

Linkage Between Large Cardamom (*Amomum subulatum*, Roxburg) Value Chain and Food and Nutritional Security in Bhojpur District of Nepal

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Introduction

In Nepal, over 21,960 households in 51 districts are engaged in large cardamom (LC) farming (MoAD, 2017). KC and Upreti (2017) reported that farmers of Illam (eastern hill) depend on income from LC for fulfilling their need of food, health services, education, and paying their debts.

Objective

- Examine value chain map of large cardamom.
- Find the role of LC in maintaining food & nutritional security among LC growers.

Methodology

The research was conducted in major cardamom growing municipality of Bhojpur district. Altogether 150 LC growers and 40 traders were chosen for study. Collected information was analyzed using SPSS 20, MS-Excel and STATA 12. Food and nutritional security was analyzed using food security index and dietary diversity score respectively.



Figure 1: Data collection

Findings

- Number of active member involved in LC production from a household = 2.38
- B:C ratio = 1.49
- Average Gross margin = 479.45 USD (NRs. 56,050.617)
- Mean per capita food share = 94.71 USD (NRs.11,072) (per month)

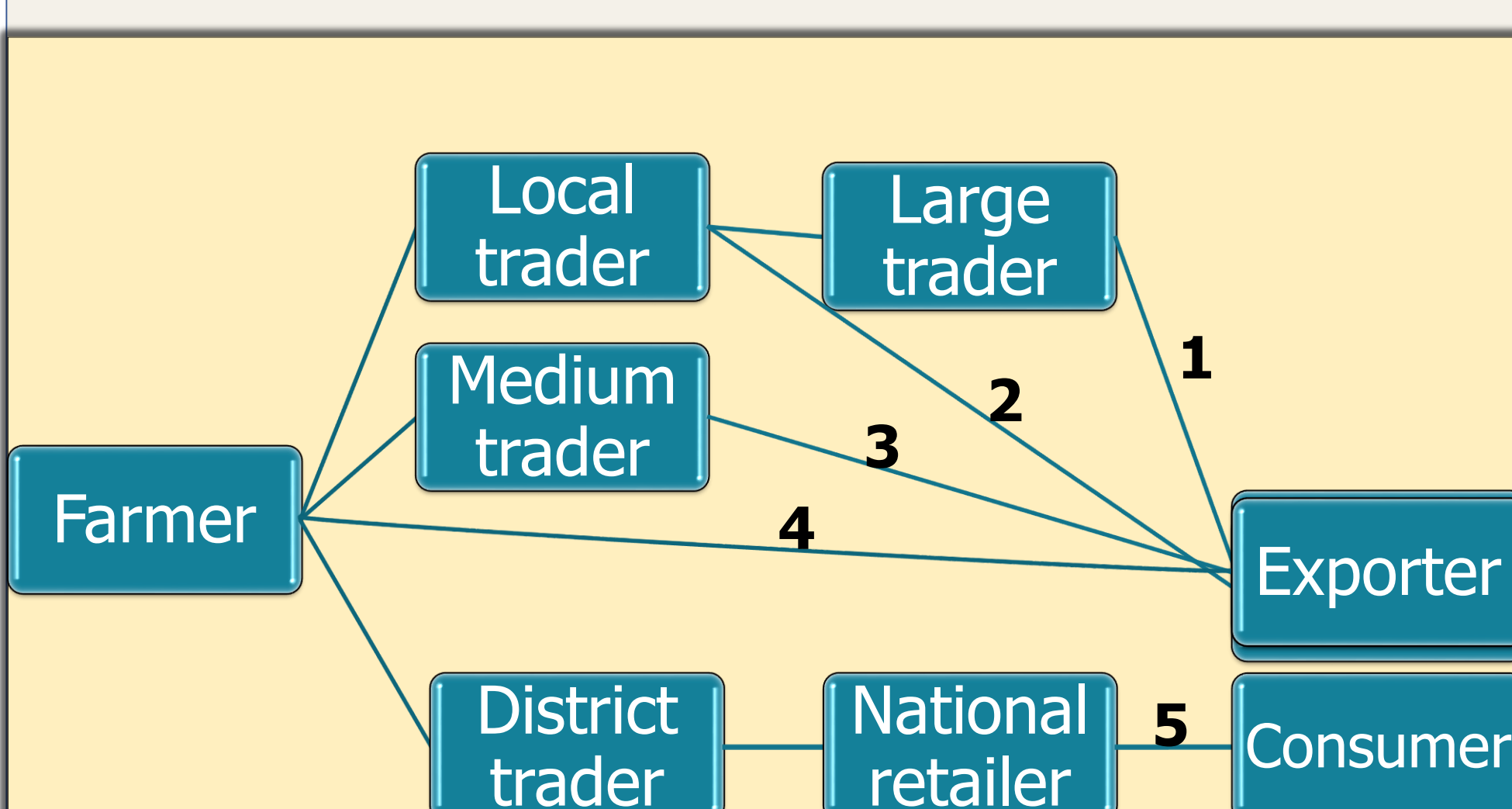
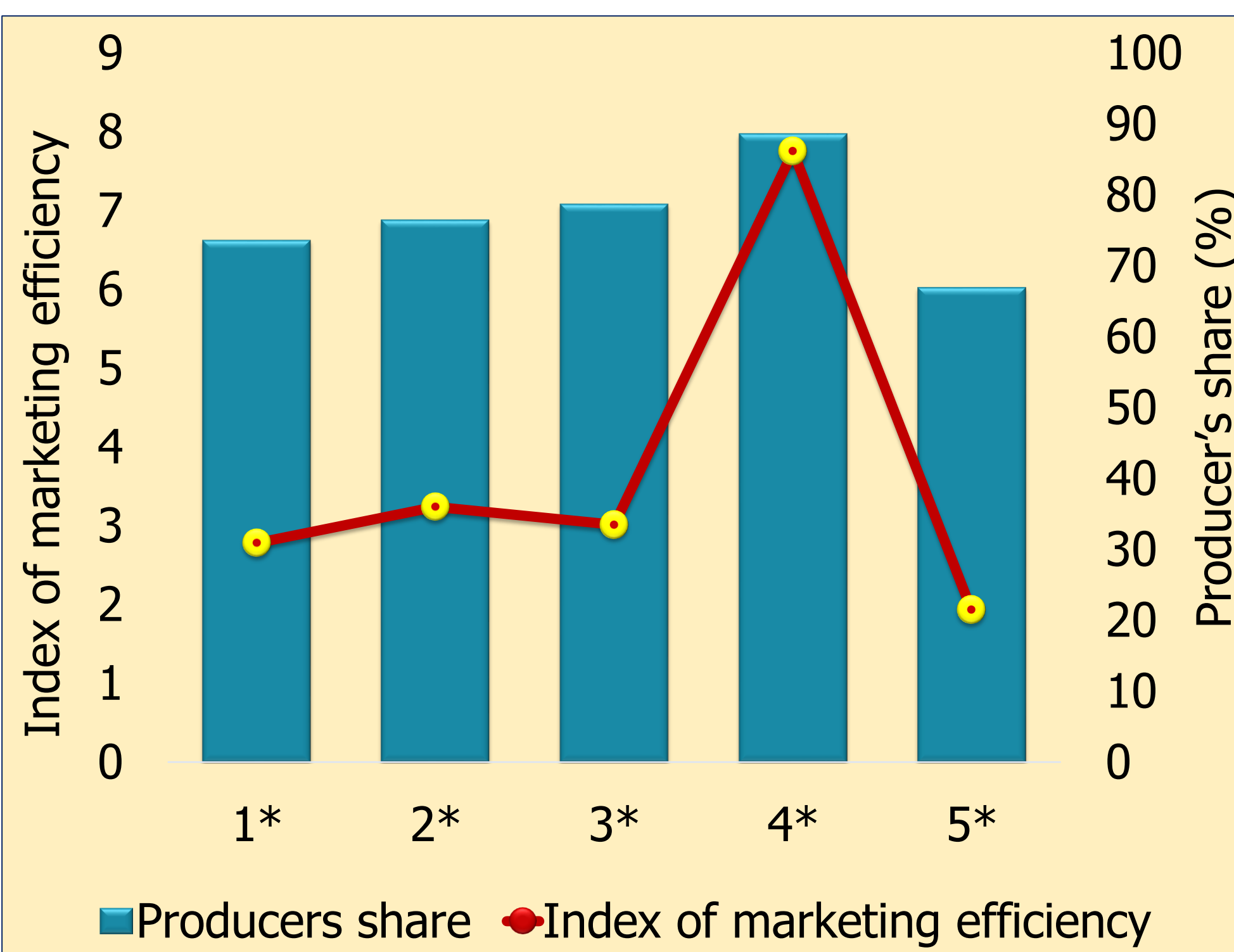


Figure 2: Marketing Channel of LC



Horizontal axis 1*,2*,3*,4*,5* represent marketing channel from Figure 2.

