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Kiribati 2019–2020 Household Income and Expenditure Survey Report: Copra brief

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Introduction and summary

The Kiribati National Statistics Office included a specific module in the 2019 household income and expenditure survey (HIES) questionnaire in order to evaluate the impact of the government increase to the price of copra, which took effect in 2018 and where the price was increased from a minimum of \$1 per kilogram to \$2 per kilogram. This brief presents a summary of relevant data collected through the HIES, which was implemented from June 2019 to April 2020.

The results indicate that there are relatively high levels of household (HH) participation in copra and coconut production (around one-third of all HHs, three-quarters of rural HHs and half of low-wealth HHs). Of the HHs participating in copra and coconut sales and exchange, the government increase to the price of copra appears to have had a positive effect of increasing HH income and motivating residents to remain on their home island. Female-headed HHs, however, are among the population groups that appear to have had the lowest benefit as they reported more moderate increases to their income and lower incentive to remain on their home island. Copra and coconuts are widely used to acquire narcotics (tobacco, alcohol and kava) and foods that are energy dense and of low nutritional value (e.g., sugar, confectionary, rice, noodles, oil and salt), so there are adverse implications in terms of improving access to items that are associated with poor diet and unhealthy consumption.

Overall, the government increase to the price of copra appears to have had positive benefits to HH income and to reduce motivation for urban migration, however consideration needs to be given to ensure that the interventions are beneficial for all, especially women, and that they are not at cost to the health of i-Kiribati people.

Household participation in the sale or exchange of copra

Around 40% of i-Kiribati HHs produce copra for the purpose of sale or exchange (Figure 1). HH participation in copra production is low in South-Tarawa and relatively high in other areas. In Southern Gilberts, 87% of HHs produce copra; in the Central Gilberts, 86% of HHs produce copra; in Northern Gilberts, 63% of HHs produce copra; and in the Line & Phoenix Islands, 54% of HHs produce copra.

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In terms of number of HHs that participate in copra production, the Southern Gilberts has the highest number of HHs with 2,880 HHs (Table 2) followed by Northern Gilberts (2,524 HHs), Central Gilberts (1,519 HHs), Line & Phoenix Islands (827 HHs) and South Tarawa (163 HHs).

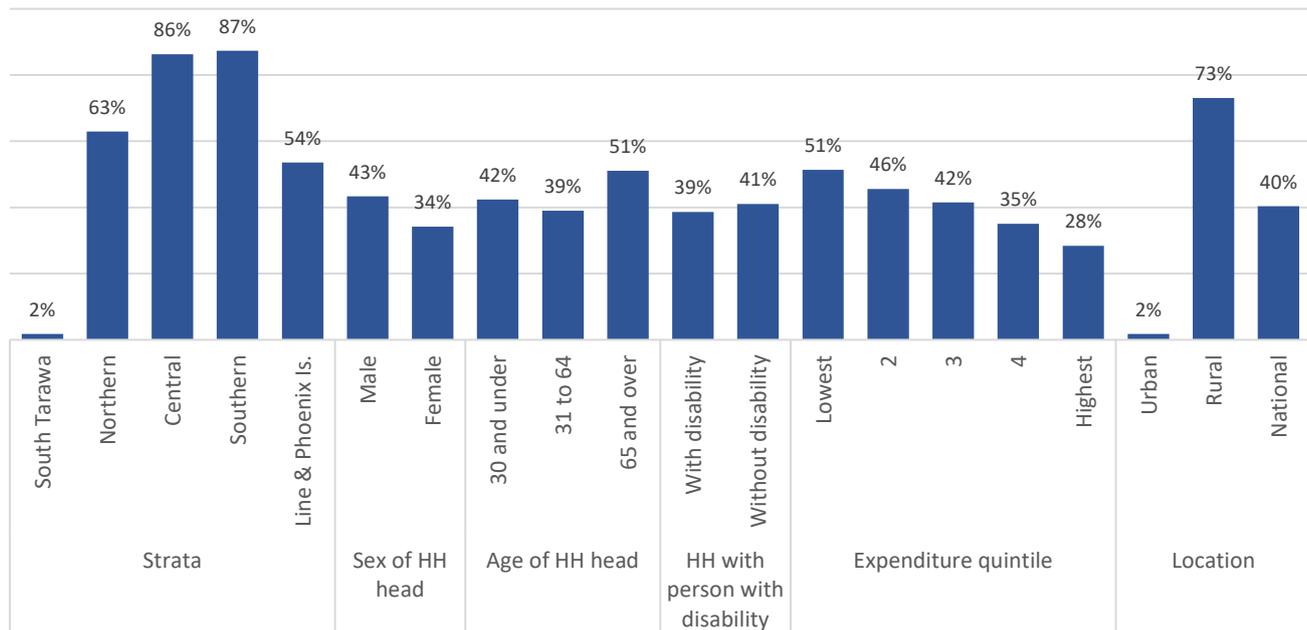


Figure 1: Household participation in copra production

Around 43% of male-headed HHs sell or exchange copra compared to 34% of female-headed HHs. More than half of HHs with a HH head aged 65 and over participate in the sale or exchange of copra, while 42% and 39% of HHs with a head aged 30 or less and 31 to 64 years, respectively, sell or exchange copra. 39% of HHs with at least one member with a disability sell or exchange copra compared to 41% of HHs without a HH member with a disability.

