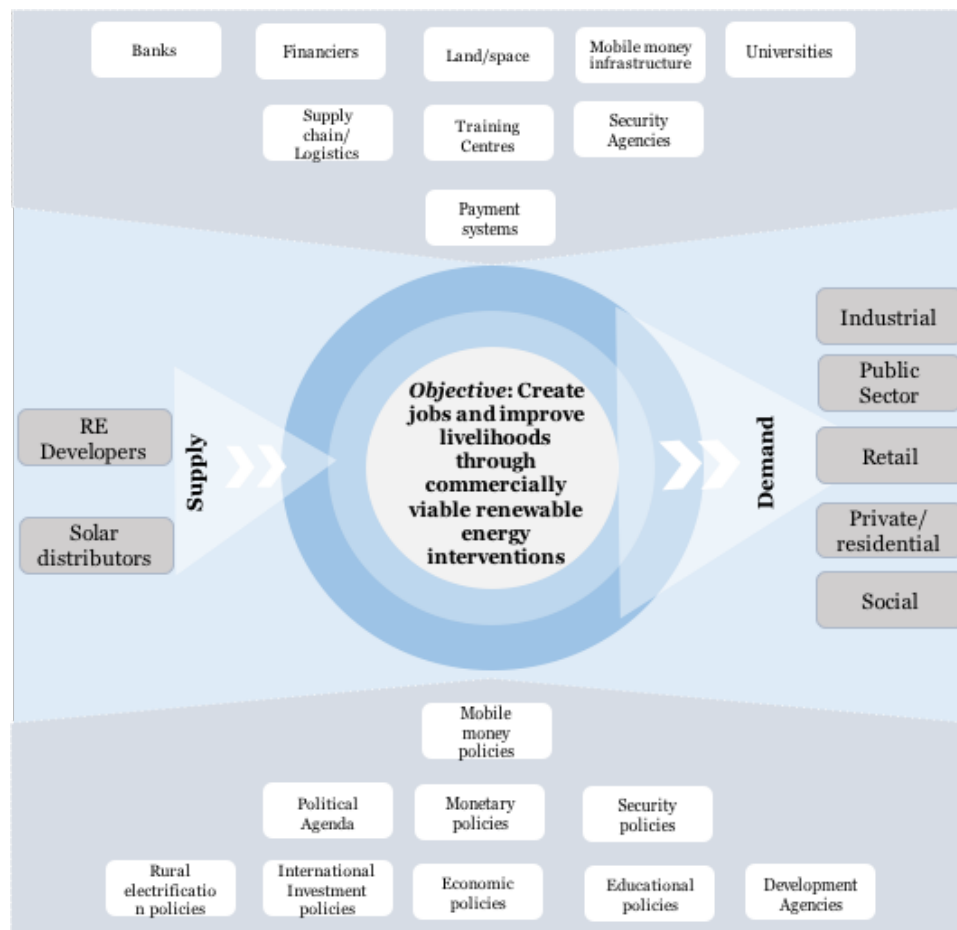
Large-scale impact

While RE on its own cannot scale to create the expected number of jobs, it can contribute to the growth in other sectors of the economy. Therefore, the incorporation of RE alternatives in say agriculture, retail, and ICT could and should spur job creation, improve revenue, and improve the quality of life for individuals and businesses. This will act to further stimulate the demand for scalable RE solutions and related services.

Facilitative role

ESIP's intervention will foster the much-needed partnerships to support RE development in Edo state.

Figure 2. Market systems framework analysis



4.3 Key Findings and Conclusions

Based on secondary source research and numerous discussions with public and private stakeholders in the renewable energy sector, the industry is no doubt growing in stature and significance across Nigeria. The need for better and cleaner power, as well as broader distribution is widely recognised. The Government of Edo state further differentiates itself with a well-respected and well-spoken Governor who is leading the charge to deepen and diversify the State's economy.

Solar energy is present in Edo but is only at the margins, contributing less than 1% to the State's energy supply. Edo's population is estimated at approximately 4 million people with an estimated number of approx. 10,000 households (approx. 40,000 users) having some form of solar energy system in place to defray some of the costs of the more expensive national grid. There is just 1 community being powered by a solar mini-grid with a few potential mini-grid sites identified by the Rural Electrification Agency of Nigeria. A few larger scale public-private and donor initiatives are

planned but have yet to begin. Solar, as well as other forms of renewable energy, are likely to lag in terms of their growth and expansion until infrastructure is improved, the legal and regulatory incentives are more conducive, access to affordable finance is provided to both customers (buyers) and developers (suppliers), and public awareness increases through demonstration projects and clearly articulated cost/benefit analyses making it an obvious and safe choice for various types of buyers/users.

Until then, the highest and best application of renewable energy, primarily solar and biomass, will be as add-ons to industry sectors that are already in place and growing, such as agricultural production and processing, ICT hubs, light manufacturing, and community markets. More on how solar can impact other sectors is provided in a later chapter.

4.4 Proposed Interventions

The renewable energy sector today is neither a consistent nor scalable job creating opportunity on its own as skill sets are very specific and are only required on a project by project basis. However, RE sources have proven to be sustainable and economically viable ingredients in facilitating enterprise start-ups, business growth, and increased earning potential.

For Edo state, the best intervention opportunity that fits the ESIP project budget, timeframe, and performance indicators center around the use of solar PV in the home and retail subsectors. Herein, and as described in more detail below, ESIP has the potential to support a pilot/demonstration initiative, in partnership with others, to provide reliable power, create several aspirational jobs (short and long term), and improve the local economy.

This proposed intervention will require strong a technical partnership with the key players in the renewable energy space. Amongst those identified who are willing to invest and jump start this intervention are Arnergy Limited, Eon Gratis Limited, and Rubycom Tech Limited.

It is also worthy to note that there are other interventions being planned at the National level with flow down support to selected key states. For example, the World Bank is providing Nigeria with a loan facility which will be used to support mini-grids and SHS expansion nationwide. Some of the communities in Edo states have been selected for this programme. Also, the IFC has made funds available through FCMB to aid consumer financing on a national scale. This can potentially be leveraged by solar developers working in various states who meet pre-determined eligibility criteria. Though both are long-term projects being driven at the national level, they are worth noting as Edo will likely be a target audience for both.

Intervention proposed: Electrify local retail markets using RE technology.

The most viable intervention is to electrify local markets in Benin City with renewable energy sourced via solar PV or Biomass systems. As stated earlier, 6 of these markets have been identified. According to Arnergy and Rubycom Tech – the two intervention partners coming together to implement this solution for the local market shops in Edo State, the following Figure 3 shows the locations and prioritisation of the local markets.

Figure 3: Local retail markets in Benin City metropolis

Market Name	Local Government Area	Order of prioritization*	Total number of shops	Estimated total load (kW)
Edaiken market	Egor LGA	4	479	100
Ibilo market	Akoko- Edo	6	136	50
New Benin market	Oredo LGA	2	1679	80
Oba market	Oredo LGA	1	2524	600
Ogiso market	Oredo LGA	3	542	80
Igueben market	Igueben LGA	6	657	40

*Order of priority 1 – Highest; 6 – Lowest.

See map below indicating the top 6 prioritised LGAs.



The proposed intervention calls for solar companies to use of the roof space of the existing markets to install a solar PV panel array. This will be accompanied by an installed grid to all the markets' shops with individual meters supplied and only energy efficient products connected to ensure efficient use of the solar PV installed. For markets that have high food and animal waste content, assuming they have a sufficient availability of land within the market, anaerobic bio-digesters can be constructed to also provide energy from biomass. Once set up in each market, individual shop owners will have a reliable and affordable supply of electricity, and will only pay for the electricity consumed. There will be no need for fossil fuel powered generators. Key steps and considerations in this proposed retail market electrification project are listed below:

1. Stakeholder Facilitation - Bring the various stakeholders together for a one-day workshop to understand what each partner can offer and terms of collaboration between the various partners and stakeholders. This stakeholder engagement will also entail the sketch of a pre-feasibility study of the site and an energy use and demand audit of each proposed market for electrification.

2. Development Plan - Based on the workshop, ESIP will put together a detailed development plan for the market electrification project including the roles and responsibilities of various partners, timelines, budget requirements, and milestones of the project.

3. Facilitate an SPV – ESIP, based on the results of the stakeholder meeting, will then facilitate the coordination and registration of a legal Special Purpose Vehicle (SPV) binding all the partners/stakeholders together for the long haul. The SPV's Partnership Agreement will ensure that all foreseeable risks, concerns, and scenarios have been adequately addressed to protect the participating members' interests and, and result in long term project viability.

4. Foster Partnerships - As mentioned, once the stakeholder engagements have been made and agreements reached, legal partnerships by way of a special project vehicle can be formed which each partner providing either technical contribution, financial contribution, and/or policy support to ensure the viability of the rural market project for the long haul. The partnership agreement can be drafted or facilitated by ESIP on behalf of the partners and these will cover duration and condition for the partnership to run. Some of the suggested partners (lead firms) met with during this research include:

Arnergy Limited, a Nigerian owned solar PV company. Arnergy is a distributed utility technology company that leverages the Internet of Things (IoT) to deploy affordable, reliable, distributed solar energy solutions to rural and urban consumers and SMEs across Nigeria. It's payment plan is based on a monthly subscription model. Arnergy custom designs solar energy systems for commercial and residential clients using tried and tested, intelligent solar energy systems. This ensures their customers have 24/7 power in their homes and businesses, both improving productivity as well as reducing operating expenses (e.g. the huge costs otherwise spent on fuel and generator maintenance). Arnergy proposes to focus on the following parts of the proposed market electrification technology solution:

- Inverters and batteries
- Balance of Systems (BOS)
- Meters
- Mobile payment solutions

Eon Gratis Limited is Nigeria's foremost biomass energy player with existing bio-digesters in markets in Lagos state. Eon Gratis builds bio-digesters ranging in capacity from 5KW to 100KW. Eon Gratis is primarily interested in testing out a hybrid model where biomass will be used alongside solar PV, and is open to the partnership model discussed above.

Eon Gratis proposes to focus on the following parts of the proposed market electrification technology solution:

- Bio digester tanks and installation
- Technical skills training for the operation of the biomass facility
- Generators that can run on the biogas (where applicable)
- Bio-gas compression and bottling (if required)

Rubycom Technologies Limited is another Nigerian solar PV company with core expertise in solar PV rooftop deployment and financing. Rubycom Technologies has been operating in the solar PV space in Nigeria for over a decade and has executed solar PV rooftop projects in the retail, home and light industrial sectors.

Rubycom Technologies proposes to focus on the following parts of the proposed market electrification technology solution:

- Solar PV panels and cabling on the rooftops of the selected markets
- Charge controllers and the BOS for the solar PV panels

Edo State Government is a key partner to the success of this intervention as the state is responsible for providing the authorisation and long-term lease for the SPV to operate in the market place. This includes ensuring support is provided by market union leaders and permission is granted to use the roof space as well as sufficient land for the bio-digesters. The state government stands to benefit from this project as it can be shown to provide the following:

- Leverage on private financing to power or electrify public facilities at no cost.
- Create employment for the locals who will install and operate the systems as well as other indirect jobs (fabrication, sales reps, etc.).
- Showcase a true example of a local public-private partnership to foster economic growth, etc.

8. Facilitation of project finance - With the RE sector in Nigeria presently expanding to new locations, with RE tech deployed for more productive uses in other sub-sectors of the economy, and industry players increasing in knowledge and number, all these improve the interest in financial institutions to design sector specific financing instruments. MADE II can help promote the intervention, along with the project partners, to generate sufficient interest from a funder, bank or non-bank financial institution to finance this intervention. Entities like LAPO MFB, Nigeria's largest MFB with the most branches across the country, might be interested in supporting the consumers as the electricity off-taker. Other financing groups such as Sterling Bank and FCMB, both commercial banks, are also well positioned in the country to support and promote RE projects, with the latter bank supported with a US\$20 million facility strictly for Renewable Energy and Energy Efficiency (EE) projects.

"We all want constant electricity and we believe solar can work. If we had a bank that can provide the funds for consumer finance, this would make solar PV sales improve in Edo State" Engr Omorogbe, Satlex Limited, Benin City.

9. Provide TA to support the marketing strategy/ subsidise a forum – One of the key success factors in a demonstration pilot like this is getting the marketing and promotion right. Herein,

ESIP could provide technical assistance in determining the key audiences and putting together the main ingredients of a promotional and public awareness strategy for off-takers and consumers. This will not only add pace to the delivery of the intervention but it will also speed up the replication and roll out of such an initiative in other local retail markets. In addition to a broad-based marketing and promotion strategy, it will also be important to bring together key stakeholders such as the market's union leaders, shop owners, local government authorities, traditional rulers, government agencies dealing with local markets and land use, etc. The agenda should include an overall presentation of the project, presented by the SPV partners, a discussion of the pros and cons, benefits and risks, and operational parameters. This forum will also be a great opportunity to highlight the collective ownership of the system and the need to communally support the scheme to enable continuous power supply.

Local retail market RE electrification – Key success factors
<ul style="list-style-type: none"> • Independent private sector management of this public-sector energy service • Support to the Edo state government by attracting private financing for public projects to improve the state's economy. • Basic level of electrical literacy for technicians trained • Minimal restrictions if not direct assistance in the sector's growth from the state and federal government to create an enabling regulatory environment • State level government support to the development of the local retail market RE electrification project (e.g. land, tax breaks, approvals, policy support and marketing assistance) • Improved support from local authorities (e.g. Union leaders, Local Govt, Traditional Leaders, Chair persons) • Improved access to consumer financing for off-takers

4.5 Synergies Between Renewable Energy with Other Industries

Fashion

The fashion industry consists of four main operational levels which are the production of raw materials; the manufacturing of finished goods; wholesale and retail sales; and advertising.⁹⁷ Nigeria's fashion industry, while growing, is still very heavily focused on the manufacturing, sale and advertising of fashion products while ailing on raw material production. – the manufacturing of finished goods by designers is plagued by issues such as the high cost of imported raw materials needed to produce the finished goods (often imported), competition from imported finished products from China and India, and developing efficient and effective distribution channels. In the operational wholesale and retail level, mass market production is still upcoming as most designers manufacture bespoke solutions, catering to a select few. The bulk of the mass market is made to purchase from imported options.

While not a silver bullet, the availability of lower cost, reliable energy solutions could support the growth of each of the four levels in the fashion industry and make Nigeria's fashion products more competitive in the global market.

⁹⁷ Britannica, <https://www.britannica.com/art/fashion-industry>

As a first step, renewable energy solutions can support the electrification of the textile industry where cotton, which is produced in Nigeria, can be converted into textiles that will be used by Nigerian manufacturers and designers in country. For instance, in India, where textile production accounts for a large portion of the domestic energy consumption, some textile mills have switched from the use of conventional fuels to the use of solar energy. Others are employing the use of solar powered machinery such as solar water heating systems to boil water used when dying textiles.⁹⁸ This is just one of many ways in which RE can be employed to support the development of the fashion industry.

Entertainment (Nollywood)

Nigeria's entertainment industry, Nollywood, is a \$5 billion industry ranked the 3rd largest in the world, after Hollywood, USA; and Bollywood, India. The entertainment industry is heavily reliant on technology and the use of technology in turn is reliant upon the availability of energy.

Currently, Nollywood is hampered using low-end technology, lack of funding, lack of cohesion, and it is estimated that about N9billion naira⁹⁹ is lost annually to film editing and video shooting in other countries such as South Africa and India. Localisation of these functions within Nigeria could mean a major boost for the entertainment industry.

The Benin Film School, located in Edo state's capital city, was created in 2017 to support the growth of the entertainment industry within Edo state and consequently, Nigeria. The school provides technical training and has a long-term plan of becoming a hub for the Nigerian film industry. These endeavours are energy intensive and their rapid development might be hampered, on or off location, by the lack of reliable power.

This presents an opportunity for the introduction of renewable energy solutions. The availability of constant power supply can serve as a part of an incentive package and much-needed catalyst to attracting investments into the film industry.

ICT

As with the entertainment industry, information and communications technology (ICT) is also heavily dependent on the availability of energy. There is therefore a direct correlation between technological literacy in Nigeria and the availability of energy.

Advancements in technology have meant that even those living in the most rural settings can benefit from the use of solar powered ICT equipment. One company, Sustainable Computers, founded by Tony Winfield, recognised that the availability and cost of electricity was restricting the advancement of ICT in Africa, developed solar powered computers that could be utilised by students residing in off-grid communities.¹⁰⁰ Not only could this be expanded, but also training and educational centres designed to build capacity in computer literacy (among other subject areas) could be similarly provided with equipment that is powered by solar energy.

Agriculture

Renewable energy can offer a wide range of solutions to problems in the agricultural industry, ranging from planting and cultivation to processing, packaging, and sales. Rural communities that make up most of the agricultural community mainly lack access to grid electricity and therefore cannot adequately store or process their agricultural produce.

