

Balochistan produced 94.1% of all apples produced in Pakistan in 2022-23, Pakistani households spent 0.46% of their monthly expenditure on apples in 2018-19 - Gallup Pakistan Analysis of MNFS&R and PBS data

(Islamabad), 15th May, 2024

A recent comprehensive analysis conducted by Gallup Pakistan on the “*Fruits, Vegetables and Condiments Statistics of Pakistan, 2022-23*” by the Economic Wing at the Ministry of National Food Security and Research (MNFS&R), and the Household Integrated Economic Survey 2018-19 data by the Pakistan Bureau of Statistics (PBS) has unveiled noteworthy trends in the production and expenditure towards various fruits & vegetables. The analysis, covering data from the past five years from 2018-19 to 2022-23 goes in depth into the national and provincial land allocation, towards the cultivation of food crops, their production, and average household expenditures across wealth quintiles towards their consumption.

This press release focuses on Apples, and is part of a series by Gallup Pakistan which will be looking into the above-mentioned details for various fruits and vegetables, which are staples in the country to identify current trends to inform future resource allocation and policy decisions on the matter.

The previous press release in this series focusing on Bananas can be accessed [here](#).

Rojah Sheikh, a Research Executive at Gallup Pakistan says, “It is very important for an agrarian country such as ourselves to be making *informed* policy decisions when it comes to agriculture and food security. Through the data driven insights explored in this series we will be able to achieve some transparency in the production and consumption patterns for various fruits and vegetables common in Pakistan, and we hope that this in turn encourages dialogue on how to utilize our resources best so that our economy may reap the most benefits.”

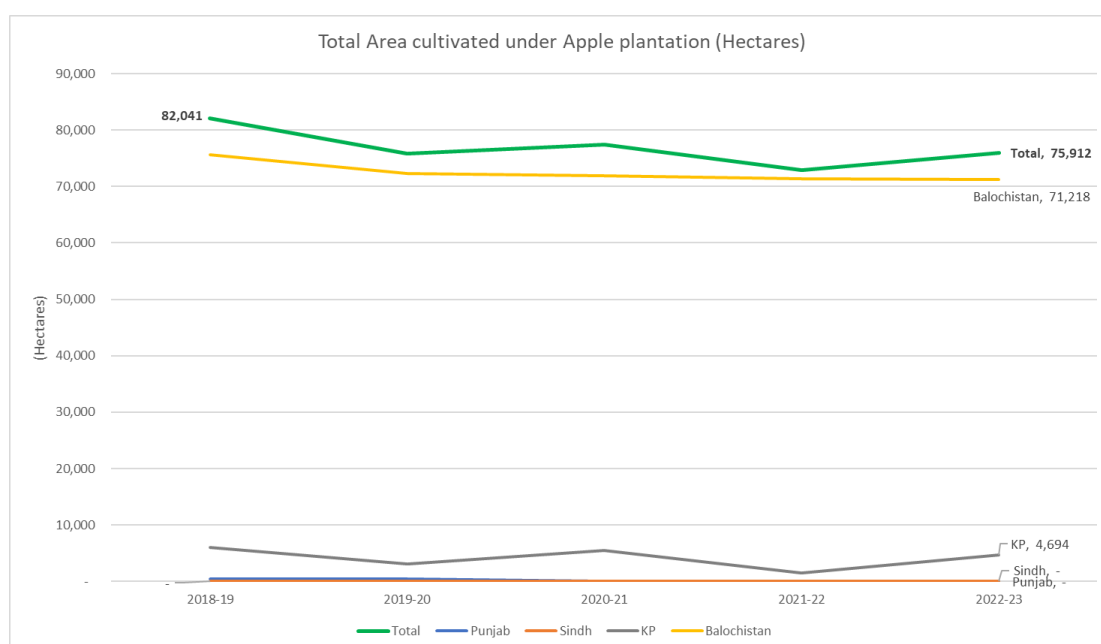
Key Findings:

