

A Brief Report of Climate Change Situation Gathered in the ten Pilot Communities

Table 1: Respondents' Characteristics, Occupation, Income Level and Awareness of Climate Change

Name of Community/LGA	No. of Household Surveyed	Average Household Size	% Male	% Female	Main Occupation of Respondents				Income Level/month of respondents (%)				Awareness of climate change (% Yes)
					Farmers (%)	Civil servants (%)	Private business/Artisans	Total	Less than N30,000	N30,000 to N50,000	N51,000 and Above	No Response/Don't know	
Aboh/ Ndokwa East	60	8	38.0	62.0	76	7	17	100	65.7	7.0	0.5	26.8	95.0
Onicha-Ugbo/ Aniocha North	60	6	34.0	66.0	75	12	13	100	43.0	15.0	1.0	41.0	93.8
Otorho-Agbon/ Ethiope East	60	7	35.0	65.0	68	8	24	100	64.0	4.0	2.6	29.4	91.6
Alifekede/ Ika South	58	8	35.0	65.0	81	4	15	100	47.0	13.0	3.0	37.0	87.4
Uzere/ Isoko South	60	7	36.0	64.0	83	5	12	100	53.8	9.5	2.0	34.7	94.0
Amajomata/ Sapele	60	9	35.0	65.0	86	1	13	100	36.0	21.0	4.0	39.0	89.2
Ekamkpamre/ Ughelli South	60	6	40.0	60.0	67	13	20	100	39.7	23.7	2.0	34.6	87.0
Agoloma/ Patani	60	8	35.0	65.0	74	3	23	100	69.0	7.8	1.0	22.2	93.5
Ayakoromo/ Burutu	59	7	34.0	66.0	87	-	13	100	36.0	12.0	6.0	46.0	98.3
Igbudu/ Warri South	60	6	32.0	68.0	65	16	19	100	40.0	30.0	5.0	25.0	85.7
Total/ Average (%)	597	7	35.4	64.6	76.2	6.9	22.1	100	49.4	14.3	2.7	33.6	91.6

The results of the rapid assessment carried out in the ten pilot communities for intervention show that the majority of the households have an average size of 7 members as shown in table 1 above. This shows the pressure on the family head to care for his/her family as majority of the households are peasant farmers practicing subsistence agriculture. The income level of households in the selected communities was also examined. Results show that majority of the respondents (49.4 per cent) earn less than the minimum wage of N30,000 per month in Nigeria. In a country where a bag of rice, be it local or foreign, is more than N30,000, one can imagine what families in this region go through to survive economically. An attempt was made to ensure more women respond to the community rapid assessment survey as they are the major target for

pilot activities in the communities. Hence, over 60 per cent of the respondents were female. Respondents lamented over the various challenges they face as they are engaged in agricultural activities in the community ranging from low yield of farm outputs, uncoordinated market prize, destruction of farmland by flood, bad weather and activities of cattle herdsmen during grazing, especially those in lowland rainforest ecological zones. These amongst other challenges are the results of the low income of the families in the target communities. A very important challenge that majority of the respondents who are mainly farmers (about 76 per cent), mentioned was the fact that they do suffer a sharp drop in prices of farm produce because of the rush by most of the farmers to harvest farm produce such as cassava due to impending flood, thereby increasing the supply (**surplus**) of some farm products in the market. Respondents said a measure of garri that sells for about N3,000 to N4,000 is sold at a loss for less than N1,000 when it's clear that flooding is imminent and everyone harvesting and taking product to the market in large quantities. Respondents to interviews said, the food marketers usually take advantage of the farmers during this period because of lack of storage facilities in the communities.

Majority of those who responded to survey which are over 80 per cent acknowledged that they are aware of climate change and its associated indicators such as early onset of rain and increase in rainfall amount according tables 1 and 2. While over 50 percent of the respondents were quite familiar with climate change impacts occurring in their communities such as increase in sea level rise, increase in the magnitude of flooding as well as increase in conflict between the farmers and the cattle herders as shown in Table 2 below.