⁹⁸ <http://www.textileexcellence.com/news/details/1980/textile-industry-can-use-solar-energy>

⁹⁹ The Guardian, <https://guardian.ng/art/with-okowa-ugbomahs-asaba-film-village-gets-a-boost/>

¹⁰⁰ <https://phys.org/news/2014-01-solar-powered-africa.html>

An example of the use of solar power to enhance the agricultural value chain is the company ColdHubs. Coldhubs is a Nigerian owned company that builds cold rooms powered by solar energy for use in storing agricultural produce. Mr. Benjamin Igbokwe, CEO of ColdHubs, said in an interview that ColdHub storage containers have increased the shelf life of the produce stored from 2 to 21 days¹⁰¹, which yields significant and immediate economic benefits to the farmers.

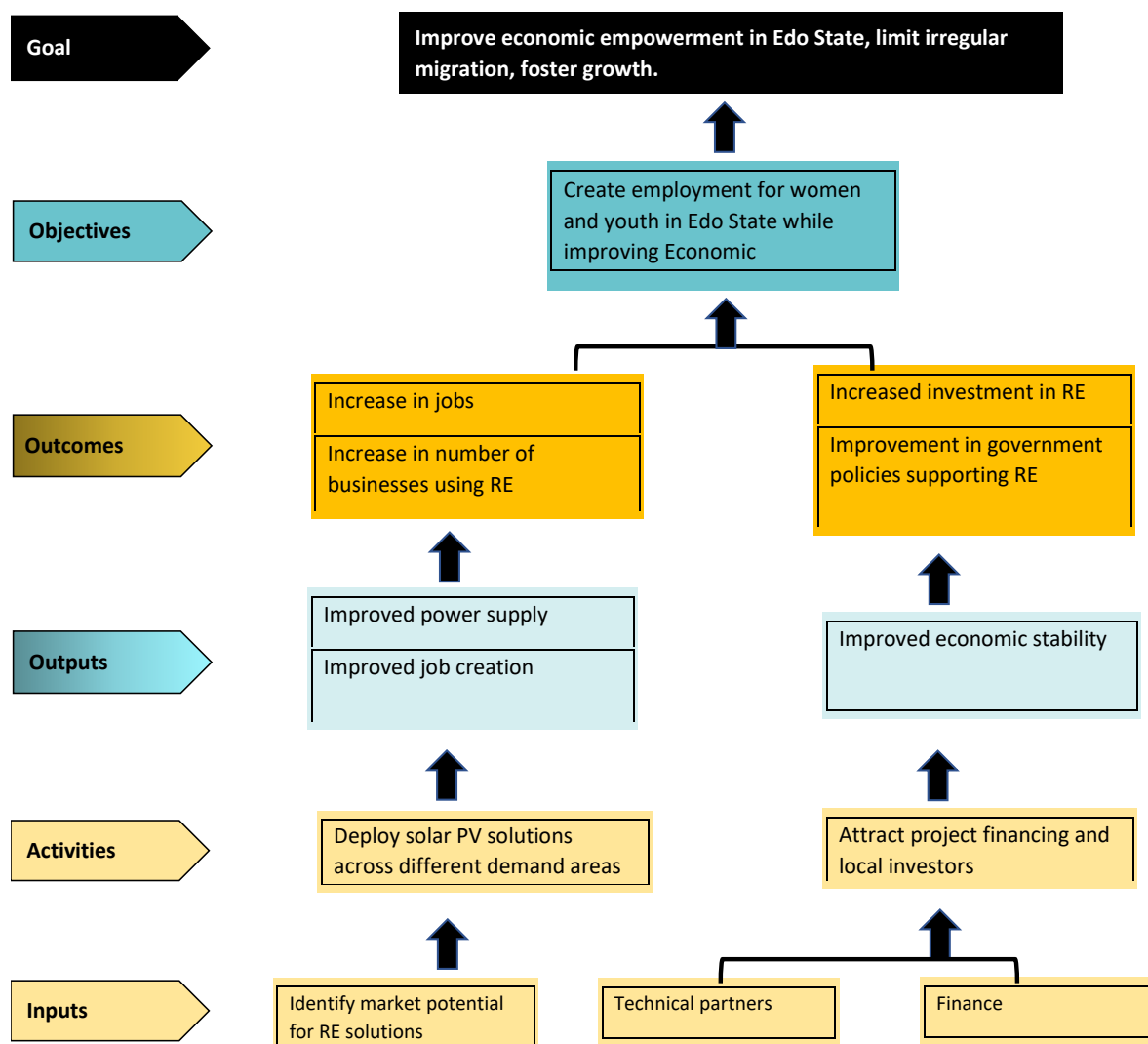
4.6 Theory of Change

As stated earlier in this report, the renewable energy sector on its own is neither a consistent nor scalable job creating sector as the skill sets at this juncture are very specific, and are only required on a project by project basis. However, RE sources have proven to be sustainable and economically viable to improve business competitiveness, drive growth, and improve corporate as well as employee earning potential.

Below is an illustration showing the envisage theory of change for the sector in Edo state.

¹⁰¹ <https://www.vanguardngr.com/2016/11/cold-hub-introduces-solar-powered-storage-facility-to-empower-nigerian-entrepreneurs/>

Theory of Change Diagram Retail Market Electrification with RE



Revenue Streams:

That are a few revenue models that can be pursued simultaneously to ensure that the local market electrification solution stays in operation during and after the close of MADE II. Amongst the technical partners for the solution, Oba market – the largest retail market in Benin - has been proposed to the Edo state government by the 2 key Solar PV tech companies intending to set up an SPV with the government. The available roof space of the Oba market will most likely be used for the solar PV installation. The partners are still in the process of aligning themselves, designating the shareholding structure and defining individual responsibilities. MADE II has an opportunity to fine tune this alignment and be enlisted as part of the success once project is properly rolled out. A few of the ways revenue can be streamed from this intervention include:

- Local market off-taker payment – The immediate consumers of the energy as a service solution – the shop owners will pay in instalments for the service and this will serve as the

primary revenue stream. The solution provider will provide metered power without owning the equipment and in turn, the clients can pay for using mobile money or cash-based payment systems

- **Spin-off projects** – The success of this inception intervention can be easily spun-off into other local markets as well as foster partnerships in other states which will serve as additional income generating streams.
- **Consumer financing** – The data collected from this service on the users, could be tied to bank verification references and be used to support a consumer's/borrower's credit history, which in turn would aid consumer financing. Solution providers can now approach commercial banks and MFBs to support clients with consumer financing to provide energy boxes for residential and other light industrial purposes, as far as they are diligent with the payment for the solution.

Local market off-takers
Shop categorisation: Shops in the markets can be categorised into many tiers according to energy needs and a pricing structure to be determined per tier.
Interval payments: Payments can be made in daily, weekly or monthly intervals.
Mobile money payments: Mobile money solutions can be deployed to aid remote revenue collection as well as secure payments by limiting the movement of cash.

Local Retail Market – RE grid solution – Proposed timelines

Implementation Steps	Year 1, Q2	Year 1, Q3	Year 1, Q4	Year 2, Q1	Year 2, Q2	Year 2, Q3	Year 2, Q4
Stakeholder facilitation							
Development planning							
Facilitate SPV							
Partnerships							
Promote financing							
Provide TA for marketing/ comms and subsidise a forum							
Impact (women)		increased income	increased income	increased income	increased income	increased income	increased income

The local retail market electrification project might not have direct impact on the increase in number of jobs for women but the access to power will indirectly improve the income of the mostly women who transact in the markets.

Monitoring & Evaluation Metrics (This tracking will be a key responsibility of the SPV partners)
<ul style="list-style-type: none"> • Number of people connected to renewable energy by virtue of private financing and government support • Number of people that have been gainfully employed by virtue of renewable energy financing • Amount of CO2 emissions avoided by the installation of renewable energy projects • Number of people with potentially improved income by virtue of installing renewable energy solutions • Number of people with new job opportunities (disaggregated by direct, indirect, part-time and full time)

Potential for Scale:

After a pilot retail market has been successfully completed, the local retail market RE electrification project could be easily rolled out in other local markets in or around the Benin metropolis. The general idea will be to start with one of the small market locations, conduct a baseline study, monitor the rate of customer uptake and growth patterns in the market. Based on the impact recorded, design the next installations in other larger markets with more shops. To achieve scale, the SPV must ensure secure agreements with the Edo state Government to be sole providers of this service to all public markets in the State.

Potential High Impact/Longer Term Interventions in the Renewable Energy Sector

In the course of our research, we identified other high impact interventions for job creation and investment in Edo State that were beyond the scope and short term manageable interests of ESIP. Amongst these are:

Private/ Residential markets: Worthy of note is the potential for reputable RE project developers especially in the solar PV tech space, to set up firms in Edo state and supply products to the private market (strictly for residential purpose). Most importantly to achieve this will be leveraging on available support from local financial institutions like commercial banks or MFBs that are open to consumer lending and aid end users to adopt solar PV tech in their homes by paying in instalments after going through verifiable credit checks.

Agro-processing zones: Edo state relying heavily on agriculture and its by-products, has a strong potential to incorporate RE technologies to aid agro-processes like storage, drying, packing, milling, cooling etc. These could be in simple technology modifications like the conversion of an AC powered/ fuel operated motor to solar/ DC powered motors for milling. This would mean no more purchase of refined fuel products for agro-processing needs. However, funding is also required to achieve.

CHAPTER V FASHION AND BEAUTY ASSESSMENT

5.1 Introduction and Executive Summary

The purpose of this assessment is to determine if, within the fashion and beauty sectors, there are suitable opportunities for ESIP to facilitate further investment, increase incomes, and/or generate new jobs for Edo state's vulnerable population. The objective of this assessment is to chart a course for ESIP to identify and pursue investment and employment related initiatives that will serve as viable and aspirational alternatives to illegal emigration, and likely human trafficking. The assessment methodology used included secondary source desk research, key informant interviews with a broad cross section of public and private sector renewable energy stakeholders, and meetings with potential manufacturers, off-takers and consumers. For more detail on the overall MADE II and ESIP projects, the overall objectives and key performance criteria, and the M4P research and assessment methodology utilised, please refer to Chapter 1 of the consolidated ESIP Inception Study Main Report.

Methodology/Approach

The Nigerian Fashion Sector

The fashion industry has become a critical component of the Nigerian economy - creating jobs, promoting creativity, spawning entrepreneurship, and highlighting Nigeria's unique designs and culture. The 2005 re-based GDP figures for Nigeria, according to the News Agency of Nigeria (NAN), reveals that the Fashion, Garment and Footwear industry contributed 0.47% (estimated at N380 billion), to the national GDP.

The Nigerian fashion sector is vast and is comprised of designing, tailoring and garment manufacturing as well as many ancillary industries such as hair making, hair styling, accessories, textile manufacturing, photography, costuming, modeling, and fashion schools/academies. The distribution channels for fashion products and services is equally vast, comprised of national brands with large shops, boutique brands focusing on specific customer segments, rural retail outlets, internet sales, sole proprietorships, micro-franchises, and more. While the largest consumer of such products and services are individuals, Nigeria's booming entertainment sector (e.g. music, television, and film) is also a significant player in the industry.

The Nigerian Fashion Sector is made up of the following actors:

- i. Cotton farmers
- ii. Textiles companies (local and foreign)
- iii. Fashion designers
- iv. Tailors
- v. Garment manufacturers
- vi. Retail outlets (stores)
- vii. Micro-franchise, owner/operating retail product and service providers
- viii. Online fashion retailers
- ix. Fashion bloggers

The fashion industry in Nigeria has been immensely boosted by the effort of and the support of public and private institutions like MTN Nigeria, Heineken, GTBank, Bank of Industry, Nigerian Export Promotion Council, Nigerian German Business Association, British Council, and Vlisco Nigeria. These and other firms help to create wider awareness, appreciation and acceptance of the sector and its components by subsidising forums, sponsoring competitions, and hosting award ceremonies.

A major player and contributor to the growth and expansion of the sector is **Style House Files (SHF)**. SHF is a creative development agency for fashion designers. SHF has been at the forefront of the fashion industry working with Nigerian brands on brand positioning for years. SHF, through the Lagos Fashion and Design Week, has been able to give young, talented Nigerian fashion designers a platform to showcase their work to their target audience, thereby positively impacting job creation and the generation of additional sources of income.

Table 1: SWOT Analysis for the Fashion Sector

Strength <ol style="list-style-type: none"> 1. Creativity 2. Fashion Shows 3. Retail Revolution 	Weakness <ol style="list-style-type: none"> 1. Lack of garment manufacturers 2. Cheap imports 3. High running cost 4. Comatose textile industry 5. Lack of skilled manpower 6. Lack of production/tailoring hubs 7. Lack of retailing outlets 8. Lack of governance structure and coordination
Opportunities <ol style="list-style-type: none"> 1. Large population 2. Online sales platform 3. Increasing global demand 4. Wear Nigeria Campaign by Chimamanda Adichie 5. Synergy with Movie, Pageantry and Music industry 6. Awareness creation opportunities for trafficked returnees in Edo State 	Threats <ol style="list-style-type: none"> 1. Inconsistent government policies 2. There are no regulatory agencies 3. Lack of funding/access to finance 4. Poor infrastructure 5. Nigerian preference for foreign goods 6. Lack of access to information - research and data 7. Depreciation of the naira

The Nigerian Beauty Sector

The Nigerian beauty sector encompasses the sale of cosmetics, perfume, and products for skin and hair care. Beauty salons and makeup studios are considered as the service sector of the beauty industry.

Cosmetics and beauty care products can be classified into five sub-clusters; namely Body Creams, Beauty Care which will involve face creams, anti-ageing creams, eye and anti-wrinkle creams, Hair Products, Fragrances and, Personal Care products such as deodorants, anti-perspirants, hand and foot creams etc.

Nigeria's cosmetic and beauty care products are largely imported. Imports from foreign countries currently account for 70% of the domestic market, leaving Nigerian producers with the remaining 30%. This could be as a result of the mindset of consumers who regard Nigerian manufactured beauty products as being substandard or more expensive due to the high cost of production. Thus, there is higher demand for the imported cosmetic and beauty products against those produced locally.

Some of the notable players in the Nigerian cosmetics and beauty care products include foreign firms such as Procter and Gamble, Unilever, PZ Cussons. Other indigenous industry players are House of Tara International and Soulmate Industries Ltd. However, there is a need to grow the industry as the nation looks inwards to generate additional revenue from the non-oil sector.

The Beauty Sector is very wide and consists of a lot of sub components. These include among others:

- i. Hair Products Manufacturers
- ii. Hair Products and Extension Retailers
- iii. Hair Salons
- iv. Hair Stylists
- v. Make-Up Products Manufacturers (International and domestic)
- vi. Independent Makeup Artists
- vii. Makeup Studios
- viii. Retail stores e.g. Supermarkets and exclusive brand outlets and specialty stores
- ix. Customers

As mentioned above under the fashion industry, the beauty industry also has a vast array of distribution channels including but not limited to supermarkets, specialty stores, exclusive brand outlets, standard retail shops, and individual product and service professionals. Similar to fashion, Nigeria's booming entertainment sector (e.g. music, television, and film) also is a growing and significant player in the industry.

Table 2: SWOT Analysis for the Beauty Sector

Strengths <ol style="list-style-type: none"> 1. Creativity 2. Beauty fairs 3. Retail revolution 4. Natural and organic products 5. Online beauty retail outlets 	Weakness <ol style="list-style-type: none"> 1. Lack of manufacturing companies 2. Lack of skilled personnel 3. Lack of governance structure and cohesion resulting in low professionalism and poor competitiveness globally.
Opportunities <ol style="list-style-type: none"> 1. Population growth 2. Growing middle class 	Threats <ol style="list-style-type: none"> 1. Product counterfeiting 2. No regulatory oversight 3. Porous Nigeria border 4. No access to affordable financing

Key Findings

- There is very little industry data, information or statistics available on either the beauty or fashion sectors
- The fashion and beauty sectors are attracting new entrants, yet the industry is far from saturated. Only a few of the practitioners are specialized (expert in a particular sub component) or core professionals who can compete globally and meet certified standards.
- Competition in the sector is primarily based on price and quality. Each Make-Up Artist (MUA) and fashion designer is unique. They try to stand out through the quality of their artistry and by offering of a range of services and bespoke products.
- Despite the existence of the Fashion Designers Association of Nigeria (FADAN) and the Make-Up Guild, some respondents opined that the sector is highly fragmented and driven by fiercely independent entrepreneurs who do not seem to communicate or collaborate to any extent.
- Both the fashion and beauty sectors, in terms of products and services, are well represented across the country and demand continues to grow.
- Both sectors were affected by the economic recession and suffered a temporary decline in demand.
- According to the garment manufacturer, Sam and Sara; the garment sub sector of the fashion industry consists of contractors who get orders from the government or large organisations and then sub-contract the jobs to smaller

operators who lack the experience and expertise in order to maximize their gains.

