

## **Economic Impact Of Amnesty Policy Intervention On Artisanal Fishing Agribusiness In Niger-Delta, Nigeria**

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**Abstract:** *A stable political environment is an important factor in the productivity of agribusiness enterprises. Amnesty policy was formulated to stop the ugly effect of militancy on the economy of Nigeria. Economic impact of government amnesty policy on artisanal fishing business, was studied using randomly selected 80 fishers. Structured questionnaire was used to collect primary data from the respondents. Following a counterfactual approach, collected data were disaggregated into pre-amnesty and post - amnesty policy eras. Null hypothesis of no significant impact was tested using t-statistics. The result shows that artisanal fishing output after the amnesty policy is significantly higher than output before the amnesty policy. Similarly, test of hypothesis shows that the average revenue from fish sales (₦10,428,750) after the amnesty policy is significantly higher ( $P < 0.05$ ) than revenue obtained before amnesty policy intervention. The result of the counterfactual analysis of output/revenue of fishers indicates that government amnesty policy intervention significantly and positively impacted on artisanal fishing business in the Niger-Delta region of Nigeria. It was concluded the amnesty policy (presidential pardon granted militants, disarmament and re-integration) actually translated to peaceful business environment necessary for development of artisanal fishing agribusiness in the Niger-Delta, Nigeria. This policy option should be replicated as a template in locations where political instability is a threat to economic development.*

**Keywords:** *economic resonance, amnesty policy intervention, Niger-Delta, artisanal fishing, agribusiness,*

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### **I. Introduction**

Nigeria is blessed with high level of oil and agricultural resources. Although large revenue is derived from the oil sector, agriculture including the fishing subsector, particularly, artisanal fishing contributes substantially to Gross Domestic Product (GDP), foreign exchange earnings, employment generation, food security and poverty alleviation. The problem of the Niger-Delta includes marginalization, lack of infrastructural development and lack of political space. The oil wells in their backyard were managed and owned by external and internal colonial masters. The indigenes were left out of the business of oil prospecting, lifting and sale of both the crude and finished products and even in the employment scheme in the oil industry. Federal Government was insensitive to the people's agitations. This culminated in arm struggles and militancy. The militancy in the Niger-Delta negatively affected economic activities, including artisanal fishing business in the water ways. There was insecurity, loss of life, properties and livelihoods. These were clear manifestation of economic entropy. The paradox of living in poverty in the midst of plenty best describes the situation in the Niger-Delta during the period. Amnesty policy was chosen as the appropriate intervention by Nigerian government to deal with the social economic and political monster called militancy. The responses of economic indicators to the amnesty policy in this article, is referred to as economic resonance. Economic resonance in this study is regarded as the state of economic system in which a large vibration of economic indicators is produced by small policy stimulus. The militancy era was characterized by sound of wars and woes produced by the trigger of guns and bombs. The post amnesty era, is characterized by sounds of economic fortune generated by conducive business environment. The war mongers have been converted to genuine fish business mongers in the post amnesty era. What is left to be done now is the continuous fine-tuning of the cash economy by relevant policy instruments in the Niger-Delta, Nigeria.

Every business operates within an environment such as physical, economic, social, cultural, Legal and political environments. Artisanal fishing agribusiness is not an exception. The environment tends to influence the performance and growth of the business. Hence for any business to flourish and experience growth there is the need for a peaceful and safe environment. Against this background the realization of a peaceful business environment cannot be compromised in any part of the federation (Ujah and Biniyat, 2010).

The Niger-delta is an area endowed with abundant human and natural resources that needs to be optimally exploited in order to harness the desired economic growth that Nigeria craves for. Besides oil and gas, the Niger-delta is a very viable fishing ground. The fishing industry contributes substantially to Nigeria's economic sustainability, because it provides the much needed protein and nutrient for the people, and job for the rural dwellers, who earn honest living through fishing activities.

The once viable artisanal fishing agribusiness was hampered by the absence of a peaceful

environment, emanating from youth restiveness and militancy in the region, bringing untold hardship to the people and the economy. A situation where the water ways were barricaded by restive youths, harvested fish product in transit were often damaged, confiscated or seized. This has brought untold financial losses or even loss of life in some cases to the fishers.

