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Address of Host Institution: Centre for Population and Environmental Development (CPED),

54, Akenzua Street, Off Airport Road,

P.O. Box 10085, Ugbowo Post Office

Benin City, Nigeria

Email: enquiries@cped.org.ng

Tel: +234-8023346647, +234-8080472801

Country of Project Work: Nigeria, West Africa

Names of Members of the Research Team:

Professor Dicta Ogisi, Principal Investigator Professor Andrew G. Onokerhoraye, Team Leader Professor May Nwoye Professor Onovughe Ikelegbe Engr. Job Eronmhonsele Dr. Francis Onojeta

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HIGHLIGHTS OF THE RESULTS OF THE COVID-19 RESEARCH PROJECT

- Covid-19 restriction of movement and local travels significantly impacted on food farmers' ability
 to hire labour and purchase farm inputs since mid-march 2020 leading to a decline in the quantity
 of harvest and post-harvest losses. Government needs to urgently make farm inputs available to
 farmers at a subsidized rate and engage the services of extension workers to support local food
 farmers in order to increase food production.
- Women farmers were more affected by the government imposed lockdown as they dominate the production of food items such as arable crops and yet are the main care givers to the elderly, the sick and caring for children who due to the lockdown were out of school. Women should be encouraged and supported at every step of the value creation chain in order to play their important role in ensuring their families are food secure.
- Partial closure of wholesale markets and open retail food markets due to covid-19 pandemic shut down the traditional food market system in the Niger Delta region. This posed serious challenges for food farmers and food marketers as they were unable to sell their surplus food items resulting to wastages due to lack of storage facilities and loss of income. There is need to support the provision of storage facilities to farmers and food marketers, especially the vulnerable groups.
- The widespread disruption to livelihoods by covid-19 pandemic translated into loss of jobs or income for many individuals and households particularly impacting on local food farmers and marketers as a significant proportion of the respondents (about 47 percent) reported that they had to skip meals or ate less than usual during the period of lockdown. Government should expand the coverage of providing safety nets and related programs for vulnerable households, with priority attention to women in the informal economy.

1. Executive Summary

Since mid-March 2020, Federal and State Governments in Nigeria have put in place several measures to prevent, mitigate, and respond to the spread of the covid-19 virus across the country. The study examines the disruptions to food production, marketing and nutrition created by the covid-19 situation and its impact on the most vulnerable population in Nigeria using the Niger Delta region as a case study. The project collected policy-relevant data to inform policies regarding social protection for vulnerable households and support for informal food markets affected by shutdowns.

The rapid assessment approach was used to collect the required data entailing the triangulation of quantitative and qualitative methods. Primary data were collected from 10 randomly selected local government areas including 5 urban and 5 rural areas. Within the selected urban and rural communities a total of 2,000 copies of the sets of questionnaires were administered as follows: (i) 600 Food Producers; (ii) 600 Food Marketers and 800 Households. Furthermore, qualitative data was collected through key informant interviews and focus group discussions in the 10 local government areas. The survey covered important issues including knowledge and concerns about the pandemic, access to food and other basic needs, employment and income loss, safety nets and coping strategies.

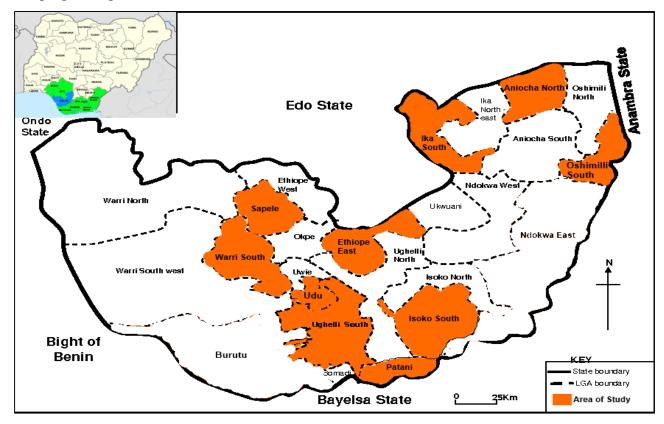


Fig 1. Man of Delta State Showing the Study Local Government Areas

The findings indicate that a large proportion of local food farmers still depend on hired labour to supplement family labour supply. Consequently, government restrictions on travel and movement had some effects on farm labour shortages. Just as the availability and use of hired labour by food

farmers was negatively affected by covid-19 so was the availability and use of other inputs. The overall impact of the shortage of paid labour supply, inadequate availability of farm inputs and the high cost of the inputs which has affected the use of these inputs have led to a decline in the quantity of harvest by famers during the period after March 2020. Covid-19 also led to interruptions in the availability of labour for harvest, post-harvest handling, transportation and storage activities, leading to high post-harvest losses, especially for perishables. Food farmers rely mainly on private transporters to transport produce from the farms to urban markets. Due to covid-19, farmers find it difficult to supply produce to markets due to restricted movement of vehicles. The findings of the survey show that a greater proportion of the food famers sold their products in the local market. While more women take their surplus products to markets, the reverse is the case for men with regards to selling to middlemen. The implication is that with covid-19 restrictions on movement, women are negatively affected in terms of taking their food items to markets where prices are higher than those offered by middlemen.

The findings of the survey show that the partial closure of critical food system infrastructure (rural producer markets, wholesale food markets and open-air retail food markets) led to the apparent shutting down of the traditional marketing system in the Niger Delta region. Partial market closures by government during the covid-19 pandemic prevented transactions between producers, traders, wholesalers, retailers and consumers. With no place for transactions, supply is reduced, prices increased and livelihoods and incomes suffered, creating a major stress on food security. Insufficient and poor access to dry and cold-chain storage compounded the marketing problems, leading to increased food loss and waste. The emergence of covid-19 pandemic and the associated protocol put in place by governments had some effects on the activities of food marketers in Delta State. Government precautionary measures have exempted the movement of people and goods related to agriculture and food products from covid-19-imposed controls. Traders, transporters, producers and businesses in Delta State, report, however, that frequent road closures, police-enforced checkpoints and government-imposed "lockdowns" on free movement of people, limited transportation of agricultural and food products between rural and urban areas affected their trading activities.

Covid-19 has significantly impacted people's lives and livelihoods in the Niger Delta region. The widespread disruption to livelihoods has already translated into loss of jobs or income for a large proportion of the respondents, particularly impacting local food farmers and food marketers. A major challenge to households during the period of covid-19 pandemic has been their ability to have access to markets for the purchase of essential items particularly food. The covid-19 pandemic has interrupted all aspects of the food supply chain, including the logistics related to food handling and distribution. Even when food supplies are available, there are barriers for it reaching consumers, most especially due to movement restrictions imposed to reduce the spread of the virus.

Support to livelihoods (agriculture, livestock, trade and informal businesses) to strengthen capacities for productivity enhancement including provision of subsidized inputs, value addition and market access to ensure food supply remains intact is essential. In the prevailing covid-19 environment, measures that will allow for business and market transactions to take place while observing social distancing prescriptions must be initiated and implemented. To meet immediate needs of the most vulnerable population in rural communities, governments, non-governmental organisations and private sector actors should invest in food storage facilities in the rural areas and possibly create improvised food market channels for the rural populace to purchase essential food

items at regular prices. Food marketing interventions must address all food system channels – modern, traditional (open markets, small stores) and informal (street vendors). Each channel serves different markets and parts of the population, helping to maintain a resilient food system that is imperative to minimizing the impact of covid-19 on society.

There is an urgent need for governments in Nigeria, technical experts, food producers, marketers, and other food market participants to share data, information and analysis to develop a stronger understanding of the pandemic's various effects on food security, nutrition and overall food system functioning in real time. Compromised livelihoods and especially reduced food consumption in many households call for urgent action. Safety nets and other economic and health policies are needed to address these shortfalls. Currently, few of survey respondents are receiving support from social safety net or palliative programmes. Policy options to provide a cushion for the poorest of the poor may face challenges due to lack of data and ability to clearly identify those that would desperately need help. These challenges highlight not only the importance of data collection to facilitate interventions but also collective efforts in a constrained environment.

Women need to be supported in order to improve and secure their productive bases. They need access to good quality arable land, a sufficient supply of good quality water, and certified seeds. They need to be supported and encouraged to adopt sustainable production systems by means of incentives, like specially adapted agricultural insurance products, storage and preservation infrastructure. The resources and leadership capacities of community-based feminist and women's rights movements must be stepped up so that they can provide women a voice and make sure that their concerns are taken into account in the strategies for coping with Covid-19.

2. The research problem

As covid-19 reaches different parts of Nigeria sometime in February 2020, Federal and State Governments made efforts to contain the spread of the virus. A corona-virus Preparedness Group was established at the end of January 2020 by the Nigerian government. Since mid-March 2020, Federal and State Governments in Nigeria have put in place several measures to prevent, mitigate, and respond to the spread of the covid-19 virus across the country. These measures include lockdowns, movement restrictions, social and physical distancing, as well as public health measures. Aside from the heath/mortality effects of the pandemic, the seemingly clearer effect is the impact of the social distancing and lockdown measures on the economy. How people make a living and access markets is impacted by covid-19 across Nigeria. There are emerging signs of the negative impact of covid-19 on nutrition and food security including local food production and the informal economy's food marketing system since March, 2020.

The agricultural food system is one of the largest economic sectors in Nigeria, spanning production, industry and marketing services, especially after the ban on the importation of food by the government in 2015. It is also one of the leading job producers in Nigeria. Indeed, over 80 per cent of all food sales in the country are carried out through the informal food markets. Given the structure and the largely informal food production and marketing systems in Nigeria, governments must have to cater for the informal food marketing channels and also put in place measures to make them operate consistently with the covid-19 virus containment strategy. Consequently, policies and programs designed to contain the spread of covid-19 in Nigeria must be accompanied by measures to minimize disruptions to the food system. Nigeria needs to seek

balance between saving lives and livelihoods. The best approach to maintain this delicate balance is ensuring that measures are pragmatic, dynamic, flexible and localized with the participation of the key stakeholders.

In order to do this effectively, policy makers need short term data including: How interruptions in the availability of labour for food production, harvest, post-harvest handling and storage activities, especially for perishables have affected food production and marketing?; How government-imposed "lockdowns" on the free movement of people have affected the transportation of local food products between rural and urban areas and food security?; How the closure of critical food system infrastructure such as rural producer markets, urban wholesale food markets and open-air retail food markets have affected food marketing system and food prices?; How have women, who are key actors in the food production and marketing system, been affected?; and What policies should be articulated to protect the capacity of local food production and marketing.

The study examines the disruptions to food production, marketing and nutrition created by the covid-19 situation and its impact on the most vulnerable population in Nigeria using the Niger Delta region as a case study. The project collected policy-relevant data to inform policies regarding social protection for vulnerable households and support for informal food markets affected by shutdowns. The findings show that food producers, food marketers, households and women are negatively affected by the containment measures and with the second wave of the pandemic policy makers must respond to the challenges which the containment measures have posed to vulnerable men and women in the Niger Delta region and indeed other parts of Nigeria (See the full Research Report).

3. Progress toward milestones

The project milestones were successfully completed as reported in various sub-sections below:

3.1 Formal inauguration of Project Team

Following the final approval and the signing of the project MOU in August 2020, the research team organised inception meeting to discuss and map out implementation strategies. Although six

project team members of the IDRC funded project on Women and Climate Change' were selected to drive the process, other members of the project team and key staff were invited to take part in these meetings to plan the implementation of the project. The meetings afforded the team members opportunity to share their knowledge and expertise and gather more information that will inform implementation of the



research project. The methodology and approach to be adopted amid Covid-19 pandemic were discussed. Following government containment measures to reduce the spread of Covid-19 pandemic, most of the project team meetings were held using videoconferencing platform. Records of these meetings are available in the Project Implementation reports in CPED office.

3.2 Review of Government policy and programme on Covid-19

The review of the literature on Federal and State Government policies and programs on the containment of the spread of the virus was successfully carried out as reported in Chapter 1 of the main research report. Key elements of the findings are as follows: The Nigerian Centre for Disease Control (NCDC) is the government agency in charge of covid-19 preparedness and response activities. A corona-virus Preparedness Group was established at the end of January 2020 by the Nigerian Government following the emergence of the covid-19 epidemic in China. National NGOs, civil society organisations, international NGOs and UN agencies are also engaged in responding to the pandemic and the effects of covid-19 containment measures. Since mid-March 2020, Federal and State Governments in Nigeria have put in place several measures to prevent, mitigate, and respond to the spread of covid-19 across the country. These include lockdowns, movement restrictions, use of face masks, social and physical distancing measures, as well as public health measures. The distribution of cases is uneven across the country and has resulted in diversified response from the Federal Government. The degree of implementation and level of compliance from the population varies from State to State; this is related to perception of the government, trust in government directives, and different levels of education and sensitisation to the measures.