Figure 3: Marketing efficiency measures with respect to marketing channel

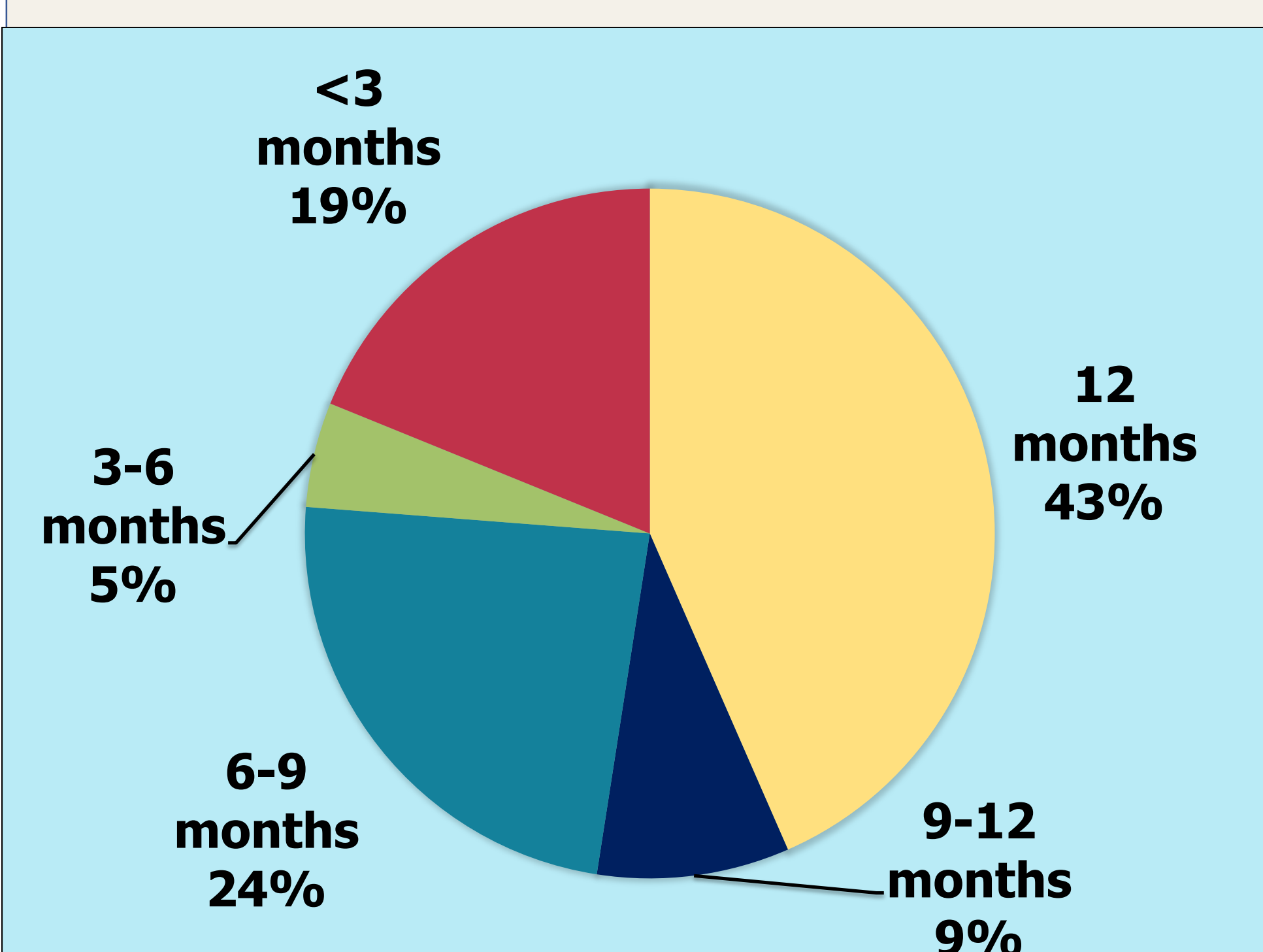


Figure 4: Food availability