- Some respondents, especially those that have made their names in the industry, speak of improvements in the sector as more and more customers now patronise local tailors. This is because of the gradually improving reputation of, and appreciation for, local designs and fabrics. Previously, local products were primarily used for making new clothes for burial and marriage ceremonies.
- Ten (10) out of 17 respondents plan to expand their current businesses. Some plan to expand into new lines of business like women's clothing, while others plan to open business outlets in new locations, offer training services, diversify into adjacency industries like the laundry business or develop an online sales platform to outreach to new prospective clients.
- In many cases, large orders for garment manufacturing from leading public and private sector institutions are not accompanied with initial deposits or upfront payments (e.g. to purchase raw materials) which results in a very high barrier to entry for SME manufacturers.
- High import tariffs/duties and clearing fees at the port on imported fabric and other raw and finished materials constrain the profit and inhibit the growth of the sectors.
- In general, industry practitioners lack marketing and sales acumen as well as infrastructure.
- Most of the local garment factories are unable to fill large orders because of a lack of industrial equipment (e.g. sewing machines).
- Perceived low purchasing power of potential customers in Edo state especially for fashion designers who provide services to high earning clients. Respondents in the footwear and accessories industry also talked about the issue of demand, they say the cost of producing locally is high hence the high cost of their products compared to the cheap imported ones.
- Edo state is generally considered to have low purchasing power which does not help attract new or existing players to its markets.
- Edo state residents expect local prices to be lower and the quality of service to be the same as in Lagos, but this is rarely the fact due to the contextual reality.
- There remains a large amount of counterfeit products on the market that are dangerous and often sold for lower prices.

Conclusions

1. Growth in the fashion and beauty industries has tremendously increased in the last decade due to increases in population, a growing middle-class, urbanisation and employment in formal settings.

2. Federal and State Government involvement in the fashion and beauty sectors have been peripheral with no substantial investment and/or commitment to their development.
3. The privatisation of comatose textile companies, such as Finetex Textile Limited and African Textile Mill Plc, may be needed to further foster dynamism and growth in the fashion sector.
4. Federal and State Government agencies and ministries need to be more active in these sectors through the enforcement of laws, especially as they relate to product standardisation, regulation, piracy, imports, and the ease of doing business.
5. More people are appreciating the use of beauty care products that are natural and present no side effects over the long term. Thus, the nutritional and organic sides of beauty products offers a growing market.
6. Industry stakeholders need to create more public awareness on the dangers posed by using locally made counterfeit beauty products.
7. Financial institutions like the African Development Bank (AfDB) could leverage its “Fashionomics” project to reach out to more fashion entrepreneurs on the continent, support the cotton farming value chain, and provide low interest loans and grants to jumpstart careers in the fashion and beauty sectors.
8. Stakeholder collaboration is key and can be achieved through workshops, trainings, fairs and networking events to bridge existing value chain gaps and market failures in both the fashion and beauty sectors.
9. An improvement in the ability of local manufacturers to compete against imported products will result in income and employment growth. To achieve this, adequate and affordable infrastructure such as land, buildings, electricity, and access to raw materials, must be in place.
10. Main players like Mai Atafo and Frank Osodi in the clothing segment, and House of Tara, who charge a minimum of N100,000 to train in their Make-Up Artist academies, are not willing to invest in Edo state. The main reasons are their main market is in Lagos, their raw materials are sourced in Lagos, and the size and purchasing power of Edo state simply doesn't make it financially attractive to further expand.
11. At this juncture, it does not look like the fashion and beauty sectors have the momentum or aspiration to either manufacture in or greatly expand their distribution and sales channels in Edo state.
12. Furthermore, owing to the peculiarity and scope of the fashion and beauty sectors, unavailability of quantitative data, time constraints in putting together this report and the lack of market structures in these sectors, there is a need for more extensive research and analysis to develop a deeper understanding of the problems and opportunities within the fashion and beauty sectors.

Proposed Interventions

As stated above, no specific short-term interventions with identified lead firms were discovered that would contribute to ESIP's goals and objectives in a material and timely manner. However, we have identified intermediate and longer term initiatives that might be worth considering if ESIP could find the right partner(s) or project(s) to collaborate with. The following interventions are seen as pre-requisites for Edo state to fully realise the potential of the fashion and beauty sectors:

- Developing, marketing, and delivering market-based training courses that are attractive and affordable to Edo's vulnerable population. The objective is to train aspiring artists and fashion designers with contemporary skills that will enable them to be competitive in the market. This would likely require partnering with other projects and programmes to leverage funds.
- Advocacy with relevant government bodies, such as the Nigerian Export Promotion Council and other relevant agencies, to facilitate easier import of raw materials as well as export of Nigerian designs, fabrics, and products.
- Awareness creation through broad-based traditional and social media campaigns to change the perception of Nigerians that 'Made in Nigeria' clothes, shoes, and other products are sub-standard. This could potentially include the patronage of 'Made in Nigeria' products by celebrities via ESIP's involvement with the entertainment sector and other recognised public figures.
- Supporting more public forums, events, exhibitions, and celebrations to showcase Nigerian designs and manufactured products in partnership with reputable brands, boutiques and retail outlets.
- Learning and development; fashion hubs; fashion shows that will attract investment and buyers.
- Support system that will enhance growth through continuous mentorship and entrepreneurial workshops.
- Working with Edo state's forthcoming industrial park and other land driven initiatives to make room for fashion and beauty manufacturing/production hubs that are safe, proximate, well-constructed, and have affordable and reliable sources of electricity.
- Development of a standardised training curriculum that includes but is not limited to make-up artistry, gele tying, and okuku making (which is unique to Benin). These training offerings should be easy to access, affordable, and offer some sort of credible and portable certification. Herein, partnering with existing organisations, such as vocational training schools, fashion academies, and NGO's focused on enterprise development for youth and women, will be needed to ensure as broad a coverage as possible, with a focus on the zones known to be subject to the highest incidences of human trafficking.

5.2 Scope of Study

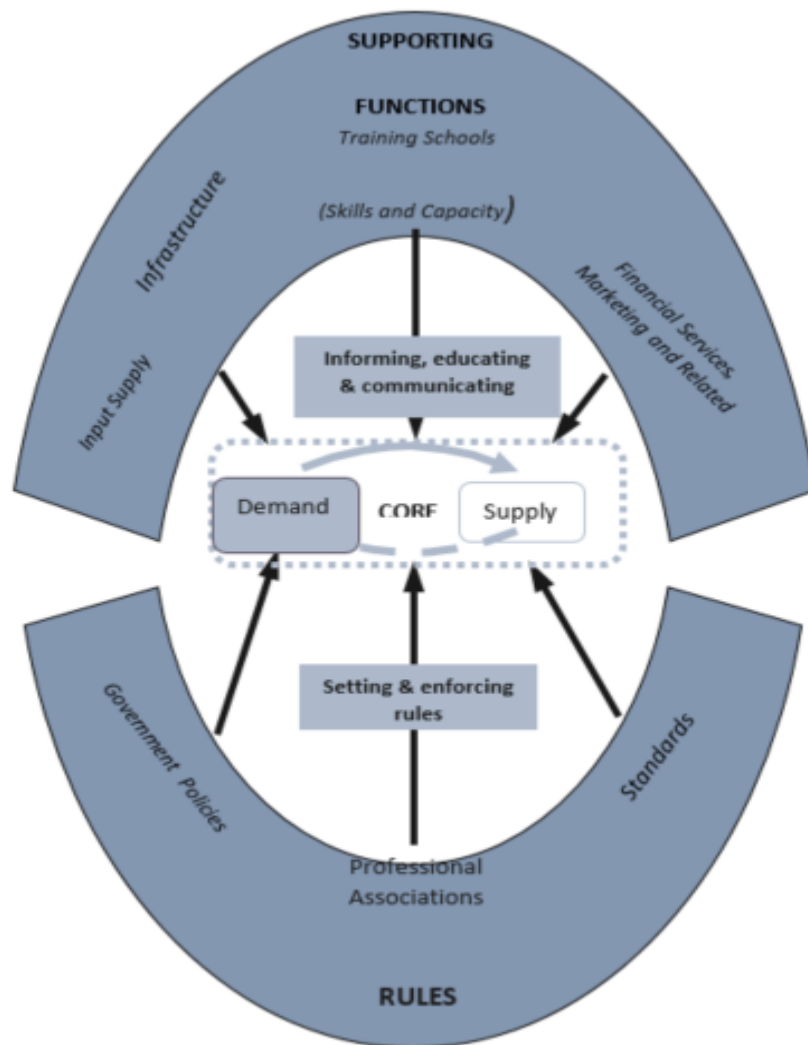
The assignment will focus on a comprehensive assessment of fashion and beauty sectors. In line with the purpose and objective of the assignment, get a comprehensive analysis of:

- Selected areas in the sector (including clothe-making, footwear/bags, makeup and hair making), highlighting those channels, which are growing, and those, which are shrinking;
- Identify the players in the sector by scale and gender;
- Identify key actors in the value chains;
- Identify factors that hinders growth potential of the sector i.e. finance, skills, technology, business linkages etc. by analyzing the business environment and the incentives and disincentives created for investment and upgrade;
- The economic benefits/impacts and market size by identifying the capabilities and incentives/disincentives for investing in upgrading to exploit end-market opportunities- all along the value chain, with particular attention on target beneficiaries;
- The value chain mapping and distribution of inputs and products by identifying and analyzing the supporting markets-service needed to strengthen value chain (including finance, skills, technology and business services) given the business environment and growth of, expected returns from and perceived risk in the value chain.
- Opportunities for a potential growth node for the sector, and examine its linkages to the rest of Nigeria.

5.3 Sector Overviews

The fashion and beauty sectors are two broad industries. While fashion encompasses clothe-making and footwear/bags sub-sectors, the beauty sector is made up of beauty product manufacturers and make-up artists/entrepreneurs (MUA), who trade in cosmetics and beauty care products. See Figure 1 below for an M4P systems graphic of the fashion and beauty sectors.

Conceptual Framework of the Fashion and Beauty industry



5.3.1 The Nigerian Fashion Sector

The Nigerian fashion sector is comprised of designing, tailoring and garment manufacturing. The sector is vast, with correlated industries such as styling, textile manufacturing, photography, costuming, modeling, fashion schools and as well as retailing.

The Nigerian fashion sector has evolved over the years to become a sector that can provide jobs, promote creativity, provide social security, and create a massive economic base of micro, small and medium scale enterprises that are able to lift a large number of the populace from poverty to wealth and global relevance.

Economic Contribution

The fashion industry has become a critical component of the Nigerian economy, creating jobs, promoting creativity, ingenuity and culture. The 2005 re-based GDP figures for Nigeria, according to the News Agency of Nigeria (NAN) reveal that the Fashion, Garment and Footwear industry contributed 0.47% (about N380b estimate), to the national GDP.¹⁰² The Sub-Saharan Africa's apparel and footwear market is reportedly worth \$31 billion according to data by Euromonitor.¹⁰³

The main Nigerian fashion sector practitioners include:

- i. Cotton farmers
- ii. Textiles companies (local and foreign)
- iii. Fashion designers
- iv. Tailors
- v. Garment manufacturers
- vi. Retail outlets (stores)
- vii. Micro-franchise, owner/operating retail product and service providers
- viii. Online fashion retailers
- ix. Fashion bloggers

Top Indigenous Fashion Designers

Nigeria is a fashion powerhouse not only on the African continent, but globally. Numerous Nigerian fashion designers have won accolades for their exemplary work and roles in showcasing the Nigerian spirit, culture, and diversity. The following ten (10) fashion designers are, no doubt, the trendsetters putting Nigerian and African fashion on the international map.¹⁰⁴

1. Folake Folarin-Coker

Folake Folarin-Coker is the founder of Tiffany Amber, a world-famous iconic label whose journey began in Lagos in 1998. Born in Lagos, she did her schooling in Europe (England, Scotland and Switzerland), where she got an opportunity to interact and engage with various cultures while still at a young age.

Folake's tasteful and colorful creations have earned her global recognition, making her the first African fashion designer to showcase her talent at the New York Mercedes Fashion Week two years in a row. She has also been widely featured by International media houses such as CNN, and in 2013, she received an Enterprise Award at WIE (Women, Inspiration and Enterprise) Symposium. In addition, she has made it onto the Forbes Power Women in Africa list.

2. Duro Olowu

London-based, Nigerian born, Duro Olowu, shares both Nigerian and Jamaican roots and is a household name in both the Nigerian and global fashion industry. He is, undoubtedly,

¹⁰² <https://www.pmnewsnigeria.com/2014/08/09/nigerias-fashion-industry-worth-over-10bn/>

¹⁰³ <http://www.euromonitor.com/apparel-and-footwear-in-2015-trends-developments-and-prospects/report>

¹⁰⁴ <https://www.africa.com/top-10-nigerian-fashion-designers/>

a well-respected Nigerian fashion design personality, famous for his unique and colorful African prints. He's super talented in working with patterns, and his designs incorporate the rich culture, spirit, and diversity of the Nigerian people.

His interest in fashion began when he was only six years old and went on throughout his childhood. Olowu's talent has earned him global fame and recognition with top clients to his name such as Michelle Obama, Solange Knowles, Uma Thurman, and Linda Evangelista, among others.

In 2005, he was the first designer to be named New Designer of the Year at London Fashion Week without staging a catwalk show. At the African Fashion Awards in 2009, he was named the Best International Designer and was one of the six nominees for the Swiss Textile Federation's top prize of 100,000 Euros. Both British and American Vogue in 2005 named his waist patchwork "Duro," as the "Dress of the Year."

3. Deola Sagoe

Deola Sagoe is a renowned Nigerian fashion designer, entrepreneur and founder of The House of Deola Sagoe. Her unique approach of designing lively and colorful prints has earned her global following including notable personalities such as Oprah Winfrey and Will Smith, who have recognized her for her celebration of African prints.

Having launched her career in 1989, Sagoe has a Master's Degree in Finance and Management and has studied at both University of Lagos and University of Miami. She is a woman with many layers and this is reflected in her multilayered designs. Her signature designs, Attitude and Elegance, draw their inspiration from fabrics with a traditional Nigerian touch and western aesthetics.

Aside from showcasing her couture collection at Cape Town and New York Fashion Weeks, Deola won the MNET/Anglo Gold African Designs 2000 Award. United Nations World Food Program appointed her Nigeria's ambassador to the program, "Catwalk the World: Fashion for Food." This was aimed at raising funds to reduce, by half, the number of starving people in the world, especially children by 2015.

Her three daughters, Teni, Tiwa and Aba Sagoe, have taken after their mother and are owners of the popular CLAN fashion label.

4. Lisa Folawiyo

Lisa Folawiyo is a self-made Nigerian fashion designer who is famous for the way she creatively fuses traditional West African fabrics with modern tailoring techniques. She is known for her label, Jewel by Lisa, which she launched in 2005, and has since grown to become a global fashion brand with showrooms in New York and Nigeria.

Folawiyo uses Ankara, a traditional West African fabric, to create captivating and luxurious custom prints. She has her own fabric line that also produces accessories such as jewelry and purses. Line J Label, her diffusion line, showcases the best of Nigerian culture by incorporating Afropop with tasteful urban designs. Some of her celebrity fans include Beyonce, Kelis, Tasha Smith, and Eve.

Aside from Nigeria, her collections have been showcased in the UK, US, and South Africa. She has participated in New York Fashion Week 2010 and Paris Fashion Week 2010.

Some of her career achievements include winner of the African Fashion Award in 2012, and she was featured in Vogue Italia in 2012. In 2014, Women's Wear Daily (WWD) named Folawiyo among the eight emerging talents. In 2015, BOF500, a prestigious list of international brands, featured the designer among top fashion brands making an impact on the global scene.

5. Soares Anthony

Soares Anthony is a young, energetic, and talented fashion designer who focuses on his men's clothing line, Soares Anthony. His work draws inspiration from local Nigerian fabrics coupled with Japanese tailoring designs. His designs are masculine, yet modern and trendy by way of transforming an ordinary look into a sophisticated design that embraces elegance.

Anthony acquired his love for fashion when he was a young boy where he spent his time sketching and drawing. He loves to work with colors, and his awesome talent has seen his pieces worn by famous politicians and celebrities. Young and successful, he is a talented fashion designer to watch out for as his name continues to cause ripples in both the local and global fashion industries. His pieces are also sold globally in the UK, US, and France. Anthony uses his talent to make an impact on the community through a mentoring program he runs that helps young and upcoming Nigerian designers excel and compete on a global platform. Nature, colors, and artwork are his main sources of inspiration.

6. Lola Faturoti

Lola Faturoti is a Nigerian-born, New York-based fashion designer with extensive experience and renowned international repute. Faturoti, who hails from Ondo State, went on to school in London before moving to New York in the early 1990s. Her fashion journey began from childhood when she helped her grandmother, who was also a fashion designer.

Her inspiration is mainly drawn from her roots, and Faturoti rose to fame in New York when she made a dress to celebrate Barack Obama's election as President of the United States. The dress had these bold Yoruba words, "Oluwa gba President Barack Obama," which means, "God Bless President Barack Obama."

While in New York, she was employed in the Charivari Boutique where president of the company, Barbara Weiser, noticed her potential and passion for unique fashion and helped her launch her first fashion collection. Her passion for African fashion is profound. Her deep African roots, as well as extensive global experience with having lived and worked in New York and Milan have been instrumental in her success and international spotlight.

7. Frank Osodi

Frank Osodi is a perfect presentation of how Nigerian cultural diversity has been embraced in unique fashion design trends. With extensive industry experience spanning over 25 years, Osodi began his career as a model and was employed by top household fashion houses, such as Dakova and Nikki Africana.

