



UDC 332; DOI 10.18551/RJOAS.2022-12.18

CONSUMER BEHAVIOR TOWARDS VEGETABLE PURCHASING DECISIONS OF RIVERSIDE COMMUNITIES IN BANJAR REGENCY, INDONESIA

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ABSTRACT

According to a publication from BPS, vegetable consumption in South Kalimantan Province is the lowest of the 34 provinces in Indonesia, in the years 2019 and 2020 at 81.27 grams and 88.40 grams, which is only about 33% of what WHO and the Ministry of Health recommend as much as 250 grams a day. The objectives of the study are described as follows: (1) Analyze the characteristics of respondents and a picture of vegetable consumption communities in the riverside area; (2) Analyze the factors influencing the purchasing decision of vegetable communities in the riverside area. The number of samples taken was 90 respondents. The analyses used to answer the objectives are descriptive and multiple linear regression. The characteristics of respondents for age are most numerous at intervals of 35-50 years of age. The majority of respondents were educated in elementary school. The majority of respondents' family members are 3-4 people. The most household expenses per month are Rp. 1,300,001 - Rp. 1,950,000. Household expenditure for vegetable consumption per week is at most Rp. 36,001 - Rp. 54,000. The most consumed vegetables of respondents were spinach, kangkong, string beans, and pumpkin, Siamese pumpkin. The majority of respondents for the frequency of vegetable consumption in a week is daily. The duration of storage of vegetables by respondents was mostly carried out ≤ 1 day. Reason to consume vegetable majority that they like to eat vegetables, then the reason because of the necessity for Health. Place purchase vegetables, majority of respondents at surrounding vegetable vendors. Family members who decide on the purchase of vegetables in the family are mostly mothers. Factors that affect the decision to purchase vegetable communities in the riverside area in the riverside area are variable cultural (X_1), personal (X_3), and psychological (X_4). Meanwhile, the social variable (X_2) did not significantly affect the purchasing decisions of vegetable communities in the riverside area.

KEY WORDS

Consumer behavior, vegetables, riverbanks, healthy living fulfillment, purchasing decisions.

Vegetables are horticultural crops that have a fairly high commercial value. Therefore, vegetables are agricultural products that are always consumed every day. This horticultural commodity also besides having high economic value, can be a source of income for the community and farmers, both small, medium, and large scale, because it has advantages in the form of high selling value, diversity of types, availability of land resources, technology, and the potential for market absorption in the country and internationally that continues to increase, even vegetables today have been able to supply the needs of domestic consumers through traditional markets and modern market. Vegetables in human life play a very important role in meeting food needs and improving nutrition because vegetables are a source of vitamins, minerals, fiber, antioxidants, and energy needed by humans. However, many Indonesians still do not realize that as evidenced by the very low level of vegetable consumption of the Indonesian people, based on the record of the Directorate General of Horticulture in 2007 only amounting to 36.63 kg/capita/year. It should be according to the standards of the World Food and Agriculture Institute (FAO) that the ideal consumption of vegetables is 65.75 kg/capita/year (Director General of Horticulture, 2013).

Consumption of vegetables and fruits is necessary for the body as a source of vitamins, minerals, and fiber in achieving a healthy diet according to the recommendations of



balanced nutrition guidelines for optimal health. Some of the vitamins and minerals contained in vegetables and fruits function as antioxidants so that they can reduce the incidence of non-communicable diseases related to nutrition, as a result of excess or malnutrition (Ministry of Health of the Republic of Indonesia, 2014). Fruit and vegetable consumption has a relationship with the incidence of hypertension, this happens because most of the fiber intake in a day is not sufficient. A high intake of fiber mainly in the form of soluble fiber is related to the prevention of hypertension. If fiber intake is low, it can cause obesity which has an impact on increasing blood pressure and degenerative diseases (Suryani, et al, 2020). In the short term, the lack of consuming fruits and vegetables will cause constipation during bowel movements, but in the long term, the large number of toxic compounds that are not wasted in the walls of the colon will result in bowel cancer.

Based on the provincial level, the highest per capita daily vegetable consumption was found in West Nusa Tenggara Province, which was 177.33 grams in 2019 and for 2020 it was in Papua Province, which was 186.36 grams, while the lowest was in South Kalimantan Province in 2019 and 2020, namely 81.27 grams and 88.40 grams.