Perhaps the most interesting population groups in terms of participation in the sale or exchange of copra are those of lower-wealth and those living in rural areas. More than half of HHs in wealth quintile 1 sell or exchange copra while around one-quarter of HHs in wealth quintile 5 do. Around three-quarters of rural HHs sell or exchange copra, while only 2% of urban HHs do.

Overall, HH participation in copra production is high in all divisions of Kiribati, with exception of the highly populated urban area of South-Tarawa. Copra appears to be an important income source for lower-wealth, ageing and rural populations. Copra appears to be a logical vehicle to for policy that aims to increase income opportunities for those who are of low-income, rural and ageing and who otherwise may not have a cash income source.

Household participation in the sale or exchange of coconut

Around one-third (38%) of HHs reported selling or exchanging coconuts (Figure 2). HH participation in the sale or exchange of coconuts is high in Southern and Central Gilberts (88 and 83% of HHs respectively) and moderate in Northern Gilberts and Line & Phoenix Islands (57% and 33% respectively).

In terms of number of HHs that participate in the sale or exchange of coconuts, the Southern Gilberts has the highest number of HHs with 2,899 HHs (Table 2) followed by Northern Gilberts (2,293 HHs), Central Gilberts (1,475 HHs), Line & Phoenix Islands (510 HHs) and South Tarawa (185 HHs).

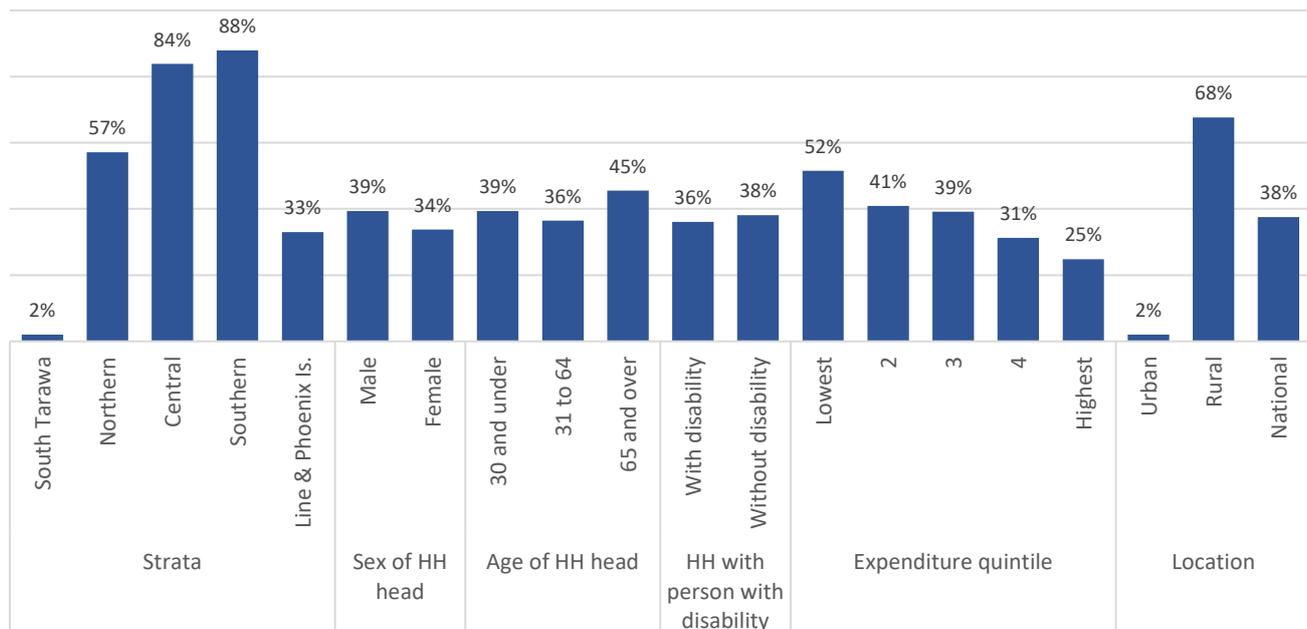


Figure 2: Household participation in coconut production

Around 39% of male-headed HHs sell or exchange coconuts compared to 34% of female-headed HHs. Almost half of HHs with a HH head aged 65 and over participate in the sale or exchange of coconuts, while 39% and 36% of HHs with a head aged 30 or less and 31 to 64 years, respectively, sell or exchange coconuts. 36% of HHs with at least one member with a disability sell or exchange coconuts compared to 38% of HHs without a HH member with a disability.