1. A total area of 75,912 hectares in Pakistan was recorded to be utilized for apple farming in the year 2022-23.
2. The total area cultivated for apples has fluctuated in the past 5 years, experiencing an overall decrease of 6,129 hectares nationally, from 82,041 hectares in 2018-19.
3. Across provinces, Balochistan makes up the bulk of the land used for the production of apples, with 71,218 hectares used for this purpose in 2022-23. This is followed by Khyber Pakhtunkhwa (4,694 hectares), meanwhile no land was reportedly utilized for apple farming in both Punjab and Sindh in 2022-23.
4. In terms of proportion, Balochistan continually makes up the majority of land utilized for Apple farming, from 92.3% of the total in 2018-19 to now having marginally increased to 93.8% in 2022-23.
5. A total of 0.79 million tonnes of apple were produced in Pakistan in the year 2022-23.
6. The overall production of apples has steadily increased in the past 5 years by 0.25 million tonnes at the national level, from 0.54 million tonnes in 2018-19.
7. Across provinces, Balochistan makes up the bulk of the production of apples, with 0.74 million tonnes produced in 2022-23. This is followed by Khyber Pakhtunkhwa (46,407 tonnes), meanwhile no apple production was reported in both Punjab and Sindh in 2022-23.
8. In terms of proportion, Balochistan continually makes up the majority of apple production, having increased from 89.4% of the total in 2018-19 to now 94.1% in 2022-23. Meanwhile Khyber Pakhtunkhwa makes up the next largest chunk, accounting for 10.6% in 2018-19, Shrunk down to now 5.9% in 2022-23.
9. Decrease in land allocation has gone hand-in-hand with decrease in production in Khyber Pakhtunkhwa, however, this is not the case in Balochistan, where farming productivity for apples has incremented to a degree where land allocation and production has formed an inverse relation from 2018-19 to 2022-23.
10. According to the Household Integrated Economic Survey (HIES) of 2018-19, an average household spends Rs. 171.2 on apples in a month. This makes up 0.46% of their overall household expenditure, 1.28% of their total expenditure on food, and 24.35% of their total expenditure on fruits.
11. Across wealth quintiles, it is interesting to note that as wealth increases, the proportion of expenditure on apples also increases. Moreover, this absolute increase in expenditure on apples, is also paired with a proportional expenditure on apples from the household expenditure (Figure 7), food expenditure (Figure 8), and fruit expenditure (Figure 9).
12. An average household in Pakistan spent Rs. 29.9 more on apples in a month than they did on bananas (Rs. 141.3) in 2018. It also appears that households in lower wealth quintiles had a higher proportion of expense on bananas than they did on apples, and the opposite is true for the higher wealth quintiles.

1. Area Under Production:

A total area of 75,912 hectares in Pakistan was recorded to be utilized for apple farming in the year 2022-23. The total area cultivated for apples has fluctuated in the past 5 years, experiencing an overall decrease of 6,129 hectares nationally, from 82,041 hectares in 2018-19. This pattern of decrease is mimicked in the fluctuation of land allocation towards apple farming in the province of Khyber Pakhtunkhwa, however, decreases have been recorded in both Balochistan and Punjab as well, having plummeted to zero hectares since 2020-21 for the latter. Across provinces, Balochistan makes up the bulk of the land used for the production of apples, with 71,218 hectares used for this purpose in 2022-23. This is followed by Khyber Pakhtunkhwa (4,694 hectares), meanwhile no land was reportedly utilized for apple farming in both Punjab and Sindh in 2022-23.

Figure 1: Total area cultivated under Apple farms, 2018-2023



Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

It can be noted that land allocated to apple farming has decreased across all provinces in Pakistan in the past five years. Most significantly in Balochistan by 4,466 hectares from 2018-19 to 2022-23. In other provinces the decrease has been less extreme with a decrease of 1,282 hectares in Khyber Pakhtunkhwa, and 381 hectares in Punjab down to zero. According to the data by MNFS&R no land was allocated to apple farming in Sindh in the five years covered in the report.