Vegetable consumption is also still very limited, dominated by spinach, kale, cassava leaves, and eggplant. Even though there are still many types and varieties of vegetables the menu served at the dinner table is more diverse and varied. Of course, this will encourage families, especially children, to consume more vegetables. The variety of vegetables supplied by farmers is far more than enough to ensure availability and affordability in the market; this should be a response for people to start a healthy lifestyle.

The BPS data illustrates the poor paradigm of healthy living in Indonesia, especially in consuming vegetables for the fulfillment of daily nutrition, where South Kalimantan Province is the lowest province, which is around 33% of what WHO and the Ministry of Health recommend.

The low level of vegetable consumption in South Kalimantan needs to be a concern for the health of the body both in the short and long term. So, efforts to increase awareness to consume vegetables are very important for the people of South Kalimantan, especially Banjar Regency, which is located on the outskirts of the river. The tendency of differences in the behavior of people in riverside and urban areas was a consideration of previous research looking at the knowledge and perception of housewives in consuming vegetables, from the study it was found that the knowledge and perception of housewives in riverside areas are lower than that of urban areas that are directly proportional to the low consumption of vegetables in riverside areas.

South Kalimantan Province itself has many river flows, especially in Banjar Regency which is one of the largest districts and its location is spread almost part of South Kalimantan Province. Banjar Regency has abundant water resources from rivers and anjir / canals. The existing river has a catchment at the foot of the Meratus Mountains and all flows westward converging to form Alalak River, Riam Kanan River, and Riam Kiwa River. The three rivers are watery all year round and form a watershed. Martapura Barat, Martapura Timur, and Sungai Tabuk sub-districts are sub-districts where some of the villages are located on the outskirts of the river.

METHODS OF RESEARCH

This research was conducted in Martapura Barat, Martapura Timur, and Sungai Tabuk sub-districts, Banjar Regency. The selection of the research site was purposive (deliberate) with the reason that the location was relatively large in population compared to other villages. The research time is carried out from May-November 2022 starting from the preparation of proposals, data collection, data analysis, and final research reporting.

The number of samples taken was 90 respondents. The sample was taken by simple random sampling; each sub-district was taken as many as 30 respondents, and the determination of respondents was random. The reason for choosing the research area in Martapura Barat, Martapura Timur, and Sungai Tabuk sub-districts, on the topographical



conditions of the area where most of the people live on the outskirts of the Martapura river so that it is by the purpose.

There are two types of data in the study, secondary data sourced from related agency publications, books, research reports, and journals related to this research. Then the second type of data, primary data sourced from direct observation of the field and the results of interviews using questionnaires that have been prepared.

The analysis used to answer the first goal is descriptive analysis. Descriptive method is a research method that describes the characteristics of the population or phenomenon being studied. In this case, the characteristics studied are housewives towards decision-makers purchasing vegetables to fulfill healthy living. To answer the second objective of using multiple regression analysis is an analysis that measures the influence of independent variables on dependent variables, where independent variables (X) there are two or more variables against dependent variables (Y). The data needed includes:

Cultural, Social, Personal, and Psychological Factors are thought to influence vegetable purchasing decisions and are categorized as independent variables (X) that affect dependent variables (Y) vegetable purchasing decisions.

RESULTS AND DISCUSSION

The description of the characteristics of the respondents consists of the age of the respondent, the level of education, the type of work of the respondent, the number of respondents' families, the expenses of the respondents' families, and expenses for vegetable consumption, as well. The following describes each of the characteristics of the respondent.

