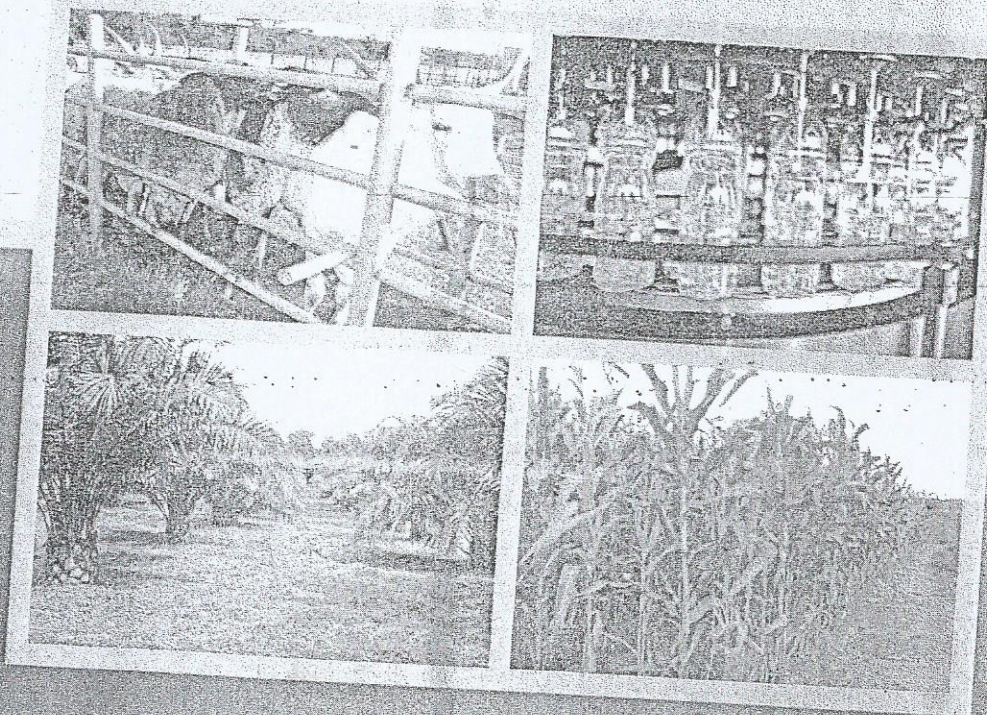


CONFERENCE PROCEEDINGS OF THE 18TH
ANNUAL NATIONAL CONFERENCE OF THE
NIGERIAN ASSOCIATION OF AGRICULTURAL ECONOMISTS

**AGRIBUSINESS DEVELOPMENT:
PANACEA FOR ECONOMIC
RECESSION IN NIGERIA.**



HELD AT FEDERAL UNIVERSITY OF AGRICULTURE, ABEOKUTA, NIGERIA
16TH-19TH OCTOBER, 2017

EDITORS: > **AYINDE, I. A.**
OBAYELU, A. E.
SANUSI, R. A.
OKOJIE, L. O.
OKUNEYE, P. A.

NATIONAL EXECUTIVES

1. Prof. P. A. Okuneye, ffaman, fnaae, National President
2. Dr Paul Elhuaiwe Vice- President I
3. Prof. J. N. Nmadu, fnaae Vice-President II
4. Dr Shola O. Adepoju, fnaae General Secretary
5. Dr O. A. Olajide Assistant General Secretary
6. Dr A. A. Oredipe Treasurer
7. Prof. Abdul Yaro Muhammed Auditor
8. Prof. I. A. Ayinde Business Manager
9. Prof. C.C. Eze, fnaae Legal Adviser
10. Prof. Y. I. Fabiyi, fnaae Ex-Officio
11. Prof. M. S. Igben, fnaae Ex-Officio
12. Dr. Salisu A. Ingawa, fnaae Ex-Officio
13. Prof. C. A. Onyenwaku, fnaae Ex-Officio
14. Prof. Sheu Musa, fnaae Ex-Officio
15. Dr C. I. Ada-Okungbowa Ex-Officio

MEMBERS OF LOCAL ORGANISING COMMITTEE

- Prof. L. O. Okojie Chairman, LOC
- Prof I. A. Ayinde Chairman, Technical Committee
- Dr. R. A. Sanusi Public Relation Officer
- Dr. A. E. Obayelu Secretary
- Prof (Mrs) D.A. Adegbite Chairperson Welfare
- Prof. A. M. Shittu Member
- Dr O. F. Ashaolu Chairperson, Transportation and logistics
- Dr. D. Akerele Member
- Dr A. M. Dare Financial Secretary
- Dr E. T. Tolortunju Treasurer
- Dr. E. Oyedepo Member
- Mr S.O. Oladeji Transportation and Logistics
- Mr O. I. Afolabi Transportation and Logistics
- Mr. Adeleke Adekambi Member
- Miss Deola Phillips Member
- Mrs. C. P. Adekunle Member
- Dr (Mrs) E. O. A. Oluwalana Accommodation

EDITORIAL ASSISTANTS

- Dr (Mrs) Esther T. Tolorunju
- Dr Dare M. Alaba
- Mr Oladeji S. Oladele

SUB-THEME 1: E-BUSINESS AND VALUE CHAIN DEVELOPMENT IN THE AGRICULTURAL SECTOR

S/N	Contents	Page
1.	Assessment Of Plantain Value Chain In Osun State: Ademola Oluwaseyi E., Omotesho Olubunmi A., and Olaghere Ivie L.	1
2.	Economic Analysis Of Cassava Processing In Yewa South Local Government Area, Ogun State, Nigeria: Obayelu A. E., Olaleke O. A. Oke F.O. and S. A. Oladeji	10
3.	Value Addition And Processing Technologies Of Palm Fruit In South-South Zone Of Nigeria: Agribusiness Suggestion For Recession: Udoka, S.J. Ugwu, D.S Akpan, S.B. Patrick, I.V. and Akubuilu, C .J. C.	16
4.	Chain Analysis Of Cassava Peels, In Ogun State, Nigeria: Elegbede Vivian Asika, Oyedepo .E. Omolola	23
5.	Enterprise Analyses Across Cassava Agribusiness Value Chain In Niger-Delta Region Of Nigeria: Implications For Agribusiness, Women And Youth Policies: Coker, Ayodeji Alexander Ajibola; Molokwu, Christopher C.; Odoemena, Benjamin C., Tuedogheye, Jeremiah G. and Elega, Julius O.	34
6.	Analysis Of Cassava Value.Chain In Southeast Nigeria: A Seemingly Unrelated Regression Model Case: Osuji Maryann N, Eze C.C, Ibekwe, U.C, Obasi, P.C, Benchendo G.N, Nwaiwu I.O.U, Uhuegwulem I, Anyanwu U.G	43
7.	Agribusiness And Value Addition To Plantain By Small Scale Entrepreneurs In Lagos State, Nigeria: Aminu, F.O., Falola, A.O., Ayinde, I.A. and Sanusi, R.A.	53

SUB-THEME 2: ECONOMIC RECESSION: CAUSES AND AGRIBUSINESS ANTIDOTES.