He also worked on popular TV commercials such as Maclean's before rising in the ranks to become a model manager. He went into choreography before finally launching his makeup label, House of Bunor and Fashion Designing. His big break came when Silverbird hired him to be the designer and makeup artist for Agbani Darego, who was the 2001 Miss World winner. Since then, Osodi's career has continuously rewarded him, enabling him to acquire many clients across the world.

Effortless beauty and elegance is the foundation of Osodi's career and is reflected in the years he has been in the industry. He has played a major role in numerous events such as The West African Fashion Week 2008, whose aim was to showcase the very best of Nigerian fashion.

8. Zizi Cardow

Zizi Cardow has been instrumental in successfully showcasing the Nigerian fabric and culture on a global level. She launched her label, Zizi, which has seen her profile expand proudly, letting the world know how unique and elegant the Nigerian fabric is. She is credited with promoting the Ankara fabric, which has earned it global fame as the fabric is now being worn to red carpet events around the world.

When she was young, Cardow hoped to become a forensic profiler, but after landing her first fashion job at only 17 in an Italian-owned boutique ignited her interest in fashion. Being a popular African fashion ambassador, her success has seen her designs featured in many international catwalk events in Cape Town, Milan, Paris, the USA, and other destinations worldwide.

Her global revolution for the African fabric to be appreciated internationally has earned numerous awards, with the list being long and continuing to grow. In 2001, after only one year in the fashion industry, she bagged the Prestigious Designer of the Year Award at the Nigerian Fashion Show. With this award to her name, the world noticed her work, and her work was showcased on a global platform.

In 2002, other awards knocked at her door. The DAME Award recognized her for her outstanding achievement in fashion, and also winning the St. Moritz Style Selection Award and Nigerian Women Awards. From 2002, she kept winning numerous awards successively year after year, raising her profile in the industry. Some of the other major accolades Cardow has achieved include the 2010 UN Peace Ambassador, 2010 Global Leadership Award, 2010 Young Achievers Award, 2010 Fashion and Style Award, 2010 Merit Award for African Heritage, 2009 Zenith Award for Excellence, and 2007 African Role Model Leadership Award, as well as many others.

Her client base is vast, consisting of famous political figures and celebrities. She has also been featured by top international media houses such as CNN, SABC, Channel O, and FTV. Zizi Cardow has given back to society through numerous mentorship programs, which have, in turn, earned her awards.

9. Mai Atafo

Mai Atafo is a well-known Nigerian male bespoke designer. He rose into the limelight after launching his brand, Mai Atafo, which has been successful both on the local scene, as

well as global fashion scene. His aim throughout his career has been to uniquely showcase the personality of a confident and elegant Nigerian gentleman.

Atafo's clothing label has gained popularity while attracting top clientele. He has dressed personalities such as Most Beautiful Girl in Nigeria in 2005, Omowunmi Akinnifesi and I.K. Osakioduwa. In addition, other famous personalities on his list are Mercy Johnson, 2Baba, Waje, Gbenro Ajibade and Stephanie Okereke.

Atafo also launched his fashion line, Weddings by Mai, in 2011 with his designs being showcased at various high-profile events. Atafo has bagged numerous awards during his career to celebrate and appreciate his excellent craftsmanship. Some of the awards he has received include being the winner of City People Fashion and Style's Hottest New Male Designer two years in a row, Lagos Fashion Week (LFW) Menswear Designer of the Year, Mode Men Magazine's Fashion Designer of the Year, and Allure's Most Stylish Man of the Year.

10. Ade Bakare

Ade Bakare is an established Nigerian fashion designer whose impeccable African designs have caused ripples around the globe. Having been in the fashion industry for two decades, his super elegant designs are popular, making him a household name in both Nigeria and London. His work is a perfect example of female sophistication.

Bakare was born and schooled in the UK, after which he was employed in some of the top and finest fashion houses of Christian Stambolian and Victor Edelstein. In 1991, he founded Ade Bakare Couture and began selling his own collections to various boutiques in England, Scotland, and Channel Islands.

His work ranges from exclusive evening gowns to stylish wedding gowns, hats and fragrances. He deals with high-end clients in both Nigeria and London, who have recognized his over-the-top fashion talent. Bakare also has perfumes named Breeze, and Ade Breeze which is a jersey line of his brand.

Bakare's work has been showcased around the world in places such as New York, Vienna, Mozambique, Morocco, Paris, and Cape Town. Aside from having numerous English personalities and celebrities wearing his pieces, he also has first ladies, senators, and minister's wives as clients. He has also been involved in numerous programs geared to inspire upcoming designers. The Ministry of Youth and Culture recognized Bakare for this role in supporting young and upcoming fashion designers.

Bakare has also received awards from the Paris Academy and Conde Nast Publication. His dresses are known to be classic with a modern twist while spanning various types of fabrics. Bakare is well-known and celebrated for his famous and luxurious female gazar and organza sweep coats.

Marketing the Fashion Industry

Involvement by private and public sector players has contributed immensely in boosting the fashion sector in Nigeria. From telecom companies to banks, breweries, multi-nationals

organisation, non-profit agencies and even diplomatic missions have all in the past jostled for spots in the Nigerian fashion ecosystem. Style House Files (SHF), a creative development agency for Nigerian and African designers founded by Omoyemi Akerele, has been in the fore-front of helping Nigerian fashion brands on positioning and retail strategies. SHF also helps brands gain essential international exposure through presenting showcases at Pitti Immagine in Italy, and through Lagos Fashion and Design Week (LFDW). For example, it was through showcasing at the Pitti Immagine held in Florence Italy that led to the Lanre Da Silver-Ajayi's brand LDA to become the first African fashion label to stock at the Dolce and Gabbanna multi concept store in Milan, Italy.

Lagos Fashion and Design Week

The Lagos Fashion and Design Week (LFDW) Founded by Akerele in 2011, runs a four-day schedule featuring a select list of talented up and coming designers and fashion entrepreneurs. The LFDW has given the Nigerian fashion industry its place on the global scene.¹⁰⁵ Burgeoning talents have used the LFDW to present their work to larger markets. Adebayo Oke-Lawal, the designer behind Orange Culture, an androgynous Lagos based street wear brand, self-funded debut at Lagos Fashion Week led to his nomination as one of 30 designers for the 2014 LVMH prize for young fashion designers (300,000 euros prize).¹⁰⁶

Box 1: I realised that there was a huge gap that needed to be filled and, for the industry to grow, it was important to think of a platform that would act as a catalyst on the scene to spearhead change and work towards positioning fashion properly in Nigeria, and of course in Africa, as a business. – **Omoyemi Akerele, Founder, Lagos Fashion Week**

In the eight years of its existence, the LFDW event has had the following companies as headline sponsors:

- ✓ MTN (2011 and 2012), co-sponsored by British Council
- ✓ GTBank (2013 and 2014)
- ✓ Heineken (2015 - present)

The LFDW events which usually features Runway shows, Design exhibitions, Master Classes, Fashion Business Series, Fashion Focus talks, and Awards has been a platform for emerging and established designers to display their fashion artistry. The Moët Hennessy Louis Vuitton SE (LFDW) 2016 edition featured the participation of the African Development Bank (AfDB), with the launch of “¹⁰⁷Fashionomics”, a platform to develop the African fashion industry for jobs creation.

¹⁰⁵ the Lagos Fashion and Design Week (LFDW)

¹⁰⁶ LVMH Moët Hennessy Louis Vuitton SE, better known as LVMH, is a French [multinational luxury goods conglomerate](#) headquartered in [Paris](#), France.

¹⁰⁷ [Fashionomics \(“the economy of fashion”\) initiative](#) will offer AfDB’s support to micro, small and medium-sized businesses (MPME) in the fashion and textile industry in Africa. The Bank has already invested €10 million in Madagascar, in the support project for investment promotion (PAPI), focused on MPME in these industries and in particular on women and young people.

The GTBank Fashion Weekend

After successfully partnering with SHF as titled sponsors for the LFDW of 2014, GTBank returned in 2016 with its own two-day fashion event to further enrich the Nigerian fashion landscape.

The GTBank Fashion Weekend brings together the most promising, talented and recognised fashion designers, brands and retail enterprises from across Nigeria and abroad to showcase the latest trends and products to a large and diverse audience of consumers, press and industry enthusiasts.¹⁰⁸

The inaugural event, which held on the 12th and 13th of November 2016, not only created visibility and trade opportunities for indigenous businesses but also facilitated learning workshops and encouraged e-commerce as a sustainable avenue for driving growth. The 2nd edition of the GTBank Fashion Weekend held on the 11th and 12th of November, 2017.

Africa Fashion Week Nigeria

Africa Fashion Week Nigeria (AFWN) is a platform that supports upcoming designers from Nigeria and Africa. The core aim of AFWN is providing visibility platforms for new talent, who would otherwise not have the means to gather national attention and awareness of their own.¹⁰⁹ AFWN also get the support of established Africa designers and pay homage to the African designers who have continuously and tirelessly worked to the growth of Africa Fashion.

The African fashion week Nigeria (AFWN) first edition was hosted on May 18, 2014. The event, a brainchild of Princess Ronke Ademiluyi was conceived as a result of the success recorded by Africa Fashion week London (AFWL) which she started in 2011 in London UK.¹¹⁰ The fifth edition is scheduled to hold on 6 – 8 July 2018 at National Arts Theatre with over 50 African designers from various countries like Namibia, Zambia, Nigeria, Ghana, Zimbabwe, UK and more showcasing in a three-day world class fashion event.¹¹¹

FADAN Fashion Shows

FADAN has been in the forefront of promoting the Nigerian fashion industry through Fashion shows and empowerment programmes. FADAN host fashion shows like the Lagos Fashion show and Runway FADAN. While Lagos Fashion Show showcases both indigenous and international brands¹¹², Runway FADAN is a platform for emerging designers.¹¹³ Previous FADAN events include the Lagos Fashion Show 2016, and the Runway FADAN 2015 and 2016 which held in Lagos and Abuja respectively. The Runway FADAN 2016 Abuja, had as its theme “Clothing the Future”- An initiative to cloth 5,000 Nigerian Children on the Street.”

¹⁰⁸ <https://fashionweekend.gtbank.com/about/>

¹⁰⁹ <http://www.daviva-blog.com/single-post/2014/06/17/Da-Viva-at-AFWN-Africa-Fashion-Week-Nigeria>

¹¹⁰ <http://sunnewsonline.com/designers-on-global-stage-as-africa-fashion-week-nigeria-season-3-opens/>

¹¹¹ <http://www.pulse.ng/lifestyle/fashion/event-kicks-off-with-a-daviva-urban-catwalk-show-id8273782.html>

¹¹² <https://www.youtube.com/watch?v=qphMfpix9il>

¹¹³ <https://www.youtube.com/watch?v=p1dT-qBdN2Y>

EVOL Fashion Shows

In Edo State, Evol Entertainment – a subsidiary of la Evol de moi - has been at the forefront of fashion fairs in the state, with its yearly fashion show in University of Benin (UNIBEN). The event is an engaging platform for new and emerging fashion designers to showcase their collections and pieces on the runway with the aim of increasing youth entrepreneurship in fashion designing, accessorizing, hair & makeup, hair styling and modeling.¹¹⁴

In February 2018, Evol Entertainment held the sixth edition of the event with the theme: Healthy You. In his address, the chairman of Evol Entertainment, Dr Agogbuo Chigbo Joshua, said the show was initiated to promote youth entrepreneurship and also to provide a platform for youngsters to pursue their talents in fashion designing. He said the show offered a platform for young fashion designers operating from campuses to showcase their products to the world.¹¹⁵

Fashion Promoters in Nigeria

- **Bank of Industry**

The Bank of Industry (BOI), in line with its cluster-specific approach to SME financing, launched a N1bn Fashion Fund for female SME operators in the fashion industry in 2015. BOI's foray into the fashion industry through this Fund was in order to exploit the enormous opportunities the industry has to create jobs and generally grow the stature of the Nigerian fashion industry within the global fashion industry.

The N1bn Fashion Fund was available to women who were into fashion business in all the 36 states of the federation. It had a tenor of three to five years, with a moratorium period of 12 months from the date of disbursement. The loan was priced competitively, having a single digit interest rate of just nine (9) percent.

BOI went a step further in 2016 by becoming co-sponsors of the African Fashion Week Nigeria (AFWN), 2016 alongside the Nigerian Export Processing Council (NEPC), and the Nigerian-German Business Association (NGBA).

- **Nigeria Export Promotion Council**

The Nigerian Export Promotion Council (NEPC) is Nigeria's apex agency for the promotion of non-oil exports. It promotes the development and diversification of Nigeria's export trade; assists in promoting the development of export-oriented industries and plays a leading role in the creation of export incentives.

In 2016, The **Nigerian Export Promotion Council (NEPC)** entered into an agreement with **Style House Files**, for the management of its **Human Capital Development Centre (HCDC)**. The HCDC located in Apapa Lagos has over 150 sewing machines, pattern making and cutting tables. This arrangement was to facilitate capacity development for the garment sector. Under the arrangement, Style House Files will manage the HCDC and run training programmes that meet international standards for developing the skills of practitioners in the garment-making sector to meet the requirements of the fashion industry for exports.

¹¹⁴ <https://www.bellanaija.com/2014/09/experience-fashion-music-exhibitions-at-the-evol-fashion-show-4-0-in-uniben-this-october/>

¹¹⁵ <http://thenationonlineng.net/fashion-fiesta-uniben/>

In the second edition of the training at the HCDC (May 2017), 64 students — 16 industrial pattern makers and 48 sewing machine operators — successfully completed their skill acquisition training. The 8-week training session which was in partnership with **Vlisco Nigeria**, a textile manufacturing company, was facilitated by Style House Files, and promoted garment making skills, creation and upgrade of the technical skills of participants to improve quality, productivity and efficiency level of the garment industry.¹¹⁶ Speaking at the event, the then Executive Director/CEO of NEPC Mr. Segun Awolowo said, “At the training center students are exposed to fundamental expertise and mastery needed to contribute to the garment and textile industry, catalyzing an ecosystem that fosters a trade oriented private sector through indigenous product development and export.” Also speaking on the success of the training, Country Manager, Vlisco Nigeria, Mr. Adebisi Yeye-Adekunle said, “Vlisco is committed to facilitating solutions that empower creatives with skills and revenue generating opportunities within the textile and garment sector of the economy, an industry we believe will be very crucial in the future economic landscape of Nigeria.”

- **Nigeria-German Business Association**

Nigeria-German Business Association (NGBA) was founded in 1986 to promote bilateral trade between Nigeria and Germany. It comprises representatives of the German business community in Nigeria, the Nigerian business community, the delegation of German Industry and Commerce/AHK Nigeria and the German Embassy.¹¹⁷

The NGBA a not-for-profit organisation comprising of over 400 Nigerian and German owned business enterprises, was named as an institutional partner for the AFWN 2016 first ever “Textile and Garment Manufacturing Conference” which held at Eko Hotels & Suites Lagos on Friday July, 1st, 2016. The conference with the theme 'Making Nigeria the Fashion Production Hub of Africa' hosted fashion entrepreneurs, development finance institutions, and textile industry groups among others. The conference which was focused on reviving textile and garment production, sought to position Nigerian home-grown fashion entrepreneurs for emerging opportunities in an increasingly globalized world. As Nigerian designers and fashion entrepreneurs gain increasing recognition across the world’s fashion capital of New York, Paris for their genius, there is more than a compelling need for the local fashion production value chain to be strategically positioned to face the influx of global challengers.¹¹⁸

- **Vlisco Nigeria**

Vlisco, a textile manufacturing company has been creating unique textiles - Dutch Wax/Wax Hollandais - since 1846. Their textiles are known for their wax effects, distinct colour mixes and designs. They employ a wax process which originates from elaborate batik techniques that ensures that every inch of the fabric is unique. The brand has become a standard for creating authentic Dutch wax today as each fabric stands true to Dutch craftsmanship.¹¹⁹ Vlisco is the most popular producer of what is

¹¹⁶ <https://guardian.ng/saturday-magazine/64-students-complete-skills-acquisition-at-nepc-hcdc-vlisco-training/>

¹¹⁷ <https://www.thecable.ng/adebija-appointed-dg-nigerian-german-business-association>

¹¹⁸ <http://www.pulse.ng/lifestyle/fashion/africa-fashion-week-nigeria-2016-attend-the-textile-garment-manufacturing-conference-tomorrow-id5211446.html>

¹¹⁹ <http://www.pulse.ng/lifestyle/fashion/vlisco-fashion-fund-2017-winner-is-skentele-by-etti-id7604297.html>

dubbed 'ankara' in Nigeria and West Africa. The brand has its largest market in the region.

In order to boost the creative industry in Nigeria and contribute to entrepreneurship in the country, Vlisco launched the Vlisco Fashion Fund (VFF) in 2014, an annual development initiative to empower African designers in fulfilling their dreams. The Vlisco Fashion Fund supports designers in starting and strengthening their own fashion businesses giving the winner of the annual competition a chance to win N2Million and a masterclass. VFF is Vlisco's way of creating a platform that connects Africa's fashion talent and creativity with their knowledge and activities in the African and global fashion world.