3.3 Mobilisation of key stakeholders and partners in target localities:

Over the years CPED has ensured that project beneficiaries are part of the implementation process. Therefore, at the commencement of the Covid-19 food project in Delta state, relevant stakeholders including top government functionaries in each of the selected local government areas, community leaders, leaders of unions of food supply chain-including farmers unions, traders unions of various categories and other professionals were all mobilised. Mobilization of key stakeholders was designed to raise their awareness on the project so as to ensure their active collaboration and participation during the administration of the various survey instruments.



Photo: Cross Section of Participants during Mobilization Visit, August 2020

Each team member was involved in the awareness mobilization visit to stakeholders including visit to policy and decision makers in the project location. Each of the Team Members led field staff in two visits each to two of the ten project areas in Delta State. Thus a total of twenty awareness mobilisation visits were carried out. These visits were designed to raise the awareness of the stakeholders on the project so as to ensure their active collaboration and participation during the administration of the various survey instruments. It must be pointed out here that mobilization of key stakeholders took various forms in order to conform to government containment measures of reducing the spread of Covid-19. Some of the meetings with state and local authorities were held using the telephone conferencing options. Where telephone and internet network was a serious challenge, meetings were scheduled with individuals who are key stakeholders to discuss the implementation of the project. Even in situations where physical meetings with community groups were inevitable, the project team ensured that not more than 10 to 20 persons were invited to such meetings and Covid-19 safety protocols were strictly adhered to.

3.4 Design and finalisation of Survey Instruments

The Project Research Team using Zoom videoconferencing tool was able to design and finalise the research protocols in early August, 2020 for use by the project field officers. Survey instruments entailing: (i) Subject Information and Consent Form for Respondents; (ii) Key Informant Interview Guide; (iii) Food Producers' Questionnaire; (iv) Food Markers' Questionnaire; (v) Household Questionnaire; and (vi) Focus Group Discussion Guide, were produced and successfully used by field staff during data collection in 10 local government areas, selected in the three senatorial district of Delta state (See Annex A attached to this report for copies of the survey instruments).

3.5 Recruitment and training of Field Staff

During the mobilization visit to project areas, field officers were also recruited. Majority of the field officers comprising of 4 technical project staff (2 males and 2 females) and 20 field survey personnel (10 males and 10 females) were persons who took part in data collection of the climate change project in Delta state. Those who had performed well and were available at the time to participate in the data collection exercise were given priority during the recruitment of field officers. After due selection of project technical and field staff they received their initial training for five days by project team members using different training modules. The field personnel were further trained during the administration of survey instruments. Some of the topics covered during the training include community mapping and household mobilization. How to identify respondents to the food producer's questionnaire, food marketer's questionnaire and food consumer/household questionnaire were all discussed. Field staffs were properly guided on how to prepare a key informant to respond to a survey questions. The basic features in conducting Focus Group Discussion (FGD), common errors in moderating FGD were well spelt out. The training of field staff and administration of survey instruments commenced in mid-August 2020. During the training of field survey staff, covid-19 containment measures put in place in Nigeria and in Delta State in particular i.e. taking temperatures before meetings; providing water and soap for washing hands before meetings; providing sanitizers; social distancing was maintained and wearing of face masks was compulsory for all who attended the meetings.

3.6 Administration of quantitative and qualitative survey Instruments

The *rapid assessment approach* was used to collect the short-term data required in this project entailing the triangulation of quantitative and qualitative methods. Primary data were collected from 10 randomly selected local government areas including 5 urban and 5 rural areas. Within the selected urban and rural communities a total of 2,000 questionnaires were administered as follows: (i) 600 Food Producers Questionnaires were retrieved and used for analysis; (ii) 600 Food Marketers Questionnaires were retrieved and used for analysis; and 800 Household Questionnaires were retrieved and used for analysis. Furthermore, qualitative data collection entailing key informant interviews and focus group discussions were carried out in the 10 local government areas. The survey covers important topics including knowledge and concerns about the pandemic, access to food and other basic needs, employment and income loss, and safety nets and coping strategies. The data collected also include those relating to the nature and types of lockdown measures imposed by various governments; data on the nature of labour availability and various farm input supplies for local food production; data on the frequency of market holdings and the types of food marketed; and data on the impact of lockdown on household livelihoods and vulnerability.

Quantitative data collection used largely *mini-surveys* entailing the following: First, information on lockdown measures at the Federal, State and Local Government levels were collected from relevant Ministries, Departments or Agencies. Second, questionnaires were administered to representatives of food producers mainly in rural communities. Third, questionnaires were administered to representatives of food marketers in urban and rural communities. Fourth, questionnaires were administered to representatives of households inclusive of all categories of

the vulnerable. A11 the questionnaires focused on challenges of covid-19 containment measures imposed by government respect to with local production, purchase and marketing of food items, and cost of food items. Considering the rapid data collection nature of the study, the sample size for the questionnaires, which were administered by trained assistants, ranged from 600 to 800 per category but their selection was random to ensure representativeness.



Photo: CPED Field Officer During interaction with food trader in Delta state

On the other hand, qualitative data collection entailed the following: First, *in-depth interviews with key informants* was carried out including policy makers, community leaders, leaders of food market associations, women heads of household, women food traders, health workers, women leaders and leaders of food producers in order to provide more in-depth discussion of the impact on them and others of covid-19 pandemic and the associated government measures on food production and marketing. Second, a series of *focus group discussions* were organised to obtain rapid data from a purposely selected group of individuals comprising food producers, processors, community leaders, food marketers, especially women and girls. Again, the focus of discussions was on the impact of covid-19 pandemic and the associated government measures on their

economic activities and livelihoods with respect mainly to food production and marketing as well as various other sources of livelihoods. At least 9 persons were interviewed in each LGA comprising 3 food producers, 3 food marketers and 3 food consumers/householders. Therefore, a total of about 90 key informants comprising at least 65 percent females were interviewed in the 10 LGAs. Also 10 FGDs were held in the project location comprising a mix of males and females of between 11-13 experienced food producers, food marketers, community leaders including women leaders.

3.7 Data cleaning, analysis and writing of report

Quantitative data were rapidly analysed as they were collected entailing variables definition and measurement and the use of SPSS for the data analysis to generate the output. Outputs are presented as frequency distribution, histograms, bar charts, and cross tabulation etc. On the other hand, qualitative data analysis entailed the *transcription of interviews*, *coding* during which codes were assigned to the chunks of data and finally the determination of similarities, patterns and relationships.

3.8 Feedback meetings with key stakeholders/committees

Following the completion of data collection, entry and preliminary data analysis, a feedback meeting of key stakeholders was carried out in the project area and the input of the stakeholders and beneficiaries were integrated into the final report. During the feedback meeting, preliminary findings of the research was presented to the participants and results validated. While mobilizing survey respondents for the feedback meeting, effort was made to ensure that women and girls constituted at least 50% of those invited to take part. The feedback meeting was arranged in smaller settings at different locations taking into cognizance Covid-19 protocols and containment measures (See Annex. B below for the report of the feedback meetings).

3.9 Knowledge translation activities with policy makers

One key platform which has worked for CPED in reaching out and disseminating findings of policy research to policy makers and other government officials who make decisions and implement them is through policy workshops. To this end, the project team organised a policy briefing meeting on January 26th, 2021. It was held virtually. The meeting brought together, policy actors from Delta State Ministries of Economic Development, Social Development and practitioners, media representatives, project team members, junior researchers and students, amongst others. (See the report of the policy briefing meeting)

3.10 Communications and Dissemination activities

Communication and dissemination activities have started. Three policy briefs have been published and are being widely distributed to policy makers and other stakeholders. The first focuses on the effects of covid-19 containment measures on local food farmers in Delta State. The second focuses on the effects of covid-19 containment measures on local food marketers in Delta State while the third focuses on the effects of covid-19 containment measures on the welfare of household members and their livelihoods in Delta State.

3.11 Final Report to IDRC

All the milestones of the project were successfully completed on schedule and by 31st January 2021, all the project activities excluding the writing of the report were carried out. The final report to IDRC is scheduled to be submitted by February 2021.

4. Synthesis of research results

The overall objective of the Project was to examine the disruptions to food production, marketing and nutrition created by the COVID-19 situation and its impact on the most vulnerable population in Nigeria using the Niger Delta region as a case study. Three specific objectives were articulated. This section presents the research results with specific reference to each of the three specific objectives of the project.

4.1 Objective 1: "To provide short-term sex and age disaggregated data on the impact of the lockdown on local food production with respect to access to farm inputs, labour supply and farmland and its effects on the food security crisis".

The key outcomes of this research objective are outlined in this subsection. However, further details are provided in Chapter 3 of the <u>research report</u>.

- **4.1.1.** Women are major participants in the local food production: The majority of the food famers (51percent) are mainly involved in arable food production while over 20 percent are involved in fishery/aquatic production with about 16 percent of them being engaged in animal production. Women dominate local food production as they constitute about 59 percent while men account for 41 percent. Women are also more involved in the production of other food items except fishery activities in which there are more men than women.
- **4.1.2.** Women food farmers are more negatively affected by covid-19 restrictions: Women are more negatively affected than men by the impacts of covid-19 in terms of food production activities thereby making them more vulnerable than men. This is confirmed by the fact that women were more negatively affected by their inability to go to their farms during the period March to July 2020 as over 71 percent of them were not able to go to their farmland for farming activities during the period due to lockdowns.
- 4.1.3. Dependence of local food farmers on hired labour and the negative impact of covid-19 lockdown on the availability of hired labour: A large proportion of local food farmers still depend on hired labour to supplement family labour supply. Consequently, government restrictions on travel and movement had some effects on farm labour shortages. This in turn significantly disrupted the harvesting and processing of food, and thus impacting the supply chain. It was found that over 86 percent of the food farmers reported that covid-19 has affected their ability to hire the required labour for their farms as 58.67 percent of the farmers did not hire labour for their farms since March, 2020. A greater proportion of the farmers who were not able to employ paid labour were women as 40 percent of the 68 percent of the farmers who were not able to hire labour are women. This disruption was also exacerbated as women are often not only the primary crop producers, but are also the main care givers to elderly, the sick and caring for children who due to lockdowns were out of school.

- 4.1.3 The availability of other farm inputs to local farmers was also affected by covid-19 restrictions: Just as the availability and use of hired labour by food farmers was negatively affected by covid-19 so was the availability and use of other inputs. It was found that about 60 percent of the farmers were able to visit agro-dealers or markets while less than 40 percent pointed out that they were not able to do so with more women not able to visit markets to purchase inputs compared with men. Considering the major role which women play in food production, the lack of access to agricultural inputs had negative effects on food production during the covid-19 period. Majority (64.80 percent) of the respondents pointed out that lack of funds was the major factor responsible for non-purchase of farm inputs because there were increases in input prices due to COVID 19 lockdown and higher transportation cost to access the few markets that had input supplies.
- 4.1.4 Women local food farmers are more negatively affected by lack of access to farm inputs: Women local food farmers were again most affected by the price of the inputs as over 45 percent of them were affected compared with just 23.73 percent of the men. With local food supply chains disrupted, many would naturally rely on imports but the Federal Government closed the borders to trade and travel. This has prevented farmers from being able to distribute their raw or processed foods both nationally and internationally, making it harder for farmers to support their operations. The dramatic rise in the cost of farm inputs during the covid-19 period had some negative effects on the quantity of farm inputs which food farmers used or planned to use for farm production, thus negatively impacting on outputs and perhaps, quality of farm produce. Women food farmers are again more affected than men in terms of quantity of farm inputs used as a higher proportion of women (33.00 percent) used fewer and much fewer quantities of inputs compared with men (19 percent). This again reflects the fact that women food farmers are more negatively affected by covid-19 than their male counterparts.
- 4.1.5 The impact of covid-19 restrictions and associated effects on access to farm inputs led to a decline in farm harvest: The overall impact of the shortage of paid labour supply, inadequate availability of farm inputs and the high cost of the inputs which has affected the use of these inputs has led to a remarkable decline in the quantity of harvest by famers during the period after March 2020. Covid-19 also led to interruptions in the availability of labour for harvest, post-harvest handling, transportation and storage activities, leading to high post-harvest losses, especially for perishables. It is noted that agricultural production has been decreasing, because fewer people are now working in the fields due to social distancing regulations and fear of contracting the disease. Furthermore, covid-19 has reduced the frequency of farm visits by extension officers who provide technical support to farmers.
- 4.1.6 The impact of covid-19 restrictions on the ability of local farmers to sell their products: Although a large proportion of local food farmers are engaged in subsistence production in which case they consume a significant proportion of their products, many of them also sell proportions of their farm produce so as to generate income with which they buy other food items not produced by their households. The covid-19 pandemic has brought challenges to food farmers in terms of being able to sell their surplus food items, especially when most of them do not have adequate storage facilities for their surplus food items. The movement of farm products from rural to urban centres is severely affected by the crisis. Food farmers rely mainly on private transporters to transport produce from the farms to urban markets. Due to covid-19, farmers find it difficult to

supply produce to markets due to restricted movement of vehicles. The transport system has been slowed down, and at times, it is unavailable because of travel restrictions. A number of transporters fear taking risks and don't turn up to collect farm produce. Furthermore, as a result of the escalating costs of fuel, the cost of hiring vehicles became unaffordable for many food farmers. Very few people have their own means of transport, so they depend on privately operated vehicles for transportation. Due to the pandemic, buses and motorcycle taxis are not fully operating, or take fewer passengers and charge higher prices. This affects people in numerous ways: Hired labourers are no longer able to travel to other farms; and farmers who try to sell their products in neighbouring towns are no longer able to make a profit. Rising transportation costs are also brought up as the reason for increased prices of products sold in village stores.