S/N	Contents	Page
8.	Repositioning Smallholders For Food Production In Nigeria: Alamu, Salawu Abideen	60

9.	Agribusiness Development: An Elixir To Economic Recession In Nigeria: Ettah, O.I. , Ettah, Goddy I., Kuye O. O., Oniah, M. O and Adinya, I. B.	65
10.	Analysis Of Factors Affecting Agribusiness In Oyo State, Nigeria: Fato, B. F., Oyegbami, A. Nwali, C. S. And Obute, J. E.	71
11.	Economic Recessions in Nigeria: An Econometric Investigation of Roles of Crude oil Price Volatility (1970 – 2016): Adeniyi, B.A., Daud, S.A., Amao O., Omotoso, A.B.	77
12.	Agricultural Diversification As Antidote To Economic Recession In Nigeria: Product Option: Ogundele, O. O. and Akujobi, Cajetan	48
13.	Recovery From Economic Recession And Agribusiness Productivity Nexus In Nigeria: Oke, M. A.	90
14.	Determinants Of Rising Price Of Yam In Nigeria: Times-Series Approach: Ajibade T.B., Ayinde O.E., Abdoulaye T., Ayinde K.	95
15.	Effects Of Seasonality On Foodstuff Marketing: A Study Of Tomato Marketing In Esan Central Local Government Area Of Edo State, Nigeria: Erie, Gladys; Eguare, R.A. ; Ejuetueyin, J. O. And Ogbeide, M.	103
16.	Economic Recession In Nigeria, Causes, Effects And The Agribusiness Antidote: A Thematic Discuss And Review: Ajie, E. N. And Uche, C	952

SUB-THEME 3: POLICY AND AGRIBUSINESS DEVELOPMENT

S/N	Content	Page
17.	A Review Assessment Of Rural Households Food Coping Strategies In Northern Nigeria: A Window For Investment And Intervention: Ahungwa, G. T., Mamman, B. Y. and Adeleke, E. A.	108
18.	Exchange Rate Volatility And Agricultural Exports In Nigeria: An Autoregressive Distributed Lag (ARDL) Bound Test Approach: Sakiru Oladele AKINBODE and Olutunji Timothy OJO	115

19.	Reducing Food Importation In Sub Saharan Africa: Myth Or Reality? Empirical Evidence From Cameroon (1995-2015): Djomo, R. F Ukpe, U. H. Gama, E. N Nwalem, M. P. Onuigbo, I. Dzever, D. D. and Chancha, T.E.	123
20.	Vector Autoregressive (VAR) Analysis Of The Dynamic Link Among Producer Prices, Area And Yield Of Cassava In Nigeria: Orefi Abu	130
21.	Co-Integration And Causality Analysis In Major Natural Rubber Markets Of Nigeria: Agbonkolor N. B, Alufohai G.O , Mesike C.S, and Adindu, A.G	137
22.	Contribution Of Foreign Direct Investment To Agricultural Productivity In Nigeria: Edewor, S. E. Dipeolu, A. O., Ashaolu O. F., Akinbode, S. O., Ogbe, A. O, Edewor, A. O., Tolorunju, E. T. and Oladeji S. O.	143
23.	Policies And Agribusiness Development: The Nigerian Experience: Tijani, I.A., Alawode, O.O., Fawehinmi, O. O., Gafar, A. O and Kolade, O.A.	150
24.	Investigating The Relationship Between Loans Accessed Under Agricultural Credit Guarantee Scheme (Acgs) And Interest Rate Policy In Nigeria: Umoren Aniefiok Akpan, Effiong Etim Okon and Akpan Sunday B rownson	156
25.	Record Keeping : An Effective Management Practice In Poultry Business In Uyo Local Government Area Of Akwa Ibom State.: Obinaju, Lawrence C. and Ekpo, Roberta R	163
26.	Effects Of Training On Employees' Loyalty In Agribusiness Firms. In Ogun State, Nigeria: Ashaolu O. F, Akerele D., Ayinde A.F.O, Afolabi O. I and Agbeniga D. O	172
27.	Rice-Importation Trend In Nigeria And Its Effects On Local Production: 1970-2013 : Biam, C.K. and Adejo, S.A.	179
28.	Can Nigeria Sustain Ban On Rice Importation Overtime? Analysis Of Its Determinants On Agri-Business Development In Commercial Rice Production And Processing (1991-2015): Dzever, D.D and Ayoola, J. B	187
29.	Does Socio-Economic Attributes Influence Public Agriculatural Credit Utilization? The Case Of Small Holder Farmers In Ekiti State, Nigeria: F. T. Kolade, M. U. Agbonlahor, S. O.Adeogun O. F. Ashaolu	195

30.	Agribusiness Performance And The Roles Of Domestic Economic Policies: The Nigeria's Scenario: Sunday B. Akpan, Edet J. Udoh and Aniefiok A. Umoren	959
-----	---	-----

SUB-THEME 4: SOCIAL WELFARE DEVELOPMENT AND AGRIBUSINESS

S/N	Content	Page
31.	Level Of Asset Ownership And Control By Women In Rural South West Nigeria: Yetunde O.M Oladokun and Kemisola O.Adenegan	203
32.	Perennial Conflict Between Farmers And Hausa/Fulani Herdsmen: Implications On Food Security In Nigeria: Oti, O. G., Onyia, C. C., Okere, R. A. and Umoinyang, M. E.	212
33.	Determinants Of Nutritional Status Of Preschool Children Of Farming Households In Southern Parts Of Nigeria: E. O. A Oluwalana, A.M Shittu and O.O Olaomi	221
34.	Economic Appraisal Of Inert Atmosphere Silo For Wheat Storage: Oyebamiji I. T., Olatilewa M. O., Adetayo S. A., and S. N. Oyewole	230
35.	Assessment Of Poverty Status Among Fish Farmers In Ogun State, Nigeria: Sodeeq A.E, Ashaolu O.F, Ibrahim A.G, Lamidi L.O, Salawu M.B, Idowu S.D, Ogunleye B.T	239
36.	Analysis Of Poverty Level And Land Management Practices Among Maize-Based Food Crop Farmers In Oyo State, Nigeria: Oladeebo, J.O, Ganiyu, M.O and Omotayo, A.O	245
37.	Analysis Of Economic Viability Of Small Scale Furniture Enterprise In Edo State, Nigeria: P. T. Owombo, F. O. Idumah, O. H. Opute	259
38.	Profitability Of Arable Crop Enterprise Under Goronyo Dam Irrigation Project In Sokoto State, Nigeria: Mohammed, U. S., Baba, K. M. Nmadu J. N. and R. S. Olaleye	267