It is possible, however, that apple farming may still be done in the provinces of Punjab and Sindh at a small-scale, or for self-subsistence, with farmers not being required to report it due to its limited and/or non-commercial nature.

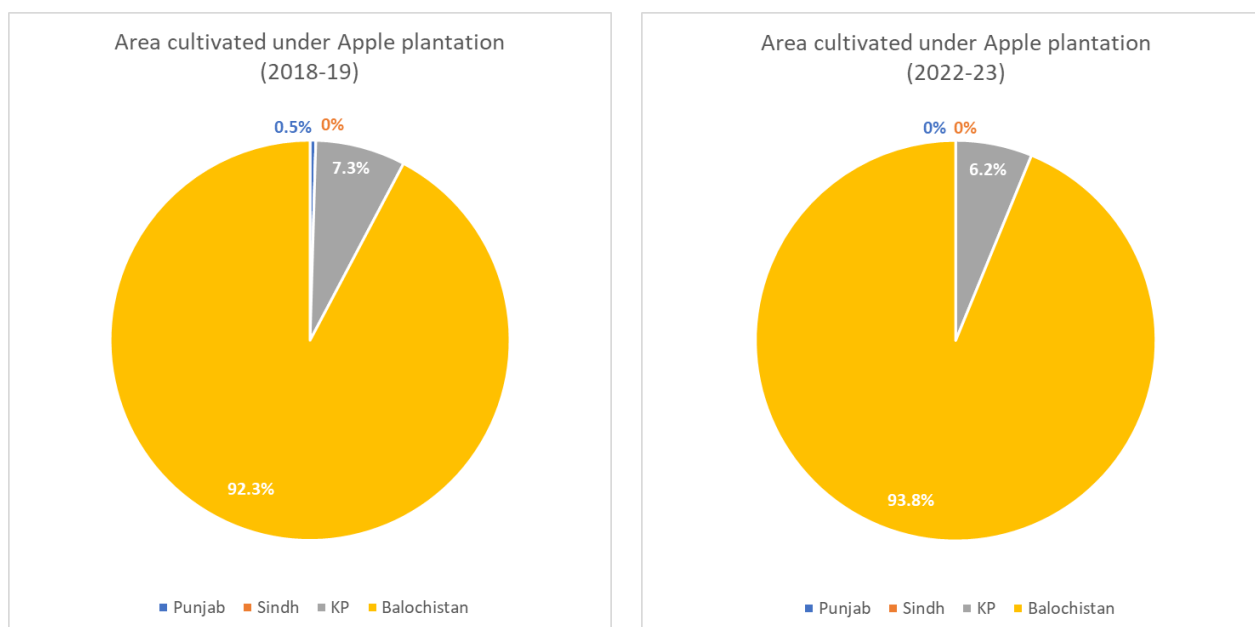
Figure 2: Area Under Fruit – Apple (Hectares)

		2018-19	2019-20	2020-21	2021-22	2022-23
Pakistan		82,041	75,772	77,429	72,894	75,912
Punjab	Total	381	379	-	-	-
	Kharif:	381	379	-	-	-
	Rabi:	-	-	-	-	-
Sindh	Total	-	-	-	-	-
KP	Total	5,976	3,027	5,512	1,556	4,694
	Kharif:	5,976	3,027	5,512	1,556	4,694
	Rabi:	-	-	-	-	-
Balochistan	Total	75,684	72,366	71,917	71,338	71,218

Source: Provincial Crop Reporting Service Centre, “Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23”, Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

In terms of proportion, Balochistan continually makes up the majority of land utilized for Apple farming, from 92.3% of the total in 2018-19 to now having marginally increased to 93.8% in 2022-23. Meanwhile Khyber Pakhtunkhwa makes up the next largest chunk, accounting for 7.3% in 2018-19, to now 6.2% in 2022-23. Punjab made up for very little in 2018-19 with just 0.5%, but is now down to 0%, same as Sindh where no apple farming takes place.