Again, the most interesting population groups in terms of participation in the sale or exchange of coconuts are those of lower-wealth and those living in rural areas. More than half of HHs in wealth quintile 1 sell or exchange copra while one-quarter of HHs in wealth quintile 5 do. Around two-thirds of rural HHs sell or exchange coconuts, while only 2% of urban HHs do.

Overall, HH participation in coconut production is high in all divisions of Kiribati, with exception of the highly populated urban area of South-Tarawa. Coconuts appear to be an important income source for lower-wealth, ageing and rural populations. Coconut appears to be a logical vehicle to for policy that aims to increase income opportunities for those who are of low-income, rural and ageing and who otherwise may not have a cash income source.

Household income in the last 30 days from the sale of copra

Household income from copra (excl. coconuts) amounts to approximately AUD 1.85 million per month, which is around 7% of total HH income (Figure 3). The sale of copra is a significant source of HH income in Kiribati, particularly in rural areas. In the Line & Phoenix Islands, income from the sale of copra amounts to almost one-quarter of HH income (23%); this is followed by Southern Gilberts (17%), Central Gilberts (15%), Northern Gilberts (10%) and South Tarawa (less than 1%). The sale of copra is a significant source of rural HH cash income amounting to 15% of total income.

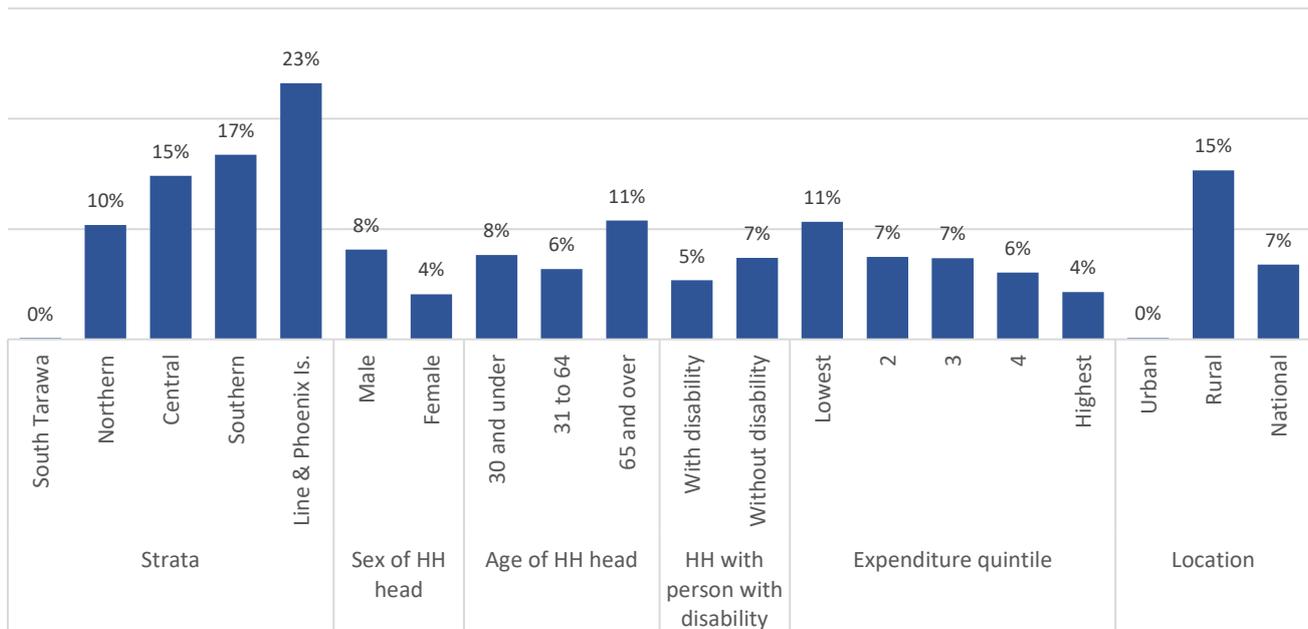


Figure 3: Proportion of total household income sourced from the sale of copra

Around 8% of total HH income of male-headed HHs is derived from the sale of copra, while 4% of total HH income of female-headed HHs. More than one-tenth of total HH income of HHs with a HH head aged 65 is sourced from the sale of copra, while 8% and 6% of HH income with a head aged 30 or less and 31 to 64 years, respectively, is sourced from the sale of copra. 5% of HH income for HHs with at least one member with a disability is sourced from the sale of copra, compared with 7% of HH income for HHs without a member with a disability.