39.	Women In Agriculture (WIA) And Rural Households' Welfare In Contribution Of Snail Production Business To The Income Of Snail Farmers In Edo South, Nigeria: Ahmadu, J. and Oyoboh, D.E.	272
40.	Determinants Of Rural Households' Food Security In Ogun State, Nigeria: T.A. Obasan, L.O Okojie and P A Okuneye	278
41.	Profitability Analysis Of Maize And Sorghum Based Cropping Enterprises In Niger State, Nigeria: Yisa, E. S., Nmadu, J. N., Tanko, L. and Tsado, E. K.	287
42.	Evaluation Of Profitability Among Cattle Fattening Enterprises In Kebbi State, Nigeria: Gona, A., Mohammed, I. and Baba, K. M.	296
43.	Economic Analysis Of Plant Species Utilized For Infant And Maternal Health Care (IMHC) In Ogun State, Nigeria: Idowu, S. D, Adedokun, M.O, Oluwalana, S. A, and Momoh, S.	305
44.	Effects Of Domestic Remittances On Poverty Status Of Rural Households In Ogun State: E.T. Tolorunju, A. O. Dipeolu, R. A. Sanusi, D. Akerele, S. O. Oladeji, S. E. Edewor And A. O. Ogbe	315
45.	Consumers' Preference For Honey In Ibadan North Local Government Area Of Oyo State, Nigeria: Obisesan Adekemi A. and Olasoji Oluwaseyi A.	322
46.	Asset-Based Wellbeing Of Oil Palm Farmers Under Presco Plc Out Grower Scheme In Edo And Delta States, Nigeria: Adade, B.F. and Ada-Okungbowa, C.I.	330
47.	Analysis Of Non-Farm Enterprises And Poverty Reduction Of Farming Households In Oyo Metropolis, Oyo State, Nigeria: Adeoye, A, Olojede, M.O, Balogun, O.L., and Adegbite, S.K	339
48.	Economics Of Occupational Health In Resist Dyed Fabrics (<i>Adire</i>) Production In Abeokuta, Ogun State, Nigeria: Adekunle, C.P., Ashaolu, O.F., Sanusi, R.A., Akerele, D., Oyekale, T.O. and Ogunrinde, F.	347
49.	Women In Agriculture (WIA) And Rural Households' Welfare In Oyo State; Evidence From Maize Arbitrators In Ibarapa Central Lga: Ogunwande, I.O. Akinrinola, O.O. Adeseluka, M.	356

50.	Socio-Economic Determinants Of Calorie Consumption Among Rural Farm Households In Ogun State, Nigeria: Olabode, O. J., Ogunnaike, M. G., Kehinde, M. O., Ibitoye A. O and Adeyinka O. A.	367
51.	Agricultural Technology Adoption And Profitability Among Small Holder Farmers In Nigeria: Rufai, A.M., Salman, K. K, Salawu, M.B. and Ogunniyi, A.I.	374
52.	Multiple Job Holding Among Household Members In Ikorodu Area Of Lagos State, Nigeria: Ologbon, O.A.C; Oycbanjo O; Akercle E.O; Oluwasanya O.P and Olowu F.A	384
53.	Determinants Of Willingness To Pay For Disposal Of Households Solid Waste In Ifako Ijaya and Agege Local Government Areas Of Lagos State: Adesope, A.A., Bolaji-Olutunji, K.A., Apata O.V., and Odediran, F.A	395
54.	Impact Of Membership Of Cooperative Society On Smallholder Farmers' Income In Kwara State, Nigeria: G. Adeyonu, I. O. Amao, B. O. Ajiboye, S. A. Faseyi and S. U. Isitor	403
55.	How Knowledge Affects Use: The Case Of Child Farm Labour Use By Rural Households In Ogun State, Nigeria: Adeoye S.O., Agbonlahor M.U., Ashaolu, O.F., Sodiya, C.I. and Sanusi R.A	409
56.	How Long Will It Take Poor Arable Crop Farmers To Opt Out Of Poverty In Nigeria?: Olutumise, A.I., Amos, T.T. and Ajibefun, A.	418

SUB-THEME 5: INTERNATIONAL ISSUES AND AGRIC. TRADE/MARKETING

S/N	Contents	Page
57.	Promoting Shea Nut And Butter Production In Nigeria : Akparanta, C.D., Abu, R.A., Oloyede, A.O., Obazee B. E.	428

58.	Assessment Of Catfish Marketing In Iwo Local Government Area Of Osun State, Nigeria: Nwali, C .S., Samuel, J. E., Adepoju, O. A., Oladiran, S. S. and Yilson, J. E.	433
59.	Economic Analysis Of Rice Marketing In Ibadan North Local Government Area, Oyo State Nigeria: Oyewo, I.O, Oladipupo-Alade, E.O, Oke, O.O, Ademuwagun, A.A, Afolabi, R.T	440
60.	Assessment Of Marketing Efficiency Of Moringa Leaves In Kano State, Nigeria: Yakubu, S. A., Umar, A.S.S. Umar, S.U. and Dan-Musa A. H.,	446
61.	Gender And Returns To Marketing Of Non-Timber Forest Products In Southwest Nigeria: Oluwakemi Adeola Obayelu and Lucy Adeteju Farinola	454
62.	Marketing Analysis Of Fresh And Processed (Barbecue) Along Catfish Value Chain, Implication For Youth Livelihood In Southeast, Nigeria: Ben-Chendo, G.N., Obasi P.C., Osuji M.N., Nwosu F.O., Emenyonu C.A., Ibeagwa, B.O. and Uhuegbulem I.J.	464
63.	International Trade In Agribusiness: A Review Of Nigerian Experience: Samuel, K.D., Alawode, O.O., Fawehinmi, O.O., and Tijani, I.A	471
64.	Commercialization Among Small Scale Maize Farmers In Federal Capital Territory, Abuja, Nigeria: C.O. Adebayo., A. O. Oladele And S. U.Tanko	476
65.	Performance Appraisal Of Cocoa Marketing In Osun State, Nigeria: Oseni, J. O. And Enitilo, B.O.	491

SUB-THEME 6: AGRIBUSINESS, CLIMATE CHANGE AND ENVIRONMENTAL ISSUES.

S/N	Contents	Page
66.	Determinants Of The Factors Affecting Willingness To Pay For Improved Sanitation Among Rural Households In Oyo State, Nigeria: Dare, A. M., Ayinde, I. A., Shittu, A. M., Akerele, D. and Sam-Wobo, S. O.	506