Figure 3: Area cultivated under apple farms across provinces in 2018-19 vs 2022-23

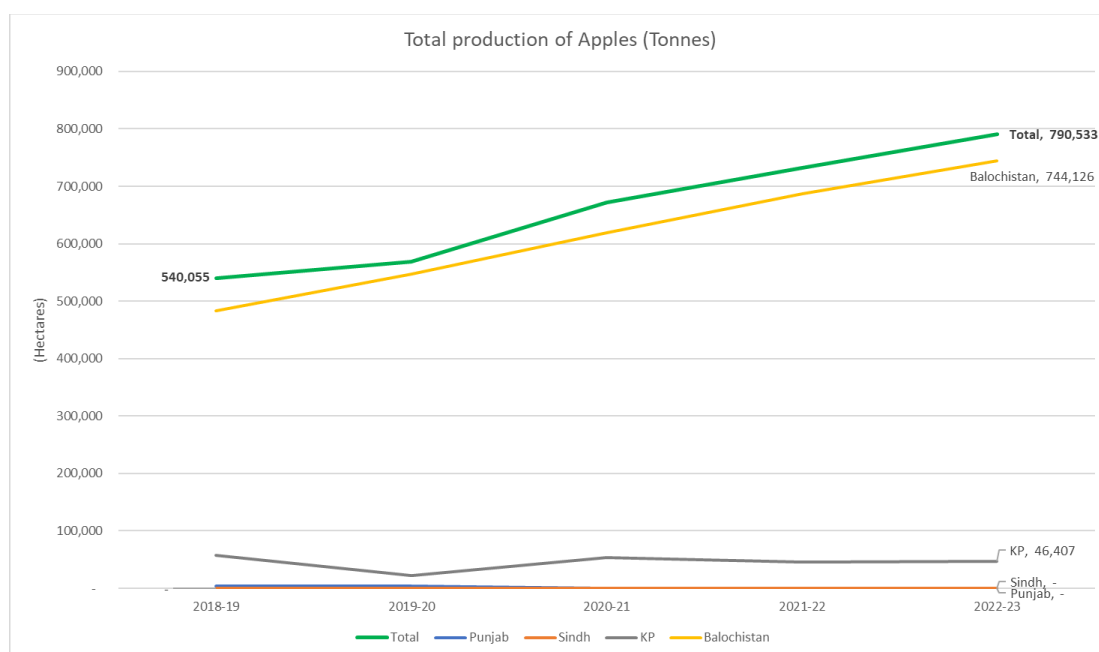


Source: Provincial Crop Reporting Service Centre, “Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23”, Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

2. Total Production:

A total of 0.79 million tonnes of Apple were produced in Pakistan in the year 2022-23. The overall production of apples has steadily increased in the past 5 years by 0.25 million tonnes at the national level, from 0.54 million tonnes in 2018-19. This is mimicked in the increase in production in Balochistan, conversely production in Khyber Pakhtunkhwa seems to have plateaued, while apple production in Punjab has plummeted, reporting zero tonnes since 2020-21. Across provinces, Balochistan makes up the bulk of the production of apples, with 0.74 million tonnes produced in 2022-23. This is followed by Khyber Pakhtunkhwa (46,407 tonnes), meanwhile no apple production was reported in both Punjab and Sindh in 2022-23.

Figure 4: Total production of Apples, 2018-2023



Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

It should be noted that production of apples has increased in the province of Balochistan quite significantly by 0.26 million tonnes from 2018-19 to 2022-23. However, in other provinces it has decreased, in Khyber Pakhtunkhwa by 10,829 tonnes, and in Punjab by 3,590 tonnes down to zero during the same time period. According to the data by MNFS&R no apple production was reported in Sindh in the five years covered in the report.

Moreover, unlike banana production which takes place across both rabi and kharif cycles, apples are a strictly kharif crop, sown during winter months, after the monsoon season and reliant on irrigation.