Again, the most interesting population groups in terms of income from the sale of copra are those of lower-wealth and those living in rural areas. More than one-tenth of HH income of HHs in wealth quintile 1 is derived from the sale of copra compared with 4% of HHs in wealth quintile 5. Around 15% of rural HH income is sourced from the sale of copra, while less than 1% of urban HH income is.

Overall, the sale of copra is an important source of cash income for i-Kiribati HHs, with exception to the highly populated urban area of South-Tarawa. Copra appears to be an important source of cash income for lower-wealth, ageing and rural populations, and those living in the outer islands of Kiribati.

Increase in household income from the government increase in the price of copra

Of the 7,458 HHs reporting the sale of copra, almost all (94%) reported an increase in cash income, or increased access to goods and services that can be exchanged for copra, as a result of the government increase in the price of copra (Figure 4). More than 90% of all houses in rural Kiribati (Northern, Central, Southern and Line & Phoenix Islands) reported increased income as a result of the government increase in the price of copra, while 84% of South Tarawa HHs reported an increase.

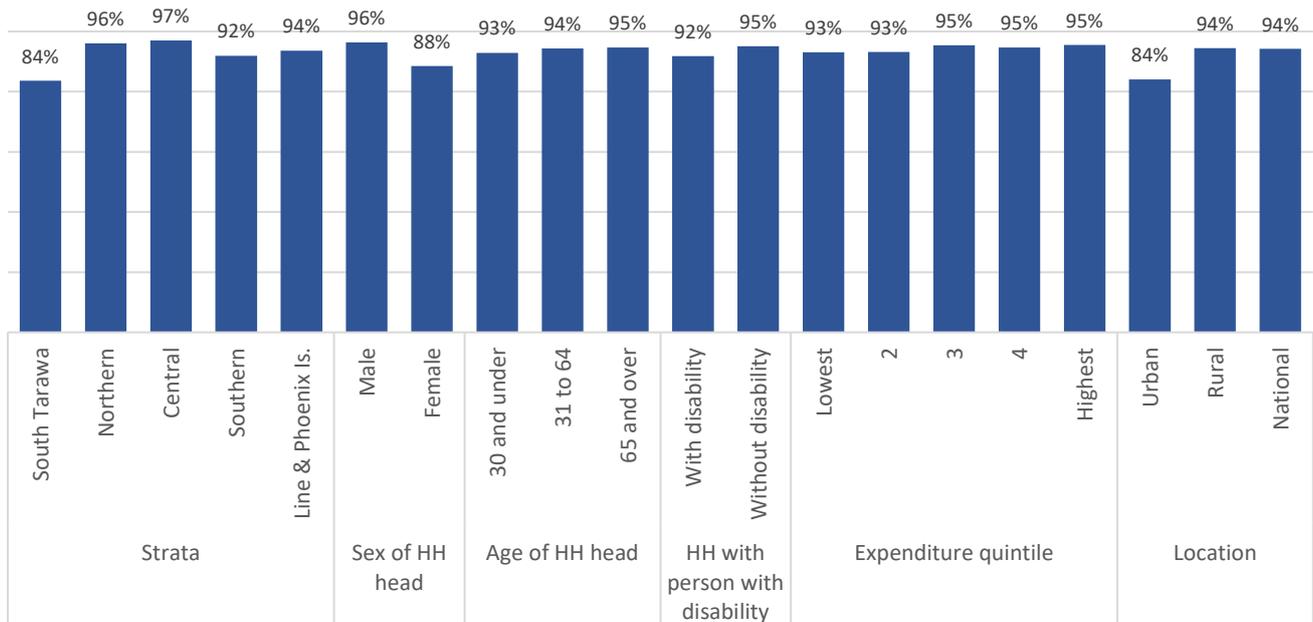


Figure 4: Household that noticed an increase in their cash income or goods and services that can be exchanged from copra or coconuts since the government increased the price of copra

The results are indicative that the government increase in the price of copra has almost universally resulted in an increase to HH income for copra-producing HHs, which make up 40% of i-Kiribati HHs.

Significance of increase

Of the 7,458 HHs reporting increased income resulting from the increased price of copra, 44% reported that the increase was large, 37% said that the increase was moderate, while 19% reported that the increase was small (Figure 5). The income effect appears to have been most significant in Line & Phoenix Islands where 79% of copra producing HHs reported a large increase to their income. In the Gilbert Islands, around 40% of HHs reported a large increase, 40% reported a moderate increase and 20% reported a small increase to HH income. In South Tarawa, around three quarters of HH reported a moderate or large increase to HH income, with a quarter reporting a small increase.