Table 2: Respondents' Awareness of Climate Change Variables and Perceived Impact of climate change in their community

Name of Community/LGA	No. of Household Surveyed	% Male	% Female	Awareness of climate change Variables in pilot communities (% Yes)				Respondents Perceived Impact of Climate Change in their Communities (% Yes)			
				Early onset of rains	Increase In rainfall amount	Increase in sunshine intensity	Changes in wind speed	Disappearance and appearance of some species of fishes	Increase in sea level rise	Increase in the magnitude of flooding	Increase in conflict due to scarcity of grazing land
Aboh/ Ndokwa East	60	38	62	87.1	95.4	87.3	56.4	45.8	70.0	92.6	57.1
Onicha-Ugbo/ Aniocha North	60	34	66	86.4	89.7	90.5	67.8	25.2	43.2	76.1	65.3
Otorho-Agbon/ Ethiope East	60	35	65	78.9	92.1	85.6	78.2	30.5	56.4	68.7	87.4
Alifekede/ Ika South	58	35	65	83.6	96.3	78.0	80.1	34.0	35.6	74.4	95.2
Uzere/ Isoko South	60	36	64	88.7	94.0	81.7	79.0	57.2	82.5	89.9	43.7
Amajomata/ Sapele	60	35	65	86	87.8	79.6	74.6	62.5	60.6	75.8	41.3
Ekamkpamre/ Ughelli South	60	40	60	82	91.4	77.7	65.2	45.0	63.2	78.1	78.5

Agoloma/ Patani	60	35	65	80.2	90.0	67.0	69.3	71.1	78.5	95.9	31.8
Ayakoromo/ Burutu	59	34	66	87	93.6	73.4	70.8	68.9	97.9	89.0	12.9
Igbudu/ Warri South	60	32	68	88.2	92.5	85.9	71.0	43.3	77.2	76.0	15.3
Total/Average (%)	597	35.4%	64.6%	84.81	92.28	80.67	71.24	48.35	66.51	81.65	52.85

As shown in Tables 2 above, communities in Patani, Burutu and Warri South LGAs are the worst hit with the effect of flooding due to sea level rise and river over flow. This can be explained by the fact that these are coaster communities and infrastructural development to prevent the impact of rivers over flow is almost non-existence. Uzere and Aboh communities in Isoko South and Ndokwa LGAs also suffer flooding due to river over flow because of these communities to the nearest river. These communities complain that river overflow destroy their fish farms as most of the fished do escape to the river when it rescinded. The situation is however different from Alifekede in Ika South, Onicha-Ugbo in Aniocha North and parts of Otorho-Agbon clan in Ethiope LGAs as these communities suffer from flooding as a result of increase in the duration of rainfall and increase in the amount of rainfall. As noted by interview respondents in some of the communities such as Aboh, Otorho-Agbon, Alifekede, Amajomata and Agoloma communities as shown in Table 3 below, pest invasion is major climate change hazards the farmers in these communities are living to contend with. Again because of the low income of majority of the farmers, access to pesticide and pest resistance crops becomes a daunting challenge.

Another worrisome development in most of the selected communities is the invasion of farmlands by cattle herdsmen in search for grazing land. Respondents complain that even when they are able to sustain the growth of the crops amid pest invasion and excessive heat at some point, the cattle herders usually take their cattle to the farmland in the evenings or Sundays when the farmers are usually not around in the farm, thereby destroying the crops and the entire farmlands. This according to respondents has led to countless conflicts between the farmers and the cattle herdsmen leading to loss of lives and properties. Some farmers noted that they have had to abandon their farmlands for fear of being attacked by these herdsmen.

Table 3: Interview Respondents' Perceived Most Critical disaster occurring in their communities and CCA and DRR initiatives being practiced by the Community members

Name of Community/LGA	Three most critical disaster occurring in the community due to climate change	Some Climate Change Adaptation and Disaster Risk Reduction Initiatives Being Practiced by Community Members in Selected Communities
Aboh/ Ndokwa East	-Excessive flooding due to river overflow; -Pest invasion;	-Early planting and harvesting; -Keeping crop produce in the barn for preservation; -Packing out refuse from water channels; -Diversification from farm to non-farm activities;

