Petroleum Extraction, Agriculture and Local Communities in the Niger Delta. A Case of Ilaje Community.

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Chapter I: Introduction

Petroleum resource exploration and extraction--

- A crucial economic activity
- Petroleum resources contributed substantially to economic development
- Conversely, petroleum exploration and extraction often induce negative impacts on other economic activities such as agriculture.
- Threatens environmental Safety.
- Ilaje Community, Ondo State, Nigeria, was chosen as a case study.
Introduction Cont.

- Location and member states of the Niger Delta.

Located in Coastal Southern Region of Nigeria.

Map of the Niger Delta region
Niger Delta

Image of the Niger Delta

Source: Ken Saro-Wiwa 20 years on Niger Delta ...

Cnn.com
Map of Ondo State Showing the 18 Local Government Areas

Ilaje Local Government
Introduction Cont.

- Population --- Estimated at 46 Million (UNDP)
- Geographical Landmark --- ND Covers area over 70,000 Sq Kilometers (ie 27,000 Miles)
- Ilaje Community --- Occupies Atlantic Coastline of Ondo State, Nigeria.
- Ilaje Local Government (Polluted Area) was one of the 18 Local Governments in Ondo State, Nigeria.
- Five Local Governments were randomly selected to served as control.
Scope of the study

This research work will cover Ilaje Community in Ondo State. Ondo State is located in the petroleum producing area of the Niger Delta.

Ilaje community was mainly into agricultural production.
Chapter II: Literature Review

- Agriculture in Economic Development of Nigeria:
  - Machinery for life sustenance
  - Supportive role raw material provision for industrial development
  - Todaro MP (2000) viewed role of AG as passive and supportive
  - Precondition for eco developed
  - Rapid structural transformation of the AG sector
Jhingan M.L (1985) opined that:

(a) AG provides food surplus for the rapidly expanding population.
(b) Increase demand for industrial products.
(c) Necessitate the expansion of secondary and tertiary sector.
(d) Provides additional foreign exchange earnings for the import of capital goods through increased AG exports.
Literature Review Cont.

Nigeria Agricultural Performances

Prior to Petroleum discovery:

- AG’s contribution to GDP was the largest.
  - In 1961 and 1963 AG contributed 62.9% and 61.0% to the GDP respectively.
Gross Domestic Product by Activity Sector

- Agriculture was only 22%
Literature Review Cont.

The Discovery of Petroleum in Nigeria.

- Shell BP discovered oil in Oloibiri, Bayelsa State.
- Civil unrest in the Niger Delta region.

Reasons for civil unrest:

- Environmental pollution and effects on the local communities.
- Denial of benefits.
Largest Producers of Petroleum and other Liquids

Largest Producers of Petroleum and Other Liquids, 2019 (barrels per day)

<table>
<thead>
<tr>
<th>Country</th>
<th>OPEC members</th>
<th>Non-OPEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
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<tr>
<td>Saudi Arabia</td>
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<tr>
<td>Russia</td>
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<td>Canada</td>
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<td>China</td>
<td></td>
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<tr>
<td>Iraq</td>
<td></td>
<td></td>
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<tr>
<td>United Arab Emirates</td>
<td></td>
<td></td>
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<tr>
<td>Brazil</td>
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<td>Iran</td>
<td></td>
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<tr>
<td>Kuwait</td>
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<td>Nigeria</td>
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<td>Qatar</td>
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<td>Kazakhstan</td>
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<td>Mexico</td>
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<td>Norway</td>
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<td>Algeria</td>
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<td>Libya</td>
<td></td>
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<tr>
<td>United Kingdom</td>
<td></td>
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<tr>
<td>India</td>
<td></td>
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</tr>
</tbody>
</table>

Note: “Other liquids” includes biodiesel, ethanol, and additional liquids produced from coal, gas, and oil shale. “OPEC members” refers to 2020 member states.