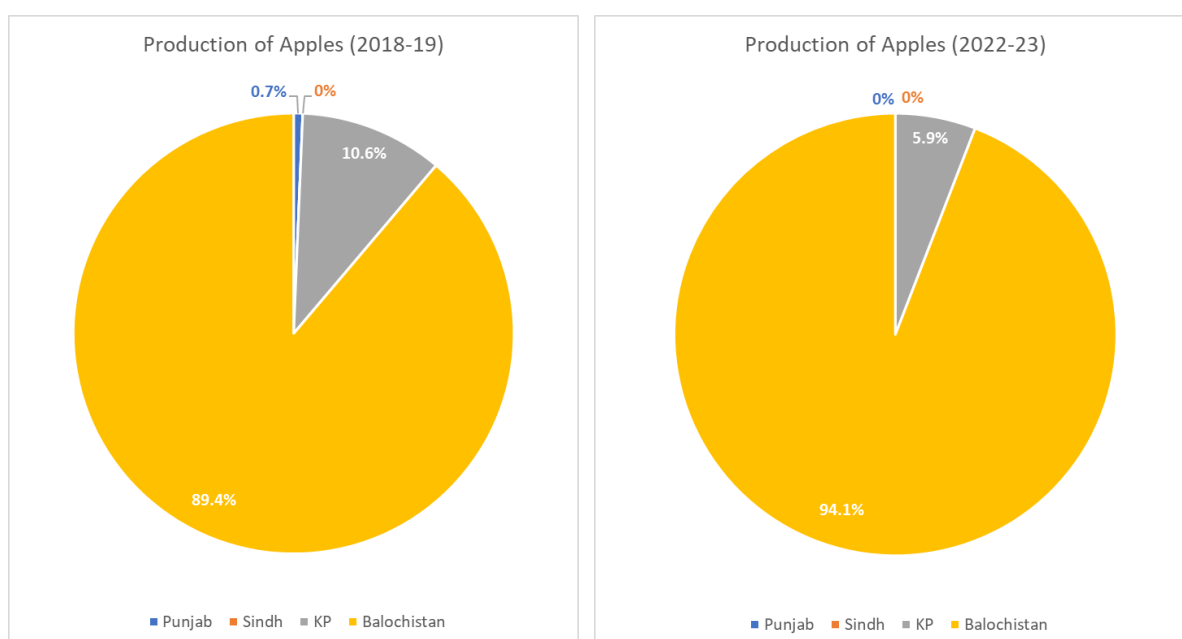
Figure 5: Production of Fruit – Apple (Tonnes)

		2018-19	2019-20	2020-21	2021-22	2022-23
Pakistan		540,055	569,043	671,756	732,287	790,533
Punjab	Total	3,590	3,535	-	-	-
	Kharif:	3,590	3,535	-	-	-
	Rabi:	-	-	-	-	-
Sindh	Total	-	-	-	-	-
KP	Total	57,236	22,488	53,364	46,011	46,407
	Kharif:	57,236	22,488	53,364	46,011	46,407
	Rabi:	-	-	-	-	-
Balochistan	Total	482,819	546,555	619,492	686,276	744,126

Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

In terms of proportion, Balochistan continually makes up the majority of apple production, having increased from 89.4% of the total in 2018-19 to now 94.1% in 2022-23. Meanwhile Khyber Pakhtunkhwa makes up the next largest chunk, accounting for 10.6% in 2018-19, Shrunk down to now 5.9% in 2022-23. Punjab made up for very little in 2018-19 with just 0.7%, but is now down to 0%, same as Sindh where no apple farming takes place.