In the pre-amnesty era the absence of peace in the Niger-Delta brought about under-development, skyrocketing prices of staple food items, high rate of unemployment especially among the youths, impairment of business investment opportunities especially in the agribusiness sector which is the back bone of any great economy. Guerilla armed struggle, hostage-taking, terrorism, sea pirates and other forms of militant activities inimical to a peaceful environment for business and development, brought fishing activities to a halt. The free movement of fisher folks, from the creeks to the township in their day to day transaction of business was no longer safe. The damage to the rural cash economy and the nation was enormous. Investors perceived the region and indeed Nigeria as an unstable society thus diverted their investment to other safe regions (Achoja, 2007). Civil conflict bestows most of the suffering on non-combatants as conflicts rages, income tend to plummet, mortality rises, and diseases spread (Lan and Paul, 2003).

There is the need for a peaceful and secured region that would bring about creation of job opportunities, food security and development. This can only be achieved in a peaceful and secured atmosphere, this is the basis for Federal Government Amnesty Policy (presidential pardon, disarmament and re-integration). Faced with the looming collapse of the economy due to militancy, the Federal Government on June 25, 2009 proclaimed a 60-day unconditional amnesty period for militant in the Niger Delta, as a step towards resolving the protracted insecurity in the region [www.nigerdeltaamnesty.org/index.php](http://www.nigerdeltaamnesty.org/index.php), (2011). The term of the amnesty policy include the willingness and readiness of militants to surrender their arms, unconditionally renounce militancy and sign an undertaken to this effect. In return, the Federal Government pledges it's commitment to institute programmes to assist their disarmament, demobilization, rehabilitation and provision of re-integration assistance to ex-militants. These are major preconditions to address wider developmental challenges in the Niger Delta. [www.nigerdeltaamnesty.org/index.php](http://www.nigerdeltaamnesty.org/index.php) (2011). The major objective of the amnesty policy was to ensure security and economic stability in the Niger-Delta through disarmament, demobilization, rehabilitation and sustainable re-integration of ex-militants as a precondition for medium and long term development. The participants in the programme should be ex-militants who accepted the Federal Government's amnesty offer and registered ([www.nigerdeltaamnesty.org/index.php](http://www.nigerdeltaamnesty.org/index.php) (2011)).

The long term development impact intended for the amnesty policy, to the best of our knowledge, has not been investigated before this study was conducted. The economic impact of the amnesty program on artisanal fishing business is worthy of investigation. This investigation was intended to provide missing information on the success or otherwise of amnesty policy intervention, particularly in relation to the development of artisanal fishing business in Nigeria.

The specific objectives of the study was to:

- i). describe the artisanal fishing business in the study area;
- ii). evaluate the economic impact of amnesty policy intervention on artisanal fishing business in Niger-Delta, Nigeria.

#### **Research Hypotheses:**

The following hypotheses were formulated and tested to guide the study:

*Ho<sub>1</sub>: There is no significant difference in fish out-put before and after amnesty policy intervention.*

*Ho<sub>2</sub>: There is no significant difference in income earned from fishing business before and after amnesty.*

*Ho<sub>3</sub>: Government amnesty policy does not have significant impact on the sustainability of artisanal fishing business in the study area.*

## **II. Methodology**

### **Study Area, Sampling Technique and Data Collection Technique**

This study was carried out in Niger Delta Communities. These include: Ajoki, Koko, Utonlila, Ogheye, Orere, Ureju, Tisun, Eghoro, Gbokoda, and Ugbege communities. These communities were chosen for the study because it inhabits or occupy rural riverine communities where the people are predominantly fishers ([www.deltastate.gov.ng/chapter1.htm](http://www.deltastate.gov.ng/chapter1.htm), 2011). It's geographical coordinates are 5° 37' 0" north, 5° 15' 0" east. ([www.maplandia.com/./saghara](http://www.maplandia.com/./saghara), 2005). The area is characteristically rainforest climate, It experiences high rainfall and high humidity for most part of the year. And it is marked by two distinct seasons, the dry season and the rainy season ([en.wikipedia.org/wiki/warri](http://en.wikipedia.org/wiki/warri), 2008). The climate is influenced by the monsoon originating from the Atlantic ocean, which is brought into the country by the MT air mass (maritime tropical air mass), a moist unstable wind that forms cumulonimbus clouds leading to thunderstorms and heavy rainfall. The rainy season is heavily influence by this air mass locally known as the south-west wind or by it's name the tropical maritime (MT) air mass ([en.wikipedia.org/wiki/Geography\\_of\\_Nigeria](http://en.wikipedia.org/wiki/Geography_of_Nigeria), 2011). The dry season last from about November to April and is significantly marked by cool harmattan dusty haze from the continental tropical (CT) air mass otherwise called the north-east winds. The rain fall regime is double-peaked, which occur in June/July and September, but