Overall, 3,279 HHs reported a large increase to their income, 2,763 reported a moderate increase and 1,417 reported a small increase as a result of the government intervention (Table 2).

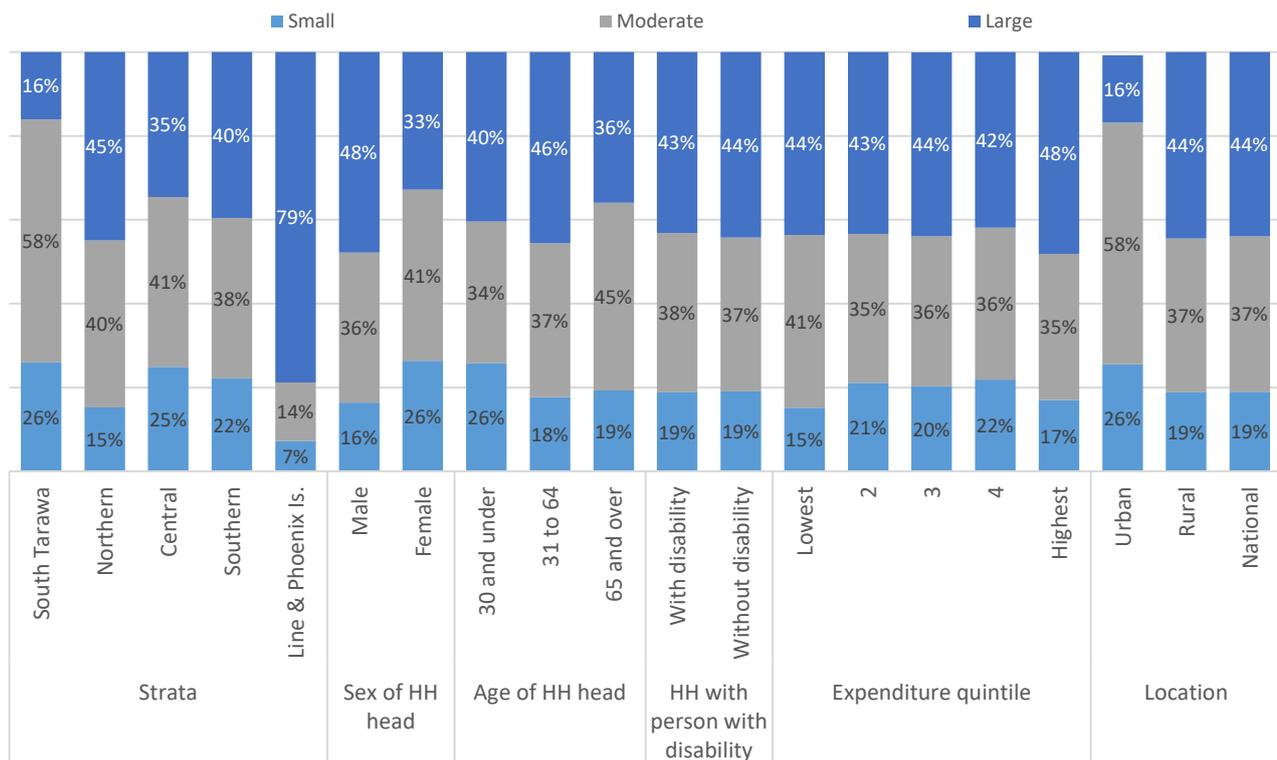


Figure 5: Magnitude of income increase since the government increase to the price of copra

Almost half of male-headed HHs and one-third of female-headed HHs reported a large increase in their income as a result of the copra price increase. The government increase to the price of copra had a moderate to large increase in the income of more than three-quarters of copra-producing HHs.

Household receipts from selling copra

Around 40% of i-Kiribati HHs receive cash income from the sale or exchange of copra and coconut and 33% of HHs exchange copra or coconuts for food (Figure 6). Income from the sale or exchange of copra is also reported to be used for the purchase or, or exchange for, other non-food items and services, including alcohol, kava and tobacco.

In Southern, Central, Northern and Line & Phoenix Island groups, 86%, 84%, 62% and 51% of HHs, respectively, reported receiving cash income from the sale of copra and coconuts. For the same respective island groups, 81%, 81%, 40%, and 41% reported exchanging foodstuffs for copra and coconut. Again, for the same groups, 33%, 43%, 25% and 17% reported exchanging copra and coconuts for alcohol, kava and tobacco.