- **Da Viva Fashion Limited**

Da Viva is a brand for the fashion lover, blending cutting edge designs with the vibrant colours associated with traditional African fabrics.¹²⁰

The Da Viva brand has been partnering and sponsoring fashion shows in Nigeria and London. Some of the fashion shows that have been sponsored by Da Viva include the African Fashion Week Nigeria (AFWN) and the African Fashion Week London (AFWL), and the FADAN Fashion show.

Da Viva been a major sponsor of fashion shows in Nigeria, this has in turn exposed Da Viva brand to the right audience by defining African fashion in the right perspective through the various medium that the various shows is promoted. Designers tend to patronize Da Viva brand to showcase at the event since they are aware of Da Viva being a major textile company sponsoring the fashion shows. Nigerian and London based Nigerian designers display on the runway special collections with Da Viva fabrics both pattern and plain Da Viva fabrics.

In 2016, Da Viva brand was well represented at AFWN 2016 with 5 designers at the runway sponsored by Da Viva and one of the designers Mcstell, emerged winner of Nigeria Next Top Designer, a sister company to AFWN.¹²¹

Governance in the Fashion Sector

The fashion industry in Nigeria is governed by **Fashion Designers Association of Nigeria (FADAN)**. **FADAN** is the recognized body for the fashion designers profession in country and was duly incorporated in 1989 by the then Federal Ministry of Trade and Corporate Affairs.¹²² The organization has a secretariat at National Art Theatre and is supported by the National Council of Art and Culture (NCAC), a Federal Government organ charged, with the responsibility of coordination, development and promotion of the Living Arts and Culture of Nigeria at national and international fora.¹²³

In its almost 30 years of existence, FADAN has had as its presidents, notable Nigerians, including the 1986 Fashion designer of the year award winner, Mrs Folorunso Alakija, who today is an oil magnate and one of the richest black women in the world. Mrs Alakija who until

¹²⁰ <http://www.daviva-blog.com/>

¹²¹ <http://www.daviva-blog.com/single-post/2016/07/22/DOCUMENTARY-ON-AFWN-2016>

¹²² <http://fadan.ng/>

¹²³ <https://www.ncac.gov.ng/>

2001 was a fashion designer and CEO Supreme Stiches - later rebranded Rose of Sharon House of Fashion - served as National President of FADAN for two terms, and is now a lifelong Trustee of the organisation.¹²⁴ The current president of FADAN is Mrs. Funmi Ajila-Ladipo, who is also the Creative Director of House of Regalia. She is the fifth president of FADAN, and is in her second term of three years which started in May 2016.¹²⁵

FADAN has state chapters in Akwa Ibom, Delta, Ondo, Lagos, Abuja, Yobe, Uyo, and Ibadan (Oyo). Membership of FADAN is in three categories: Student, Emerging designer and Professional Designer with membership fees of NGN10,000, NGN25,000 and NGN50,000 respectively. While the student membership is for a period of five years, emerging and professional designers' membership fees are renewable every year.¹²⁶

FADAN has been working with stakeholders in the industry to organize events like the 2015 "Mother of All Shows" with the support of Da viva Fabrics. Sub Skill Workshops are also organised alongside the fashion shows in skills like: pattern drafting, sewing, fabric painting and fabric embellishment.

Private Labeling in the Fashion Industry

Private labeling or contract manufacturing is the outsourcing of part of the manufacturing process of a product to a third-party. More specifically, contract manufacturing is an outsourcing of certain production activities that were previously performed by the manufacturer to a third-party. A company may outsource the manufacture of certain components of the product or outsource the assembly of the product.¹²⁷ Contract manufacturing or private labeling is a common practice in the Nigeria fashion industry because of a dearth of tailoring and production hubs in the country.

SWOT Analysis of the Fashion Industry

The fashion industry is divided into the creative and sales functions, that is, design and production on one side and sales and distribution on the other. The SWOT analysis will be used to assess the industry in terms of all four functions.

Strengths

Creativity: In the Nigerian fashion, creativity is strength. Nigerian designers have featured prominently around the world, from Vogue to the New York Times. The creativity of the Nigerian designer has been on display especially through the use of Africa fabric. Ankara fabric, which is perhaps the most used by designers, called prints and tribal by the western world, is used in making blazers, customized accessories, jumpsuits, dresses, bags, shoes, etc; and it is being worn all over the continents. Even the first lady of United State of America, Michelle Obama, was photographed and spotted on various occasions wearing African influenced designs, made by a Nigerian Designer Duro-Oluwa.

¹²⁴ <http://theroseofsharonfoundation.org/meet-the-founder/>

¹²⁵ <http://fadan.ng/new-president/>

¹²⁶ <http://fadan.ng/signup/>

¹²⁷ <https://study.com/academy/lesson/what-is-contract-manufacturing-definition-lesson-quiz.html>

Fashion Shows: In the past 10 years, Nigeria's fashion has been revolutionized by world-class fashion shows such as Arise and Lagos Fashion and Design Week that have drawn attention to the sector.

Retail Revolution: There has also been a fashion retail revolution with many malls being built in Lagos, Abuja, Enugu, Ibadan and other population dense cities in Nigeria.

Weakness

Lack of garment manufacturers: A lack of garment manufacturers in the country is a serious weakness.¹²⁸ The challenge for designers is that it is expensive to produce collections in Nigeria. It is costly to find well-trained tailors and pattern cutters and also to power machines. This has led many designers to create their collections abroad in countries such as Ghana, China, India and Turkey. This leads to much better quality but increase prices, since they pay with foreign exchange. Affordable clothing stems from mass production through garment manufacturing. This is more or less the biggest reason Nigerian fashion is expensive. Garment manufacturing is the process of mass-producing clothes, using efficient industrial methods to drive down the cost of production. Nigeria does not have enough garment manufacturers.

Cheap imports: Cheap imports constitute a weakness in the sector. A major deterrent to investment in garment manufacturing for everyday fashion is the flooding of markets with cheap imports. Countries like China are aware of Nigerian's large population and are able to mass produce affordable clothing that is suitable to the nation's budget. Garment manufacturing requires power and Nigeria's power situation is problematic. If Nigerians are supposed to 'Buy Nigerian' the clothes have to be affordable and the only way to make them affordable is to invest in garment manufacturing. Nigeria needs garment factories with industrial sewing machines and industrial pattern cutting machines. The country needs training schools to train machine operators, production managers and the various personnel that will maintain the machinery. The investment will be capital intensive but the benefits of building businesses and creating jobs outweigh any disadvantages.

High running costs: The high cost of running a fashion business limits the profitability of the entire value chain. In fashion you need the creatives such as designers, and the business people, who will help build business development, sales, personnel that will help you draft contracts and keep accounting records. Oftentimes, a fashion business has a designer, tailors and a brand manager - that is an incomplete team. Nobody is focusing on sales and creating business opportunities. Nobody is looking internally at the business operations to ensure efficiency. Again, limited revenues prevent designers from hiring competent staff; they are forced to play all the roles themselves. Designer entrepreneurs tend to neglect the business side and therefore their businesses rarely scale up or even worse they run into financial hardship and have to stop operations.

Comatose textile industry: A comatose textile industry affects the fashion sector adversely. Nigeria today has about 30 textile mills still functioning whereas there were almost 200

¹²⁸ <https://guardian.ng/saturday-magazine/fashion/the-role-fashion-plays-in-the-hopes-possibilities-and-realities-of-nigerians/>

operating in the 70s. The Nigerian textiles industry has been in decline since and due to the discovery of oil. Government neglect and no industrial policies to protect the sector have led to the reliance of imported fabric for our fashion industry.

Lack of skilled manpower: In the fashion sector, a lack of skilled personnel hinders the development of the sector. Lack of adequate fashion industry education is a major problem; our tertiary and vocational institutions are not in good shape.

Lack of tailoring/production hubs: Affordable clothing stems from mass production through garment manufacturing. This is more or less the biggest reason Nigerian fashion is expensive. Garment manufacturing is the process of mass production of clothes, using efficient industrial methods to drive down the cost of production. The Nigerian fashion sector does not have enough garment manufacturers.

Lack of retailing outlets: The Nigerian fashion and retail industry is still in infancy and lacking in proper structure.

Lack governance of structure and cohesion: Though the Fashion Designers Association of Nigeria (FADAN) exist as an umbrella body for fashion designers, the bulk of fashion designers in Nigeria do not belong to the body.

Opportunities

Large population: Fundamentally, the ingredients for a thriving fashion sector exist in Nigeria; with a population of 170 million, if the industry aims to sell to 5% of the Nigeria population then that is potentially millions of dollars in revenue. Creating large volumes will allow Nigerian fashion designers to export and price their clothes competitively. Low production costs will enable competitive pricing and help to increase revenues for fashion businesses.

Online sales platform: Online channels for cloth retailing are gaining popularity among consumers. Nigerian online fashion websites like *fashpa.com* are making African fashion industry more accessible by leveraging on technology and innovation to help small fashion business grow and compete more effectively in the domestic and global fashion industry. Fashpa is a platform for African design talent in apparel, accessories, art and home ware to showcase and sell their products to a global fashion-conscious customer.

Increasing global demand: In recent times, the global demand and discussions on African inspired clothing has led to tremendous boost in sales for some African designers and brands whose works have caught the eyes of international personalities including Beyonce, Michelle Obama, Rihanna, and Thandie Newton. The potential for this billion dollar market has birthed a need for African-led e-commerce fashion platforms to create structures that will not only cater to global demands, but also help upcoming brands to thrive.

Wear Nigerian Campaign by Chimamanda Adichie: Multiple award-winning Nigerian author Chimamanda Ngozi Adichie will be wearing made-in-Nigeria brands to promote the local fashion industry. In a post she made on her Facebook page May 8th, 2017, the U.S.-based author said she will be wearing Nigerian designs to most of her public appearances to actively promote made-in-Nigeria products and support the “Buy Nigerian to Grow the Naira” campaign. The “Buy Nigerian to Grow the Naira” campaign is a government-backed initiative

meant to promote the local consumption of made-in-Nigeria products and stimulate growth in one of Africa's largest economies.

Synergy with Movie, Pageantry and Music industries: The Nigerian fashion industry's partnership with the movie and music industry holds enormous opportunity for the growth of the fashion sector. Today, some fashion designers have become renowned for producing top quality avant garde couture and ceremonial outfits for international beauty queens, musical artists, musical videos, and movie costumes.

Awareness creation opportunities for trafficked returnees in Edo State: As more and more people become aware of the tragedy of trafficking in persons, and migration to Europe through dangerous land routes, there are possibilities that some of them with adequate exposure to training and financial support could find employment in the burgeoning Nigerian fashion sector.

Threats

Inconsistent government policies: The decline of the textile industry has been tied to the hasty accession of Nigeria to the World Trade Organisation (WTO) in 1995. In accordance with WTO rules, Nigeria had to remove any protection of the local textile industry. Both the World Bank and the IMF have criticised WTO's trade liberalisation policies for favouring rich nations at the expense of developing countries. The United Nations Conference on Trade and Development said market distortions caused by its free trade policies cost developing countries \$700 billion in lost exports annually, with the World Bank adding that its textile quotas of 1994-2005 enriched advanced economies, but cost developing nations 27 million jobs and \$40 billion in lost exports each year. Nigeria's market is said to sustain 2.5 million jobs and more in China, India, Bangladesh, Turkey and Europe.

Lack of regulatory agencies: The fashion industry in the Nigeria is not regulated by any government agency. There is no advocacy or pressure group that will campaign and push for policies that will favour and protect the fashion and textile industries. The Nigerian fashion industry does not have a government recognized body that can serve as a mouth piece and voice of operators and stakeholders in the industry.

Lack of funding/access to finance: There is no access to affordable financing; loan interest rates are too high, most fashion and beauty businesses are not even eligible for loans. The few government grants to the fashion industry like the BOI grants are poorly publicised, and difficult to access. The lack of funds leads to low productivity in all aspects of the fashion design industry in Nigeria.

Poor infrastructure: Poor electricity supply has been the bane of manufacturing in Nigeria, and it has limited the potential for growth and development. Power in Nigeria is a huge challenge for most industries including the fashion industry. The costs of fueling generators overweigh the retail prices of the piece of clothing or material to be sold.

Nigerian preference for foreign goods: The importation of foreign fabrics and clothing which is as a result of Nigerians preference for foreign goods is hampering the growth and development of the textile industry and the fashion value chain. This is regrettable in spite of

the superiority of some local and African apparel such as Adire, Kampala and Ankara to the foreign ones that are being dumped in the country.¹²⁹

Lack of access to information - research and data: Industry stakeholders do not have access to information and data, and most times there is no existing data that can help educate the investors on what the potential of the fashion industry is.

Depreciation of the naira: Nigerian government's disastrous economic policies have caused the country's local currency to decline in value, which has led to a reduction in disposable income, and a disorientation of the middle class.

5.3.2 The Nigerian Beauty Sector

The Nigerian beauty sector encompasses the sale of cosmetics, perfume, and products for skin and hair care. Beauty salons and Makeup studios are considered the service sector of the beauty industry. Cosmetics and beauty care products can be classified into five sub-clusters namely; Body Creams, Beauty Care, Hair Products, Fragrances and, Personal Care.

Economic Contribution

The cosmetics and personal care industry globally generates an estimated annual turnover of around US\$400 billion. Over the last 20 years the industry has grown on average 4.5% annually.

Sub-Saharan Africa currently accounts for 3% of global beauty products sales but that share is expected to grow at double the rate of the market. Nigeria has emerged as the investment destinations of choice to international firms aiming to capture the beauty and personal care market in the continent. Research indicates Nigeria's cosmetics industry is valued at \$3.4 billion. Nigeria is also the most populous with over 184 million people.¹³⁰

The beauty and personal care industry is estimated to reach \$34.5bn by 2021 in the Middle East and Africa (MEA).¹³¹ According to a report by Bank of Industry¹³², the performance of the Nigerian beauty and personal care market during 2014 recorded an impressive growth over that of previous years. This growth was driven by a growing middle-class, population growth (particularly of the young and baby populations), urbanization and increasing employment in formal settings. Men and women in formal employment are more likely to desire better-quality beauty and personal care products as they attempt to boost their personal image and confidence.

Nigeria's cosmetic and beauty care products are largely imported. Imports from foreign countries currently account for 70% of the domestic market leaving Nigerian producers with the remaining 30%.¹³³

¹²⁹ Textile Industry is Worth N4.7billion, Says Minister,

<https://www.thisdaylive.com/index.php/2016/07/07/textile-industry-is-worth-n4-7billion-says-minister/>

¹³⁰ <http://cajnewsafrika.com/2016/08/22/nigeria-key-to-africa-beauty-industry-boom/>

¹³¹ <https://guardian.ng/business-services/fair-to-boost-nigerias-share-of-34-5b-beauty-personal-care-sector/>

¹³² <https://www.boi.ng/cosmetics-and-beauty-care-products>

¹³³ <https://www.boi.ng/cosmetics-and-beauty-care-products/>

Some of the notable players in the Nigerian cosmetics and beauty care products include Procter and Gamble, Unilever, PZ Cussons, House of Tara International, Soulmate Industries Ltd, etc. However, there is a need to grow the industry as the nation looks inwards to generate additional revenue from the non-oil sector.

The main Nigerian beauty sector practitioners include:

- I. Hair Salons
- II. Hair Products Manufacturers of relaxers e.g. PZ Cussons, Soulmate Industries Limited.
- III. Hair extension retailers
- IV. Hair Stylist
- V. Make-up product manufacturers e.g. House of Tara, Zaron cosmetics.
- VI. Independent Makeup Artists
- VII. Makeup Studios
- VIII. Retail stores e.g. Supermarkets and exclusive brand outlets and specialty stores
- IX. Customers

Popular Indigenous Brands

The beauty sector in Nigeria has been driven to its present commanding heights by the pioneering efforts of a few beauty entrepreneurs. The five top leading indigenous cosmetic companies in Nigeria according to a survey by Jumia Travels¹³⁴ are:

i. House of Tara

Established in 1998 and founded by Tara Fela-Durotoye – a premier in the makeup beauty business in Nigeria, House of Tara International has grown from a small make-up business in 1998 into a franchise enterprise with three main lines of business: the Make-up Studio, the Makeup School and the Tara product line, comprising beauty products and professional make-up kits.

Gradually becoming a beauty empire, it features a wide range of cosmetic products and accessories, from foundations and powders to lip sticks, eye pencils and shadows, mascaras as well as make-up tools including brushes, waist pouches and make-up bags all promoting Nigeria's ethnicity and cultural heritage.

Tara Fela-Durotoye was the brain behind the 2014 Makeup in Nigeria Conference (MINC), the first ever gathering of makeup professionals in Nigeria. House of Tara today, has franchises spread across Nigeria (branches in Lagos, Ibadan, Port-Harcourt and Abuja) and with emerging footprints on the West African coast in Benin, Ghana and Senegal.

In other to expand her market share in Nigeria, L'Oreal, the world's largest beauty product maker, sought out Nigerian brands that understood the retail of cosmetics and possessed scalable infrastructure. Tara Durotoye's House of Tara (HOT) was subsequently offered national distribution deals that necessitated HOT's expansion for a stronger and more inclusive presence.