67.	Analysis Of The Awareness Of Banana Bunchy Top Disease (BBTD) Among Farmers In Idologun Village, Ogun State: Akinyemi, S.O.S, Adebisi-Adelani O.; Layade A.A; Adegbite, O.; Arogundade O.; Fajinmi O.B. and Kumar L.	515
68.	Assessment Of Land Tillage Practices And Related Problems Among Rice Farmers In Agricultural Zone I, Niger State: Madu Ali Bwala, S. A. Tiamiyu, S. Adedeji and Alhaji Y. Kolo	522
69.	Effect Of Oil Spillage On Poverty Status Of Artisanal Fishing Households In Rivers State, Nigeria : Numa, W.D., Obayelu, A.E., Sanusi, R.A. and Bada, B.A	527
70.	Assesement Of Food Security Status And Adaptation Strategies To Climate Change Among Farm Households In Kwara State: K. K. Ogunbiyi, O.A. Olajide	533
71.	Awareness And Adoption Rates Of Climate Smart Practices Among Cereal Farmers In Nigeria: Adebayo M. Shittu, Mojisola O. Kehinde, Maria G. Ogunnaike, Funminiyi P. Oyawole and Lois T. Akisanya	541
72.	Land Tenure And Property Rights Impacts On Adoption Of Climate Smart Practices Among Smallholder Farmers In Nigeria.: Mojisola O. Kehinde, Adebayo M. Shittu, Maria G. Ogunnaike, Funminiyi P. Oyawole and Lois T. Akisanya	550
73.	Does Access To Agricultural Credit Explain Land Use Choice? A Case Of Odukpani In Cross River State, Nigeria: Egbe B. Etowa, Zelda A. Elum and Emmanuel D. Nwiido	559
74.	Determinants Of Climate Change Adaptation Strategies Of Yam Producers In Niger State, Nigeria: J. N. Nmadu, A.A.A. Coker, and E. Adams	566
75.	Investigating Climate Smart Agricultural Practices In Livestock Production: An Application Of Principal Component Analysis: Daniel Ekpa, Mudashiru Akinyemi and Hassan Ishaq Ibrahim	585
76.	Analysis Of Climate Change Effects On Rice Output In Ebonyi State, Nigeria: 1990- 2015: Nte I. Nwali. and Frank N. Okoro	591

77.	Gender Gaps And Adoption Of Climate Smart Practices Among Cereal Farm Households In Nigeria: Fapojuwo, O.E., Shittu, A.M., Ogunnaike, M.G., Kehinde, M.O., Oyawole, F.P., and Akisanya, L.T.	597
78.	Mitigating Environmental Impact Of Locust Bean Agribusiness: Potentials Of Modifying Seed Collection Time And Pre-Germination Treatments Of Parkia Biglobosa: Alawode, Ramatallah Adenike	609
79.	Effect Of Climate Change On Small And Medium Scale Agro-Allied Enterprises In Ogun State, Nigeria : Thompson, O.A and Amos, T.T.	615
80.	Indigenous Climate Change Adaptation Strategies As Practiced By Farm Households In Udi Lga Of Enugu State, Nigeria: Stella Nwawulu Chiemela, Chinedum Jachinma Chiemela ,Onyia Chukwuemeka Chiebonam and Ezekiel Sunday Mgbebu	622
81.	Does Evidence From Oyo State, South-West Nigeria Indicate Poverty Status Influencing Farmer's Disposition To Incentives In Climate Change Mitigation Scheme?: Sanusi, R. A., Shittu, A. M., Kehinde, M. O., Tiamiyu, S. O., Fapojuwo, O. E. and Oladeinde, K. B.	630
82.	Perceived Effects Of Climate Change On Cassava Production And Farmers Coping Strategies In Ahoada – East Local Government Area, Rivers State: Tasie, C.M. And Wilcox, G.I	643
83.	Influence Of Climate Change Indicators On Agribusiness Growth Index In Nigeria: Sunday B. Akpan, Uwemedimo E. Okon and Udoro J. Udo	658
84.	Perception on Climate Variability and Adaptation Strategies among Plantain Producing Farmers in Omi-Adio Area, Oyo State, Nigeria: Sanusi M. M., Oyedeji O. O. and D. Akerele	650
85.	Potential Effects Of Climate Change On Insurance Demand For Agricultural Activities In Nigeria: Elum, Z.A. and Ndubueze-Ogaraku, M.E	667
86.	Determinants Of Environmental Sustainability Of Cassava Processing In Selected Local Government Areas Of Ogun And Oyo States, Nigeria: Abiola Agbeniga, C.A. Afolami, A. E. Obayelu, George Mavrotas and B. O. Oluwatosin	674

87.	Adaptation Strategies And Farmers' Perception On The Effect Of Climate Change On Cassava Production In Ondo State, Nigeria: Oduntan, O., Oluyide, O. G. and Adérinola E. A	968
-----	---	-----

SUB-THEME 7: AGRIBUSINESS: PRODUCTIVITY, EFFICIENCY AND OTHER EMERGING ISSUES.

S/N	Contents	Page
88.	Productive Efficiency Of Fish Production: A Panacea For Economic Recession Among Farming Household In South-West, Nigeria: Ajiboye, B. O., Bamiro O. M., Adeyonu A. G., Adigun G.T.	683
89.	Technical Efficiency Of Rice Farmers In Nigeria: A Way Out Of Economic Recession: Ashagidigbi Waheed. M, Afolabi Olaniyi and Omotola Aderonke M.	691
90.	Technical Efficiency Of Battery Cage And Deep Litter System Of Poultry Production In South West Nigeria: Bamiro, O. M. Ajiboye, B. O. and Adeyonu , A. G.	696
91.	Determinants Of Land Pproductivity Among Arable Crop Farmers Using Sustainable Soil Management Techniques In Imo State, Nigeria: Ehirim, N. C., Azubogu, C. C. and Osuji, E. E.	706
92.	Determinants Of Maize-Based Arable Crop Farmers Productivity In Niger State, Nigeria: F.D. Ibrahim, A. O. Oformata, A.J. Jirgi, A.I. Oseghale and R.K. Bako.	712
93.	Effects Of Land Tenure System On Land Access And Productivity Among Women Rice Farmers In Enugu State, Nigeria: Iorliam Terngu	721
94.	Technical Efficiency Of Sesame Production In Niger State, Nigeria: Lawal A.F, Adedeji S. O; Bwala M. A, A. Umaru and Joel Momoh	730
95.	Allocative Efficiency Of Egusi- Melon (<i>Citrullus Colocynthis</i>) Production, Among Sole And Mixed Crop Farmers In Niger State, Nigeria: Liman, A; Maikasuwa, M.A; Ala, A.L and M.B. Sokoto	735