Figure 6: Production of Apples across provinces in 2018-19 vs 2022-23



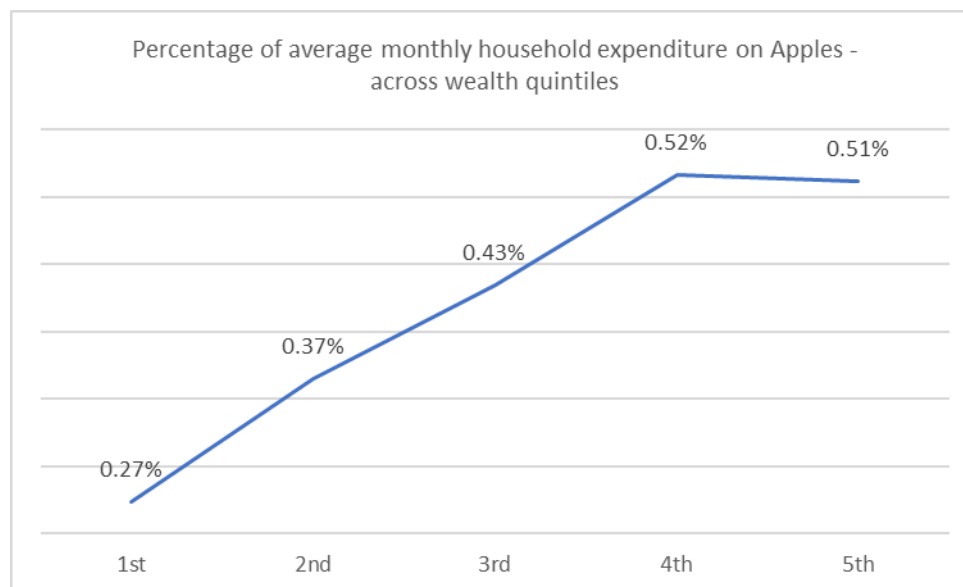
Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

It is quite interesting to observe that despite a national decrease of land allocation towards apple farming (Figure 1), there has still been a steady and significant increase in apple production in the past 5 years, as evident in Figure 4. Decrease in land allocation has gone hand-in-hand with decrease in production in Khyber Pakhtunkhwa, however, this is not the case in Balochistan, where farming productivity for apples has incremented to a degree where land allocation and production has formed an inverse relation in the past five years covered in the MNFS&R report from 2018-19 to 2022-23.

3. Expenditure as a proportion:

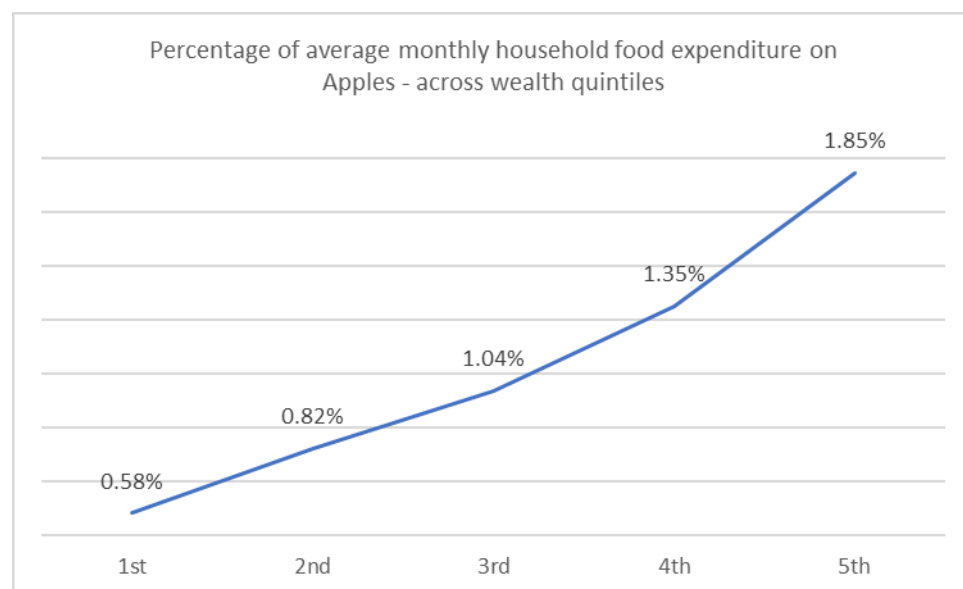
According to the Household Integrated Economic Survey (HIES) of 2018-19, an average household spends Rs. 171.2 on apples in a month. This makes up 0.46% of their overall household expenditure, 1.28% of their total expenditure on food, and 24.35% of their total expenditure on fruits.