based on own production

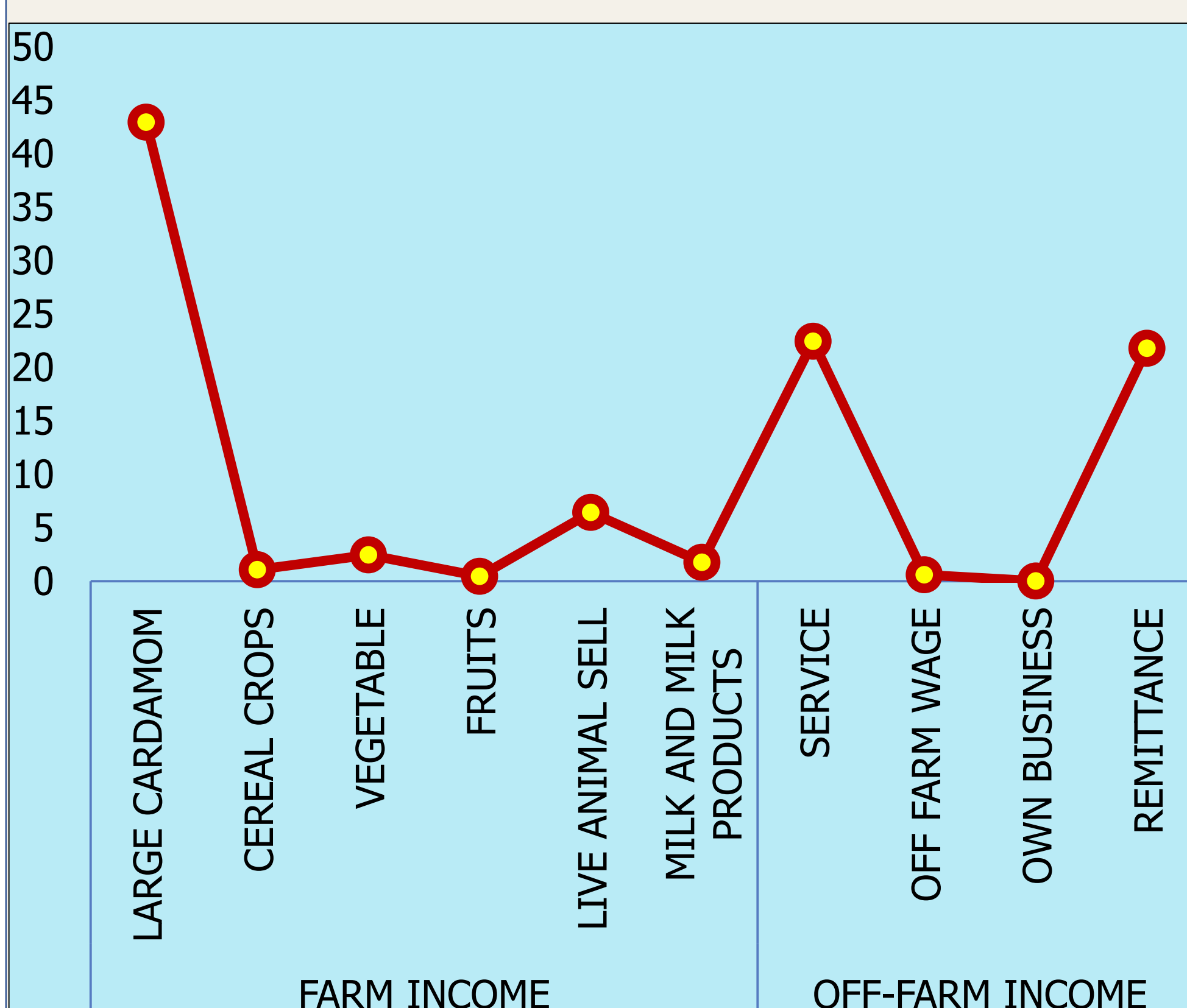


Figure 5: Contribution of farm and off-farm activities annual income of household