are separated by a relatively dry period in August: usually called the August Break. ([www.deltastate.gov.ng/aboutdelta.pdf](http://www.deltastate.gov.ng/aboutdelta.pdf), 2011). The annual rainfall is usually about 273.8mm and mean annual temperature of 32.8<sup>o</sup>c. It's vegetation consist of extensive mangrove forest and brackish swamps (<http://en.org/wiki/environmental>, 2011). Geographically Niger Delta is located in the mangrove swamp ecological zone of Nigeria. This is an area endowed with a rich natural resources base which includes creeks, lakes, rivers, forest resources aquatic life raffia palm and oil palm as well as natural gas deposits (IRDC, 2007). This makes the area suitable for artisanal fishing business.

Data used for the study were collected from both primary and secondary sources. The primary data was obtained through the use of structured questionnaire and personal interview, while the secondary data was collected from existing information such as text books and reports. In determining the artisanal fishing output, primary data was obtained from fisher-folks, on the number of baskets of fish caught before and after the amnesty period and revenue generated from fishing before and after amnesty policy intervention.

### **Data Analysis Techniques**

Collected data were disaggregated into pre-amnesty and post amnesty periods and analysed accordingly. The income earned by the fisher-folks was determined by multiplying the number of basket of fish sold (Q), by the selling price for a basket of fish (P).  
i.e. Unit Price X Quantity.

The data on socio-economic characteristics of artisanal fishers, fishing output and income, were analyzed using appropriate descriptive statistical tools (frequency distribution table, mean, percentage and standard deviation). Counter factual analysis was used to analyze the impact indicators, fishing output before and after amnesty policy, revenue before and after amnesty policy intervention. The null hypothesis of amnesty policy having no significant impact on artisanal fishing business was tested using t – statistics.

## **III. Results And Discussion**

### **Description of Artisanal Fishing Business in the Study Area.**

The description of artisanal fishing business is shown in Table 1. Cast nets and other forms of net were mainly used for fishing activities in the study area. Of the 80 respondents interviewed, 44 persons use cast net in fishing, this figure represents 55% of the population, while 36 people used other forms of net representing 45% of the population under study. The method of sales was either directly to retailers or to the final consumers. About 85% of the fishers sold to middlemen, while 15% of the fishers sold to the ultimate consumers.

**Table1: Description of Artisanal Fishing in the Study Area.**

<b>Artisanal fishing system</b>	<b>Frequency</b>	<b>% (percentage)</b>
I Cast net	44	55
Ii Other forms of net	36	45
ii Sells to middlemen/retailer	72	90
Iv Sells directly to ultimate/consumers	8	10

(Source: 2011 Field Data)

### **Fishing Out-put before and after Government Amnesty intervention policy in the Study Area.**

The average fish out-put among fisher-folks before the amnesty programme was observed to be between 1 basket and 1½ basket of fish while the average output after amnesty is observed to have increased significantly, more than half the out-put before the amnesty. This is attributed to the fact that with the actualization of the amnesty programme fisher-folks now fish wider than they were fishing prior to the amnesty programme as there is now a prevailing level of peace in the fishing ground which encourages fishing activities. This confirms the assertion that many problems be-setting rural populations can be solved at the community level with local community resources and with outside intervention Ekong (2003).