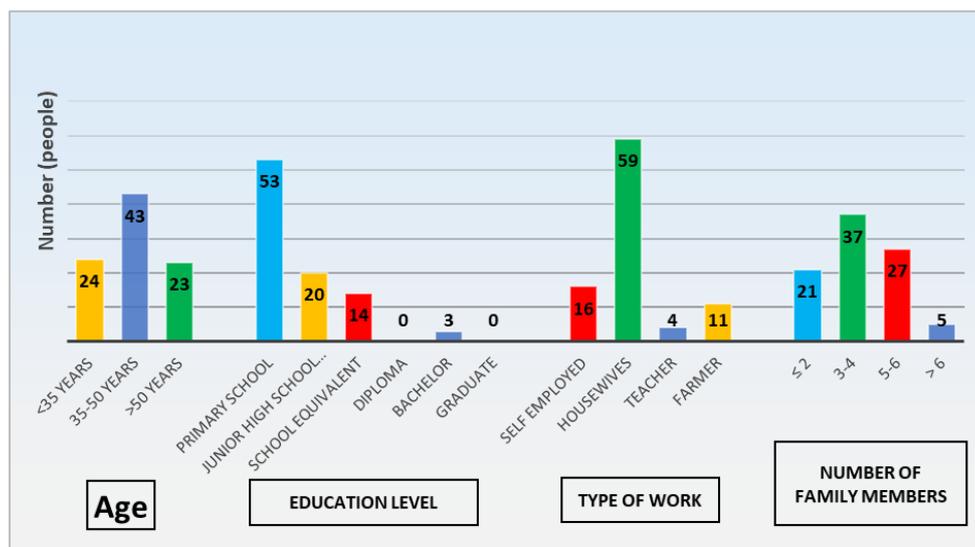


Figure 1 – Characteristics of Respondents by Age, Education Level, Type of Work, and Number of Family Members

The characteristics of respondents for the age of housewives of riverside areas were most numerous at age intervals of 35-50 years and at least at age intervals over 50 years. Education Level of respondents in riverside areas, the majority of respondents are educated in junior high school only. This education influences respondents in obtaining information and processing information. Respondents with higher education know and can get good information including information about vegetables, while respondents with low education are usually less able to get accurate information about vegetables. For employment, the majority of respondents to the riverside area do not work or as housewives only. The number of household members is the sum of all existing members of the household but does not include the head of the household. In general, the more household members, the more expenses, especially food expenditures. The majority of the number of family members of respondents to the riverside area is 3-4 people.



This study uses the expenditure level approach. Based on respondents' data regarding the level of income and expenditure, after analysis, it has a high correlation so it is assumed that income is equal to expenditure. In addition, the approach of the level of expenditure is used because it is more accurate compared to income. The most household expenditure per month in the riverside area is Rp. 1,300,001 - Rp. 1,950,000. Household expenditure for vegetable consumption per week in the riverside area is at most Rp. 36,001 - Rp. 54,000, with an average per household of Rp. 53. 200. The small household expenditure on vegetable consumption in the riverside area is directly proportional to the household expenditure which is also small and the majority of housewives work.

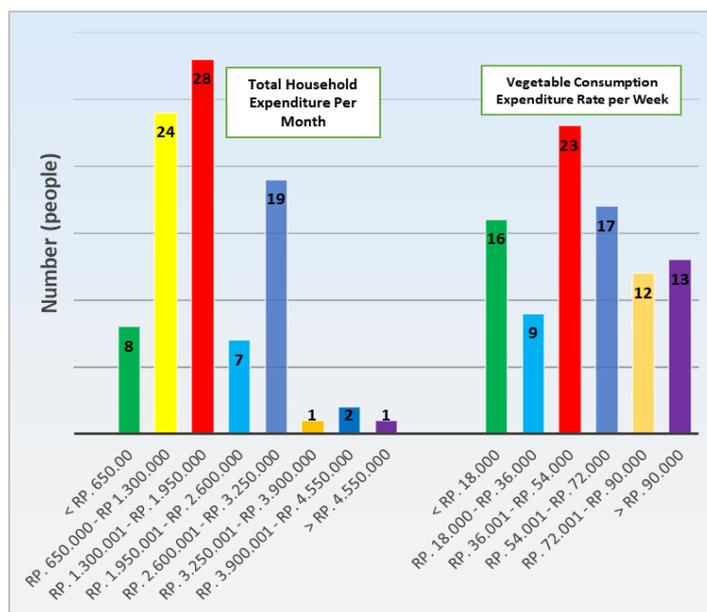


Figure 2 – Number of Respondents Based on Total Household Expenditure per Month and Vegetable Consumption Expenditure Rate per Week Per Household

The respondent's vegetable consumption picture shows what vegetables are most consumed. For the most consumed vegetables, respondents in the riverside areas are spinach, kangkong, string beans, and pumpkin, Siamese pumpkin. For kitchen seasonings most onion, garlic, and cayenne pepper because it is always used daily for cooking. For the frequency of vegetable consumption in a week households of the riverside areas are mostly every day of the past week. This is great for the frequency of vegetable consumption. As for vegetable consumption in units of weight (grams), the average per household is 3160 grams/week or 451 grams/day. If the average number of family members is 4 people, vegetable consumption per capita/day is 113 grams, where the per capita/day vegetable consumption is still far from what WHO and the Ministry of Health recommend as much as 250 grams in a day.