With regards to the impact of the lockdown and movement restriction on farming activities some key informant respondents and participants in the focus group discussions made these remark as follows:

"The COVID-19 has reduced our capacity to hire workers. The more you produce, the more you are able to hire workers, because of the COVID-19 and the restriction in movement I left my farm crops in the farm to waste away because market was closed and middlemen are not coming as usual. So, there was no need to hire workers."

"As a result of the restriction, there was no movement, the workers cannot come to work, and even if they come, when you are supposed to have 2 persons, 1 will be available. As a result of that the workload was much."

It was found that majority (50 percent) of the food farmers sold some of their farm produce since March 2020. A greater proportion (27.33 percent) of the food farmers that sold part of their farm produce are women compared with 23 percent men. The findings of the survey show that a greater proportion of the food famers sold their products in the local market while about 18 percent sold their produce to middlemen. While more women take their surplus products to markets, the reverse is the case for men with regards to selling to middlemen as more men sold to middlemen. The implication is that with covid-19 restrictions on movement, women are negatively affected in terms of taking their food items to markets where prices are higher than those offered by middlemen, thus reducing their livelihoods.

4.1.7 Covid-19 restrictions led to increases in the prices of farm outputs but most farmers did not sell their products so as to meet their household needs: An examination of the extent to which covid-19 has affected the prices of farm outputs shows that most of the respondents (56.01 percent) reported that the prices of their farm produce were higher or much higher compared with the preceding five years. Despite that, many food farmers were hesitant selling their food products because they do not know when the covid-19 restrictions will end and so they saved their produce for household use. Here again the challenge of storage facilities confronted them as most of food farmers do not have facilities for the storage of perishable food items. It was found that over 76 percent of the food farmers do not have storage facilities. Reasons given for non-sale of products include closed marketplaces (16.95 percent), prices offered too low (10.17 percent) and that transportation was either not available or too expensive (8.47 percent).

4.1.8 Covid-19 restrictions led to a decrease in local farmers' access to agricultural information: The covid-19 pandemic has made it impossible for government officials to perform the functions

owing to travel restrictions. This means that much of the agricultural information flow that is normally given to farmers has been curtailed. In the prevailing environment, farmers had to either adjust to other income-generating activities or wait for the situation to improve. At the commencement of the covid-19 pandemic in March 2020, the Federal Government of Nigeria put in place some palliatives to cushion the negative effects of the restrictions that were imposed. However, the vast majority of the respondents (97.00 percent) reported that they did not receive any support whatsoever from government or any of its agencies.

4.2 <u>Objective 2</u>: "To provide short-term data on the impact of market closures on the informal urban and rural food markets with respect to the prevention of transactions between producers, traders, wholesalers, retailers and consumers on the one hand and the supply of food, price increases, livelihoods, incomes and food security on the other"

The key outcomes of this research objective are outlined in this subsection. However, further details are provided in Chapters 4 and 5 of the <u>research report</u>.

4.2.1 The partial closure of local food markets led to reduced supply of local food items and increase in food prices: The partial closure of critical food system infrastructure (rural producer markets, wholesale food markets and open-air retail food markets) led to the apparent shutting down of the traditional marketing system in Delta State as in other parts of the Niger Delta region. Partial market closures by government during the covid-19 pandemic prevented transactions between producers, traders, wholesalers, retailers and consumers. With no place for transactions, supply is reduced, prices increased and livelihoods and incomes suffered, creating a major stress on food security. Insufficient and poor access to dry and cold-chain storage compounded the marketing problems, leading to increased food loss and waste. As noted earlier, women dominate the food marketing system with over 72 percent of them as food traders. The findings showed that women comprise 45 percent of the 59.66 percent of the traders involved in retailing of food items and also dominate wholesale of food items. Again, more women have been in the food trading business for a longer period compared with the male counterparts.

The food marketers are involved in the sale of a variety of food items locally consumed in Nigeria. The vast proportion of the respondents (60.76 percent) are involved in the marketing of arable crop products such as potato, maize, yam, cassava, gari, rice, plantain, vegetable, etc. The marketing of animal products such as goats, sheep, cattle, poultry, etc constitute 14.16 percent of the traders with women constituting 6.61 percent while men constitute the balance of 7.55 percent which indicates that slightly more men were involved in marketing livestock and livestock products compared with women.

4.2.2 Food marketers most of whom are women were negatively affected by the partial closure of traditional market places: The emergence of covid-19 pandemic and the associated protocol put in place by governments had some effects on the activities of food marketers in Delta State. Government precautionary measures have exempted the movement of people and goods related to agriculture and food products from covid-19-imposed controls. Traders, transporters, producers and businesses in Delta State, report, however, that frequent road closures, police-enforced checkpoints and government-imposed "lockdowns" on free movement of people, reduced the transportation of agricultural and food products between rural and urban areas. These restrictions reverberate through the food production system affecting food supplies in urban areas and the

transport of food produce from rural communities to urban areas. This situation has affected the number of customers and volume of sales. It was found that the vast majority of the respondents (80.01 percent) reported that the number of customers patronising them declined since March 2020 with women again more negatively affected with 58 percent of them reporting lower patronage compared with men that had 22.01 percent.

Interview and FGD conducted in the markets indicate that women are the worst hit in terms of the market loses. This is attributed to the fact that the rate of women who work in the informal sectors - agriculture, livestock farming, fishing, trade and processing - is high, and they are the first at risk of losing their incomes in the current situation. A female key informant in the study area has this to say about the market re-schedule during the lockdown period and how it affected her business.

"Yes, it was a big problem. They fixed days (Mondays, Wednesdays and Saturdays). If I don't have money on Monday for market, meaning I will stay till Wednesday and if I don't have on Wednesday meaning I will stay till Saturday and if peradventure I do not have on Saturday, it means I will go hungry for the full week and what I was not supposed to eat, I will have to eat. That is what is really affecting me since I don't eat garri since I'm diabetic. We don't even eat to satisfaction, maybe where I usually cook 3 cups before, I had to cut it to I and 1/2 cups. I make a pot of soup for #1,000 before, as a result of the COVID19, I will just find where I can see vegetable, I will pluck it, put crayfish and eat it. The COVID-19 really affected us severely......."

With regard to the volume of sales, respondents pointed out that although government restrictions on movement tend to exempt the transport of local food items and other related goods but there were still restrictions on the movement of farmers living in localities close to urban areas that often come (daily or weekly) to the urban markets to sell part of their crops and return to the village with manufactured goods. These restrictions on rural-urban travel and the closure of rural markets thus affected traditional mechanisms of destocking of local agricultural products by farmers, particularly in collection markets. This situation also affected the marketing of livestock by pastoralists and agro-pastoralists. The vast majority of the food marketers (83.34 percent) reported that their sales declined since the introduction of covid-19 precautions by government. Indeed the sales volume of over 44 percent of the food marketers decreased by more than 50 per cent.

The stock levels of food products being sold by the marketers were also affected by covid-19 as over 76 percent of the food marketers reported that their stock was much lower due to the impact of the various precautionary measures that have reduced the mobility of the food marketers to replenish their supplies. However, about 10 percent of the respondents reported that their stock is much higher while another 9.34 percent indicated that there were no changes in their stock. These patterns of increase in stocks or lack of changes may reflect the fact that sales were poor and hence the supplies remain in stock. About 47 percent of women were affected compared with 17 percent for men.

With the negative impact of covid-19 on the ability of households to generate adequate incomes to meet their obligations, the vast majority of the food marketers (80.00 percent) reported that they provided credit to their customers during the period after March 2020 with 60 percent of them

being females while 20 percent were males. It is obvious that women are more sympathetic to their customers during this difficult covid-19 period.

In situations where the covid-19 pandemic affected food production and the movements of food items for sale have been constrained, it was observed that prices of food items increased. The food marketers (80.57 percent) reported that the purchase price of their commodity increased since covid-19 pandemic started. The proportion of the respondents that reported that their commodity price did not increase was only about 18 percent. The food marketers also needed credit in the covid-19 period to sustain their trade but this was not forthcoming as over 88 percent of the food marketers reported that they did not receive any credit facility from any government agency.

4.2.3 Covid-19 negatively impacted household welfare and livelihoods: The widespread disruption to livelihoods translated into loss of jobs or income for a large proportion of the respondents, particularly impacting local food farmers and food marketers. These impacts were also slightly more prevalent among female respondents. While a lot of attention has been given to the consequences of covid-19 for societies as a whole, the debate on vulnerable groups is much quieter. Understanding the extent to which different groups are at risk, and how certain policies and programme can protect and support them, is crucial for promoting effective and equitable interventions as well as preventing the worsening impacts as a result of the covid-19 pandemic. Vulnerable groups include those living in poverty, informality, conflict and fragility, often in overcrowded settings with limited access to sanitation and healthcare and who do not benefit from subsidized wages or unemployment benefits. It also includes young people, who may struggle even harder to find decent work, women, who lack decision-making power and are disproportionately represented in healthcare, childcare and vulnerable work, and other marginalised groups who may not be able to access the resources they need for their wellbeing.

4.2.4 Covid-19 led to a decrease in household access to local food markets: A major challenge to households during the period of covid-19 pandemic has been their ability to have access to markets for the purchase of essential items particularly food. The vast majority of the respondents (91.25 percent) indicated that there were times that they could not access the markets to purchase what they needed in their households because of movement restrictions and closure of markets. The covid-19 pandemic had considerable impact on the supply of fresh food items due to the restrictions in the movement of food items between rural communities and semi-urban and urban areas. The inability to perform normal farming and food processing activities led to crop losses and food shortages which affect different communities. The availability of basic food items such as rice, bread, gari, yam, etc. was equally affected by covid-19 pandemic precautions. A major impediment to food security is limited distribution options. The covid-19 pandemic has interrupted all aspects of the food supply chain, including the logistics related to food handling and distribution. Even when food supplies are available, there are barriers for it reaching consumers, most especially due to movement restrictions imposed to reduce the spread of the virus.

Some of the key informant respondents and participants in the focus group discussions stated as follows with respect to the transportation of food items for sale:

"Transport is another thing affecting us as retailers. They talk about social distancing. Instead of you paying the normal transport fare, you now have to pay that of another person because of social distancing."

"It has affected it because most of the time you do not even get vehicle to transport from one place to another and when you eventually get one, the transport fare is high."

"That is the real wahala now. After you buy those food products at expensive prices, you have to use expensive transport fare to bring the goods. Before, the transport we usually use to bring those loads here was N5,000 but now it is N10,000. Transport fare is too much."

4.2.5 Covid-19 led to a decrease in household access to health care facilities: As the covid-19 pandemic spreads across Nigeria, many people are heeding the advice of health experts to wash their hands. Many people in rural communities in Nigeria do not have access to running water and soap to wash hands as required by Covid-19 protocol. This is due to inadequate water infrastructure in rural communities and further, the fact that during the first few weeks of the pandemic available hygiene supplies were bought, making it difficult for some households to have access to these basic hygiene materials. The survey shows that while 53.50 percent of the respondents indicated that their households always got hygiene materials to buy some 42 percent reported that these materials were partially or only sometimes available for them to buy.

Essential medicines are those drugs that satisfy the priority healthcare needs of the population. As a result of the surge in the pandemic, which led to the inevitable lockdown of the Nigerian economy, there has been a noticeable decrease in production and exportation of raw materials as well as finished products (drugs) across different countries. These greatly affected the ease of access to these medicines by the consumers who need them either for treating acute ailments or for the management of chronic diseases. Nigeria is in its early stages of pharmaceutical development; thus, they rely on importation of drugs, raw materials, and equipment from other countries, notably India and China. Nigeria is highly dependent on other countries for its medicinal needs. The covid-19 pandemic also caused an increase in the prices of medicines, hand sanitizers, face masks, personal protective equipment, and other medical equipment used for providing health care. Some 47.75 percent of the respondents reported that essential medicine/drugs are not available in clinics and pharmacies within their reach all the time since the covid-19 pandemic while 34.75 percent indicated that these essential medicines/drugs were partially or sometimes available but usually expensive.

4.2.6 Covid-19 led to increased food prices for households: The combination of reduced supply resulting from restrictive measures and panic buying that reduced the availability of certain food has resulted in price increases in markets. Staple food price trends were mixed during the post-covid-19 period through May in the region on a month-on-month basis. Two contrasting effects were observed. The measures reduced business activities and increased unemployment, resulting in reduced demand. At the same time, transport delays including screening of truck drivers at borders adversely affected supplies. The net effect was a slight elevation of prices moderated by reduced demand and purchasing power.