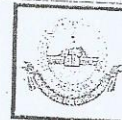
96.	Empirical Investigation And Analysis Of Shea Butter Production: Evidence From Baruten Local Government Area Of Kwara State, Nigeria: Oluwalana, E. O. A. and Sowunmi, A. S.	741
97.	Profitability And Production Efficiency Of Maize Farmers In Osun State, Nigeria: Oyckale, T. O., Azecz, S. M., Sanusi, R. A., Elemo, K. A.	749
98.	Promoting Shea Nut And Butter Production In Nigeria: Akparanta, C.D., Abu, R.A., Oloyede, A.O., Obazee B.E.	757
99.	Resource Use Efficiency In Raphia Palm Wine Production In The Niger Delta Area Of Nigeria: B. Adakaren, O.J. Ekhaton, S.A.N.D. Chidebelu, C.J. Arene .	762
100.	Effect Of Agrochemical Use On Allocative Efficiency Of Lowland Rice Farmers In Niger And Ogun States Nigeria: Oseghale A.I., Ayinde I.A., Shittu A.M. and Adeofun C.O	770
101.	Socio-Economic Analysis Of Soybean Production Among Small Scale Farmers In Kaduna State, Nigeria: L. A. Saliu,, S. A. Abdulrazaq and F. E. Yefte	779
102.	Profitability And Resource-Use Efficiency In Pineapple Production In Delta State, Nigeria: Waziri-Ugwu, P. R. and Tiku, N. E.	788
103.	An Application Of Stochastic Frontier Production Function To Agribusiness Firms In Lagos And Ogun States, Nigeria: Aderonmu A. A Olagunju, F. I, Aderibigbe A. J and Otekunrin O. A	796
104.	Economics Of Plantain Production In Ogun State: Ashaye, W.O, Abdulqadri, A.F, Daramola, R.B, Nwajei, E. I, Ayodele,	803
105.	Technology Gap And Technical Efficiency Of Rice Production Ecologies In South Eastern Nigeria: Ogbe, A.O., Dipeolu, A.O., Obayelu, A. E, Porbeni, J.B.O., Edewor, S. E., Ogbe O.C., Tolorunju, E.T., Oladeji, S.O.	808
106.	Growth And Variability Of Selected Agricultural Raw Materials: Panacea For Growth In Nigeria Agro-Allied Industries: Salawu M.B., Salman. K. K. , Ibrahim A.G., Rufai, A.M., Sodeeq A.E. and Lamidi L.O..	815

107.	Effect Of Social Capital On Productivity Of Cassava Farmers In Ijebu North-East Local Government Area Of Ogun State, Nigeria: Balogun, O.L; Ogunsina, I. J., Ayo-Bello, T. A; Afodu, O. J and Osuji, E. E.	822
108.	Technical Efficiency Of Organic And Inorganic Leafy Vegetable Production In Ogun State, Nigeria. Using Stochastic Frontier Production Model: Oladeji S.O, Soladoye O. O, Omoare A.M, Sanusi R. A, Akerele D., Lawal M. K, Tolorunju E.T, Edewor S. E, Ogbe A. O.	828
109.	Budgetary Analysis Of Small Scale Poultry Production In Egbeda Local Government Area, Oyo State, Nigeria: Oseghale, A.I, Olarewaju, T.O., Ibrahim, F.A., Orumwense, L.A. and Akinleye, D.O.	834
110.	Gender Analysis Of Resource Use And Efficiency In Rice Production In Kogi State, Nigeria: Ayinde, O.E., Aletan, O.J., and Ajewole, O.O	842
111.	Technical Efficiency And Its Determinants In Watermelon Farming In Yobe State, Nigeria: I. A. Adedeji, N. E. Tiku and P. R Waziri-Ugwu	848
112.	Economics Of Broiler Production: A Case Of Recessed Economy, Nigeria.: Udoro J. Udo, Sunday B. Akpan and Ubokudom E. Okon	855
113.	Socio-Economic Factors Affecting Local Rice Production In Biase Local Government Area In Cross River State, Nigeria: Tiku, N.E, Sanusi, S.O, Adedeji I.A. And Ebira, A.J	861

SUB-THEME 8: INSTITUTIONS, YOUTHS AND AGRIBUSINESS DEVELOPMENT

S/N	Contents	Page
114.	Determinants Of Credit Access Among Small Scale Maize Farmers In Akure South Local Government, Ondo State, Nigeria: AJAYI, Clementina Oluwafunke, Ajayi, Joseph Omotoso, Ayo-Bello, Taofeek Ayodeji, and Oluwawehinmi, Temitope Adewale	871

115.	Youths' Participatory Decision Towards Agriculture: A Case Study Of Oyo State, Nigeria: Obayelu Abiodun Elijah, Ogunmola Omotoso Oluseye and Balogun Atinuke Ibironke	878
116.	Assesment Of Students' Level Of Participation On Selected Adopted School Enterprises (Cassava And Poultry) In Oyo State, Nigeria: Samuel, J. E., Nwali, C. S., Adepoju, O. A. and Oladiran, S. S.	887
117.	Output Performances Of Cooperative And Non Cooperative Farms In Rivers State, Nigeria: Sixtus O. Anyanwu, T.P. Ojimba and Queeneth Dick	894
118.	Socioeconomic Analysis Of Beneficiary And Non-Beneficiary Smallholder Farmers Of Bank Of Agriculture Loan Scheme In Ogun State, Nigeria: Ugalahi, U. B., adeoye, S. O. And ocheni, B. A.	901
119.	Determinants Of Fast Food Consumption Among Government Employees Of Kwara State, Nigeria: Oladimeji, Y. U., Abdulsalam, Z. and Oyewole, S. O.	907
120.	Youths' Participation In Agricultural Production In Oyo State: Panacea To Agribusiness Development In Nigeria: Adigun G.T, Bamiro O.M and Oyetoki A.	914
121.	Factors Affecting Decision To Participate In Agribusiness Among Youths In Ogun State, Nigeria: Akinwekomi O. E, Obayelu A. E. and Afolabi O. I.	920
122.	Comparative Analysis Of Income Inequality Among Small And Medium Agribusiness Loan Beneficiaries From Commercial And Microfinance Banks In Imo State Nigeria: Ukoha, I. I., Ibeagwa, O.B., Uhuegbulam, I.J., Ejike, O.U., Oshaji, I.O., Oşuji E.E, Chikezie, C	930
123.	Socio-Economic Determinants Of Informal Savings For Small Scale Cassava Production In Abi LGA, Cross River State, Nigeria: Kuye, O.O, Ettah, O.I, Oniah, M.O And Egbe, B. M.	936
124.	Effects Of Microfinance On Small And Medium Scale Enterprises In Ondo – State, Nigeria: Afelumo, B.E. And Afolabi, J.A.	944



ENTERPRISE ANALYSES ACROSS CASSAVA AGRIBUSINESS VALUE CHAIN IN NIGER-DELTA REGION OF NIGERIA: IMPLICATIONS FOR AGRIBUSINESS, WOMEN AND YOUTH POLICIES

¹Coker, Ayodeji Alexander Ajibola; ²Molokwu, Christopher C.; ³Odoemena, Benjamin C.,
¹Tuedogheye, Jeremiah G. and ¹Elega, Julius O.