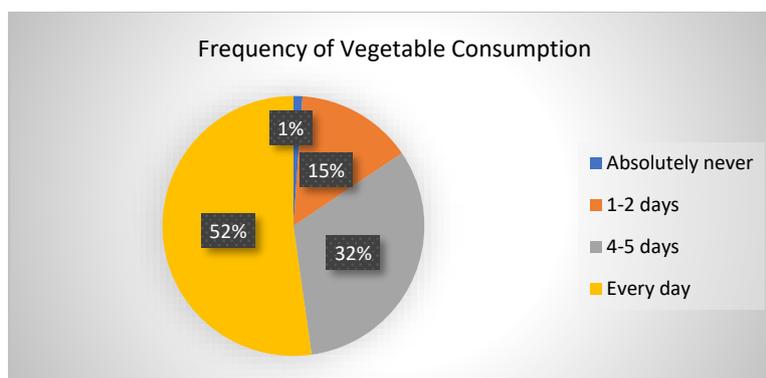


Figure 3 – Frequency of vegetable consumption in the past week

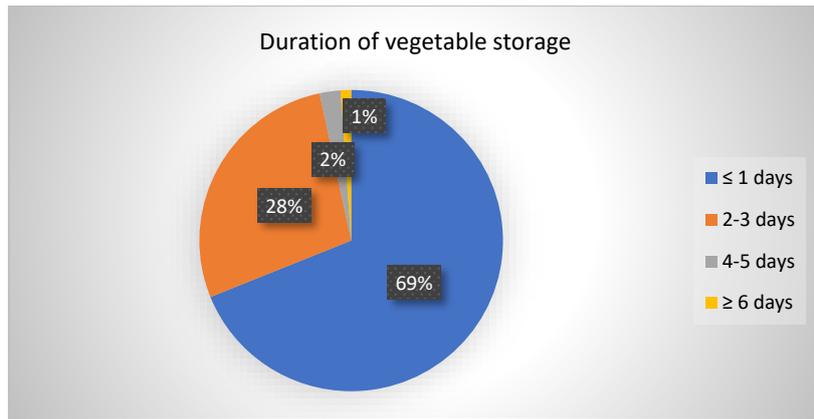


Figure 4 – Percentage of respondents based on the duration of vegetable storage

Based on Figure 5, the reason for consuming vegetables is mostly because they like to eat vegetables, and then continue the reason because of their health need. From these results, it can be seen that the majority of respondents already that the need for vegetables for their health, in addition to liking to consume vegetables.