Source: U.S. Energy Information Administration.
Nigeria Crude Oil Exports: 1980-2020

![Graph showing Nigeria Crude Oil Exports from 1980 to 2020. The graph indicates fluctuations in oil exports over the years.](chart.png)
Environmental problems of the oil-rich Niger Delta.

- Contamination of soil and natural water
  - Crude oil negatively affects soil fertility and growth of crops.
  - Chemical components in crude oil can kill organisms.
- The problem of Gas-flaring
- Climate Change
Chapter III: Estimation

Research Methodology:

Comparative and descriptive method of data analysis.
Data

Sources of Data:

- United State Energy Information Administration.
- Nigeria Bureau of Statistics 2009
- F.A.O. Statistic Division (FAOSTAT)
- Ondo State Ministry of Agriculture and Natural Resources.
- Newspapers
- Internet
- Library textbooks.
- Nigeria GDP Report 2019
## Graded Cocoa output in tonnes in 6 LGA in Ondo State: 2007-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Odigbo</th>
<th>Akure South</th>
<th>Idanre</th>
<th>Ondo West</th>
<th>Owo</th>
<th>Ilaje</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>4324</td>
<td>3555</td>
<td>24341</td>
<td>8564</td>
<td>3746</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>6067</td>
<td>4469</td>
<td>20185</td>
<td>11293</td>
<td>5078</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>8945</td>
<td>5746</td>
<td>24821</td>
<td>13100</td>
<td>5967</td>
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<td>2010</td>
<td>7103</td>
<td>5331</td>
<td>18396</td>
<td>11778</td>
<td>5531</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>8152</td>
<td>7044</td>
<td>22671</td>
<td>17365</td>
<td>6094</td>
<td>0</td>
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<td>2012</td>
<td>7333</td>
<td>6198</td>
<td>20185</td>
<td>14961</td>
<td>4713</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>8736</td>
<td>7499</td>
<td>24821</td>
<td>15734</td>
<td>7343</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>9298</td>
<td>5345</td>
<td>18021</td>
<td>15936</td>
<td>4946</td>
<td>0</td>
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<tr>
<td>2015</td>
<td>7246</td>
<td>6214</td>
<td>19354</td>
<td>16298</td>
<td>5384</td>
<td>0</td>
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<tr>
<td>2016</td>
<td>8599</td>
<td>7224</td>
<td>18021</td>
<td>19134</td>
<td>4243</td>
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<tr>
<td>2017</td>
<td>6763</td>
<td>4506</td>
<td>20880</td>
<td>19097</td>
<td>4058</td>
<td>0</td>
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<tr>
<td>2018</td>
<td>4441</td>
<td>4506</td>
<td>20069</td>
<td>19223</td>
<td>5051</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Extracted from Ondo State Ministry of Agriculture and Natural Resources
Graded cocoa output (in tonnes) in six LGA of Ondo State

- Illaje does not produce any graded cocoa
Revenue (in Naira) graded from graded cocoa in six LGA 2007-2008

- Five Local Government areas generated revenue
- Ilaje local government did not generate revenue
- The five local government areas are located unpolluted areas
- Ilaje local government is located in a polluted area
Growth Rate of Ondo State Cocoa Exports

- Exported cocoa from Ondo State has been steadily declining
- Factors responsible for declining Cocoa growth rate:
  - Environmental Pollution
  - Lack of funds
  - Pest and diseases
  - The old age of Cocoa plants
Growth Rate of Oil Production

- The growth rate of Crude oil production fluctuates
- Reasons for decrease
  - Pipeline Vandalism
  - Oil bunkering
- Reasons for Increase
  - Efficient management
  - Government proactivity to suppress vandalism
## Numbers of Trees Felled in Six LGA.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Akure North</td>
<td>11736</td>
<td>8728</td>
</tr>
<tr>
<td>2</td>
<td>Ifedore</td>
<td>6748</td>
<td>5486</td>
</tr>
<tr>
<td>3</td>
<td>Ondo East</td>
<td>3155</td>
<td>6029</td>
</tr>
<tr>
<td>4</td>
<td>Ilaje</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Idanre</td>
<td>5162</td>
<td>3551</td>
</tr>
<tr>
<td>6</td>
<td>Owo</td>
<td>19409</td>
<td>21393</td>
</tr>
</tbody>
</table>

Estimated yield and demand for some food crops in the coastal wetlands of the Niger Delta region in 2010.