Likewise, the border closure limited food imports, further shrinking the supply chain. These developments have led to increases in price of food items which impacted on household ability to purchase the food they wanted. This observation is confirmed by the fact that the consumer price index for food has increased all through the pandemic period. It rose from 14.9 percent in February 2020 to 15.18 percent in June 2020, showing an increase of about 0.28 percent within only four months. It rose sharply to 17 percent by September 2020. This is a considerable rise from 13.39 percent in July 2019 and 14.09 percent in October 2019. The survey shows that over 94 percent of the households reported that there have been increases in food prices since March 2020. Thus, households in the study area have experienced dramatic increase in prices of food constituting a major challenge to their standard of living and adequate nutrition.

- 4.2.7 Covid-19 led to changes in household shopping behaviour: The outbreak of covid-19 has already caused an array of changes in shopping behaviour among households in the study area. It was found that 92 percent of the respondents reported that the covid-19 pandemic and the measures introduced by government have led to changes in their shopping behaviour compared with the situation before the pandemic. A major component of the behavioural shopping changes relates to buying smaller quantities (85.25 percent). This phenomenon is a reflection of the declining resources available to the households.
- 4.2.8 Covid-19 led to a decrease in household livelihoods: The livelihoods of vulnerable rural households in fragile environments such as Niger Delta region have been strongly affected by the unprecedented circumstances of the covid-19 pandemic. As traditional resilience mechanisms falter, vulnerable households in Niger Delta are confronting worsening economic conditions and a breakdown of the traditional resilience mechanisms that they rely on. The survey result shows that 94 percent of the respondents reported that the covid-19 pandemic affected their ability to carry out their livelihood activities while just 6 percent reported that the reverse was the case. This is explained in terms of movement restrictions, reduced demand for the goods and services which they provide and their concern about leaving the house so as not to contract the virus. It was in this context that 71 percent of the respondents reported that the covid-19 pandemic had severe impact on their livelihood sources while 19.75 percent pointed out that covid-19 had only a moderate impact on their livelihood.
- 4.2.9 Covid-19 led to a decrease in household access to education: The Covid-19 pandemic and the containment measures introduced by government had considerable impact on the access of households to key social and economic services. The focus of this section is mainly on education which most households regarded as a major challenge to their welfare and that of their children. Governments in Nigeria closed down educational institutions early in March 2020. School closures prompted by the pandemic are reducing children's opportunity for class room or face to face learning. Closures of educational institutions hampered the provision of essential services to children and communities, including access to nutritious food, affect the ability of many parents to work, and increase risks of violence against women and girls.

Over 80 percent of the respondents reported that they had children in primary or secondary schools during the period schools were closed down by government. Of the respondents that had children in primary and secondary school about 44 percent of them reported that their children have been engaged in some form of education or learning activities since Mid-March 2020 while 37.25

percent indicated that their children have not been in school. For those children that were engaged in some form of learning, these were engaged in a series of largely informal education or training including studying or learning on their own (21.74 percent), taught by parent or other household members (15.03 percent) and session/meetings with lesson teachers (15.0 percent). It is obvious that these forms of engaging the children in education were temporary and not sustainable in terms of advancing the learning programmes of the children. It can therefore be concluded that basically covid-19 has not allowed the children to make progress in their education since March, 2020.

4.2.10 Covid-19 and Household Food Security: Restrictions of movement within Delta State and across the country disrupted local and inter-state food supply chains and affecting the availability of food as well as labour markets and supplies of critical agriculture inputs. This posed a challenge for food production and jeopardized food security for most households, especially the poor and marginalized. Access to food is becoming increasingly difficult for the most vulnerable. As the covid-19 crisis unfolds, disruptions in domestic food supply chains, other shocks affecting food production, and loss of incomes and remittances are creating strong tensions and food security risks in many households and communities. In effect the covid-19 pandemic is having a devastating impact on already fragile livelihoods.

The survey shows that about 74 percent of the respondents reported that some members of their households had to skip a meal because there was not enough money or other resources to get food since mid-March 2020 while only about 26 percent reported that all members of their household had enough to eat during the period as shown in figure 2 below.

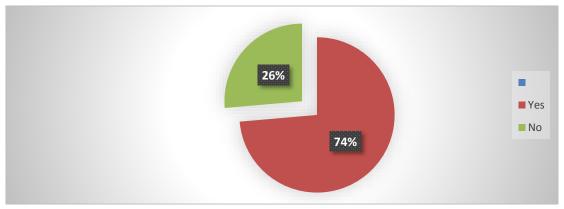


Fig. 2: Percentage distribution of households according to whether they or any other adult in their household, had to skip a meal because there was not enough money or other resources to get food since Mid-March 2020

Another indicator of food security explored was the reason why households ran out of food stocked because of lack of money or other resources since mid-March 2020. It was found that the vast proportion of the households (77.75 percent) reported that they ran out of food because of lack of money or other resources since mid-March 2020. On the other hand, about 22.25 percent indicated that their household never ran out of money for food during the period. Similarly, 33.50 percent of the respondents stated that they had difficulties eating enough food in relation to their normal (pre-covid-19) ration.

A significant proportion of the respondents (46.50 percent) reported that they skipped meals or ate less than usual during the period. Some of the respondents (6.25 percent) even reported that they went whole days without food while an insignificant proportion of them (1.25 percent) reported that they increased their food intake during the period. Finally, it was found that 53.5 percent of the households had food stock for less than one or two weeks while 13.25 percent reported that they had stock of food that can last them for between three and four weeks. Less than five percent indicated that they had food stock that can last for more than one month.

4.2.11 Covid-19 and Gender: While the covid-19 crisis affects everyone, women and girls face specific and often disproportionate economic, health, and social risks due to deeply entrenched inequalities, social norms, and unequal power relations. Although the data from the surveys as presented in the earlier sections of this report indicated various ways in which gender disparity is manifested by the covid-19 pandemic and the associated containment measures put in place by government, some further analysis of the gender component of covid-19 based on the findings of the survey can be outlined. In the first place, women lack adequate access to information and health services particularly as it relates to covid-19. Traditional gender roles ascribed to women often means that they are primary care-givers for sick family members, a situation which exposes them to the risk of contracting and transmitting covid-19. The closure of schools further exacerbates the burden of unpaid care work on women and girls, who absorb the additional work of caring for children. Second, women are more disadvantaged with respect to the negative impact of covid-19 as regards livelihood impacts. The direct implications of prevention measures, such as travel restrictions, have adversely impact livelihoods and economic security of women in the informal sector. While government-imposed restrictions on the physical movement of citizens are currently necessary, they tend to increase women's burden of household care, which leaves them with less time to access or choose potential livelihood options. Furthermore, women and girls are at greater risk of experiencing increased gender-based violence including domestic abuse, as a result of prolonged periods of confinement within homes and increased tensions within households due to economic hardships. Finally, women's key role as food and nutritional needs providers to their families mean that Nigerian women who form a greater majority of Nigeria's informal economy workforce are the ones tasked with the risk of visiting informal market systems to purchase food items during this covid-19 period.

4.3 Objective 3: "To outline and disseminate key policy measures to address the identified challenges so as to protect local food production and sustain informal food markets in urban and rural areas during this period of COVID-19".

The key outcomes of this research objective are outlined in this subsection. However, further details are provided in Chapter 6 of the <u>research report</u>

The sustainability of food production and food marketing during covid-19 and after will depend, in large part, on policy responses over the short, medium and long term. Some of the possible short and medium term policy issues arising from the findings of this study are outlined in this subsection and they form the framework for the dissemination activities to be carried out during and after the conclusion of the project.

4.3.1 Policy issues relating to local food production

- 4.3.1.1 Need to urgently make farm inputs available to farmers: Many communities rely on markets, especially in urban settings, capacity for home food production and/or processing is limited, and local production systems are unable to cope with shocks. Therefore, governments need to increase household and community food production through distributing seeds, tools, and fertilizers for small farmers and urban gardens during and after the pandemic. In addition, governments could help by providing local agricultural and livestock extension services and technical assistance.
- **4.3.1.2** Need to support the provision of food storage facilities: To meet immediate needs of the most vulnerable population in rural communities, governments, non-governmental organisations and private sector actors should invest in food storage facilities in the rural areas and possibly create improvised food market channels for the rural populace to purchase essential farm inputs and food items at regular prices.
- **4.3.1.3** Need for improved management of local food production resources: More efficient, sustainable and resilient local food production systems require careful management of land, soil, and water through integrated approaches. Such food systems also require reduction of post-harvest food losses at every stage of the value chain with improved practices. These include access to low-cost handling and storage technologies, and packaging.
- **4.3.1.4** Need to monitor the consequences of any covid-19 containment measures on local famers: Ensuring that agricultural actors and activities at all levels, particularly harvests, are not severely affected by the unintended consequences of the containment measures and restrictions on movement, while keeping safe the work environment of food producers and farm workers.

4.3.2 Policy issues relating to the marketing of local food

- **4.3.2.1** Need for regular information on food availability or otherwise: Regular, consistent and concise communication with clear messages on the food situation is critical to reduce panic, maintain confidence in agriculture and food sector and feel secure about the availability of and access to food. People in rural and urban areas need information on market operations and good health practices when working and shopping.
- **4.3.2.2** Need to regularly monitor local food marketing channels: Food marketing interventions must address all food system channels modern, traditional (open markets, small stores) and informal (street vendors). Each channel serves different markets and parts of the population, helping to maintain a resilient food system that is imperative to minimizing the impact of covid-19 on society.
- **4.3.2.3** Need to pay special attention to the interrupted movement of local food products during covid-19 containment period: Just as governments need to address key regulatory barriers and policy responses that may undermine national and intra state food trade, so must they ensure that the movement of local food continues to flow unimpeded during the period of covid-19 restrictions and post Covid-19 precautions.

4.3.2.4 Allow rural markets to operate with modest restrictions and precautions: Ensure farmers can farm, which may mean guaranteeing supplies of fertiliser, seed and fuel, and in some cases, allowing seasonal labour to move for harvests. Remittances will probably fall, but for those still flowing, transmission from urban to rural areas must be facilitated. This will require training and empowerment of all parties involved as well as compliance monitoring.

4.3.3 Policy issues relating to Food Security

- 4.3.3.1 Humanitarian and palliative support to the vulnerable must be put in place: As livelihoods of millions of people are likely being disrupted, food insecurity is an urgent challenge. Among those that will require food services are expected to be urban poor populations affected by the lockdowns. At the same time, humanitarian support to most vulnerable groups needs to be planned with food commodities secured supply chain. Federal and State Governments and other key stakeholders should ensure that people must obtain the food they need, especially the most vulnerable individuals (infants, young children, women, elderly people, homeless people, people living with HIV/AIDS and other chronic illnesses, disabled people, and homebound individuals).
- **4.3.3.2 Support for food preservation should be provided to reduce shortages:** To end restrictions on transportation and disruptions in markets that may quickly create shortage problems, governments and allied stakeholders should educate the public about the critical need to prepare for food shortages at the household level by promoting responsible levels of stockpiling, home production, processing and food preservation.

4.3.4 Policy issues relating to Household livelihoods

- 4.3.4.1 Provision of safety nets and related programs for households: Compromised livelihoods and especially reduced food consumption in many households call for urgent action. Safety nets and other economic and health policies are needed to address these shortfalls. Currently, few of survey respondents are receiving support from social safety net or palliative programmes. The Federal and State Governments should expand the coverage of existing social protection schemes to provide livelihood support, otherwise known as palliatives, directly targeted at vulnerable women (cash or food transfers), with priority attention to women in the informal economy and female-headed households
- **4.3.4.2** Need for regular data collection: Moreover, policy options to provide a cushion for the poorest of the poor may face challenges due to lack of data and ability to clearly identify those that would desperately need help. These challenges highlight not only the importance of data collection to facilitate interventions but also collective efforts in a constrained environment.

4.3.5 Policy issues relating to Gender

4.3.5.1 Women need to be supported in order to improve and secure their productive bases: Women need access to good quality arable land, a sufficient supply of good quality water, and certified seeds. They need to be supported and encouraged to adopt sustainable production systems by means of incentives, like specially adapted agricultural insurance products, storage and preservation infrastructure. The resources and leadership capacities of community-based feminist and women's rights movements must be stepped up so that they can provide women a voice and make sure that their concerns are taken into account in the strategies for coping with Covid-19.