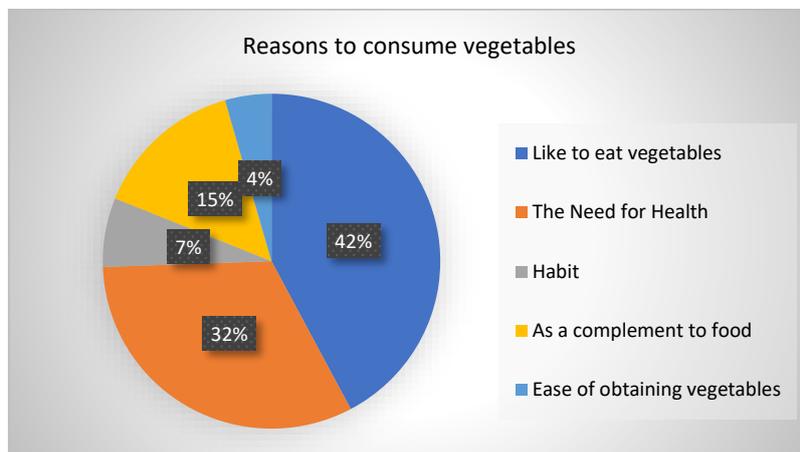


Figure 5 – Reasons to consume vegetables

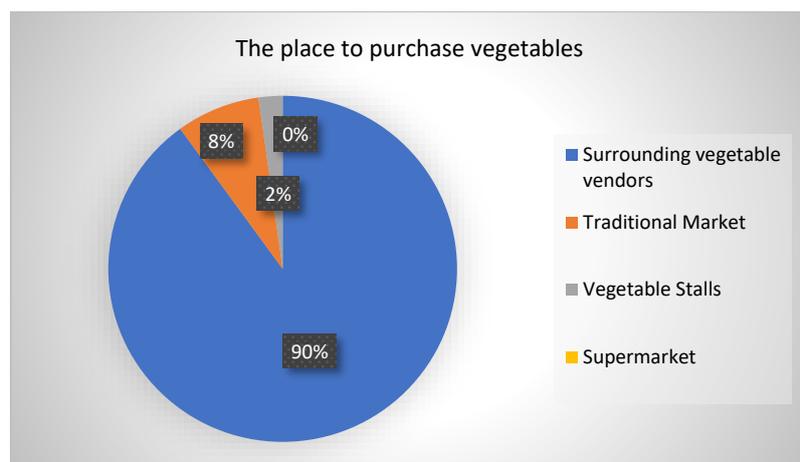


Figure 6 – Percentage of respondents based on the place to purchase vegetables

Based on Figure 6, the majority of respondents bought vegetables at surrounding vegetable vendors. The location far from the market causes many respondents to choose to buy from surrounding vegetable vendors; another reason is also easier to buy because it is



waiting for surrounding vegetable vendors who come every day, so there is no need to bother to go to the market to buy vegetables.

Based on Figure 7, the party who decides to buy vegetables in the family is the majority of the mothers; the mother is the head of the kitchen in the family so the decision on the food served is mostly determined by the mother.

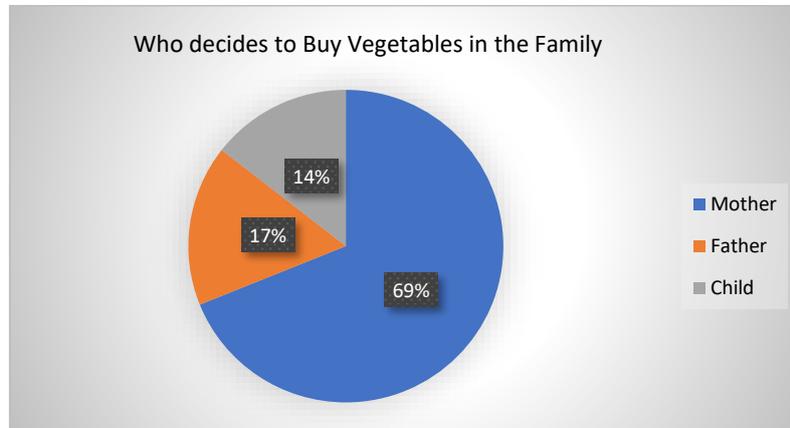


Figure 7 – Percentage of respondents based on who decides to buy vegetables in the family

Based on Table 1, it can be seen that the results of the validity test that have been processed show that the cultural (X_1), social (X_2), personal (X_3), psychological (X_4), and purchasing decision (Y) variables have the value of $r_{table} < count$ so that it can be stated that all question items are said to be valid. This proves that all variables are worth using in research.

Table 1 – Validity test

Research Variables	Items	count	T_{table}	Validity Test
Culture (X_1)	X11	0,787	0,207	Valid
	X12	0,722	0,207	Valid
	X13	0,587	0,207	Valid
	X14	0,680	0,207	Valid
	X15	0,485	0,207	Valid
Social (X_2)	X21	0,591	0,207	Valid
	X22	0,579	0,207	Valid
	X23	0,806	0,207	Valid
	X24	0,702	0,207	Valid
	X25	0,702	0,207	Valid
Personal (X_3)	X31	0,528	0,207	Valid
	X32	0,539	0,207	Valid
	X33	0,473	0,207	Valid
	X34	0,728	0,207	Valid
	X35	0,478	0,207	Valid
Psychological (X_4)	X41	0,829	0,207	Valid
	X42	0,673	0,207	Valid
	X43	0,852	0,207	Valid
	X44	0,510	0,207	Valid
	X45	0,737	0,207	Valid
Purchasing Decision (Y)	Y11	0,776	0,207	Valid
	Y12	0,723	0,207	Valid
	Y13	0,580	0,207	Valid
	Y14	0,855	0,207	Valid
	Y15	0,587	0,207	Valid

Source: Primary data processing (2022).