¹Department of Agricultural Economics & Extension Technology, School of Agriculture & Agricultural Technology, Federal University of Technology, Minna, P.M.B 65, Minna, Niger State, Nigeria

²Economics Programme, Department of Social Sciences, College of Management and Socio-Sciences, SALEM University, Kogi State, Nigeria

³International Fund for Agricultural Development, Nigeria Country Office, Federal Capital Territory, Abuja, Nigeria

*E-mail of Correspondence - ayodejicoker@futminna.edu.ng; Phone number: 08034091353

ABSTRACT

The issues of youth unemployment, inequality, poverty, economic recession and associated anti-social activities are critical challenges currently limiting the development of the Niger Delta Region of Nigeria. This study therefore assessed the various cassava agribusiness value chain nodes in the Region, with the view to ascertaining their returns on investment and propensity for attracting the pool of unemployed youths and women into agribusiness and uplifting their livelihoods. Evidence from the study suggests that cassava enterprises, particularly processing, is most promising to attract the youths and women into agribusiness, given its high returns on investment. It thus becomes imperative that cassava enterprises be incorporated into on-going and proposed development interventions of the private sector, government and development partners, with a view to actualising the policy objective of women and youth empowerment in the country, and in particular, the Niger Delta Region, as detailed in the Agricultural Promotion Policy and the Economic and Growth Recovery Plan. The study further recommends that the cassava value chain enterprises should be deployed as focal commodities for the proposed agribusiness incubation centres and the agro-industrial parks, with a view to causing entrepreneurs empowerment and national output, while serving as antidote to economic recession.

KEYWORDS: Enterprise Analysis, Cassava, Value Chain, Niger Delta, Agribusiness, Recession Women and Youth Policies

INTRODUCTION

Agriculture is the most important sector in the Nigerian economy. It employs 38.0 per cent of Nigerians and contributes 23.1% of the country's Gross Domestic Product (Federal Republic of Nigeria, 2017). The sector grew by 4.88 per cent in the third quarter of 2016 and by as much as 13 per cent in previous years, suggesting immense unrealized potential (Federal Republic of Nigeria, 2017). However, the performance of the sector in international trade over the years depicts declines and stagnation, having lost its position in the export of key commodities (Federal Ministry of Agriculture and Rural Development, 2011). Following the shift from agriculture to crude oil and gas in the late 1960s, Nigeria's growth has continued to be driven by consumption and high oil prices. The structure of the economy is largely import dependent, consumption driven and undiversified. Oil accounts for more than 95 per cent of export and foreign exchange earnings while the manufacturing sector accounts for less than one percent of total exports (Federal Republic of Nigeria, 2017). Bakare (2011) noted that as agriculture export shrank from the traditional 12-15 commodities of the 1960s, Nigeria became a net importer of the basic food it normally exported. Presently, majority of Nigerians

remain under the burden of poverty, inequality and unemployment. FMARD (2011) revealed that Nigeria was the leading exporter of groundnut with a world's share of 42% and had 27% of the world's palm oil export, 18% of cocoa and 1.4% of cotton. It is also the major West African cotton exporter. This glory however declined over years, with the dominance eclipsed by its competitors. The general economic performance is undermined by deplorable infrastructure, consumption and mismanagement of public finances (Federal Republic of Nigeria, 2017). Aside these, youth unemployment became rife, (particularly in the Niger Delta Region) with about 27% (22 million) youths unemployed, while transition from school to employment has been difficult (International Fund for Agricultural Development, 2017). There has also been no structured path to follow or role models to look up to. These developments are not unconnected to limited access to technical skills, insufficient, inappropriate and inaccessible finance, negative effect of climate change and the perception of agriculture as unattractive for generating income and sustaining life. According to Akinbamijo (2015), the shift in focus away from agriculture to petroleum brought about severe underinvestment in the sector by the public and private sectors and was further accentuated by weak, unenforced, poorly implemented and often conflicting policies at all levels of the country's governance structures (Nwuneli, undated). In a related development, Anaebonam (2015) posited that as desirable as agribusiness is to economic well-being, many countries in the sub-Saharan Africa, including Nigeria, are yet to optimise their potentials. According to the source, the challenges are not unconnected to the relegation of agriculture to subsistence farming, non-prioritization of agribusiness at the different levels of governance, lack of infrastructure, poor storage facilities, poor state of research, poor and disjointed value chains, occasioned by the discovery of oil (Anaebonam, 2015). These challenges tend to raise doubt, as to the efficiency of agribusiness activities within the Niger Delta Region of Nigeria. Thus, this study therefore examines the margins and rate of returns on investments under the cassava agribusiness enterprises within the Niger-Delta Region of Nigeria and identified the most promising enterprise in each state based on the returns on investment criteria. Justification for this study stems from the need to identify viable and sustainable agribusiness enterprises which can attract the pool of jobless unemployed youths and other vulnerable lots in the Region, particularly the women. According to the Nigeria's Economic Recovery and Growth Plan, agribusiness and agro-allied industries will enable mass employment in the formal and informal sectors, given the colossal domestic demand, the potential for import substitution, and opportunities arising from increased yields and raw material processing.

THEORETICAL INSIGHTS

Concept of Business Enterprises and Agribusiness

Numerous research works (Boehlje 2002; Mendelu undated; myfinancialintelligence, 2015 and Ogidi, 2015) have focused on numerous aspects of the agribusiness concept. Specifically however, Davis and Goldberg (1957) defined agribusiness as the sum total of all operations involved in the processing and distribution of products produced on a farm, covering production operations, storage, transportation and agricultural commodity marketing.

Agribusiness Policy in Nigeria

The policy thrust of agribusiness development in the country is aimed at promoting access to agro-processing through public and private sector participation; revitalization of Staple Crops Processing Zones, Agribusiness Incubation Centres and Agro-industrial parks; promoting partnership with State Governments to incentivize agribusiness development, amongst other development focus issues (FMARD, 2016).

Women and Youth Policy in Nigeria

The focus of the women and youth policy as detailed in the Agricultural Promotion Policy is to maximize the contributions of women and youths to agricultural production and ensure the elimination of discriminatory practices in the employment of women and youths in the sector. The policy also focussed attention at developing and launching entrepreneurship platforms, with a view to creating a pathway for youths and women to enter agribusiness economy.

Cassava Production and Value Chain

Nigeria is the largest producer of cassava in the world, with a total production of 55 million MT of fresh cassava roots in 2014. Despite her comparative advantage in cassava production, Nigeria is not one of the major players in the global value-added trade of cassava-based products (FMARD, 2015). The holistic cassava value chain actors comprise mainly of the agro-input dealers, producers, traders, processors, transporters and marketers, even though there are regional and state peculiarities. Figure 1 depicts a typical cassava value chain.