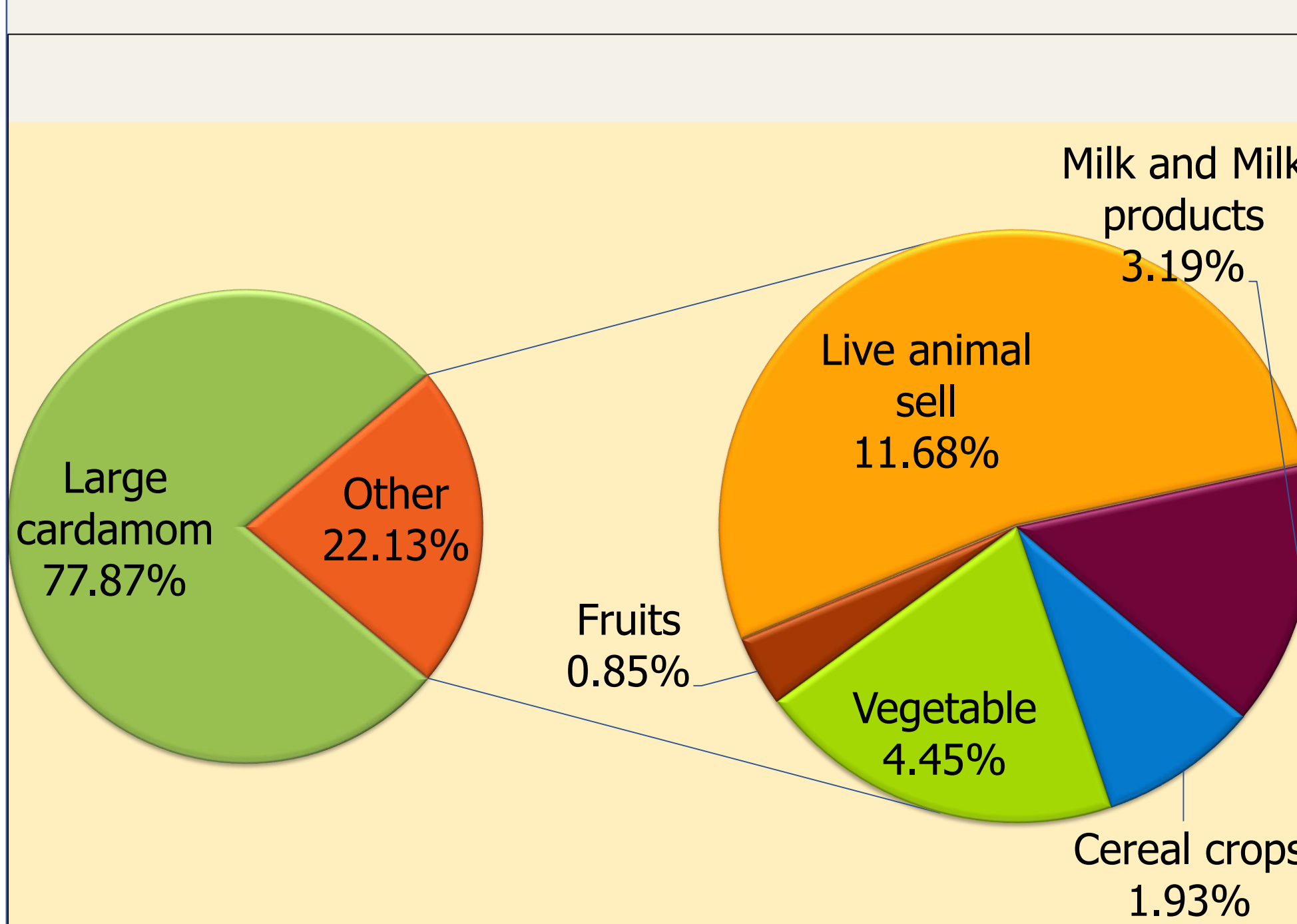


Figure 6: Contribution of large cardamom in farm income

Table 1: Linkage between different marketing channel and food and nutritional security

Channels	Average Food expenditure/month USD (NRs.)	Food Security Index	DDS (Dietary Diversity Score)
Farmer → Local collector	69.50 (8124.5)	1.03	0-4
Farmer → Medium trader	105.32 (12312.8)	1.56	5-8
Farmer → Exporter	127.42 (14895.7)	1.89	5-8