Based on Table 2, it can be known that the research questionnaire on cultural variables (X_1), social (X_2), personal (X_3), psychological (X_4), and purchasing decision (Y) is reliable because it has a Cronbach alpha value of > 0.6 .



Table 2 – Reliability test

Research Variables	Cronbach alpha	Information
Culture (X ₁)	0,623	Reliable
Social (X ₂)	0,699	Reliable
Personal (X ₃)	0,634	Reliable
Psychological (X ₄)	0,761	Reliable
Purchasing Decision (Y)	0,756	Reliable

Source: Primary data processing (2022).

Based on the results of the analysis in Table 3, it can be explained:

1. The cultural variable (X₁) has a calculated t value of 2.781 > table 1.662 with a significance value of 0.007 < 0.05, so the cultural variable (X₁) has a significant effect on the vegetable purchasing decisions of the people of the riverside area;
2. The social variable (X₂) has a calculated t value of 0.802 < table 1.662 with a significance value of 0.425 > 0.05, so the social variable (X₂) has no significant effect on the vegetable purchasing decisions of the people of the riverside area;
3. The private variable (X₃) has a calculated t value of 2,995 > table 1.662 with a significance value of 0.004 < 0.05, so the private variable (X₃) has a significant effect on the vegetable purchasing decisions of the people of the riverside area;
4. The psychological variable (X₄) has a calculated t value of 6,263 > table 1.662 with a significance value of 0.000 < 0.05, so the psychological variable (X₄) has a significant effect on the vegetable purchasing decisions of the people of the riverside area.

Table 3 – Multiple linear regression test

Research Variables	B	Std. Error	count	Significance
(Constant)	0,343	0,274	1,249	0,215
Culture (X ₁)	0,207	0,074	2,781	0,007
Social (X ₂)	0,047	0,058	0.802	0,425
Personal (X ₃)	0,221	0,074	2.995	0,004
Psychological (X ₄)	0,249	0,079	6.263	0,000
Account	57,669	T _{table}	1,662	
R	0,855			
R-square	0,733			
Adjusted R-square	0,718			

Source: Primary data processing (2022).

Based on the results of the analysis, F calculated 57,669 > F table 2,478 can be obtained, so it can be concluded that independent (free) variables, namely cultural, social, personal, and psychological, simultaneously affect the dependent variables of vegetable purchase decisions (Y).

CONCLUSION

Based on the results of the study, it can be concluded that the characteristics of respondents for the age of housewives of riverside areas are most numerous at the age interval of 35-50 years. Education Level of respondents in riverside areas, the majority of respondents have primary education. The majority of the number of family members of respondents to the riverside area is 3-4 people. The most household expenditure per month in the riverside area is Rp. 1,300,001 - Rp. 1,950,000. Household expenditure for vegetable consumption per week in the riverside area is at most Rp. 36,001 - Rp. 54,000, with an average per household of Rp. 53,200.

Respondents show vegetables most many consumed respondents riverside area are spinach, kangkong, bean long and pumpkin, pumpkin Siam. Vegetable consumption per capita/day is 113 grams, where the per capita/day vegetable consumption is still far from what WHO and the Ministry of Health recommend as much as 250 grams in a day. To Frequency consumption vegetable riverside area majority every day in last week. Duration of



vegetable storage respondents most many ≤ 1 day. The reason to consume vegetable majority because they like to eat vegetables, then continued reason because of the necessity for health. Place purchase vegetables majority of Respondents at surrounding vegetable vendors.

In this study, cultural variables (X_1), personal (X_3), and psychological (X_4) variables had a significant influence on the purchasing decisions of vegetables in riverside communities. Meanwhile, the social variable (X_2) did not significantly affect the purchasing decisions of vegetables in the riverside area.

ACKNOWLEDGEMENTS

Researchers would like to thank the Institute for Research and Community Service (LPPM) of University of Lambung Mangkurat which has provided research funds through the Obligatory Research Lecturer Research Grant (PDWM) in 2022 with PNBP Financing at the University of Lambung Mangkurat Fiscal Year 2022.

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