- 4.3.5.2 Women should be encouraged and supported at every step of the value creation chain: Between 50 percent and 60 percent of the food produced by women is intended for family consumption in the study area. Men, on the other hand, generally tend to farm crops for sale and/or the agro-food sector in order to secure an income for their families. Even if their role is often forgotten or little appreciated, women are the ones who mainly ensure their families 'are food secure. It is therefore very important to encourage and support them at every step of the value creation chain so that they can play their central role in rebuilding the policies for the security and autonomy of food supply while diversifying their sources of income.
- **4.3.5.3 Providing accessible information to women:** The Federal and State Governments should support the development and dissemination of messages specifically targeted at and easily accessible by vulnerable women, including women with disabilities (through use of sign language, local language). Messages should recognize women's roles as caregivers and communicate information on when and how women can access health facilities.
- 4.3.5.4 Governments should sensitize men, boys and other non-gender binary people to consider sharing home chores with women and girls: When it comes to food and nutrition security, women play a significant role in food production as well as transformation and food preparation. With schools closed, women have an additional burden of care. Governments should sensitize men, boys and other non-gender binary people to consider sharing home chores. Governments should also ensure that all measures and policies are gender-sensitive and do not further widen the gender gap.
- **4.3.5.4** Need for disaggregated data on gender: The Federal and State Governments should systematically collect disability, age and sex-disaggregated data on the outbreak to facilitate more targeted and effective planning and implementation of the emergency response and to facilitate enhanced understanding of the gendered differences in prevention, exposure and treatment.

4.3.6 Policy issues relating to conflict management

It is essential to use covid-19 as an opportunity for peace building in Niger Delta region through the following: 1. Considering the long-term impact of covid-19 interventions, and whether chosen approaches can help build resilience against violence beyond covid-19; 2. Building the covid-19 response in conflict-affected localities on existing local capacities for peace, and explore potential peace dividends in mitigating tensions, including transforming intergenerational and gender norms while ensuring that duty of care is upheld; 3. Facilitating coordination, cooperation, and learning across socio-economic and peace building sectors on what works in responding to public health crises in conflict affected and fragile contexts in a durable way; 4. Accelerating gender inclusivity and the leadership of children and youth in covid-19 response and post-pandemic peace building recovery which should include providing opportunities for children and young people to meaningfully contribute to response efforts.

4.3.6 Policy issues relating to Climate change

The response to covid-19 has been based on unprecedented government intervention, and almost universal social acceptance of the radical measures adopted by all. The same pragmatic approach is needed for climate change policies. Funds required for climate actions do exist, and the same approach used to mobilize Covid-19 funds should secure even greater investment in the promotion

of climate change adaptation at the local level particularly through the capacity building of women leaders. A fundamental reason for the recognition of covid-19 threats and the limited recognition of climate change threats is that Covid-19 has been clearly understood, beyond the health impacts, as an immediate and present threat to global development, while climate change continues to be viewed as a long term and uncertain threat to some remote communities of the world. This conception and approach must change.

5. Project outputs

5.1 The key project outputs are as follows:

- 1. Rapid assessment data on the impact of covid-19 containment measures on food production and marketing in Niger Delta region available on **pages 38-64** of the main research report;
- 2. One synthesis research report on "The Impact of Covid-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study". http://www.cped-ccp.org.ng/publications/report publication/cped 2021 rr 01.pdf
- 3. Three policy briefs for policy makers have been produced as follows:
 - (i) **Policy Brief 1:** The effects of covid-19 containment measures on local food farmers in Delta state, Nigeria.

 http://www.cped-ccp.org.ng/publications/policy_brief/cped_pb_2021_01.pdf
 - (ii) **Policy Brief 2:** The effects of covid-19 containment measures on local food marketing in Delta state, Nigeria.

 http://www.cped-ccp.org.ng/publications/policy_brief/cped_pb_2021_02.pdf
 - (iii) **Policy Brief 3:** The effects of covid-19 containment measures on the welfare of household members and their livelihoods in Delta state, Nigeria.

 http://www.cped-ccp.org.ng/publications/policy_brief/cped_pb_2021_03.pdf
- 4. <u>Blog post</u> by Mercy Omuero Adejeghwro titled: "*The Perception of Covid-19 in Nigeria*". (http://www.cped-ccp.org.ng/blog 1.php)
- 5. One peer review paper as follows: O'Raye Dicta **Ogisi** & Toritseju **Begho** (2021) "Covid-19: Ramifications for progress towards the sustainable development goals (SDGs) in Nigeria" *International Review of Applied Economics* https://doi.org/10.1080/02692171.2020.1864302
- 6. Team members are working on other peer reviewed papers which would be published later.

5.2 Meeting IDRC's Open Access Policy:

CPED's Research Ethics and Communications Policy are in line with the Open Access Policy for IDRC funded-project outputs and have been applied accordingly in data management and the communications of the outputs of the project. Data collected in this project are suitable for sharing because they provide information on the impact of covid-19 restrictions on local food production and marketing which other researchers can also use. CPED provides information on its completed and on-going research projects during seminars/conferences and on its website to researchers and research students. Often researchers visit CPED to access research data on its data base which are readily provide to them. CPED has no restrictions on the use of data by participants provided the

Executive Director is informed and appropriate acknowledgments are provided for those who funded the project in this case IDRC.

6. Project Implementation and Management

6.1 Research partnerships

CPED has over the years developed partnerships with universities, other research centres, NGOs, Government Ministries and civil society organisations within and outside Nigeria in the implementation of its research projects. Even though this project was a rapid assessment one executed over a period of just six months, CPED collaborated with the Delta State Government and the Intervention Council for Women in Africa (ICWA). The involvement of the Delta State Government is to promote buy in by the Delta State Government in terms of implementing the policy recommendations while ICWA specialises in working with women at the local level which is the primary concern of the project with respect to local food production and marketing. These two partners are also working with CPED in the implementation of the major IDRC funded project on women and climate change. There is no doubt that these two projects involving the three partners have contributed to building the research capacity of the organisations and in particular the personnel from the three organisations that are involved in the implementation. One particular capacity built in the implementation of the Covid-19 project relates to skills acquired in the use of rapid assessment approach to data collection. Junior researchers who are mentees in the project benefitted considerable from the rapid assessment approach which they believe can help them in collecting data for their small scale projects. Finally, partnership was also promoted by the active participation of the representatives of the beneficiaries, respondents and other stakeholders in the implementation some of who served as field assistants to collect data from food producers, food marketers and households. The participation of these varied stakeholders as partners was codified during the presentation of the draft research report to them during the feedback meetings with them to discuss the findings. They had the opportunity of reviewing the findings and contributing to the articulation of the policy recommendations.

6.2 Governance

The management of the implementation of the project was carried out by the six members of the research team through a Project Management Committee in which, as noted earlier, the three partners are represented. The Project Management Committee was headed by the Executive Director of CPED assisted by the Principal Investigator. The project Management Committee met regularly to review all the implementation activities and provided solutions to any problems identified in the implementation process. Furthermore, beneficiaries also participated in some ways in the project management, especially during the planning of the feedback meetings and policy workshop during which some of them served as members of the committees set up to organise the meetings/workshop.

6.3 Research ethics

The ethical issues addressed in the implementation of the research project are: (i) Approval of the research survey instruments was obtained from the University of Benin Ethical Committee Board which also approved the ethical issues of the major IDRC project on women and climate change adaptation. (ii) At the start of all interviews, participants were informed of the purpose and nature of the study through an information and consent form. Respondents were asked to sign a consent

form. Or provide verbal consent for those who are not able to read and write. The participants were informed that the information collected will be held in strict confidence. The respondents were informed that they were free to terminate the interviews at any point and to skip any question that they do not want to answer. (iii) Participation in the study was voluntary. No inducements were made. Participants were informed that refusal to participate will not result in any negative consequences. (iv) A number of mechanisms were used to protect the confidentiality of the information collected: (a) No names were recorded. Respondents were identified using a unique code. Upon completion of the survey, the identifiers and the respondents' lists will be destroyed. (b) Particular care was taken during the presentation of the project findings to stakeholders to ensure that the information presented is sufficiently aggregated so that no one community, household or individual can be identified. (v) Gender considerations were obviously factored in the project particularly during the administration of the survey instruments so as to address the underlying gender inequalities which characterise the project area. (vi) Finally, the research protocol was conducted in line with the ethical guidelines set out in two documents prepared during consultations among African researchers, Institutes and Organisations in Dakar in 2001 which made knowledge translation and feedback to respondents an essential ethical requirement. As noted earlier, key stakeholders and respondents received and reviewed the major findings and participate in making recommendations.

7. Problems and challenges

There was one expected major challenge in the implementation of the project and this relates to the fact that the activities were carried out in the context of the prevailing covid-19 pandemic. However, the implementation of the project responded to the covid-19 containment measures put in place in Nigeria in general and Delta State in particular including holding virtual meetings by the project team; taking temperatures before meetings and interviews in the field; providing water and soap for washing hands before meetings and interviews; providing sanitizers; social distancing was maintained and wearing of face masks was compulsory for all who attended the meetings. Furthermore, during mobilisation visits to key stakeholders to introduce the project, interactions strictly observed keeping of distance and the wearing of face masks. During the training of field staff, covid-19 compliant measures were observed as described above. Finally, during field surveys entailing key informant interviews, focus group discussions and the administration of questionnaires to households, food producers, food marketers and, respondents were further enlightened on covid-19 compliant measures as specified by government. Such survey meetings with respondents' put into practice the provision for washing of hands, sanitizers, social distancing and the wearing of face masks by all participants.

8. Overall assessment and recommendations

The research team appreciates the quick response of IDRC to the challenges facing food production, food marketing and livelihood following the emergence of the covid-19 pandemic. We note that various governments across the world introduced strict measures to contain the rapid spread of the deadly virus as from March 2020. Yet within a period of two months, IDRC has conceived of the need to implement a program on "Documenting the Impact of COVID-19 on Food Systems". IDRC's prompt action is more appreciated because emphasis was placed on the needs of developing countries where most of the governments have paid little attention to

examining the impact of their various containment measures on livelihood and food security of the vast majority of their people. The project team recommends that the results of this six-month action research program should be reviewed and large scale projects should be conceived for funding by IDRC in these low income countries. The negative impacts of covid-19 on the livelihood and food security of people in low income countries will continue for the next five to ten years because of the damage being done now. IDRC interest in supporting major projects will be welcomed. Finally, the project team appreciates the support provided by IDRC through mainly the Senior Program Specialist, Dr. Melanie Robertson and the *Agriculture and Food Security (AFS) Team* who are in charge of the project on behalf of IDRC. They consistently guided the Project Team in the implementation of the various activities carried out. They prevailed on us to ensure that we respond appropriately to the covid-19 restrictions in Nigeria and in the project localities so that we and our respondents can be safe which we did.

ANNEX A







RESEARCH SUBJECT INFORMATION AND CONSENT FORM FOR RESPONDENTS TO QUESTIONNAIRES, KEY INFORMANT INTERVIEWS AND FOCUS GROUP DISCUSSIONS

On Rapid Assessment Research Project

"The Impact of Covid-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study"

Being Implemented by

Centre for Population and Environmental Development (CPED)

August 2020-January 2021

Website: www.cped.org.ng Email: enquiries@cped.org.ng

With Funding Support from

International Development Research Centre (IDRC)

NOTE: This consent form may contain words that you do not understand. Please ask the study staff to explain any words that you do not clearly understand. You can give a verbal consent or a written one by signing the last page of the consent form.

AIM OF THE STUDY

The overall objective of the Project is to examine the disruptions to food production, marketing and nutrition created by the COVID-19 situation and its impact on the most vulnerable population in Nigeria using the Niger Delta region as a case study. The research will focus on the collection of short-term data and the documentation of the impact of the COVID-19 pandemic on local food production and marketing systems in Nigeria's Niger Delta region to enhance the articulation of programs that alleviates the impacts of COVID-19 on local food production and marketing in the region in particular and other parts of Nigeria in general.

The study is being implemented in 10 randomly selected local government areas in Delta state across the three senatorial districts. The LGAs are as follows; Ika South, Aniocha North, Oshimilli South, Sapele, Warri South, Udu, Ethiope East, Ughelli South, Isoko South and Patani LGAs respectively.

YOUR INVOLVEMENT IN THE STUDY

If you decide to participate in this research study, you will be asked some questions relating to your knowledge on how Covid-19 caused disruptions to food production, marketing and nutrition and its impact on the most vulnerable population in Nigeria, with special reference to Niger Delta region. You will also be asked questions about important issues including knowledge and concerns about the pandemic, access to food and other basic needs, employment and income loss, safety nets and coping strategies.

Or you may be asked to participate in a discussion group or an interview with project staff on a variety of issues relating to knowledge, awareness and perception of Covid-19 and its impact on local food production and the entire food supply chain. The focus group discussion or interview will be tape recorded so we are sure to get everyone's ideas, but the transcripts of the tapes will only use pseudonyms (a substitute for your real name). Once the interviewer finished transcribing the discussion or interview from the tape recorder, it will be deleted from the tape.

RISKS AND DISCOMFORTS

We do not expect that your participation in this research project in form of responding to questions from the researchers pose any risks to you. You do not have to talk about any issue you do not want to talk about. In the case of a group discussion you may decide to leave the group at any time or refuse to answer any question if you feel so.