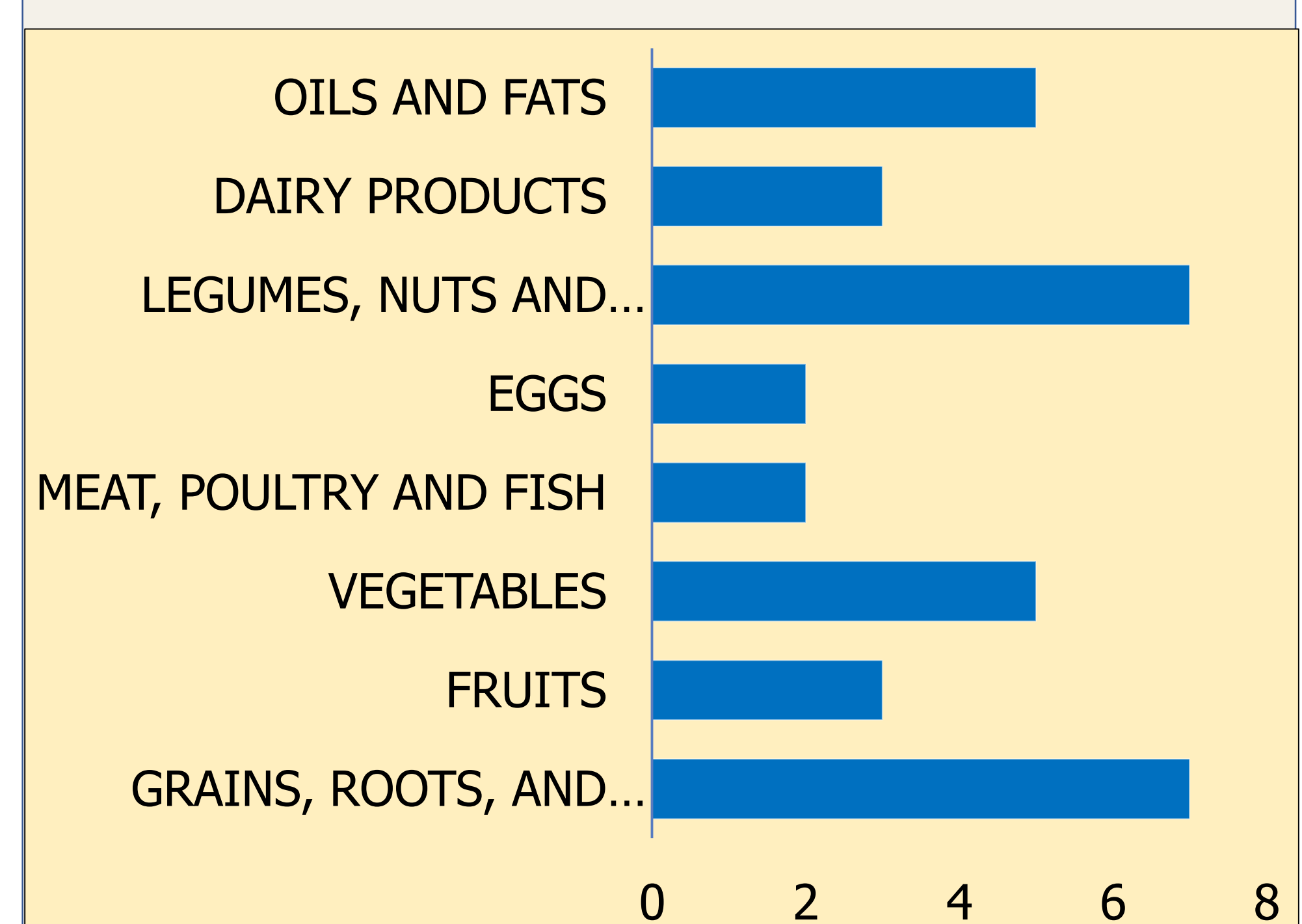


Figure 7: Median Dietary diversity score of respondents (consumption per week)

Input supply	• Lack improved variety, bio-pesticides, tool & equipment
Production	• Lack of motivation due to decreasing price trend
Post Harvest Storage & Processing	• Poor storage, traditional drying method, Lack of grading
Distribution and Marketing	• No local auction facilities, Lack of MIS, Price discrimination

Figure 8: Problems in different steps of value chain

Conclusion

Value chain of large cardamom plays pivotal role for maintaining the food and nutritional security situation by generating greater economic returns, positively influencing food affordability, and diversifying the consumed food resources. For improving the food and nutritional security, upgrading of value chain is necessary.

References

- MoAD (2017). Statistical Information on Nepalese Agriculture, Government of Nepal Ministry of Agricultural Development. Monitoring, Evaluation and Statistics Division Agri Statistics Section Singha Durbar, Kathmandu Nepal.
- KC, S., & Upreti, B. R. (2017). The political economy of cardamom farming in eastern Nepal: Crop disease, coping strategies, and institutional innovation. *SAGE Open*, 7 (2).