¹³⁴ <https://travel.jumia.com/blog/ng/5-nigerian-companies-who-changed-the-beauty-industry-1610>

As at 2014, HOT had about 15 stores with over 4,000 independent sales reps. The Company's turnover for the brand's most profitable business – a product retail unit, including distribution rights to L'Oreal products such as Mabling – spans between a billion to five billion naira (over \$30m).¹³⁵

ii. Zaron Cosmetics

Zaron is one of the most popular beauty brands in Nigeria and very well preferred by Nigerian women. Established in 2011 by Edo State-born Oke Maduewesi, Zaron products compete with foreign brands even though they are specially designed for the black skin tone and tropical climatic conditions. The brand has engraved its name in the consciousness and hearts of many makeup lovers around Nigeria and Africa at large. They were the first Nigerian beauty companies with products certified oil free and containing Sun Protection Formula (SPF).

Zaron is today one of Africa's leading makeup brands with dozens of outlets and distributors across Africa, the United States of America and the United Kingdom. Oke Maduewesi one of the Master Class speakers at 2016 GTBank Fashion Weekend, shared her wealth of experience on how to create a thriving brand in Nigeria's vibrant fashion industry.

iii. BM Pro

Founded by Banke Meshida-Lawal, a highly recognized makeup artist in Nigeria, The BMPRO (Banke Meshida Professional Makeup) makeup line started with 14 products in the line in 2006 but is currently has over 65 products in the Nigerian market as well as distributors all over Nigeria, Ghana, UK, USA, and Canada; and has received many awards and accolades. This brand also has a complete line of high pigment, hypoallergenic makeup products and brushes, and has undoubtedly achieved iconic status among the women of Nigeria.

iv. Lise Beauty Range

Lise Beauty Range is another popular indigenous brand with a complete line of makeup products. Launched in 2004 and re-launched in the summer of 2006, Lise beauty range has been making waves all over Nigeria, Ghana, Sierra Leone, US, and the UK. The brand is owned by Eni Balogun, a US certified Freelance Makeup artist.

v. Kuddy Cosmetics

Kuddy cosmetics is one of the oldest makeup stores which has now transitioned into a makeup manufacturer. For a budget makeup line, it packs a lot of punch.

Institutions with Projects in the Beauty Sector

First City Monument Bank (FCMB). In 2015, House of Tara International in partnership with First City Monument Bank launched an economic empowerment initiative for women in Nigeria known as the 'Beauty Business on the Go' (BBOG). The initiative was aimed at empowering women to become entrepreneurs, setting them on a path to realise their aspirations and

¹³⁵ <http://venturesafrica.com/building-an-african-comestic-empire/>

dreams. With this initiative House of Tara aims to recruit and empower 5,000 women to become beauty representatives.

Diamond Bank. In July 2017, Eventful Limited convened the maiden edition of The Beauty Souk, an event which promotes indigenous vendors, connects beauty enthusiasts and consumers to beauty professionals and providers. The event which was sponsored by Diamond Bank received over 70 indigenous vendors. These vendors range from cosmetologists, beauty practitioners and industry observers coming together to share knowledge, network and shop. According to an official of the bank, Diamond Bank was sponsoring the event because the bank had a strong belief in empowering entrepreneurs, and supporting Small and Medium Enterprises (SME). Diamond Bank also offered financial advisory services in addition to providing access to market for the participants. The success of the 2017 fair prompted the hosting of the second edition on 17th – 18th of March 2018 at Harbour Point, Lagos State. The second edition was still convened by Eventful Limited, an event management company established by Yewande Zaccheaus in 2002.

Cointreau Creative Crew. Genevieve magazine, the lifestyle magazine held her first ever beauty awards; Genevieve Beauty Awards in November 2016, with different categories with contenders from the Nigerian beauty industry up against each other to win €5000 from the Cointreau Creative Crew.¹³⁶ The Genevieve Beauty Awards which held at the Victoria Hall of Intercontinental Hotel in Lagos, was the first of its kind, as it celebrated the importance of the beauty and wellness industry in Africa and its economical relevance in society.

Zimbabwean model-actress, Vimbai Mutinhir, hosted the prominent award ceremony, which awarded various beauty categories. Beauty royalties such as Bobby Eke, Opral Benson and Alhaja Amisu Tejuosho were awarded with the special recognition prize for their exceptional contributions to the beauty industry in Nigeria. While Ifeyinwa Ojekwe of Ajali Handmade Naturals received the emerging beauty entrepreneur award with a prize of €5000, sponsored by Cointreau Creative Crew.

Trends in the Beauty Sector

- **Use of natural ingredients.** Rising trend of the use of natural ingredients in cosmetic products is observed among various manufacturers. This trend caters to the ever increasing demand for natural or organic products among customers. Use of herbal cosmetics products minimizes the chances of any possible side effect of the products. This ultimately increases the usages of cosmetics among individuals.
- **Demands for high-quality products.** "Demand for high-quality products at reasonable prices is one of the key trends emerging in this market," note the authors of the 'Beauty and Personal Care Market in Africa Report 2015 to 2019, published by global insights firm Research and Markets.
- **Online sales.** Online medium for the purchase of cosmetic product is observed as a rising trend among customers.

¹³⁶ The Cointreau Creative Crew is a worldwide philanthropic programme curated by Creative Director, Laetitia Casta with the aim of developing women's freedom and expression and encouraging them to strive to make their dreams real

SWOT Analysis of the Beauty Sector

Strengths

Creativity: Creativity in makeup artistry has distinguished many makeup artists from their colleagues.

Beauty Fairs: In the past 20 years, Beauty fairs have served as huge platforms for interaction and collaboration between pioneer and young beauty and make up entrepreneurs in the beauty industry. In Benin City, Edo state, the La Mode Magazine owned by Edo-State born Sandra Odige organized its first ever fashion and Beauty Fair, in April 2015. The fair gave fashion and beauty entrepreneurs the opportunity to meet with thousands of potential clients from far and wide. The 2-day exhibition gave participating brands recognition, relevance and exposure.

Retail Revolution: There has also been a beauty retail revolution with leading makeup entrepreneurs opening up makeup studios and salons in major Nigerian cities.

Natural and Organic Products: A lot of young men and women want to use natural and organic products from home grown and locally sourced ingredients. This is in line with the focus on Made in Nigeria, and so more indigenous brands like Oriki, Ajali Handmade Naturals, are manufacturing amazing cosmetics products with locally sourced materials from scratch in Nigeria.

Online Beauty Retail Outlets: Many beauty entrepreneurs are now setting up online beauty retail outlets for the sale of both foreign and Nigerian beauty products, with Instagram and Facebook accounts for added brand visibility. A few of Nigerian online retailers include Yanga Beauty, Beauty Boon, Beauty kink and Beauty Rev –winner of the Genevieve Beauty Awards 2016 in the category of Online Sales. These online retail outlets still have physical stores across the country that serve as distributors of their products.

Weakness

Lack of Cosmetic Manufacturing companies: Due to the lack of right chemist, packaging, and quality control, most indigenous brands manufacture their beauty products abroad.

Lack of skilled personnel: Human resource limitations hinder the development of the sector. Lack of adequate fashion industry education is a major problem; our tertiary and vocational institutions are not in good shape.

Lack of governance structure and cohesion: The Makeup industry is yet to have a fully functional governance structure that can coordinate the affairs of the industry and ensure professionalism.

Opportunities

Population Growth: With good population growth, particularly of the young, urban, and female populations, beauty and personal care in Nigeria has plenty of scope for growth, particularly in terms of exciting new products.

Growing middle class: As part of a fast-growing middle class in the country, young people, who are becoming more urbanised through media exposure, are expected to drive demand for beauty products.¹³⁷

Threats

Product counterfeiting: In the beauty industry, beauty product counterfeiting, is another major threat to the industry. According to The Economist, the sale of counterfeits continues to rise globally – accounting for up to 2.5 percent of world trade, or as much as \$461 billion. Global brands such as MAC Cosmetics, Kylie and Anastasia Beverly Hills are affected by the issue. Leading makeup brands in Nigeria are today battling the menace of product counterfeiting. In 2017, two of Nigeria’s largest beauty brands, House of Tara and Zaron launched campaigns addressing the problem, after they discovered that almost 50% of their market share was counterfeited products.

No regulatory oversight: There are no government policies or regulatory agencies to protect the beauty sector. The industry is not receiving the proper government attention given its employment generation potential.

Porous Nigeria border: The porous Nigerian borders have been an aid to smuggling activities, especially the smuggling of fake and counterfeited beauty products that undermine genuine brands and the nation’s economy.

No access to affordable financing: A lack of access to finance was a key weakness in the sector as cost of funding and interest rates were high. Stringent lending conditions from banks all made access to finance difficult.

Governance

The makeup industry in Nigeria is organized under the Makeup Guild Nigeria. The urbanisation was founded in 2017 by consummate beauty entrepreneurs and has on board top makeup artists and pioneers in the industry like Tara Durotoye of House of Tara and Banke Meshida-Lawal of BMPPro, Others members of the guild include Enitan Balogun of LISE cosmetics, Lolade Ogunjimi of Dainty Affairs, Bimpe Onakoya and Bolanle Okusanya Feyita. The Makeup guild was established to promote integrity and raise high standards within the makeup industry.

Private Labeling in the Beauty Sector

A private label product is manufactured by a contract or third-party manufacturer and sold under a retailer’s brand name. The retailer specifies everything about the product – what goes in it, how it’s packaged, what the label looks like – and pays to have it produced and

¹³⁷ <http://www.euromonitor.com/beauty-and-personal-care-in-nigeria/report>

delivered. Most Nigerian indigenous beauty brands are produced through private labeling or contract manufacturing. Banke Meshida-Lawal of BMPPro, says BMPRO products were manufactured in the United States but more recently, have been manufactured in Turkey.

Competitive and Comparative Advantage

According to Euromonitor report, international competition increased strongly across most beauty and personal care categories in 2016, and leading player PZ Cussons Nigeria Plc. Lost share while smaller and newer players gained share. Local companies, such as House of Tara International and Zaron International Ltd performed well, with a range of good quality and affordable brands. Cheaper, imported brands also did well in the recession, such as Milani from Milani Cosmetics Nigeria. Other good performers included Evans Industries Ltd (in bath and shower) and Albani Corporation (in fragrances).

Global Drivers and Trend

The Global Opportunity Analysis and Industry Forecast, 2014 – 2022 of the Cosmetics Market by Allied Market Research, posits that the growth in global economies, changing lifestyles, rising demands of skin and sun care products due to varying climatic conditions encourages the growth of the market for cosmetics. A shift of preference towards natural and organic beauty products fosters the growth of the cosmetics market. Rising demand for natural, herbal and organic beauty products creates potential opportunities for manufacturers to innovate and develop new products in accordance with consumer preferences.¹³⁸

Improvement in the current lifestyles of individuals is majorly affecting the cosmetics market. Consumers have now become more conscious regarding the usage of cosmetics in their daily life in an effort to step up their style quotient and overall personality. Cosmetics play an important role in enhancing one's inherent beauty and physical features. Men are also increasingly using cosmetics in their daily routine including various types of fragrances and deodorants. This growing demand of cosmetic products has in turn led to the growth of cosmetics market across the world

Given the country's large population (174 million, 37 million households), the portion of people defined as middle and upper class represent a sizeable pool of potential consumers. A significant 11 to 18 percent of urban households – numbering over 2 million –have purchasing power and annual incomes over three million Naira (\$10,000), which puts them in the modest affluent class. Half of the country's growth in wealth will come from these households.

On the next rung of the income ladder – the emerging middle class – there is also considerable growth. Nigerian households with incomes of more than \$5,000 a year will increase from a current 20 percent of the population to 27 percent by 2020, putting them within the target customer base of formal retail chains.

Much of this growth is due to a trend of migration from rural areas toward cities, where job opportunities are more plentiful. Nigeria's rate of urbanization is one of the fastest in the world, with almost half of the population living in urban areas in 2011 and an ongoing urbanisation rate of 4 percent a year. Eight Nigerian cities containing 16 percent of the

¹³⁸ <https://www.alliedmarketresearch.com/cosmetics-market>

nation's population will drive 36 percent of its growth, as per capita consumption in large cities is much higher than in Nigeria as a whole.¹³⁹

5.4 Key Findings and Conclusions

Key Findings

The field team held 36 interviews, 26 with women and 16 with men, across three locations (Abuja, Benin and Lagos) in seven subsectors of the Fashion and Beauty sectors.

Table 3: Key Informant Interview disaggregated by Gender and Sub-sectors

SN	Professions	Male	Female
1	Fashion Designer	8	7
2	Footwear		2
3	Accessories	1	2
4	Make-up Producers		2
5	Make-up Artist		10
6	Hair Making		2
7	Training Institutes	1	1
	Total	10	26
	Grand Total		36

Based on a combination of secondary source research and field based interviews with a broad cross section of representatives from the Fashion and Beauty industries, the key findings are as follows:

- The fashion and beauty sectors are attracting new entrants, yet the industry is not saturated. Only a few of the practitioners were specialized and core professionals.
- Competition in the sector is primarily based on price and quality. Each Make-Up Artist (MUA) and fashion designer is unique, and tries to standout in the market through artistry, and the offering of a range of unique services and bespoke products.
- Despite the existence of FADAN, and Makeup Guild some respondents opined that the sector is still fragmented with industry players operating individually with little or no synergy.
- Sectors are large and demand for products is growing.
- Sectors were affected by economic recession and decline in demand.
- According to the garment manufacturer Sam and Sara, the sector consisted of Artisans, Professionals and Contractors, who get orders from the government or large organizations and sub-contracted the jobs to professionals.
- Some respondents, especially those that have made their names in the industry, recorded improvements in the sector as more and more customers now patronize local tailors because of the gradually improving reputation of, and appreciation for, local designs and fabrics, as against only making new clothes for burial and marriage

¹³⁹ <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/africas-growing-giant-nigerias-new-retail-economy>

ceremonies. However, for the smaller businesses, there is still the perception about made in Nigerian products.

- Ten (10) of the respondents plan to expand their current businesses. Some plan to expand into new lines of business like women clothing's, others plan to open business outlets in new locations, or offer training services; however, one respondent plan expanding into laundry business. Two (2) of the respondents did not have any need for expansion, while one respondent wanted to have an online platform to engage with prospective clients.
- Additional large orders for garment manufacturing from some companies were not accompanied with initial deposits to facilitate processing.
- High Import charges on raw materials: Some imported fabric needed additional fees for clearing at the ports.
- Lack of business marketing structures
- Inability to meet large orders because of a lack of industrial sewing machineries.
- Low purchasing powers of customers especially for those who service high earn clients. Respondents in the footwear and accessories industry also talked about the issue of demand, they say the cost of producing locally is high hence the high cost of their products compared to the cheap imported ones.
- Low purchasing power within Edo State and the residents expect the services to be cheaper in Edo when compared to major cities such as Lagos. Meanwhile, they anticipate the same quality of service.

Conclusions

1. Growth in the fashion and beauty industries has tremendously increased in the last decade due to increase in population, a growing middle-class, urbanization and employment in formal settings.
2. Government involvements in the fashion and beauty sectors have been peripheral with no substantial investment and commitment to the development of both sectors. The privatization of the comatose textiles companies may be needful to foster growth of the fashion sector.
3. Agencies and ministries of government need to be active in these sectors through enforcement of laws especially as it relates to standardization, regulation and piracy and promote ease of doing business. There are also partnership opportunities for mass employment creation and tertiary education curriculum development to support professionalism within the sectors.
4. More people are appreciating the use of beauty care products that are natural and present no side effects over the long term. Nevertheless, stakeholders still need to create public awareness on the dangers posed by the use of counterfeit cosmetic products which are usually sold for lower prices.
5. Financial institutions like the African Development Bank (AfDB) should leverage on its "fashionomics" project to reach out to more fashion entrepreneurs in the continent, support cotton growers/farmers in the value chain and provide low interest loans and grants to jumpstart careers in the fashion and beauty sectors.
6. Stakeholder collaborations are key and can be achieved through workshops, trainings, fairs and networking events to bridge existing gaps in both sectors.

7. An improvement in the ability of local manufacturers to compete against imported products will result in income and employment growth.
8. There may be a lot of players in the sector i.e. in the clothing segment with the likes of Mia Atafu and Frank Osodi who produce for high earners. In the make up space, the likes House of Tara charge a minimum of one hundred thousand and above (N100, 000+) to train in their academies. These players are not willing to invest in Edo state because their market is in Lagos and they also get their raw materials from Lagos.
9. In looking at the numbers this program is expected to impact, the fashion and beauty sector might not be able to deliver such large numbers if there are no funds for professional training for the women and youth in Edo state to be able to compete with the outside world.
10. There is the need for the establishment of fashion production hubs in the six-geopolitical zones of the country to boost fashion designers activities and popularize made in Nigeria designs. When the hubs are established, the 'half-baked' designers and unprofessionalism in the sector will be checkmated," she said. According to him, the production hub is necessary to boost the competitiveness of Nigerian designers, and also stem the high production cost.