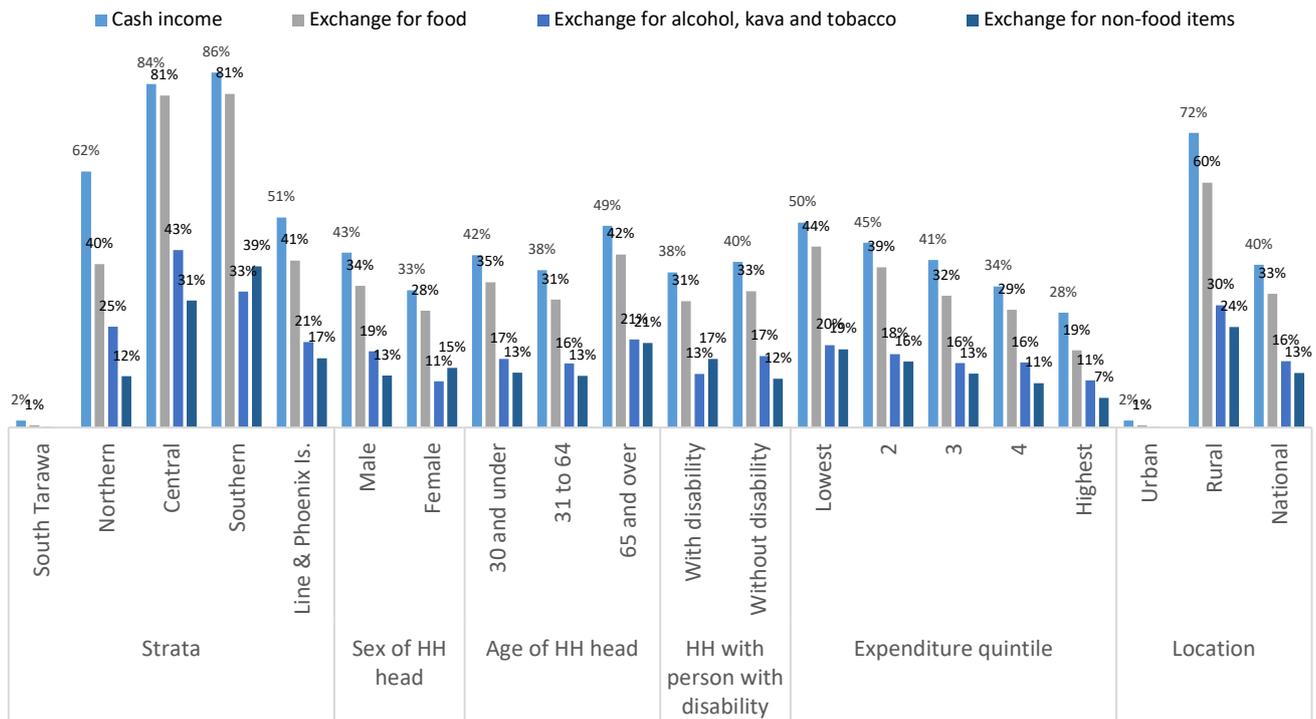


Figure 6: Household receipts from the sale and exchange of copra

By wealth quintile, around half of low income HHs (i.e., quintile 1) reported exchanging copra and coconuts for cash income and food compared to around one-quarter of high income HHs. In rural areas, around three-quarters of HHs report cash income from copra and coconuts and almost two-thirds of HHs exchange them for food.

The government increase in the price of copra appears to have positive effects on securing income and food for i-Kiribati. Copra is also used for exchange for alcohol, kava and tobacco, with 16% of i-Kiribati HHs reporting the use of copra or coconuts to acquire these products.

Items exchanged for coconuts and copra

The 2019 HIES collected information on food, tobacco, alcohol and kava production by acquisition means, including cash purchases, home production, barter and exchange and gifting. HH consumption expenditure from barter/exchange amounted to 2% of total HH consumption, but 6% in rural areas and 11% in the Southern Gilberts. In 97% of cases, coconuts and copra were the items that were exchanged by the HH; other items of exchange include seaworms, fish, cooked food, fruit, vegetables and thatch.