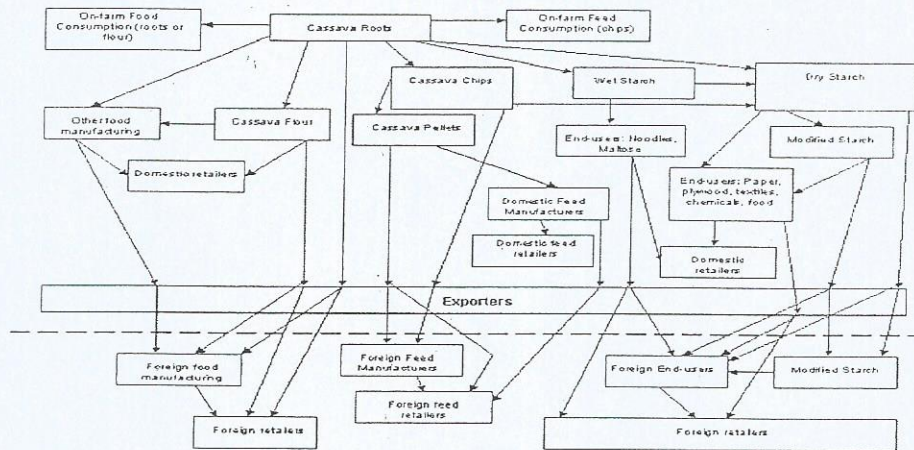


Figure 1: A typical cassava value chain
Source: Valuechains4poor.pbworks.com

METHODOLOGY

Study Area

The study was undertaken in the Niger Delta States of Nigeria, located in the southern part of Nigeria and bordered to the south by the Atlantic Ocean and to the East by Cameroon. The region covers about 112,110 square kilometers, representing 12% of Nigeria's total surface area (Federal Republic of Nigeria, undated) and a population of about 30 million people, representing 18% of Nigeria's population. The region is located within the tropical rainforest climate zone on the northern regions and freshwater swamp and mangrove swamp forests in the southern regions, from Longitudes 4.15°N - 7.17°N and Latitudes 5.05°E - 8.68°N (Okoro *et al.*, 2014). It has the heaviest rainfall within West Africa, with an annual rainfall totals of between 1,300mm and 4,000mm (Anyadike, 1992; International Fund for Agricultural Development, 2002; Nicholson, 2003), with annual rainfall peak between April and October and an average temperature of 24-33.3°C (Kadafa undated; Umoh, *et al.*, (2013). The Region comprises nine States, spread across the South-South (Akwa Ibom, Cross River, Edo, Delta and Rivers States), South East (Abia and Imo States) and South West (Ondo State) Zones of Nigeria. Bayelsa, Cross River and Rivers States have extensive coastlines; Ondo, Delta and Akwa Ibom have coastlines and agricultural lands, while Abia, Edo and Imo have no coastlines.

Sample Design, Techniques and Sample Size

Sample Selection

The multi-stage sampling design, complemented with stratification was employed for this study. The first stage involved the selection of four States (Abia, Cross River, Edo and Rivers) out of the 9 Niger Delta States, based on regional stratification and performance criteria under the recently closed IFAD supported Community-based Natural Resource Management Programme. The second stage was the random selection of one Local Government Area each under each of the three agro-ecological zones in each of these States, while the third stage was the selection of two communities each under each LGA, except for Umuhia North LGA in Abia State and Akpabuyo LGA in Cross River State which had three communities each, thus totalling 12 LGAs and 26 communities. The fourth stage entailed

the administration of 50 questionnaires in each state covering all the cassava agribusiness nodes (production, processing, marketing and transportation) (Table 1.0).

Table 1: Details of sample selection and questionnaire administration

STATE	ZONE	LGA	COMMUNITIES	FGDs proposed	FGDs Conducted
ABIA	Abia North	Bende	Etiti Ugwueke Akoli Imenyi		
	Abia Central	Umuahia North	Umuezike Ofeme Okwuta Okwoji	50	50
	Abia South	Ugwunagbo	Etiti Akano Ngwa Ngwa Iyi Ekwe		
CROSS RIVER	Calabar	Akpabuyo	Idebe Offiong Umo Urua Ndung Ikot Ekiriba Offiong		
	Ogoja	Bekwara	Ugbaro Nyanya	50	50
	Ikom	Obubra	Iyamoyong Ovukwa		
EDO	Edo North	Akoko Edo	Ikirah-Ile Ureme –Erhunrun		
	Edo South	Uhumode	Ennuhu Evbuohuan	50	50
	Edo Central	Esan	Oria/Illushi Okhuesan		
RIVERS	Zone 1	Obia Akpo	Eneka Alua		
	Zone 2	Abuah	Okana Ajrokwu	50	50
	Zone 3	Ikwere	Ozuaḥa Apani		
TOTAL				200	200

Source: Field Survey, (2017)

Method of Data Collection and Management

Given the limited time frame, a rapid survey using focused group discussion (FGD) was employed for data collection. The approach entailed using the existing profile of enterprise groups to identify groups to be interviewed. In all, 12 Enumerators were involved in the survey, comprising 3 enumerators per state. Data collection covered input and output data of the cassava value chain actors under the 5 targeted value chain nodes. Data analyses was undertaken by the research team using spss and excel packages to generate descriptive statistics, such as mean, frequencies, ratios; benefit cost analysis and Returns on Investment Index.

Model Specification

The models specified under this study were for the gross margin and returns on investment (Equations 1 and 2).

$$\text{Gross margin (GM)} = \sum TR - \sum TVC \quad (1)$$

Were;

TR = Mean of Total revenue of respondents, and

TVC = Mean of Total Variable Cost of Production

$$\text{Return on Investment (ROI) \%} = \frac{\sum GM}{\sum TVC} \times 100 \quad (2)$$

RESULTS AND DISCUSSION

The results of the cassava agribusiness value chain across the 4 states considered are as detailed in Table 1.0. The margin analysis undertaken across the four states sampled shows that cassava processing enterprise was the most profitable, with a margin of one million, thirty thousand, two hundred and ninety eight naira, thirty two kobo (₦1,030,298.32K), while margin from transportation business was the least, estimated at one hundred and forty thousand, two hundred and forty four naira, fourteen kobo (₦140, 244.14K). In terms of Returns on Investment for all sampled states combined (Figure 1.0), processing business also yielded the highest return of 414.55%, while marketing enterprise returned the least of 60.26%, implying that for ₦4.14k and 0.60K were obtained from ever naira spent on these enterprises.

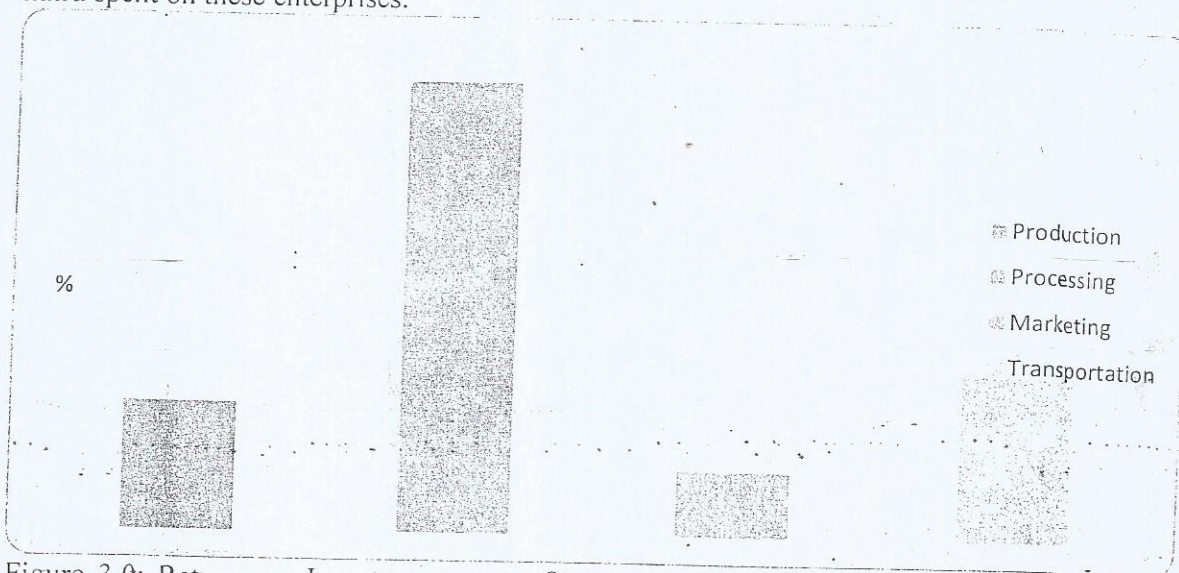


Figure 3.0: Returns on Investment across Cassava Agribusiness Value Chain (Combined for all States)