5.5 Proposed Interventions

Due to both the state of the industry, the socio-economic and demographic structure of Edo State, and the timeframe and resources available within ESIP, the team was not able to identify any highly impactful short term quick wins that would measurably contribute to the project's KPIs. While both the fashion and beauty industries have strong potential and are growing across Nigeria, the opportunities for investment and employment in Edo state were primarily along the lines of sole proprietorships (self-employed), micro-retailers in cosmetics, hair, cosmetics, accessories, and other fashion and beauty products or B2C services such as make-up artists and hair salons. With no distinct competitive advantages in Edo state in terms of supply or demand, and without the interest, commitment and ultimately investment of the industries' major players, there does not seem to be any viable and scalable interventions suitable to ESIP. Below, however, are several intermediate interventions which are pre-requisites for Edo state to fully realize the potential of these growing sectors.

- Subsidising training cost and establishing market based training courses that are affordable by partnering with other stakeholders to train upcoming artists and fashion designers with contemporary skills that will enable them to be competitive.
- Advocacy with relevant government agencies to facilitate easy export of Nigerian designs and fabric such as the Nigerian Export Promotion Council and other relevant agencies in the fashion and beauty industry.
- Awareness creation to change perception of Edo people on Made in Nigeria clothes through campaigns, radio jingles and patronage of made in Nigeria products by celebrities and public figures.

- More opportunities to showcase designs and creative work through fashion and design exhibitions with notable sponsors and deals with reputable boutiques and retail outlets partnering with young artists to show their products/designs.
- Learning and development; fashion hubs; fashion shows that will attract investment and buyers.
- Support system that will enhance growth through continuous mentorship and entrepreneurial workshops.
- Making land available for manufacturing/production hubs, and lowering the cost of electricity for start-ups through alternative sources of energy.
- Awareness campaign to influence perception of the sectors in Benin, and encourage greater appreciation for the services rendered.
- Development of a standardized training curriculum that should include make-up artistry, gele tying and okuku making (which is unique to Benin) with certification from recognized institutions.

APPENDIX 1: Overview of Selected Agriculture subsectors

Arable Crops

Cassava

Historical Background

Nigeria is the largest producer of cassava in the world with production volume estimated to be around 55 million metric tons in 2014¹⁴⁰. Majority of the production is concentrated in the South and the North Central regions which is followed by the South East and the South West¹⁴¹. According to FAO (Undated) the southern part of the country accounts for close to two thirds (66%) of the total production in Nigeria, while the north-central accounts for 30%, and other parts of the north accounts for 4%¹⁴². Located in the South-South Zone, Edo State is one of the major producers of cassava in Nigeria. The volume of production of cassava in Edo and the total land area in production cannot be determined from available published literature¹⁴³. However, the significance of cassava in agriculture in Edo is well established. Cassava is the main arable crop grown with *Taungya* farming in Edo¹⁴⁴. *Taungya* farming is an agro-forestry system which is intended to mitigate the negative effects of deforestation.

Current Status, Rational for Selection and Specific Value Chain Opportunities

Like in other parts of Nigeria, cassava in Edo is mostly produced as a staple crop for subsistence consumption. The average farming plot is 0.2-1 ha (intercropped with maize, watermelon, vegetables) and the average yield is 8-10 t/ha¹⁴⁵ (against prospective yield of 40 t/ha¹⁴⁶). IITA/CEDP beneficiary farmers in the Niger Delta region has obtained 25-30 t/ha with improved production practices¹⁴⁷. Cassava is consumed as traditional food product (accounts for 90% of the total consumptions and includes Garri and Fufu) and industrial product (for production of starch, High Quality Cassava Flour-HQCF). As much as 75% of the cassava produced in Nigeria is processed into *Garri*¹⁴⁸. The products reach the end markets through three channels. In the first channel, small scale producers sell raw cassava roots directly in the open market to traders or aggregators who then re-sell in distant markets. In the second channel, producers dry the cassava and process it into *garri* by using indigenous methods. They then sell it to traders in the local market who then aggregate the *garri* and re-sell in distant markets. The traders who buy the raw cassava roots are also engaged in *garri* processing to certain degree. The industrial processors of cassava (the third channel) for *garri*, starch, HQCF, sorbitol, ethanol, and the like either off-take directly from farmers through outgrowers' production schemes or through local off-takers. As much as 70% of the actors involved in production, trading and processing activities are women¹⁴⁹.

¹⁴⁰ FAO. FAOSTAT. Food and Agriculture Organization of the United Nations, Statistics Division (2016)

¹⁴¹ University of Florida (2017) A closer look at cassava production in Nigeria and Tanzania

¹⁴² <http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/>

¹⁴³ Various sources (<http://edah.edostate.gov.ng/agriculture-in-edo-state/>) cites that the total production of cassava in Edo is 200 million metric tons per annum. This is a flawed data given that the latest information on total volume of production of cassava in Nigeria is estimated as 55 million metric tons

¹⁴⁴ Ajobi, R. 2014. Socio-Economic Impact of Taungya System on Rural Farmers in Edo State. M.Sc. Thesis, University of Benin, Benin-City, Nigeria.

¹⁴⁵ PIND (2011): A report on cassava value chain analysis in Niger Delta

¹⁴⁶ <http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/>

¹⁴⁷ PIND (2011): A report on cassava value chain analysis in Niger Delta

¹⁴⁸ Veras, Otavjo (2016); Cassava: Key to Overcoming Nigeria's Reliance on Food Imports

¹⁴⁹ PIND (2011): A report on cassava value chain analysis in Niger Delta

Our primary findings show increasing industrial processing demand for off-take of cassava for production of *garri*, starch, ethanol, HQCF, etc. The devaluation of the Naira has made it more expensive to import ethanol and starch. In addition to the industrial markets for cassava, the established as well as aspiring industrialists are eyeing opportunities to tap the growing consumer food products market for swallows, confectionary items, biscuits as well as traditional food products like *Garri*. Financial schemes like that of the Anchor Borrower's Programme (ABP) operated by NIRSAL under CBN is playing an influential role in crowding in investment from the Nigerian industrialists. Several companies have already invested in outgrower's schemes for production of cassava or have set-up processing facilities for cassava in Edo. ESIP can leverage these investments and stimulate jobs in the cassava value chain as well in the support services market systems (input distribution, local aggregation and processing, extension services).

Relevance to ESIP and Focus Areas of Interventions

The investment in and projected growth of the industrial product market segment for cassava are likely to drive the production and marketing practices of cassava in Edo State. This will enable inclusion of new farmers, expansion of farming capacity of existing farmers, and stimulate improved production systems. Furthermore, this is expected to create new jobs for input distribution, output aggregation, and provision of extension services for the farmers. ESIP could focus on supporting the industrial processors and off takers to initiate new outgrower's scheme or strengthen the existing schemes (intervention area 1). ESIP could also support agri-entrepreneurship around input distribution and extension services for cassava (also for the crops produced alongside cassava) and output aggregation.

Geographic Scope

Cassava is produced in all the three agricultural zones in Edo State- Edo South, Edo North and Edo Central. The specific areas for interventions should be decided based on the preferences of the private sector partners for the various interventions that are proposed in chapter 3 of this report.

Rice

Historical Background

Due to urbanisation, change in employment patterns, rapid population growth, change in diets of Nigerians on account of income expansion, rice has become a staple food to the average Nigerian leading to an increase in the demand¹⁵⁰.

Nigeria is the largest producer of rice in West Africa and the third in Africa, after Egypt and Madagascar, producing about 3 million metric tonnes on the average annually. However, it falls short of meeting local demand which is placed at about 5 million tonnes. A local demand of 5 million tonnes makes Nigeria the highest consumer of rice in the West African sub region and the second largest importer in the world, buying at least 2 million tonnes annually¹⁵¹.

The yield of rice on the other hand has increased steadily, resulting from government's increased support for rice production, by providing subsidised agrochemicals and credit facilities through various intervention funds¹⁵². Rice yield is 5-6 tonnes/ha of paddy. The President of the Rice Farmers Association of Nigeria, Aminu Goronyo, says annual rice production in Nigeria has increased from 5.5 million tonnes in 2015 to 5.8 million tonnes in 2017¹⁵³. This increase could also be attributed to the CBN's Anchor Borrowers Programme with a total of 12 million rice producers and four million hectares of FADAMA rice land¹⁵⁴.

¹⁵⁰ Edo AgriHub (2017). Rice Farming. <http://edah.edostate.gov.ng/rice-farming/>

¹⁵¹ Edo AgriHub (2017). Rice Farming. <http://edah.edostate.gov.ng/rice-farming/>

¹⁵² PWC (2017). Transforming Nigeria's Agricultural Value Chain; a case study of the Cocoa and Dairy industries. <https://www.pwc.com/ng/en/assets/pdf/transforming-nigeria-s-agric-value-chain.pdf>

¹⁵³ NIPC (2018). <https://www.invest-nigeria.com/rice-production-nigeria-increases-5-8m-tonnes-2017/>

¹⁵⁴ NIPC (2018). <https://www.invest-nigeria.com/rice-production-nigeria-increases-5-8m-tonnes-2017/>

Current Status, Rationale for Selection and Specific Value Chain Opportunities

In line with the aggressive plan for Agriculture in Edo State, Governor Godwin Obaseki said his administration has identified rice as one of the products the state has comparative advantages in, along with a list of investors are waiting to come for enquiries to key into the investment plans of the state government¹⁵⁵.

Rice millers and farmers are teaming up to tap into the Anchor Borrower Programme launched by the Nigerian Government in 2015, and aimed at creating a linkage between anchor companies involved in the processing and SHFs of the required key agricultural commodities. Also, there is a lot of interest in local processing by major distributors due to recent currency devaluation.

With a target of 3,000ha of rice fields to fund in 2018, Edo Fadama III project in May 2018 funded 280 farmers from Ovia North East and Ovia South West to plant one hectare of rice each. Additional funding was also provided for about 140 hectares of rice fields in Edo North Senatorial District¹⁵⁶.

Relevance to ESIP and Focus Areas of Interventions

The demand for rice products will continue to increase in Edo and Nigeria. Also, there is increased interest in local production of rice by government and major players in the sector. In response to recent enquiries from international investors who want land for rice production in the state, Edo State Government has identified all the areas that are close to the River Niger such as Illushi, Anegbete as areas where good quality rice can be grown¹⁵⁷.

ESIP could work with these investors and rice mills to facilitate the Anchor Borrowers Programme for out grower/contract farming for Edo youths and women. More so, ESIP could facilitate an aggregation model to support the off-takers. Opportunity also exists to design service market intervention focused on provision of harvest and post-harvest service to rice farmers.

Geographic Scope in Edo

Anegbete and Illushi, fishing and rice producing communities along the River Niger belt in Esan South East LGA. Ovia North East and Ovia South West.

Plantation Crops

Oil Palm

Historical Background

Oil palm is an important crop whose products (oil and kernel) are used for food and non-food purposes and accounts for an annual average of 70%¹⁵⁸ of the Nigerian edible oil market. Consumption of palm oil in Nigeria increased from 1.2 million metric tons in 2010 to about 1.37¹⁵⁹ metric million tons in 2012, and

¹⁵⁵ The Nigerian Observer (2017). Edo set for rice production. <http://nigerianobservernews.com/2017/02/edo-set-for-rice-production/#.WvSm0KQvzX4>

¹⁵⁶ Edo Fadama III (2018). <https://www.dailytrust.com.ng/edo-fadama-iii-project-funds-280-hectares-of-rice-farms.html>

¹⁵⁷ The Nigerian Observer (2017). Edo set for rice production. <http://nigerianobservernews.com/2017/02/edo-set-for-rice-production/#.WvSm0KQvzX4>

¹⁵⁸ Report on Survey of Selected Agricultural Raw Materials in Nigeria on Oil Palm. Raw Materials Research and Development Council, 2004

¹⁵⁹ www.fas.usda.gov/.../output8_17_15_23.csv

is valued at about 406 billion naira. Approximately 878,000 metric tons was produced in in-country (2012). In the Niger Delta region, an estimated 380,000 metric tons of palm oil for household consumption (valued at about 119 billion naira) was produced by smallholders and about 60,000 metric tons of palm oil for industrial use (valued at about 13 billion naira) was produced in 2012. The sector provides employment and primary source of income for not less than 954,000 smallholder plantation owners, small holder processors, wholesaler and retailers in the region spanning production, processing and marketing functions. This comprise about 498,000 men who are mainly involved in leasing of wild grove, small scale oil palm production and processing and 457,000 women who are mainly involved in processing and marketing¹⁶⁰.

Palm oil is a commodity which is in high demand in Nigeria based on its food and non-food uses, however there is a large shortfall in supply of 150,000 – 300,000¹⁶¹ metric tons of domestic cooking oil (valued at about 70 billion naira) and over 400,000 metric tons of industrial grade palm oil (valued at about 80 billion naira) annually which is currently being bridged by imports despite the 35% tariff on imported palm oil. Eighty percent of in-country's production comes from small scale producers and processors who use inefficient practices that result in low productivity and poor quality of oil that does not meet industrial requirement, thus driving the importation of oil. Nonetheless, addressing the systemic constraints of the sector would create opportunities for increased production of oil palm for smallholder plantation owners and palm oil sales for small scale processors and traders from the Niger Delta region.

Opportunity exists to close this demand gap and increase income of over 900,000 smallholder farmers within the oil palm sector in the Niger Delta region. What is required to achieve this is an efficient oil palm market system which could sustainably provide critical missing support services needed for improved productivity for large number of smallholders in the market.¹⁶²

Palm oil production remains a major vocation in many communities in the Niger Delta region, particularly Edo state with one the largest oil palm plantations in Nigeria covering about 40,000 hectares. It involves hundreds of thousands of poor producers and tens of thousands of poor processors. It provides income for many farmers and their dependents. This connotes that an efficient and strong palm oil sector in Nigeria will enable the poor to be part of the solution to poverty challenge through provision of employment and a means of livelihood. There are numerous ways in which oil palm production could be deployed to boost employment opportunities for the people.

Current Status, Rationale for Selection and Specific Value Chain Opportunities

There is an estimated shortfall in supply of 150,000 – 300,000¹⁶³ metric tons of TPO in Nigeria, which is currently being bridged by imports. The proposed investment by the state government to increase oil palm cultivation from its current 40,000 hectares to between 100,000-150,000 hectares thereby creating 200,000 jobs offers an insight into the importance of the sector to the future economic development of Edo state.¹⁶⁴

Opportunity exists for production and aggregation of crude oil palm for high value markets. Increased production offers an opportunity for market actors to bridge demand and supply to high value markets. One of the major constraints faced by commercial users of crude palm oil is that of linkage to production clusters and aggregation of palm oil from largely dispersed production clusters in Edo state. In addition,

¹⁶⁰ MADE Programme Oil Palm Intervention Concept Note

¹⁶¹ <http://businessdayonline.com/2013/08/reactivating-nigerias-oil-palm-industry-2>

¹⁶² MADE Programme Oil Palm Intervention Concept Note

¹⁶³ <http://businessdayonline.com/2013/08/reactivating-nigerias-oil-palm-industry-2>

¹⁶⁴ <http://edah.edostate.gov.ng/edo-earmarks-150000-hectares-for-oil-palm-plantation/>

there is opportunity to provide harvest and post-harvest processing services for smallholder plantation owners to be able to meet requirements of client in high value markets.

Relevance to ESIP and Focus Areas of Interventions

The demand for oil palm products will continue to increase in Nigeria driven by demand from industrial users who are beginning to source locally because recent currency devaluation makes importation of the product less price competitive. Edo state as one of the largest producer in the country has comparative advantage to better position itself for the opportunity.

ESIP could explore the following interventions:

- Oil palm aggregation for industrial users offers a pathway to providing economic opportunities for youth in Edo state. ESIP could leverage the SSP structures in the MADE oil palm intervention for aggregation and supply to high value markets. Most SSPs provide services to smallholder plantation owners and as such could provide aggregation service to private sector partners who have signified interest to offtake from Edo state.
- One of the major constraints hampering productivity of smallholder plantation owners is the access to improved seedlings. Production of improved oil palm seedlings for smallholder oil palm plantation owners could provide an economic opportunity for youth to play in the oil palm sector. The selling price per oil palm seedling was N357.22 (\$1.02) with a gross margin of N156.71 (\$0.45) and net profit of N106.02 (\$0.30) per seedling¹⁶⁵.
- The current use of manual labour by most plantation owners lead to low yield and poor quality of crude oil palm produced. There is an existing intervention by the PIND programme involving equipment leasing and provision of harvesting services to smallholder plantation owners. ESIP could work with PIND to quickly scale this intervention in Edo state.

Geographic Scope in Edo

Oil palm production is largely done across the 18 LGAs in Edo state, however, production data is largely unavailable at the time of the production of this report.

Cocoa

Historical Background

Cocoa, which is the raw material for cocoa mass, chocolate and cocoa powder, is a very economically viable crop which is in high demand both locally and internationally. Nigeria is the sixth largest producer of cocoa globally with a production volume of 248,000 tonnes of cocoa beans. However, only 30% of the cocoa beans is processed, with the remaining exported¹⁶⁶.

Cocoa, a key cash crop, accounted for 21% of Nigeria's agricultural exports and generated US\$711 million in 2015¹⁶⁷. The Niger Delta region produces 53% of the country's output. Cross River, Ondo and Edo States are the leading producers in the Niger Delta region, producing about 97% of the regions cocoa.