Figure 7: Percentage of average household expenditure on Apples, 2018 HIES



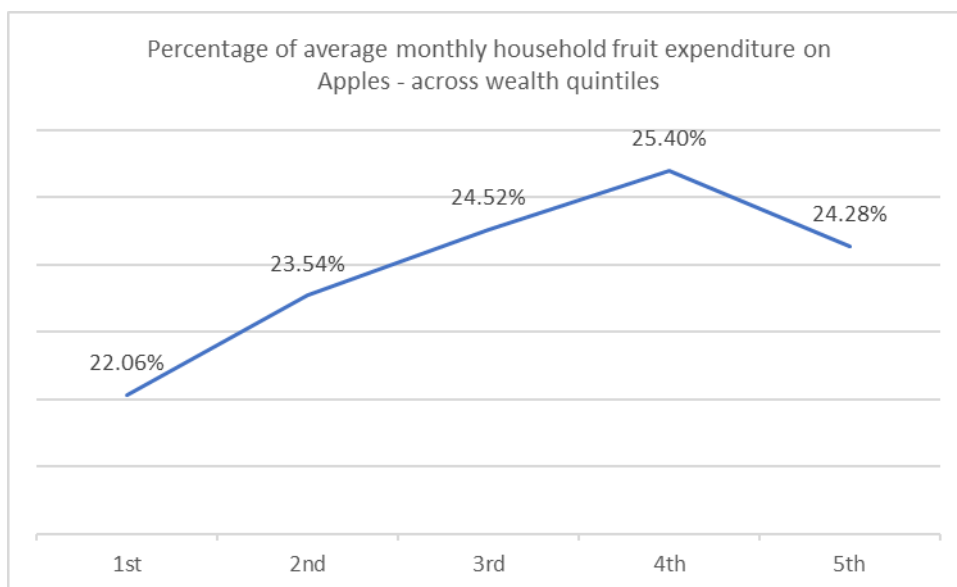
Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

Figure 8: Percentage of average household food expenditure on Apples, 2018 HIES



Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

Figure 9: Percentage of average household fruit expenditure on Apples, 2018 HIES



Source: Provincial Crop Reporting Service Centre, "Fruit, Vegetables and Condiments Statistics of Pakistan 2022-23", Ministry of National Food Security & Research <https://mnfsr.gov.pk/>

Across wealth quintiles, it is interesting to note that as wealth increases, the proportion of expenditure on apples also increases. Moreover, this absolute increase in expenditure on apples, is also paired with a proportional expenditure on apples from the household expenditure (Figure 7), food expenditure (Figure 8), and fruit expenditure (Figure 9). Although in the case of apple expense as a proportion of fruit expenditure, the increase is observed from the 1st to 4th wealth quintiles, after which it experiences a dip in the 5th quintile.

An average household in Pakistan spent Rs. 29.9 more on apples in a month than they did on bananas (Rs. 141.3) in 2018. It also appears that households in lower wealth quintiles had a higher proportion of expense on bananas than they did on apples, and the opposite is true for the higher wealth quintiles.

Wish to Contribute to Gallup Big Data Analysis?

Gallup Pakistan is looking for collaboration with researchers to expand both the Big Data Analysis project as well as this study of national level data. If you have any ideas, please write to Bilal I Gilani, Project Director of the Big Data Analysis at Gallup Pakistan.

Methodology:

The data for this analysis is based on the records within the “*Fruit, Vegetables, and Condiments Statistics of Pakistan, 2022-23*” by the Ministry of National Food Security & Research, and the Household Integrated Economic Surveys (HIES) data from 2018-19, by the Pakistan Bureau of Statistics.

The “*Fruit, Vegetables, and Condiments Statistics of Pakistan 2022-23*” by the Ministry of National Food Security & Research, can be accessed at: <https://mnfsr.gov.pk/>

The Household Integrated Economic Surveys (HIES) data, can be accessed on the Pakistan Bureau of Statistics website at: <https://www.pbs.gov.pk/publication/household-integrated-economic-survey-hies-2018-19>

For more survey data, see our website <http://www.gallup.com.pk/> or contact Gallup Pakistan at caf@gallup.com.pk

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