	<ul style="list-style-type: none"> -Intrusion of salt water into fresh water resulting to loss of fishes. 	<ul style="list-style-type: none"> -Early and frequent weeding; -Use of fertilizer.
Onicha-Ugbo/ Aniocha North	<ul style="list-style-type: none"> - Deceased crops resulting to poor yield; - Excessive heat leading to loss of livestock; - Conflict between herders and farmers due to scarcity of land for grazing and farming. 	<ul style="list-style-type: none"> -Creating awareness campaign on the bad effects of burning bushes; -Planting of early maturing crops; -Planting early; -harvesting early before the flood set in; -Planting of trees to serve as wind breakers -Clearing of blocked drainages, -mulching.
Otorho-Agbon/ Ethiope East	<ul style="list-style-type: none"> -Invasion of crops by unknown insect pest; -Forest fire destroying farmland and Animal species; -Flash flood removing top soil. 	<ul style="list-style-type: none"> -Early planting of crops, -Use of fertilizer to improve soil fertility, -Clearing of drainages to allow for free flow of flood water, -Group harvesting to hasten the pace before onset of rain, -Campaign against bush burning, -Manual Irrigation.
Alifekede/ Ika South	<ul style="list-style-type: none"> -Crop spoilage due to increased amount of sunshine and excessive heat; -Invasion of crop by pest; - Conflict between herders and farmers due to scarcity of land for grazing and farming. 	<ul style="list-style-type: none"> -Use of Sand bagging to prevent erosion, -Early planting of crop, -Construction of gutters in the farm to divert flood waters, -Tree planting to prevent damage by excessive wind, -Digging of pit for water harvesting, -Use of Ridging method in crop production to avoid damage by erosion.
Uzere/ Isoko South	<ul style="list-style-type: none"> -Heavy flooding resulting to poor yield of farm produce; - Water pollution due to oil spillage destroying aquatic lives; - Conflict due to scarcity of land. 	<ul style="list-style-type: none"> -Early harvesting to avoid damage by flood, opening of drainages, -Early planting, -Use of Ridge planting system, advocating against deforestation, -Irrigation, -Building of barns in the bush to protect cassava stems.
Amajomata/ Sapele	<ul style="list-style-type: none"> -Soil erosion ravaging community and farmlands; -Invasion of crop by pest/disease; - Conflict between herders and farmers due to scarcity of land for grazing and farming. 	<ul style="list-style-type: none"> - Early planting and harvesting of crop; - Use of pesticide; - Digging of gutters to direct flood water from destroying crops; - Mulching to avoid damage by excessive sunshine; - Use of ashes from burnt wood to prevent pest from eating the crops. etc
Ekamkpanre/ Ughelli South	<ul style="list-style-type: none"> -Increased flooding in farmlands and in the community; - Conflict between herders and farmers due to scarcity of land for grazing and farming; 	<ul style="list-style-type: none"> - Planting flood resistant crops; -Planting of cover crops and varieties of crops - Mulching; - use of cow dung as manure to grow their crops which is not sustainable; -Diversification from farm to non-farm activities.

	-Excessive heat affecting livestock growth.	
Agoloma/ Patani	-Pest/diseases affecting crops; -Excessive flooding; -Increase in new species of weeds.	- Build cemented embankment; - Digging of gutters to direct flood water from destroying community and farmlands; -Diversification from farm to non-farm activities.
Ayakoromo/ Burutu	- Increased flooding in the community due to ocean surge; -Pollution of rivers and sea water destroying aquatic lives; -Declining fish population and increase in disease in fishery.	- Community members build platforms above the water level in their living room and bedrooms in order to be able to move around; - Relocation of family members to safer grounds - The community people engage in sand bagging of the affected area etc.
Igbudu/ Warri South	-Disappearance of some forest species; -Excessive flooding and destruction of houses; - Conflict due to scarcity of land leading to loss of lives.	- Nets are used as barrier to prevent fishes from running into the rivers; - Digging of gutters to direct flood water from destroying crops; Planting flood resistant crops; -Diversification from farm to non-farm activities.

Table 3 shows that some community members have engaged in some form of climate change adaptation practices in their localities to cope with the impact of climate change. Majority of the female interview respondents opined that they have adopted planting of cover crops and varieties of crops, planting of flood resistant crops, planting of early maturing crops and early harvesting as various adaptation measures to reduce the effect of climate change on agriculture in their communities. The use of various modern irrigation methods to boost agricultural production was very low among the farming population in the communities selected for pilot activities.

From the gender perspective, respondents to interviews, majority of whom were women, pointed out that women exclusion from decision making has been a social-cultural phenomenon the communities in the region have had to contend with over the years. Respondents perceived that older male counterparts are granted authority in community decision making while women, girls and younger men usually have very limited say in decision making, be it in families or communities. This also goes with employment opportunities in the community especially for those situated in oil rich localities. The views expressed by female respondents were that oil companies and other multinationals who do operate in the region usually recruit only the male folks leaving their female counterpart to their fate even though they merit such positions. They complained that if slots for employment are allocated to families or clan, the elders and household head usually select the male folks to occupy such positions. Women and girls are perceived as weaklings even though they have the same educational qualification as their male counterparts.

However, the female respondents agreed that their husbands and men are supportive in farming activities and other household chores and perceived that they will do better if they have the right training and financial assistants.