Analysis across the individual states provided insight into the states specific performance. For Edo State for instance, transportation yielded the most return on investment of 448.96%, implying that ₦4.48K was obtained on every naira spent. In Abia State, processing yielded the highest ROI of 542.88%, while marketing yielded the least of 20.0%. For Rivers State, processing recorded the highest return of 646.42%, while production returned only 9.84%.

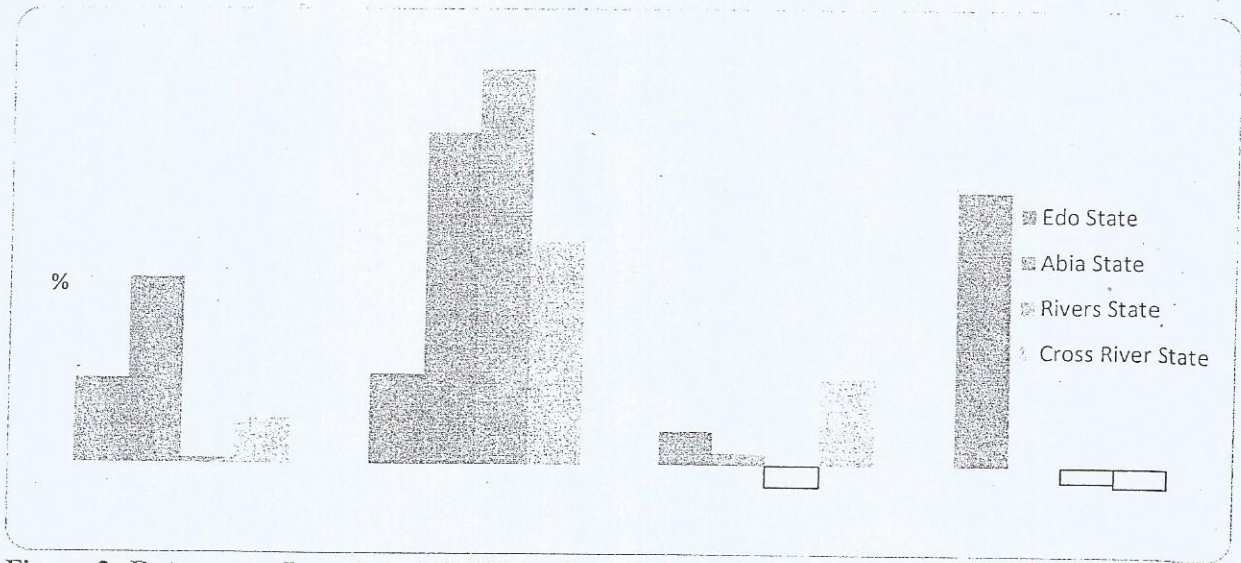


Figure 2: Returns on Investment (ROI) on Cassava Agribusiness across Sampled States

With respect to Cross River State, ROI of 366.39% was obtained under cassava processing as the highest ROI, while transportation business yielded the least of -31.08%. Thus, based on the criteria of prioritization using the ROI, it thus implies that transportation business should be prioritized in Edo State, followed by processing, production and marketing in that order. In Abia however, cassava processing should be the first priority, followed by cassava production and then, marketing; for Rivers State, cassava processing should be prioritized, followed by cassava production and in Cross River State, cassava processing should be the priority, followed by cassava marketing, production and lastly transportation.

Table 1: Summary of enterprise gross margins (Naira) and returns on investments (%)

ENTERPRISE STATES	PRODUCTION		PROCESSING		MARKETING		TRANSPORTATION	
	GROSS MARGIN	Returns on Investment	GROSS MARGIN	Returns on Investment	GROSS MARGIN	Returns on Investment	GROSS MARGIN	Returns on Investment
CASSAVA								
ALL STATES	267,355.63	117.84	1,030,298.32	414.55	270,897.19	60.26	140,244.44	151.92
EDO	218,335.29	138.66	284,663.33	147.84	81,750.00	55.23	567,166.67	448.96
ABIA	937,929.68	306.08	2,213,927.27	542.88	790,468.00	20.00	-	-
RIVERS CROSS	110,540.94	9.84	961,779.00	646.42	499,724.00	-34.57	136,933.33	-24.26
RIVERS	193,351.70	74.25	722,379.64	366.39	156,152.72	142.03	-9,500.00	-31.08

Implications of Results for Agribusiness; Women and Youth Policies in Nigeria

Arising from the outcome of the study and considering the huge natural and climatic potentials of the Niger Delta Region of Nigeria, unlocking the agribusiness potentials inherent in the cassava enterprises nodes under consideration analysed should not be an issue. Most importantly, the outcome provides impetus for private sector involvement in cassava agribusiness enterprises in the Niger Delta Region, while also justifying public sector participation through provision of enabling environment. The high ROI from cassava processing also aptly justifies the policy focus on value addition and agro-processing as detailed by the Agricultural Promotion Policy. Against this backdrop, it becomes necessary for the government of the day to be pragmatic and be fully committed to the development of the analysed agribusiness nodes through policy measures and fiscal support to the agro-industrialization strategies initiated during the Agricultural Transformation Agenda. Thus, the cassava value chain agribusiness nodes can serve as focal enterprises for the proposed agribusiness incubation centres and the agro-industrial parks of this administration.

On the other hand, the positive margins and high ROIs from most of the cassava enterprises analysed should provide more than enough incentive to attract the pool of unemployed youths and women in the Niger Delta Region to agriculture.

CONCLUSION AND RECOMMENDATIONS

The study concluded that cassava agribusiness enterprises are generally profitable with high Rates of Returns on Investment, particularly in the processing enterprise. Thus, for the entire Niger Delta Region, cassava processing should be given first priority, followed by transportation business, production and marketing in that order. For Abia, Rivers and Cross River States, cassava processing should be the priority enterprise, while in Edo State cassava transportation business should receive first priority followed by processing. The study affirms that the cassava agribusiness nodes are promising and profitable to attract the youths and women into agribusiness, while causing empowerment and serving as antidote to the current economic recession. The study further recommended that the cassava value chain enterprises should be deployed as focal commodities for the proposed agribusiness incubation centres and the agro-industrial parks.