<table>
<thead>
<tr>
<th>Crops</th>
<th>Supply/MT</th>
<th>Demand/MT</th>
<th>Deficit/MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cassava</td>
<td>14897</td>
<td>24,413</td>
<td>-9,516</td>
</tr>
<tr>
<td>Maize</td>
<td>1774</td>
<td>4,602</td>
<td>-2,828</td>
</tr>
<tr>
<td>Yam</td>
<td>12,462</td>
<td>24,475</td>
<td>-12,013</td>
</tr>
<tr>
<td>IPlantain</td>
<td>3,385</td>
<td>8,473</td>
<td>-5,788</td>
</tr>
<tr>
<td>Vegetable</td>
<td>7,766</td>
<td>13,554</td>
<td>-5,788</td>
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<tr>
<td>Fruits</td>
<td>8,752</td>
<td>14,839</td>
<td>-6,087</td>
</tr>
</tbody>
</table>

Source: Adedipe et al 2010 (as reported by Ike and Ekanem, 2016)
Medical and Healthcare Establishments in Ilaje Local Government, 2008

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of Health Care Establishment</th>
<th>Ownership</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Hospital</td>
<td>State Government</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Comprehensive Health Center</td>
<td>Local Government</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Basic Health Center</td>
<td>Local Government</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Private (General) Hospital</td>
<td>Private</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Family Support Program</td>
<td>Local Government</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Clinic</td>
<td>Mission</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

- The total number of medical and healthcare establishment was 29
- From the research work, Male population = 146,859 Female population = 142,979 Total = 289,838
- On the average, 9,994 persons/1 medical and healthcare establishment
- Medical and Healthcare establishment are grossly inadequate and overstressed.

Source: Planning, Research and Statistics, Ministry of Health, Akure. Tables 12 and 13
Chapter IV (a): Findings

- 5 Local Government Areas made good output/Revenue
- Ilaje LGA have no output/revenue
- Chemical compound have harmful effects on humans, plants and animals
- Food production was inadequate in the Niger Delta Region.

Identification of problems that limit agricultural production in the Niger Delta Region.
Chapter IV (a): Findings Cont.

- Food production was inadequate in the Niger Delta Region.
- Identification of problems that limit agricultural production in the Niger Delta Region.
Chapter IV (b): Discussion

- Implication of environmental Pollution on Cash Crops
- Implications of environmental pollution on food crops.
- Agricultural problems of the Local Community
  - Ecological Degradation
  - Loss of Acres of Land
  - Loss of Habitats
  - Oil Spillage
  - Management Problem
  - Insufficiency of domestic resource mobilization by public/Private Sectors
  - Corruption
  - Faulty selection of Leaders
  - Misapplication of Funds
  - Unstable power supply
Chapter V: Conclusion

The Researcher gives recommendations and concludes.

Federal Government and oil companies:

- Build world class hospital in the region
- Provide health insurance coverage for inhabitants of Niger Delta region.
- Agriculture insurance policies to advance agricultural production.
- Creation of awareness and encouragement on small scale agricultural loans for farmers.
- Construction of good accessible roads in the region.
- Govt. Officials should closely monitor funds designated for agricultural purposes.
Chapter V: Conclusion cont.

- Public/private partnership in the cleaning up of the polluted area.
- Needs for human capital development through:
  1. Information sharing
  2. Training
Questions?