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the reconnaissance survey, we determined and choose appropriate sampling method for the study. To ensure proper representation of the population under investigation, the purposive sampling method was employed to select the three ooded farmlands within each zone under the di erent crops; cassava, maize, yam, melon and plantain based on the existing quarters. ese crops were chosen because they are grown locally by the farmers in Oleh community. e ood data was collected in length and measured in meters, ooded portion in kilometers; percentage of length, depth in centimeters; periodicity and category of the ood in the farmlands were selected for samples collection. However, 65 samples were drawn from the study area for inclusion in the study. A total of 50 samples were drawn from 10 ooded farmlands (5 in each zone) under di erent crops and a total of 15 samples from were drawn from 3 ood-free farmlands. e di erent farmlands used were equal in size, being one acre each.

We utilized personal observation and direct eld measurements between the months of July and September. Flood information was gathered from each of the zones mentioned above.

A er heavy rainfall, when the farmlands were ooded, we engaged in personal observation and taking photographs of the a ected areas. Measurement of the ood depth, the length, width and the category of ood were recorded for each day. is was done to ascertain the depth of oods and area covered by the ood in the di erent zones.

Measurements of crops yield in all the sampled farmlands ooded and farm lands that were not ooded was done using kilogram scale. Cassava was weighed with a scale in the ooded farm lands a er the harvest. Melon was harvested and package in a sack, sun dry and weighed. Tubers of yam were weighed on the scale in the farmlands. Also, maize was harvested and weighed with the cob. is was so because maize was harvested prematurely as a resulh1(a)1(r)e(q)105(ra)9(m s)-8(c)-3v- ds /mwalphs oo(a)19(u)3(s12(n)032o)-9(o)-9(d

kilograms. The estimated loss represents 46.9 percent of the total yam loss due to flooding (Table 3).

Maize: Maize, 13(cen)19(t o)12(f t)-6(h)4(e t)6(o)11(t)-6(a)-5(l ya)9(m)TJ 0 Tw 0 -1.2 TD [(los)5(s d)12(ue 12(ue 6)4(e tpTd [(M

the total maize farmlands. Flood water remains on the land surface for a period of 1 week to 3 months with a depth of 27 centimeters. The estimated yield of maize for 2011 and 2012 was 444 kilograms with a mean of 74 kilograms. 235 kilogram is lost due to seasonal flooding that occurred in 2011 and 2012. The percentage loss was 54 percent. This implies that 54 percent of the total maize cultivated in the three quarters

Zone	Sample point farm	length Km	Flooded portion Km	Percentage of total length	Depth in cm	Periodicity	Category	Crop cultivated	Crop yield Kg	Crop yield loss Kg	Percent age loss
Odah	2011 E	0.57	0.32	72	34	2 weeks to 3 months	Seasonal	Plantain	60	36	60
"	2012 E	1.50	0.47	86	21	2 weeks to 2 months	"	Plantain	50	32	64
, Z K U H	2011 E	0.29	0.57	94	15	2 weeks to 3 months	"	Plantain	90	42	46.6
"	2012 E	0.44	0.24	65	45	2 weeks to 3 months	"	Plantain	80	34	42.5
Erorin	2011 E	0.74	0.66	88	32	2 weeks to 3 months	"	Plantain	80	43	53.75
"	2012 E	0.57	0.32	72	34	2 weeks to 3 months	"	Plantain	60	36	60
-	Total	4.11	2.58	477	181	-	-	-	420	223	328
-	\bar{X}	0.685	0.43	79.5	30.16	-	-	-	70	37.16	54.7

Source: Fieldwork, 2011 and 2012

7KH LPSOLF DWLRQ RI WKL V LV WKDW PRUH WKDQ KDOI RI WKH \LHOG IURP SODQWDLQ LV ORVW WR ÀRRQ

Table 5: 0HDQ GLVWULEXWLRQ RI WKH ÀRRGHG IDUP ODQGV E\ 3ODQWDLQ DQQ

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.888(a)	0.789	0.551	15.37178

Predictors: (Constant), melon, yam, maize, cassava and plantain.

Table 6: 0RGHO 6XPPDU\ RI UHJUHVVLQR DQDO\VLV EHWZHHQ ÀRRG DQG FURS \LHO