BENEFITS TO YOU AND OTHERS

You may not get any direct benefit from this study but the information we get from people in this study may help us to make robust recommendations to government and other stakeholders develop actionable strategies to improve the local food production and informal food markets in coping with the challenges created by Covid-19 pandemic in Delta state in particular and Nigeria in general.

COSTS

There are no costs for participating in this study other than the time you will spend in answering the questions or participating in the interview or discussions.

ONFIDENTIALITY

Information being collected is used for research purposes only. Your personal data will be identified by pseudonyms, not real names, and stored in a locked research area. All electronic personal identifying information will be kept in password protected files and these will be deleted within one year. Access to all data will be limited to study personnel. A data and safety monitoring plan is established.

We will not tell anyone the answer you will give us; however, information from the study and the consent form signed by you may be looked at or copied for research or legal purpose by the sponsor of the research.

FEED BACK ON THE RESULTS

What we find from this study will be presented at a meeting to be held later during which community members will be invited to participate in the review of the findings.

VOLUNTARY PARTICIPATION AND WITHDRAWAL

You do not have to participate in this study. If you choose to participate, you may stop at any time without any penalty. You may also choose not to answer particular questions that are asked in the study.

Your participation in this study may be stopped at any time by the study staff or the sponsor without your consent. The reasons might include: the study staff thinks it is necessary for your health or safety; you have not followed the study instruction; or the sponsor has stopped the study.

ENOUIRIES

In the future, you may have questions about your participation in this study. If you do, please direct your questions, complaints, or concerns to the following contacts:

Prof. Emeritus A. G. Onokerhoraye

Project Team Leader and Executive Director, CPED 54 Akenzua street, Off Airport Road Benin City, Edo State Email: agonoks@yahoo.com

and Engr. J. I. Eronmhonsele

Project Team Member and Deputy Executive Director, CPED 54, Akenzua Street Off Airport Road, Benin City, Edo State.

Email: j.eronnhonsele@cped.org.ng

Tel: 08080472801

CONSENT

I have been given the chance to hear or read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My signature or verbal approval confirms that I am willing to participate in this study.

Name of Respondent	Signature of Respondent	Date	
Name of Field Staff	Signature of Field Staff	Date	







PROJECT: "THE IMPACT OF COVID-19 ON LOCAL FOOD PRODUCTION AND INFORMAL FOOD MARKETS IN NIGERIA WITH NIGER DELTA REGION AS A CASE STUDY"

With Support from International Development Research Centre (IDRC), Canada

In-depth Interview Guide for key Informants

August 2020

Name of Interviewer:
Date/Time of Interview:
Name of Respondent (optional):
Local Government Area:
Community:
CECTION A. INFORMATION OF VEW INFORMAT
SECTION A: INFORMATION OF KEY INFORMAT
1. Sex: Male Female
2. Age (years): Less than 20 20-39 40-59 above 60
3. Marital Status: Single Married Widowed Separated/Divorced
4. What is your highest educational qualification? No formal education
Primary education Secondary education Tertiary education
SECTION B: AWARENESS AND KNOWLEDGE OF COVID-19 OR CORONAVIRUS
5. Have you heard about coronavirus?

- 6. If Yes, How did you hear about COVID-19? (Name as many sources as possible
- 7. What do you know about coronavirus? (Probe further by asking: Do you think people in this area believe the virus is real?)
- 8. In your own view, what actions have the community, local, state and federal government taken to curb the spread of the coronavirus in your area?
- 9. What measures have you adopted/can adopt to reduce the risk of contracting coronavirus?
- 10. What concerns you most about the coronavirus?
- 11. In your own opinion, do you think the measures taken by government is helping to reduce the spread of the virus to/in your area? Give reasons.
- 12. What else do you think the government can do reduce the spread of the virus other than existing containment measures?

SECTION C: FOR LOCAL FOOD PRODUCERS ONLY

- 13. What type of farm enterprise are you mainly involved in?
- 14. Relative to the same season in the last year, how has the number of days you hired workers to work on your farm been affected since Mid-March 2020?

- 15. Do you usually purchase farm inputs? If yes, how has covid-19 affected the purchase of your farm inputs?
- in terms of Quantity &
- in terms of Price
- 16. Relative to the same season in the last year, can you explain how COVID-19 has affected the purchase of farm inputs used by other farmers in this area since mid-March, 2020?
- 17. Relative to the same season in the last year, can you explain how COVID-19 has affected the harvest of your farm products since mid-Mach, 2020?

- Restriction of movement

-lockdown

- 18. How has COVID-19 affected the price of your food products ready for sale?
- 19. Were some farmers in your area given any palliatives/support from the community, Local, State or Federal government during this period of COVID-19? If yes, what kind of support?
- 20 Did you receive any form of support from the community, Local, State or Federal government during this period of COVID-19? If yes, what kind of support? If no, what kind of support do you require?

SECTION D: FOR LOCAL FOOD MARKETERS ONLY

- 21. What type of food products do you trade in this community?
- 22. Where do you usually purchase these food products from?
- 23. How would you compare the sales of food products before mid-March, 2020 and since mid-march, 2020? *Decreased, increased or stayed the same?* (please allow time for more response)
- in terms of quantity &
- in terms of price
- 24. How has COVID-19 affected the transportation of food products you trade from the point of purchase to the point of sales?
- 25. Were some food traders in your area given any palliatives/support from the community, Local, State or Federal government during this period of COVID-19 to support their trading business?

26. Did you receive any form of support from the community, Local, State or Federal government during this period of COVID-19? If yes, what kind of support? If no, what kind of support do you require?

SECTION D: <u>FOR</u> LOCAL FOOD CONSUMERS/HOUSEHOLD

- 27. As a consumer of food products in this area have you experienced any of the following since mid-March, 2020:
 - i. Difficulties in going to food markets due to mobility restrictions imposed by government
 - ii. Difficulties in buying food due to most food markets being closed
- iii. Unable to buy the amount of food consumed because the price of food was too high
- iv. Unable to buy the amount of food consumed because some households incomes dropped *Please probe for more response instead of direct yes or no answer.
- 28. Are fresh food items (eggs, vegetables, meat, fish, e.t.c) available all the time in the markets/stores since mid-March 2020?
- 29. Are basic food items (rice, bread, garri, etc) available all the time in the markets/stores since mid-March 2020?
- 30. Has there been any changes in the costs of food items since mid-March, 2020?
- 31. Did members of this community receive any palliatives/support from the community, Local, State or Federal government during this period of COVID-19 to support their household feeding or income?
- 32. Did you receive any form of support from the community, Local, State or Federal government during this period of COVID-19? If yes, what kind of support? If no, what kind of support do you require?







The Impact of COVID-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study

LOCAL FOOD PRODUCERS' QUESTIONNAIRE

LOCAL FOOD PRODUCERS' QUESTIONNAIRE

Name of Interviewer:
Date of Interview:
Name of Respondent (optional):
GENERAL INSTRUCTION: Please circle or tick the most appropriate answer for each question.
1. Name of LGA
2. Name of Community
SECTION A: DEMOGRAPHIC BACKGROUND
3. What is your age? Less than 20 years = 1; 20-39 years = 2; 40 -59 years = 3; 60 years and above = 4
4. What is your Sex? Male = 1; Female = 2
5. What is your marital status? Single = 1; Married = 2; Widowed = 3; Separated/Divorced = 4
6. How many people are in your household? Less than 3 persons = 1;
3-5 persons = 2; $6-8 persons = 3;$ $9 persons and above = 4$
7. What is your highest educational level completed? No formal education = 1;
Primary education = 2; Secondary education = 3; Tertiary education = 4
SECTION B: AWARENESS AND KNOWLEDGE OF THE SPREAD OF COVID-19
8. Have you heard about the coronavirus? Yes = 1; No = 2
9. How did you hear about COVID-19? Radio/TV = 1; Family/friends = 2;
Place of worship = 3; Social media = 4
10. If yes to question 8, what do you know about corona virus (COVID-19)?
(Tick all that apply)

```
It can be contracted through
                                   close contact with infected persons = 1;
  touching of contaminated surface = 2;
                                           poor hygiene = 3;
  touching of faces (eyes, nose, mouth) = 4
11. Have you been able to practice social distancing by keeping a distance of two meters from
other people in the last 7 days?
                                    Yes = 1;
                                                  N_0 = 2
12. If Yes to question 11, in which situations where you unable to practice social
distancing?
   Working in the farm = 1;
   Going to the market for food = 2;
   Going to the hospital / receiving medical treatments = 3;
   Taking care of dependents = 4;
   Meeting friends or relatives =5;
   Attending a function (wedding, funeral, temple) = 6;
   Becoming tired of being indoors = 7;
   None of the above = 8;
   Not applicable = 9
13. What actions has the Federal/Delta State government taken to curb the spread of the
coronavirus in your area? (Tick all that apply)
  Restricted Travel within Country/Area = 1;
  Restricted International Travel = 2;
  Closure of Schools and Universities = 3;
  Curfew/Lockdown = 4;
  Closure of Non-Essential Businesses = 5;
  Sensitization/Public Awareness = 6;
```

Established Isolation Centers = 7;

Disinfection of Public Places = 8;

Ban of social gathering = 9;

```
None = 10;
All of the above = 11
```

14. What measures have you adopted/can adopt to reduce the risk of contracting coronavirus? (Tick all that apply)

```
Stay at Home = 1;
Avoid Gatherings = 2;
Restricted Travel within the State = 3;
Disinfection of Public Places = 4;
Use of face mask in public = 5;
Regular hands washing = 6;
Use of hand sanitizers = 7;
Keeping social distance = 8;
All of the above = 9;
None of the above = 10
```

15. What concerns you most about the coronavirus?

SECTION C: LOCAL FOOD PRODUCTION

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Arable crop production = 1; Animal production = 2; Edible oil production = 3; Fruit Production = 4; Fishery/aquatic Production = 5

17. Relative to the same season last year, how has the number of days you and your household members spend on farming activities been affected since Mid-March 2020?

I was not able to go to the farm during this period = 1; Much fewer days = 2; About the same = 3; More days = 4

18. Relative to the same season in the last year, how has the number of days you hired workers to work on your farm been affected since Mid-March 2020?

I did not hire labour on my farm during this period = 1;

Much fewer days, lowest number of days in past 5 years = 2;

About the same =3;

More days = 4

- 19. Have you visited an agro-dealer or market to purchase any key agricultural inputs since Mid-March 2020? Yes = 1; No = 2;
- 20. If Yes to question 19, did you purchase all the inputs you were looking for?

Yes
$$=1$$
; No $= 2$; Not applicable $= 3$

21. If No to question 20, why?

Restriction of movement = 1;

Lack of funds = 2;

Closure of non-essential business places (shops for agricultural inputs are closed) =3;

Not applicable = 4

22. If No to question 19, Why?

The input was not available = 1; The input was too expensive = 2;

The brand of the input I wanted was not available = 3;

23. Did you employ any paid labour since Mid-March, 2020? Yes = 1; No = 2				
24. If Yes to question 23, did you employ more or less paid labour than at the same time in the previous year? More =1; Less = 2; Same = 3; Don't know = 4				
Not applicable = 5				
25. If Less paid labour was hired, why?				
Too expensive = 1; Not available when needed = 2; Inadequate funds = 3;				
Others = 4; please specify Not applicable = 5				
26. Which key inputs have you purchased since Mid-March 2020?				
Fertilizer = 1; Seeds= 2; Pesticide= 3; Animal feeds = 4; None = 5;				
Others = 6; please specify				
27. Relative to the same season last year, how does the price of purchased inputs compare?				
Much lower, lowest price in the last 5 years = 1; Lower = 2; About the same = 3;				
Higher = 4; Much higher, highest price in the last 5 years = 5; Not applicable = 6				
28. How has COVID-19 affected the quantity of farm inputs (e.g. fertilizer, chemicals, animal feeds, vaccine, e.t.c.) you have used (or plan to use) for your farm production?				
Much fewer, fewest amount in the past 5 years = 1;				
Fewer = 2;				
About the same = 3;				
More = 4;				
Much more, highest amount in past 5 years = 5;				
Not applicable = 6				
29. How has COVID-19 affected the quantity of your harvest?				
Much less, lowest amount in past 5 years = 1; Less = 2; About the same = 3;				
More = 4; Much more, highest amount in past 5 years = 5; Not applicable = 6;				
Don't know/prefer not to answer $= 7$				

30. Have you sold any of your farm produce (since Mid-March 2020)?

$$Yes = 1; No = 2$$

31. If Yes to question 30, where did you sell it?

Farm gate = 1; Local market = 2; To Middleman = 3;

Market outside the L.G.A = 4; Individual consumers/neighbours = 5

Not applicable = 6

32. How has COVID-19 affected the price of your farm produce?

Much lower, lowest price in the last 5 years. = 1; Lower = 2; About the same = 3;

Higher = 4; Much higher, highest price in the last 5 years = 5;

Not applicable = 6

33. If No to question 30, why haven't you sold your food produce?

Saving it for family consumption = 1; Market is closed =2;

No buyers in the market = 3; Price offered was too low = 4;

No transportation available = 5; Other = 6; please specify.....