### **Income earned in Fishing Business before and after Government Amnesty intervention policy in the study Area.**

It was observed from the study that the average income earned through sales by fisher-folks after the amnesty increased significantly from N2,881.25 per week before the amnesty to an average of N10,428.750 per week after the amnesty programme. Implying that the fisher folks earns an average of N40,000 monthly in the study area. This findings agrees with Achoja (2010) that the fisher-folks earns an average of N36,000 monthly. This can be attributed to the prevailing peace in the market place and water ways as people now move freely and more transactions are made as against the situation prior to the amnesty programme, where few market transactions took place due to militancy and youth restiveness in the water ways.

**Impact of Government Amnesty Policy.**

The statistical difference between fish out-put before and after amnesty coupled with the difference between fishing income before and after amnesty were used to measure the impact of government amnesty policy intervention in the study area.

- (i)  $H_{01}$ : There is no significant difference in fish-output before (OB) and after (OA) amnesty policy.

**Table 3: Test of statistical Difference between Fish out-put Before and After amnesty programme.**

	Mean output (basket)	n	S.D	$\alpha$	df	t.cal	t-tab	Remark
OB (xb)	1.5500	80	.57147	0.05	158	24.259	1.65	Significant
OA (xa)	3.1250		.62380					

(Source: 2011 Field Data)

From the result obtained in Table 3, t-cal is greater than t-tab, hence we reject the  $H_0$  (null hypothesis) that there is no significant difference in fish-output before (OB) and after (OA) amnesty programme and accept the  $H_1$  (Alternative hypothesis). The significant difference can be introduced to the prevailing peace in the fishing grounds after the government amnesty intervention policy fishers

- (ii)  $H_{02}$ : There is no significant difference in fishers income earned from fish business before (SBA) and after (SAA) amnesty intervention policy.

**Table 4: Test of Statistical Difference between Fish Sales Before Amnesty (SBA) and Sales After Amnesty (SAA) policy.**

	Mean sales	n	S.D	$\alpha$	df	t.cal	t-tab	Remark
SBA (xb)	2881.25	80	1844.73	0.05	158	13.970	1.65	Significant
SAA (xa)	10,428.75	80	3108.26					

(Source: 2011 Field Data)

From the result obtained in Table 4, the t-cal is greater than t-tab.; hence we reject the null hypothesis ( $H_{02}$ ) which says that there is no significant difference in income earned from fish business before and after amnesty and therefore accept the  $H_1$  (Alternative hypothesis). The significant difference can be attributed to the freedom of movement and prevailing peace after the amnesty policy which has given rise to increase in fish business in the market place. This agrees with Adeola (2010) , who asserted that with the amnesty deal introduced to the once volatile Niger-Delta region, peace and stability are gradually gaining ground after many years of insecurity in the region.

- (iii)  $H_{03}$ : impact of Government amnesty policy does not have significant relationship with government sincerity with development policies in the study area.

i.e.  $H_{03}$ :  $b_1, b_2, b_3, = 0$

Reject  $H_0$  if the value of wald cal > critical value and accept  $H_1$ .

As elucidated in the methodology, this analysis was based on the assumption that sustainable artisanal fishing business is a function of the resulting impact of the government amnesty programme namely freedom of movement, security in the water ways, peaceful political environment, government sincerity with development policies.

**IV. Conclusion**

The effect of decreasing militancy is the most important factor for a flourishing artisanal fishing business in the Niger-Delta, Nigeria. The Niger-Delta now appears rather peaceful and optimistic in the future. Sustaining the relative peace in the region is a pre-condition for sustaining a long term and stable growth in artisanal fishing business and development in the region. This is a pointer to realization of millennium Development Goals of poverty reduction. The environment tends to influence performance and growth of any business. Growth in artisanal fishing responded positively to amnesty policy intervention. Sustainable development in Nigerian economy cannot be achieved in the absence of a peaceful environment (Ujah and Biniyat, 2010). Peace and development are closely interrelated and mutually supportive. Development is indispensable to the achievement of peace and security both within and among nations. Without development there can be neither peace nor security. ([www.un.org/Docs/SG/setting.htm](http://www.un.org/Docs/SG/setting.htm)). Peace cannot be kept by force it can only be achieved by justice and understanding (NAPF 2011). For government to ensure peace within the region as evident from the recent amnesty policy intervention, other developmental promises be met.

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