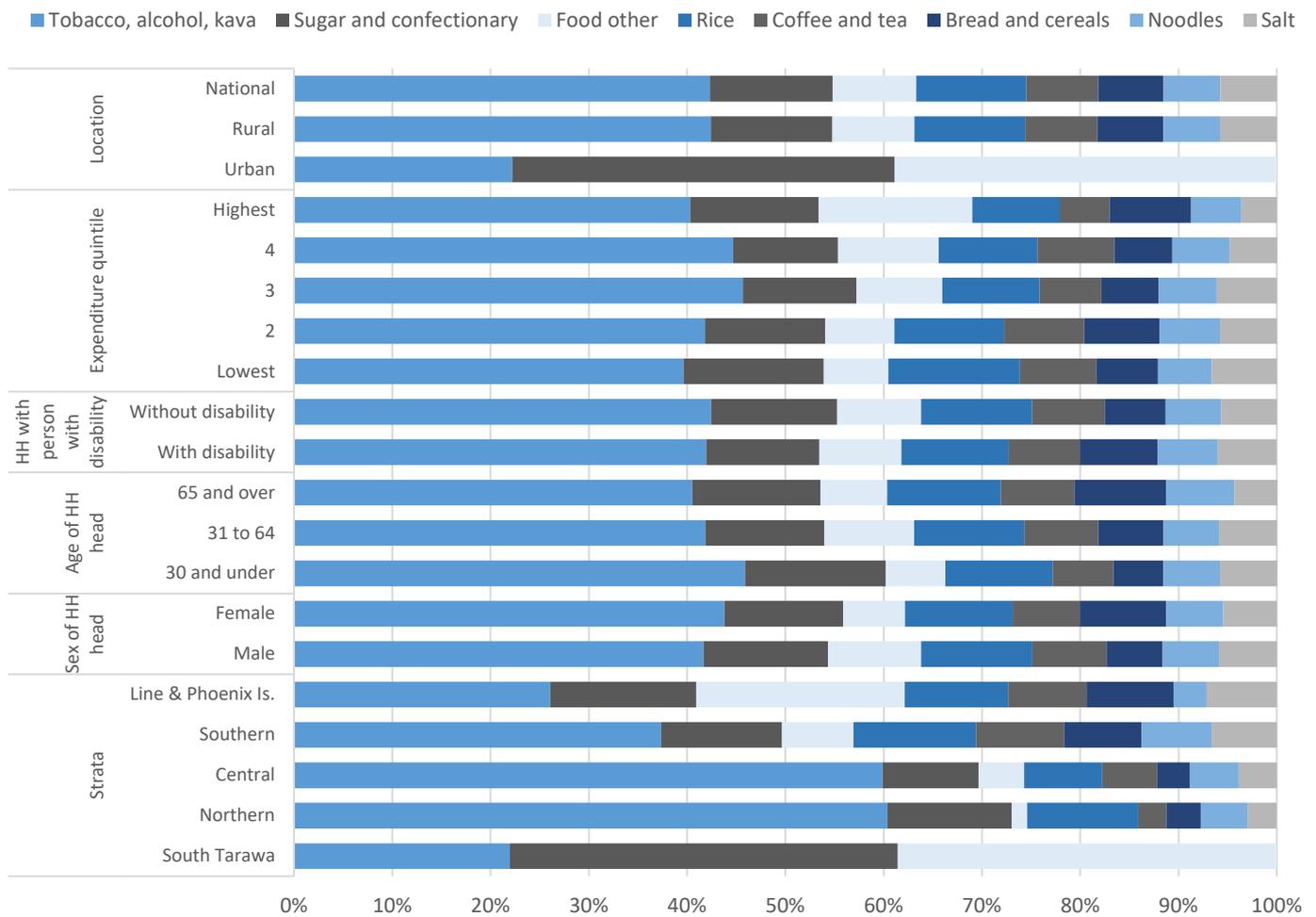


Figure 7: Items consumed via exchange of copra and coconuts

Analysis of the items that were acquired via the exchange of coconuts and copra identified that around 42% of barter transactions were in exchange for tobacco, alcohol or kava. In Northern and Central Gilberts, almost two-thirds of barter transactions exchanged copra and coconuts for tobacco, alcohol and kava (Figure 7; Table 1). Around 13% of items acquired via the exchange of coconuts and copra were for sugar and confectionary and 11% were for rice.

Table 1: Items exchanged for copra and coconut, by population group (% of exchange transactions)

	Tobacco, alcohol, kava	Sugar and confectionary	Food other	Rice	Coffee and tea	Bread and cereals	Noodles	Salt
Strata								
South Tarawa	22%	39%	39%	0%	0%	0%	0%	0%
Northern	60%	13%	2%	11%	3%	3%	5%	3%
Central	60%	10%	5%	8%	6%	3%	5%	4%
Southern	37%	12%	7%	12%	9%	8%	7%	7%
Line & Phoenix Is.	26%	15%	21%	10%	8%	9%	3%	7%
Sex of HH head								
Male	42%	13%	9%	11%	8%	6%	6%	6%
Female	44%	12%	6%	11%	7%	9%	6%	5%
Age of HH head								
30 and under	46%	14%	6%	11%	6%	5%	6%	6%
31 to 64	42%	12%	9%	11%	8%	7%	6%	6%
65 and over	41%	13%	7%	12%	7%	9%	7%	4%
HH with person with disability								
With disability	42%	12%	8%	11%	7%	8%	6%	6%
Without disability	42%	13%	9%	11%	7%	6%	6%	6%
Expenditure quintile								
Lowest	40%	14%	7%	13%	8%	6%	5%	7%
2	42%	12%	7%	11%	8%	8%	6%	6%
3	46%	12%	9%	10%	6%	6%	6%	6%
4	45%	11%	10%	10%	8%	6%	6%	5%
Highest	40%	13%	16%	9%	5%	8%	5%	4%
Location								
Urban	22%	39%	39%	0%	0%	0%	0%	0%
Rural	42%	12%	8%	11%	7%	7%	6%	6%
National	42%	13%	8%	11%	7%	7%	6%	6%