¹⁶⁵ Revenue from oil palm seedlings production in Edo State, Nigeria – Peter Ekunwe

¹⁶⁶ FAO Statistics (2017). <http://www.fao.org/nigeria/en>, PwC Analysis

¹⁶⁷ CBN (2015). Annual Report <https://www.cbn.gov.ng/>

Nigeria's value chain is characterised by 80% small holder farmers, with an average farm size of 2.5ha and a few commercial processors plagued by inadequate inputs, obsolete technology, and poor financing¹⁶⁸.

Current Status, Rationale for Selection and Specific Value Chain Opportunities

Generally, cocoa processors are underutilised, as Local Buying Agents (LBAs) and cooperatives prefer to sell cocoa beans to merchants, who offer a higher premium than processors¹⁶⁹. More so, the major processors for cocoa are located in Western Nigeria, around Lagos, so the major value addition takes place outside of Edo State.

80% of cocoa comes from small and family-run farms. A typical farm covers 2.5ha. Each hectare produces 300 to 400 kilograms of cocoa beans (WCF, 2014)¹⁷⁰. Cocoa production is highly profitable and economically viable in Edo State, with a gross margin of N66,350 per hectare.

Relevance to ESIP and Focus Areas of Interventions

Cocoa is of immense economic value to the people of Edo state as it has served as a source of employment to the rural farmers and even a foreign exchange earner to Nigeria¹⁷¹.

Over the last 4 decades, the yield of cocoa has declined – a reflection of low utilisation of improved seedlings, agrochemicals and poor adoption of technology¹⁷². A key driver to improve the yield is quality inputs – seedlings and agrochemicals. This presents opportunities for effective last-mile distribution of improved inputs, agrochemicals, and extension services. This provides opportunities for ESIP interventions in areas such as village level aggregators, last mile inputs dealers, SSP service provision and rental business, and processing.

Geographic Scope in Edo

The climatic conditions and soil composition are very suitable for the growth of cocoa in every part of Edo State.

Farming Enterprises

Poultry

Historical Background

The Nigerian poultry industry in particular has been rapidly expanding in recent years and is therefore one of the most commercialised (and well capitalised) subsectors of Nigerian agriculture. (USDA 2013;

¹⁶⁸ Mgbenka, R., and Mbah, E. (2016). A Review of Smallholder Farming In Nigeria: Need for Transformation. International Journal of Agricultural Extension and Rural Development Studies, Vol.3, No.2, pp.43-54.

¹⁶⁹ FAO Statistics (2017). <http://www.fao.org/nigeria/en>, PwC Analysis

¹⁷⁰ World Cocoa Foundation (WCF) (2014). Encouraging Sustainable Responsible Cocoa Growing. www.worldcocoafoundation.com/cocoafactsandfigures

¹⁷¹ Aikhionbare, I. (2015). Top 10 Prominent Crops Grown in Edo State Nigeria. <https://infoguidenigeria.com/crops-grown-edo-state/>

¹⁷² PwC (2017). Transforming Nigeria's Agricultural Value Chain; a case study of the Cocoa and Dairy industries. <https://www.pwc.com/ng/en/assets/pdf/transforming-nigeria-s-agric-value-chain.pdf>

Adene and Oguntade 2006). Nigeria is the number 1 egg producing nation and number 5 poultry meat producing nation on the African continent¹⁷³.

Poultry currently contributes 25% of the agricultural GDP of the Nigerian economy valued at NGN 1.6 trillion. The popularity of poultry production can be explained by the fact that poultry has many advantages over other livestock. Poultry birds are good converters of feed into useable protein in meat and eggs. Finally, eggs, one of the major products of poultry production, are more affordable for the common person than other sources of animal protein.

Current Status, Rationale for Selection and Specific Value Chain Opportunities

In the Niger Delta region, at least 3 million households keep poultry across the region with an average flock size of 24 for traditional breeds, 117 for broilers, 355 for layers per households involved in poultry production¹⁷⁴. Most of the poultry production at household level are reared with the intent of providing a safety net for the households and not with commercial intent. The production costs per unit is thus very low. Also, the production cycle is quite short, so capital is not tied up over a long period. The sector contributes much towards household food security and income in the Niger Delta region.

The poultry sector in Nigeria generates about 14 million direct and indirect jobs, the sector is projected to grow at between 7-10% annually over the next 10 years¹⁷⁵. While the sector continues to grow, smallholder poultry farmers have been unable to tap into this opportunity due low outputs arising from high mortality of about 30%.

The poultry industry has a large capacity in Nigeria to create employment. Poultry offers the greatest scope for increasing the quantity and quality of animal protein. Poultry meat and eggs account for about 30% of total livestock output in Nigeria, of which eggs account for over 80 percent. Commercial poultry is well established in the country with substantial infrastructure (poultry houses, feed mills, hatcheries and processing plants) already on ground. However, most of these assets became idle for reasons associated with high cost of strategic inputs and working capital as well as competition from cheap imports.

The poultry sector is estimated to be worth about N80 billion (\$600m), comprising of approximately 165 million birds which produced about 650,000 MT of eggs and 290,000 MT of chicken meat in 2013. From a market size perspective, Nigeria's egg production is the largest in Africa (South Africa is the next largest at 540,000 MT of eggs) and it has the 2nd largest chicken population after South Africa's 200 million birds¹⁷⁶. There is still huge opportunities for the growth and expansion of the sector as Nigeria's chicken meat consumption per capita ranks relatively low (1.41 kg/ capita) compared to Ghana (7.67kg/capita), South Africa (32.98 kg/capita) and other countries.

Demand for chicken meat and eggs in Nigeria substantial and growing due to several factors which include a rapidly increasing population, higher per capita incomes, greater popularity of chicken meat, increased urbanization, and an expanding fast food sector. While the increase in demand is primarily being met by expanding commercial production of poultry, it is the micro and smallholder poultry sector which constitutes the bulk of the country's poultry population. Characterized by a different set of dynamics and inputs, the micro and smallholder poultry sector population stood at 172m local chickens, or 94% of a total combined population of 183m local and exotic chickens, in 2009. The poultry sector has been growing at a natural growth rate, with few changes in production practices over the years¹⁷⁷.

¹⁷³ Opportunity in the Poultry Value Chain Presentation by Nigeria Poultry Association Presentation - 2017

¹⁷⁴ MADE Programme Poultry Intervention Strategy.

¹⁷⁵ Opportunity in the Poultry Value Chain Presentation by Nigeria Poultry Association Presentation - 2017

¹⁷⁶ MADE Programme Poultry Intervention Strategy.

¹⁷⁷ Opportunity in the Poultry Value Chain Presentation by Nigeria Poultry Association Presentation - 2017

Demand for poultry inputs, including poultry meat, eggs, manure, etc. in the Niger Delta, is currently being met by a combination of local production and imports from both within, from other parts of the country, mainly the south west and outside Nigeria as local production is grossly inadequate to meet the huge demand.

Edo State has an estimated chicken population of over 1.9 million birds with over 300,000 households involved in birds' production¹⁷⁸. Poultry production cuts across the 18 local governments of the states, the specific areas for interventions should be decided based on the preferences of the private sector partners for the various interventions that are proposed in chapter 3 of this report.

Relevance to ESIP and Focus Areas of Interventions

MADE had initially piloted the access to poultry inputs with AgricProject Concept International (ACI) in Niger Delta region including Edo state. The Veterinary Pharmaceutical Companies (VPCs) now see the business opportunities in selling suitably priced and sized products to micro and small-scale poultry farmers through micro retailers known as village level dealers (VLDs). More veterinary pharmaceutical companies have adopted the model as a means of reaching out to the critical unreached and underserved rural poultry keepers' population.

ESIP could work with MADE to scale the VPC's intervention in Edo state. MADE's enterprise analysis model carried out in 2016 showed an annual profit of N181,200 based on a 3-day working period. Effort is ongoing by MADE to scale this with a view to expand their business portfolio and revenue base. Opportunity exists to leverage the VLDs for poultry aggregation which would provide another means of earning revenue from the poultry sector.

Geographic Scope in Edo

While data specific to Edo states isn't available, a number of online materials researched showed that backyard poultry farming is increasingly becoming popular most especially in Benin City, as consumers seek for more cost-effective ways of meeting the high demand for poultry products¹⁷⁹.

Mushroom

Historical Background

Production of mushroom is a relatively new enterprise in the Nigeria. However, Nigerians have been eating mushrooms for a long time now but unfortunately they depend on collection from the wild. There is a huge market for mushrooms both locally and Internationally. Many opportunities abound in the production of mushrooms as many hospitality industries in the country still import the product to add to their meals. Majority of big hotels in Nigeria have mushrooms in their daily menu, but these mushrooms are imported¹⁸⁰.

Cultivation of edible mushrooms or medicinal mushrooms is profitable. Small greenhouse tunnels 10m to 15m long and 8m wide are readily available from local suppliers and should cost between N40,000

¹⁷⁹ Economics of Backyard Poultry Farming in Benin City, EdO State, Nigeria by Emokaro, C. O., Akinrinmola, F. K. and Emokpae, O. P.

¹⁸⁰ Jovana Farms (2017). Mushroom farming for smallholders. <http://www.punchng.com/mushroom-farming-for-smallholders/>

and N50,000¹⁸¹. Oyster Mushroom (*Pleurotus ostreatus*), grown for food, is one of the most sought-after mushrooms worldwide. It is not capital intensive to produce, and can be cultivated on straw, sugar cane, and other media.

Current Status, Rationale for Selection and Specific Value Chain Opportunities

Mushroom cultivation has been evaluated as an effective means for poverty alleviation in developing countries due to its possibility of low cost production, high profit and quick return. According to Dilomat Farm in Rivers State, if a youth was empowered with at least N30,000 to N40,000 to learn mushroom cultivation, they would be able to have a turnover of between N500,000 to N1 million within 6-10 months¹⁸².

According to the Director of the Centre for Mushroom Research and Technology of the University of Benin, "There is no standard hotel in Edo state that does not serve mushroom soup or omelette for breakfast"¹⁸³. It means that local production will have a ready market. Cultivation of mushrooms involves mainly the use of agricultural waste without the use of chemicals and it appears safe.

Lack of spawning straw, lack of assured market, and technical knowledge on how to cultivate mushroom were among the major challenges facing those interested in mushroom cultivation in Edo State.

Our findings revealed interest among major off-takers to embark on outgrower programs for mushroom in Edo State to meet increasing local and international demands. ESIP can leverage these interest and facilitate solutions to the above listed challenges, to stimulate jobs in Edo State.

Relevance to ESIP and Focus Areas of Interventions

Mushroom production can create aspirational job opportunities in Edo and increase incomes. Oyster mushroom is a less crowded branch of agriculture with high prospects for exportation. The short cycle makes it attractive and aspirational to young people. Mushroom beds need a dark environment for only 14 to 18 days while harvesting is usually four to five days after opening the white-bags. Mature mushrooms become ready for harvesting in another four days¹⁸⁴.

Mushroom outgrower schemes would be a suitable intervention for ESIP because mushroom cultivation is not capital intensive, it does not require large hectares of land to cultivate and harvest occurs 12 months per year, with a correspondingly short cycle.

Geographic Scope in Edo

Mushroom production is practicable in all parts of Edo because they are highly tolerant of variations in temperature, humidity, light levels and carbon dioxide levels. The specific areas for intervention should be decided based on the preferences of the private sector partners and industry experts.

Bee Keeping

¹⁸¹ Jovana Farms (2017). Mushroom farming for smallholders. <http://www.punchng.com/mushroom-farming-for-smallholders/>

¹⁸² Dilomat Farm (2017). Exploring Mushroom's Potentials for Nigeria's Growth. <https://www.agrobusinessngr.com/exploring-mushrooms-potentials-nigerias-growth/>

¹⁸³ Okhuoya, J. (2016). Centre for Mushroom Research and Technology, University of Benin. <https://newsplatformngr.com/2016/11/14/interview-with-professor-john-okhuoya-former-deputy-vice-chancellor-university-of-benin-director-centre-for-mushroom-research-and-technology-university-of-benin/>

¹⁸⁴ Jovana Farms (2017). Mushroom farming for smallholders. <http://www.punchng.com/mushroom-farming-for-smallholders/>

Historical Background

The domestic consumption rate of honey in Nigeria is currently 380,000 tonnes, with a global price of about 4.5 billion dollars¹⁸⁵. Beekeeping as an enterprise is a relatively new enterprise in the Nigeria, but traditional beekeeping is of age in the country¹⁸⁶.

The volume of production of honey in Edo cannot be determined from available published literature. However, the fact that beekeeping is gaining attention and can alleviate poverty in Edo cannot be over emphasized. Beekeeping can boost incomes particularly in the rural communities and benefit the economic situation, because honey is widely consumed with many medical values and beeswax has a number of individual uses¹⁸⁷. A 2016 study conducted in Borno, Oyo, and Edo State, revealed that Beekeeping is a profitable venture in Chibok Local Government area of Borno state as well as in Oyo and Edo states¹⁸⁸. A beekeeper with 10 beehives could make 600,000 Naira per annum from honey alone. Additional revenue could be generated from sales of beeswax.

Current Status, Rationale for Selection and Specific Value Chain Opportunities

There is increasing demand for honey and other bee products in Nigeria and international markets, but the practice of beekeeping in Nigeria is generally low. In Nigeria, the price of honey ranges from N100 – N120, 000 per ton, meaning if Nigeria were to export 2,000 tons of honey produced annually, that will fetch the Nation 200 to 240 million naira per year (Adediji and Omoba, 2016)¹⁸⁹.

Our primary findings show that, honey and bee wax were the two major bee products produced by beekeepers in Edo. Most beekeepers are women. The Talented Women Farmers Association (TWFA) currently engages about 150 beekeepers in Edo. Lack of equipment (beehives), lack of assured market, and technical knowledge on how to produce other bee products were among the major challenges raised. For beekeeping to be transformed from a subsistence activity to a business, the rural beekeepers must have access to a market chain that is reliable and efficient (UNCTAD, 2006).

There is interest among major off-takers to embark on outgrower programs for honey, bee wax, and propolis to meet increasing local and international demands. Although, financial schemes like that of the Anchor Borrower's Programme (ABP) operated by NIRSAL under the CBN is not familiar with apiculture, the interest to invest in this value chain is very high. ESIP could potentially work with these investors to stimulate jobs in Edo State.

Relevance to ESIP and Focus Areas of Interventions

This presents a promising opportunity to enable inclusion of new beekeepers, expansion of capacity of existing beekeepers, and improve productivity. This provides opportunity for mass job creation and improve incomes for youths and women. Ayansola (2012) observed that beekeeping will help to reduce the endemic poverty problem in Nigeria, especially in the rural communities. Beekeeping on a large scale

¹⁸⁵ USAID (2017). Nigeria can generate \$10bn from honey, hives. <http://agronewsng.com/nigeria-can-generate-10bn-from-honey-hives-usaid-official/>

¹⁸⁶ Adebo, G. & Osundare, F. (2015). Assessment of the Fiscal Performance of Bee Keeping for Employment Generation and Poverty Reduction in Nigeria. *Journal of Agricultural Studies*, Vol. 3, No. 2

¹⁸⁷ Famuyide, O., Adebayo, O., Azeez, F., Arabomen, O., Olugbire, O. and Ojo, D. (2014). Economic Contributions of Honey Production as a Means of Livelihood Strategy in Oyo State. *International Journal of Science and Technology*, 3(1).

¹⁸⁸ Adedeji, N. and Joseph, O. (2016). An assessment of profitability of honey production in Edo State, Nigeria. *African Journal of Agricultural Economics and Rural Development*. Vol. 4 (6), pp. 442-445

¹⁸⁹ Adediji, N., and Omoba, O. (2016). An assessment of profitability of honey production in Edo State, Nigeria. *African Journal of Agricultural Economics and Rural Development*, Vol.4(6): 442-445.

could go a long way in reducing poverty and youth unemployment in Nigeria¹⁹⁰. It is a profitable and a viable enterprise that requires very little investment and produces quick returns¹⁹¹. A 250,000 investment can get a beekeeper 10 beehives; a beehive can last for 5-10 years and produces 20litres of honey per annum (harvest is twice yearly); making a total of 600,000 revenues from 200 litres of honey. Additional income could be made from sales of the beeswax. ESIP could facilitate initiation of new outgrower schemes and aggregation to engage up to 2000 beekeepers, starting with a pilot/demonstration with 400 beekeepers.

Geographic Scope in Edo

Beekeeping is practicable in all the three agricultural zones in Edo State- Edo South, Edo North and Edo Central, although more of it is seen in Ovia North, and Okomu Rubber Plantation. The specific areas for interventions should be decided based on the preferences of the private sector partners and industry experts.

¹⁹⁰ Labe, T. (2017). Prospects and Challenges of Apiculture Business in Nigeria – A Review. Journal of Research in Forestry, Wildlife & Environment Vol. 9(2).

¹⁹¹ Adebo, G. & Osundare, F. (2015). Assessment of the Fiscal Performance of Bee Keeping for Employment Generation and Poverty Reduction in Nigeria. Journal of Agricultural Studies, Vol. 3, No. 2