Not applicable = 7

34. If you are not able to sell any of your farm produce do you have facilities for storage, especially perishable items?

$$Yes = 1; No = 2$$

35. What proportion of the major food you produced is consumed by your household?

None = 1; Less than 25% = 2; 25-50% = 3; 50-75% = 4;

Greater than 75% = 5; Don't know = 6

36. Have you received any support from the Federal/State/Local Government, community, individual or any other body for your farm enterprise?

$$Yes = 1; No = 2$$

37. What kind of support do you need from government or any other body for your farm enterprise?

38. Are you aware that government provided assistance to those affected by COVID-19?

$$Yes = 1; No = 2$$







The Impact of COVID-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study

LOCAL FOOD MARKETERS' QUESTIONNAIRE

LOCAL FOOD MARKETERS' QUESTIONNAIRE

Name of Interviewer:
Date of Interview:
Name of Respondent (optional):
GENERAL INSTRUCTION: Please circle or tick the most appropriate answer for each questions.
1. Name of LGA
2. Name of Community
SECTION A: DEMOGRAPHIC BACKGROUND
3. What is your age? Less than 20 years = 1; $20-39 \text{ years} = 2$; $40-59 \text{ years} = 3$;
60 years and above = 4
4. What is your Sex? Male = 1; Female = 2
5. What is your marital status? Single = 1; Married = 2; Widowed = 3;
Separated/Divorced = 4
6. How many people are in your household? Less than 3 persons = 1;
3-5 persons = 2; $6-8 persons = 3;$ $9 persons and above = 4$
7. What is your highest educational level completed? No formal education = 1;
Primary education = 2; Secondary education = 3; Tertiary education = 4
8. What is your main occupation? Farming = 1; Trading = 2;
Public sector employment = 3; Private sector employment = 4
SECTION B: AWARENESS AND KNOWLEDGE OF THE SPREAD OF COVID-19
9. Have you heard about the coronavirus? Yes = 1; No = 2

10. How did you hear about COVID-19? Radio/TV = 1; Family/friends = 2; Place of worship = 3; Social media = 4

11. If Yes to question 9, what do you know about corona virus (COVID-19)?

(Tick all that apply)

It can be contracted through close contact with infected persons = 1; touching of contaminated surface = 2; poor hygiene = 3; touching of faces (eyes, nose, mouth) = 4

- 12. Have you been able to practice social distancing by keeping a distance of two meters from other people in the last 7 days? Yes = 1; No = 2
- 13. If Yes to question 12, in which situations where you unable to practice social distancing?

Working in the farm = 1;

Going to the market for food = 2;

Going to the hospital / receiving medical treatments = 3;

Taking care of dependents = 4;

Meeting friends or relatives = 5;

Attending a function (wedding, funeral, temple) = 6;

Becoming tired of being indoors = 7;

None of the above = 8;

Not applicable = 9

14. What actions has the Federal/Delta State government taken to curb the spread of the coronavirus in your area? (Tick all that apply)

Restricted Travel within Country/Area = 1; Restricted International Travel = 2;

Closure of Schools and Universities = 3; Curfew/Lockdown = 4;

Closure of Non-Essential Businesses = 5; Sensitization/Public Awareness = 6;

Established Isolation Centers = 7; Disinfection of Public Places = 8;

```
Ban of social gathering = 9;
                               None = 10;
  All of the above = 11
15. What measures have you adopted/can adopt to reduce the risk of contracting
coronavirus? (Tick all that apply)
  Stay at Home = 1; Avoid Gatherings = 2;
                                                Restricted Travel within the State = 3;
                                                Use of face mask in public = 5;
  Disinfection of Public Places = 4;
  Regular hands washing = 6;
                                                Use of hand sanitizers = 7;
  Keeping social distance = 8;
                                                All of the above = 9;
  None of the above =10
16. What concerns you most about the coronavirus?
   I'm not concerned about coronavirus = 1;
   Contracting the disease, myself or my family members = 2;
   Not being able to get inputs for my farm = 3;
   Not being able to sell my food products = 4;
   Not having enough work/wage income = 5;
   Not having enough food for the household = 6;
   Not being able to send my children to school = 7;
   Other = 8; specify .....
   Don't know = 9
SECTION C: GENERAL CHARACTERISTICS OF THE FOOD TRADERS
17. What type of food trading activity are you involved in?
   Purchase from traders, sell to consumers (retailing) = 1;
   Purchase from traders, sell to traders (wholesaling) = 2;
   Purchase from farmers, sell to traders (collecting) = 3;
   Other = 4; please specify .....
18. How long have you been in this trading business? Less than 1 year ago = 1;
   Between 1-3 years ago = 2;
                                        More than 3 years ago = 3
```

19. What type of food products do you trade?

Arable crop products (e.g. potato, maize, yam, cassava, rice, plantain, vegetable e.t.c) = 1;

Animal products (e.g. goats, sheep, cattle, poultry e.t.c) = 2;

Edible oil products = 3;

Fruit products = 4;

Fishery/aquatic products (snail, crayfish, prawn, crab) = 5

20. Please indicate the two most important food products you normally trade?

(Tick all that apply)

Arable crop products (e.g. potato, maize, yam, cassava, rice, plantain, vegetable e.t.c) = 1;

Animal products (e.g. goats, sheep, cattle, poultry e.t.c) = 2;

Edible oil products = 3;

Fruit products = 4;

Fishery/aquatic products (snail, crayfish, prawn, crab) = 5

21. How would you compare the number of customers that patronize your food products before and since Mid-March 2020?

Higher = 1; Lower = 2; Same level = 3; Don't know = 4

22. How would you describe your sales since Mid-March 2020?

Increased by more than 50% = 1; Increased by 0-50% = 2; No change = 3; Decreased by more than 50% = 4; Decreased by 0-50% = 5

23. What was your most important source of the selected food products before Mid-March 2020?

Farmers within the Local Government Area = 1;

Farmers in other Local Government Area within Delta State and other parts of Nigeria = 2;

Traders within the Local Government Area = 3;

Traders in other Local Government Areas within Delta State and other parts of Nigeria = 4

24. What is currently your most important source of the selected food products (where does the trader buy the food products)?

Farmers within the Local Government Area = 1;

Farmers in other Local Government Area within Delta State and other parts of Nigeria = 2; Traders within the Local Government Area = 3; Traders in other Local Government Areas within Delta State and other parts of Nigeria = 4 25. Could you please provide an indication of your stock levels (of the selected food products) compared to before the period Mid-March to August 2020? No change = 1; My stock level is much higher = 2; My stock level is much lower = 3; I don't know = 426. If stock level is much lower, what are the three most important constraints preventing you from having a much higher stock since Mid-March 2020? Low or irregular quantity of produce (supply) including trade restrictions = 1; Lack of means of transport due to restrictions on movement = 2; Too much insecurity = 3; Lack of storage = 4; Lack of demand = 5; Inability to access the bank = 6; Not applicable = 7**27.** Do you provide credit to some of your customers? Yes = 1; No = 2

28. If Yes to question 27, have there been any changes in the number of people who have been requesting credit compared to before Mid-March 2020?

```
Yes, less people = 1; Yes, more people = 2; No, same number = 3;
Not applicable = 4
```

29. Has the purchase price of your commodity increased in your area since COVID-19?

```
Yes = 1; No = 2; No response = 3
```

30. Have you received any credit from any agent since Mid-march 2020?

```
Yes = 1; 	 No = 2
```

31. Do women have access to credit facility as much as men do in your area?

```
Yes = 1; No = 2; No response = 3
```







The Impact of COVID-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study

HOUSEHOLD/CONSUMER QUESTIONNAIRE

HOUSEHOLD/CONSUMER QUESTIONNAIRE

This questionnaire is to be completed by at least one adult male and one adult female in a household
Name of Interviewer:
Date of Interview:
Name of Respondent (optional):
GENERAL INSTRUCTION: Please circle or tick the most appropriate answer for each questions.
1. Name of LGA
2. Name of Community
SECTION A: DEMOGRAPHIC BACKGROUND
3. What is your age? Less than 20 years = 1; 20-39 years = 2; 40 -59 years = 3;
60 years and above = 4
4. What is your Sex? Male = 1; Female = 2
5. What is your marital status? Single = 1; Married = 2; Widowed = 3;
Separated/Divorced = 4
6. How many people are in your household? Less than 3 persons = 1;
3-5 persons = 2; $6-8 persons = 3;$ $9 persons and above = 4$
7. What is your highest educational level completed? No formal education = 1;
Primary education = 2; Secondary education = 3; Tertiary education = 4
8. What is your main occupation? Farming = 1; Trading = 2;
Public sector employment = 3; Private sector employment = 4
9. What is the average monthly income from your main occupation?
Less than $N30,000 = 1$; $N30,000 - N49,000 = 2$; $N50,000 - N69,000 = 3$;
N70,000 and above = 4

SECTION B: AWARENESS AND KNOWLEDGE OF THE SPREAD OF COVID-19

10. Have you heard about the coronavirus? Yes = 1; $N_0 = 2$ 11. How did you hear about COVID-19? Radio/TV = 1; Family/friends = 2; Place of worship = 3; Social media =4 12. If Yes to question 10, what do you know about corona virus (COVID-19)? (Tick all that apply), It can be contracted through close contact with infected persons = 1; touching of contaminated surface = 2; poor hygiene = 3; touching of faces (eyes, nose, mouth) = 413. Have you been able to practice social distancing by keeping a distance of two meters from other people in the last 7 days? Yes = 1; $N_0 = 2$ 14. If Yes to question 13, in which situations where you unable to practice social distancing? Working in the farm = 1; Going to the market for food = 2; Going to the hospital / receiving medical treatments = 3; Taking care of dependents = 4; Meeting friends or relatives =5; Attending a function (wedding, funeral, temple) = 6; Becoming tired of being indoors = 7; None of the above = 8; Not applicable = 915. What actions has the Federal/Delta State government taken to curb the spread of the coronavirus in your area? (Tick all that apply) Restricted Travel Within Country/Area = 1; Restricted International Travel = 2; Closure of Schools and Universities = 3; Curfew/Lockdown = 4;Closure of Non-Essential Businesses = 5; Sensitization/Public Awareness = 6; Established Isolation Centers = 7; Disinfection of Public Places =8;

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Ban of social gathering = 9;
                                                 None = 10;
  All of the above = 11
16. What measures have you adopted/can adopt to reduce the risk of contracting
coronavirus? (Tick all that apply)
  Stay at Home = 1;
  Avoid Gatherings = 2;
  Restricted Travel within the State = 3;
  Disinfection of Public Places = 4;
  Use of face mask in public = 5;
  Regular hands washing = 6;
  Use of hand sanitizers = 7;
  Keeping social distance = 8;
  All of the above = 9;
  None of the above =10
17. What concerns you most about the coronavirus?
   I'm not concerned about coronavirus = 1;
   Contracting the disease, myself or my family members = 2;
   Not being able to get inputs for my farm = 3;
   Not being able to sell my food products = 4;
   Not having enough work/wage income = 5;
   Not having enough food for the household = 6;
   Not being able to send my children to school = 7;
   Other = 8; specify .....
   Don't know = 9
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SECTION C. ACCESS TO MARKETS

18. Since Mid-March 2020 has there been any time that you and your household could not access the markets/stores? Yes = 1; $N_0 = 2$

19. If Yes to question 18, what were the main reasons why you and your household could not
access the markets/stores? (Tick all that apply)

Markets/store were closed = 1; Movement restrictions such as curfew = 2;

Concerned about leaving the house due to outbreak = 3;

20. Are fresh food items (eggs, vegetables, meat, fish, etc.) available all the time in the markets/stores since Mid-March 2020?

Always available = 1; Partially/sometimes available = 2; Not available = 3;

No response = 4

21. Are basic food items (rice, bread, garri etc.) available all the time in the markets/stores since Mid-March 2020?

Always available = 1; Partially/sometimes available = 2; Not available = 3;

No response = 4

22. Are hygiene items (e.g. soap, detergent etc.) available all the time in the markets/stores since Mid-March 2020?

Always available = 1; Partially/sometimes available = 2; Not available = 3;

No response = 4

23. Are essential medicines/drugs available in clinics and pharmacies all the time in the markets/stores since Mid-March 2020?