Copra and coconuts are an important source of HH income in the form of cash, production for home consumption (refer food consumption report based on the same survey data) and exchange. In the case of barter, it appears that coconuts and copra are primarily used to acquire narcotics (tobacco, alcohol and kava) and energy-dense foods of low nutritional value, such as sugar, rice, bread, noodles, oil, canned meat, and salt.

Motivated to stay on island as a result of government price increase of copra

Almost all i-Kiribati HHs (93%) reported that the government increase to the price of copra provided motivation for HHs to stay on their island of residence (Table 2). Motivation for female headed HH to stay is 88% compared with 95%. The increased price of copra therefore appears to have reduced motivation for i-Kiribati HHs to migrate to other islands.

Annex 1: Statistical table

Table 2: Household participation in copra production; increase in income from government copra price increase; magnitude of income increase; receipts from the sale of copra; motivation to stay on home island since government copra price increase (number of households)

	Copra production		Income increased		Effect of income increase			Receipts from the sale or exchange of copra and coconuts							Motivation to stay on home island				Total HHs
	Yes	No	Yes	No	Small	Moderate	Large	Cash income	Exchange for food	Exchange for alcohol, kava, tobacco	Exchange for non-food items	Exchange for services	Cash income from land lease	Employment	Yes	No	No more or less	Unsure	
Strata																			
South Tarawa	163	8,830	137	27	35	79	22	152	50	13	0	29	9	0	163	0	0	0	8,994
Northern	2,524	1,489	2,424	100	370	966	1,088	2,498	1,596	985	500	20	6	41	2,357	38	84	45	4,013
Central	1,519	240	1,474	45	367	597	510	1,471	1,422	760	544	128	0	51	1,433	69	3	14	1,760
Southern	2,880	417	2,648	232	588	1,012	1,049	2,848	2,677	1,090	1,293	50	0	40	2,590	165	92	33	3,298
Line & Phoenix Is.	827	718	774	53	56	108	610	789	628	322	261	22	6	6	807	20	0	0	1,545
Sex of HH head																			
Male	5,734	7,486	5,527	207	908	1,975	2,645	5,625	4,558	2,451	1,670	177	21	108	5,441	158	91	44	13,220
Female	2,181	4,208	1,930	250	509	788	634	2,134	1,815	718	928	71	0	30	1,910	134	89	48	6,389
Age of HH head																			
30 and under	1,113	1,511	1,034	79	267	349	418	1,101	928	438	350	27	0	15	1,016	38	39	20	2,624
31 to 64	6,053	9,466	5,714	339	1,013	2,096	2,604	5,938	4,828	2,416	1,946	204	21	106	5,654	212	115	72	15,518
65 and over	749	717	709	40	137	317	256	720	617	314	302	18	0	17	681	41	26	0	1,466
HH with person with disability																			
With disability	2,128	3,385	1,954	173	368	743	843	2,081	1,695	717	918	60	9	66	1,969	79	58	21	5,512
Without disability	5,787	8,309	5,503	284	1,049	2,019	2,436	5,677	4,678	2,452	1,679	188	12	72	5,382	213	122	70	14,097
Expenditure quintile																			
Lowest	2,013	1,909	1,874	139	285	772	818	1,956	1,726	785	747	54	15	28	1,901	76	29	7	3,923
2	1,786	2,135	1,664	122	352	590	723	1,763	1,528	700	630	30	0	27	1,634	71	60	22	3,921
3	1,631	2,294	1,557	74	316	557	683	1,599	1,260	614	515	54	6	29	1,562	45	18	7	3,925
4	1,375	2,552	1,302	72	285	472	545	1,348	1,124	622	424	65	0	30	1,269	53	39	14	3,927
Highest	1,110	2,803	1,060	50	180	370	510	1,093	735	448	281	45	0	24	986	47	34	42	3,913
Location																			
Urban	163	8,830	137	27	35	79	22	152	50	13	0	29	9	0	163	0	0	0	8,994
Rural	7,751	2,864	7,321	430	1,381	2,683	3,257	7,607	6,323	3,156	2,598	219	12	138	7,188	292	180	92	10,615
National	7,915	11,694	7,458	457	1,417	2,762	3,279	7,759	6,373	3,169	2,598	248	21	138	7,351	292	180	92	19,609

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