Always available = 1; Partially/sometimes available = 2; Not available = 3;

No response = 4

24. Has there been any changes in the costs of food items since Mid-March 2020?

Food prices have increased = 1; Food prices have decreased = 2; No changes = 3;

No response = 4

25. Have you change your shopping behaviour compared with the periods before Mid-March, 2020? Yes = 1; No = 2

26. How have you changed your shopping behaviour?

Buying larger quantities than usual = 1; Buying smaller quantities than usual = 2;

No Change = 3; Not applicable = 4

SECTION D: LIVELIHOODS

27. Has your ability to carry out livelihoods activities been affected since Mid-March 2020?

Yes = 1; No = 2

28. If Yes to question 27, what were the main reasons for the disruptions to your livelihood activities?

Reduced demand for goods/services = 1;

Movement restrictions (e.g. curfew) = 2;

Concerned about leaving the house due to outbreak = 3;

Not applicable = 4;

Others = 5; please specify

29. Has your household income increased or decreased since Mid-March 2020?

Increased = 1; Decreased = 2;

No Change = 3;

No response = 4

30. So far, how would you describe the extent COVID-19 has impacted your livelihood?

Severe impact = 1;

Yes, for consumption = 1;

Moderate impact = 2;

No impact = 3;

Yes, for sale = 2; Yes, for both sale and consumption = 3; No = 4

No response = 4

31. Is your household currently engaged in arable crop farming?

32. Is your household currently engaged in livestock rearing?

Yes, for consumption = 1; Yes, for sale = 2; Yes, for both sale and consumption = 3; No = 4

33. Is your household currently engaged in fishing coastal activities?

Yes, for consumption = 1; Yes, for sale = 2; Yes, for both sale and consumption = 3; No = 4

SECTION E: ACCESS TO KEY BASIC SERVICES

34. Are there children aged between 5 and 18 years old in the household?

Yes = 1: No = 2

35. Were any of the children attending primary or secondary school before schools were closed due to coronavirus?

Yes = 1;

No = 2;

Not applicable = 3

36. Have the children bee	n engaged in a	any education	or learning	activities	since I	Mid-
March 2020?						

Yes = 1; No = 2 Not applicable = 3

37. If Yes to question 36, what types of education or learning activities have the children been engaged since Mid-March 2020? (Tick all that apply)

Completed assignments provided by the teacher = 1;

Used mobile learning apps = 2;

Studying learning on their own = 3;

Taught by parent or other household members = 4;

Session/meetings with lesson teacher = 5;

Not applicable = 6

38. Who has been staying with the younger children at home since they have been out of school?

Mother = 1; Sisters = 2; Father = 3; Brothers = 4; Extended relation = 5;

Nobody = 6; Not applicable = 7

SECTION F: FOOD SECURITY

39. Have you, or any other adult in your household, had to skip a meal because there was not enough money or other resources to get food since Mid-March 2020?

$$Yes = 1: No = 2$$

40. Has your household ran out of food because of a lack of money or other resources since Mid-March 2020?

Yes = 1: No = 2

41. Which statement best reflects your food situation since Mid-March, 2020

I had difficulties eating enough food i.e. my normal food ration = 1;

I skipped meals or ate less than usual = 2;

I went whole days without eating = 3;

I increased my food intake = 4;

No change = 5

42. Does your household have any food stock for the month?

Yes, less than one to two weeks = 1;

Yes, three to four weeks = 2;

Yes, more than one month = 3;

None = 4







PROJECT: "THE IMPACT OF COVID-19 ON LOCAL FOOD PRODUCTION AND INFORMAL FOOD MARKETS IN NIGERIA WITH NIGER DELTA REGION AS A CASE STUDY"

With Support from International Development Research Centre (IDRC), Canada

Guide for Focus Group Discussion

August 2020

Name of Interviewer:	• • • • • • • • • • • • • • • • • • • •	••••••
Date/Time of Interview:		
Name of Respondent (optional)):	•••••
Local Government Area:		•••••
Community:	•••••	
No. Female Participants		

SECTION A: AWARENESS AND KNOWLEDGE OF COVID-19 OR CORONAVIRUS

- Who has heard about coronavirus?
- How did you hear about COVID-19? (Name as many sources as possible
- What do you know about coronavirus? (Probe further by asking: Do you think people in this locality believe the virus is real?)
- What actions have the community, local, state and federal government taken to curb the spread of the coronavirus in this area?
- Have you adopted any measure to reduce the risk of contracting coronavirus? What are some of the measures?
- Some people do not believe there is coronal virus? Is this true in this area? What do you think? (Ask them to raise hands. First, those who believe, followed by those who do not believe), then let each group give few reasons for their opinion.
- Do you think the measures taken by government is helping to reduce the spread of the virus to/in your area? Give reasons.

SECTION B: IMPACT OF COVID-19 ON LOCAL FOOD PRODUCTION, MARKETING AND HOUSEHOLD VULNERABILITY

- 1. What type of farm enterprise are people in this locality mostly involved in?
- 2. How has Covid-19 affected people going to farm since mid-march this year?
- 3. How has Covid-19 affected the way people hired workers to work on their farm since Mid-March 2020?
- 4. Do people in this locality usually purchase farm inputs? What type of farm inputs? How has covid-19 containment measures *Restriction of movement*/lockdown affected the purchase of farm inputs since mid-march 2020?
- 5. How has price of food products ready for sale been affected by covid-19 containment measure?
- 6. Were some farmers in your area given any palliatives/support from the community, Local, State or Federal government during this period of COVID-19? What kind of support if any?
- 7. Where do food traders in this area usually purchase their products from?

- 8. How would you compare the sales of food products before mid-March, 2020 and since mid-march, 2020? *Decreased, increased or stayed the same?* (please allow time for more response)
- 9. How has COVID-19 affected the transportation of food products in this area?
- 10. Were some food traders in your area given any palliatives/support from the community, Local, State or Federal government during this period of COVID-19 to support their trading business?
- 11. Has any of you experienced any of the following since mid-March, 2020:
- v. Difficulties in going to food markets due to mobility restrictions imposed by government
- vi. Difficulties in buying food due to most food markets being closed
- vii. Unable to buy the amount of food consumed because the price of food was too high
- viii. Unable to buy the amount of food consumed because some households incomes dropped *Please probe for more response instead of direct yes or no answer.
- 12. Has there been any changes in the costs of food items since mid-March, 2020?
- 13. Did members of this community receive any palliatives/support from the community, Local, State or Federal government during this period of COVID-19 to support their household feeding or income?
- 14. What other measures do you think the government can take adopt to ensure regular availability of food amid covid-19?

ANNEX B

Report of Feedback Meeting With Local Stakeholders Delta State, 15-16-17 December, 2020

On the Project

"The Impact of Covid-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study"

This report present the outcome of a feedback meeting held with key stakeholders on the project "The Impact of Covid-19 on local food production and informal food markets in Nigeria with Niger Delta region as case study" being implemented in Delta state, Nigeria. The meeting which was held at different locations in Delta state was imperative following the completion of data collection, entry and preliminary data analysis of the primary data collected from 10 randomly selected local government areas in Delta state across the three senatorial districts. The LGAs are as follows; Ika South, Aniocha North, Oshimilli South, Sapele, Warri South, Udu, Ethiope East, Ughelli South, Isoko South and Patani LGAs respectively.

The overall objective of the Project was to examine the disruptions to food production, marketing and nutrition created by the COVID-19 situation and its impact on the most vulnerable population in Nigeria using the Niger Delta region as a case study. The research focused on the collection of short-term data and the documentation of the impact of the COVID-19 pandemic on local food production and marketing systems in Nigeria's Niger Delta region to enhance the articulation of programs that alleviates the impacts of COVID-19 on local food production and marketing in the region in particular and other parts of Nigeria in general.

The feedback meeting of key stakeholders was carried out in the project area to get the inputs of the stakeholders and beneficiaries and to validate the preliminary findings of the research as presented by team member. Their inputs and comments will indeed be integrated into the final research report.



Photos: Participants in Group Photograph during Feedback Meeting in Delta state.

While mobilizing survey respondents for the feedback meeting, effort was made to ensure that women and girls constitute at least 50% of those invited to take part. The feedback meeting was arranged in smaller settings at different locations taking into cognizance Covid-19 protocols and containment measures.

At the start of each meeting team members would make a presentation of the findings of the rapid assessment survey and thereafter welcome comments and observation from the participants drawn from various sector in Delta state. The meetings in all the locations went well and the local participants were enthusiastic about the gathering and were happy to see that the input they made during the survey and the way they provided responses to the questionnaires were well reflected in the research report presented. In an attempt to buttress the points presented, some participants who were opportune to respond to the survey made some commendable remarks which vividly reflect the situation on ground. Some of their comments are presented below.

"CPED is the advocator; we at the community are the grassroot while the government is the policy maker and implementer. My concern is that these beautiful recommendation, will be sent to the government. And when they are eventually passed to the government, will they do something about it? This is important because if the government doesn't take seriously the recommendations, to see how they can put them to use, then all our efforts will be in futility. CPED should try harder to make sure the government hears the cries of the people at the grassroot. CPED should continue to push for policies"

"The report is a comprehensive one and it is based on what is happening in our communities. The recommendations are all well stated. To my understanding, if all these recommendations are well carried out by CPED in conjunction with the federal government, I believe everyone in the grassroot will be carried along and the impacts will be felt".

"I can see clearly that all what we discussed the last time CPED came into my community were captured in this brief report. Your effort is well appreciated than the government of this country. CPED has come to wipe away our tears. CPED should put more effort to engage the people of the community and encourage them to engage more in agriculture in order to help themselves at this trying time of our economy".

"CPED is a good organization. If at this stage they have gone to the grassroot to meet with the youths, women and everyone then they are very sincere unlike some other organizations. In the aspect of the government, I believe they do not even know the importance and needs of the youth. To me, the youth should be carried along, because it is the youth in power that can carry the interest of fellow youth; the old men there will not consider the plight of the youth. CPED should try to work with the government on how to involve the youth in governance".

"I so much appreciate what CPED has done in my community, Amajomata. They came to do great work and also gave us awareness. What we did not know before, they made us know it and what was not clear to us, they gave us enlightenment on it. We thank them for all they have done and I pray that God will bless CPED in Jesus' Name. Amen".

Summary of other Recommendations Made by Participants to Improve the Food situation in the Niger Delta region.

- Firstly, Government and other relevant agencies should help sensitize the people by creating more awareness of the effects of covid-19.
- Secondly, more testing centres should be created and random testing carried out.
- Also, local content research should be carried out for roots and herbs that can prevent and act as vaccine.
- ❖ Government should provide funds for members of the community to support their food production.
- Non-governmental organization should work alongside with the government to enable set goals accomplish.
- ❖ Members of the communities should utilize appropriately support render to them.
 - ❖ Assisting farmers with grants.
 - ❖ Assisting farmers with seeds, fertilizers and information for skills on how to boost or increase their farm yield.
 - ❖ Providing security within the farm roads/rural communities as farmers are scared of going to farm due to rampant killing and insecurity.
 - ❖ Government / policy makers should put in measures to ensure that food supply is not interrupted.
 - ❖ Government should also establish storage facilities in certain areas so that farmers could store their produce; especially fruits and vegetables.
 - ❖ Incentives should be provided for those farmers who have been severely impacted by the effect of covid-19.
 - Government should ensure that unnecessary level/tax is not incurred by farmers.
 - ❖ Government should be able to provide enough food to our rural area, so that the issue of hunger will be eliminated.
 - ❖ Covid-19 has really caused damage to our product in early march, so i am of the opinion that government should provide most especially the rural areas enough storage facilities to store their product in case such problem arises.
 - ❖ The farmers should be supported financially.
 - ❖ Tackle Insecurity from herdsmen
 - ❖ Create Awareness or means of educate and support farmers on how to improve farming and also overcome challenges brought about by Covid-19.
 - * Encouraging more persons and youth in farming.
 - ❖ The Government should help beef up security in our farms in order to secure our goods from herdsmen because during Covid-19 while we were indoors, herdsmen destroyed our crops like yams, plantain, cassava, sweet potatoes, pepper and garden eggs.
 - ❖ Government should come to our aid because during Covid -19 we lost our shops to thieves and we also lost our farms to flood.

- ❖ Government should provide a means of getting easy loans to local food producers in the Niger Delta region
- ❖ Government should construct better and accessible roads to enable the local food producers take their food to the markets
- ❖ Government should partner with the ministry of agriculture to provide better seeds for farmers so that their farm produce will be better.
- ❖ Government should also provide farmers in Niger delta with security because presently, our farmers are being attacked by the Fulani herds in their farms. They also destroy their crops
- ❖ Government should encourage farmers in the area of touts in the markets harassing those who take their farm produce to sell in the markets as they are always harassed with huge irrelevant taxes and sometimes seize their products thereby making the farmers to sell their product at a high cost
- ❖ Farmers should try and stop the police from harassing the farmers and the drivers who convey the farmers and their products to the market by extorting money from the drivers thereby making the farmers to charge the farmers high and even sometimes delay their vehicle, making them to be late to the markets and sometimes making their goods to perish.
- ❖ Government should look into the price of food commodity as it has caused a lot of hunger in society when people cannot afford the commodity in the market.

Conclusion

The various feedback meetings held provided opportunity for participants to network and exchange ideas on farming techniques and how best they can support the government in improving the food supply chain in Delta state. A key take away arising from the meetings which CPED looks forward to implementing is the fact that some participants recommended that CPED set up a virtual platform where food producers and food marketers can always interact and shares concerns and how best to address those concern in relation to improving food supply in the state and beyond.