

# General Overview of PHL Situation in Ghana

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Workshop on Private Sector Investment Opportunities  
In Post-harvest Loss And Nutrition

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# Importance of PHL

- Number of food poor in Ghana is increasing
- Reducing food poverty and malnutrition requires increased food availability
- PHL reduces food availability

# Level of PHL in Ghana – Some examples

	Value of production (2016) (Million Ghana Cedis)	Average PHL (%)	Value of production lost due to PHL in 2016 (Million Ghana Cedis)
Rice	344	19	64
Yams	3,162	31	987
Cassava	3,124	18	576
Cowpea	454	20	89
Groundnuts	607	8	50
Tomatoes	487	29	143
Okra	35	25	9
Mangoes and guavas	23	49	11
Oranges	231	5	12
Sorghum	115	11	13
Millet	93	12	12
Maize	734	31	229
<b>Total</b>	<b>9,410</b>	<b>23</b>	<b>2193</b>

Source: Based on FAO Stat, Mutungi and Affognon (2012), Egyir et al., (2008) and others

# Key Literature on PHL

- Christopher Mutungi & Hippolyte Affognon (2012)- Postharvest losses in Africa – Analytical review and synthesis: the case of Ghana Technical Report
- Egyir et al., (2008) Harvest and postharvest baseline study

# Key Points of Loss in the Value Chains

	Rice	Yam	Cassava
Harvesting	3-12	2.06 – 3.05	2.0 - 10.6
Postharvest Handling	0.8 -7.8	2.84 – 9.07	1.6 - 7.9
Transport to storage	0.49 – 0.55	0.8 – 12.5	1.83 - 1.98
Storage	2 – 9.3	4.9 – 19	
Transport to market	0 - 0.6	3.11 - 4.08	5 – 6
Marketing/distribution	0 - 0.8	1 – 4 %	
Total PHL (%)	6.3 – 31.1	14.7 – 47.7	10.4 – 26.5

# Key Points of Loss in the Value Chains

	Cowpea	Groundnut
Harvesting	--	0 -2
Postharvest Handling	--	2 -3.2
Transport to storage	--	0 - 0.2
Storage	4.7 - 9	0.5 - 0.8
Transport to market	--	0.2- 7.2
Marketing/ distribution	12 -18 % price discounting for damaged grains)	0.1 - 0.2
Total PHL (%)	12.5 - 26.5 *two studies	2.8 – 13.6

# Key Points of Loss in the Value Chains

	Sorghum (Kintampo North)	Millet (Kintampo North)	Maize
Harvesting	2.8	4.3	2.1 – 5.6
Postharvest Handling	2.9	1.1	1.6 - 4.5
Transport to storage	3.5	2.1	0.7 - 2.7
Storage	1.2	1.1	5 – 38 Mean: 15.7 (6 Mnths)
Transport to market	0.9	1.1	1.2 - 2.6
Marketing/distribution	2	3.8	0.8 -1.4
Total PHL (%)	11.1	12.4	7.5 – 54.8

# Key Points of Loss in the Value Chains

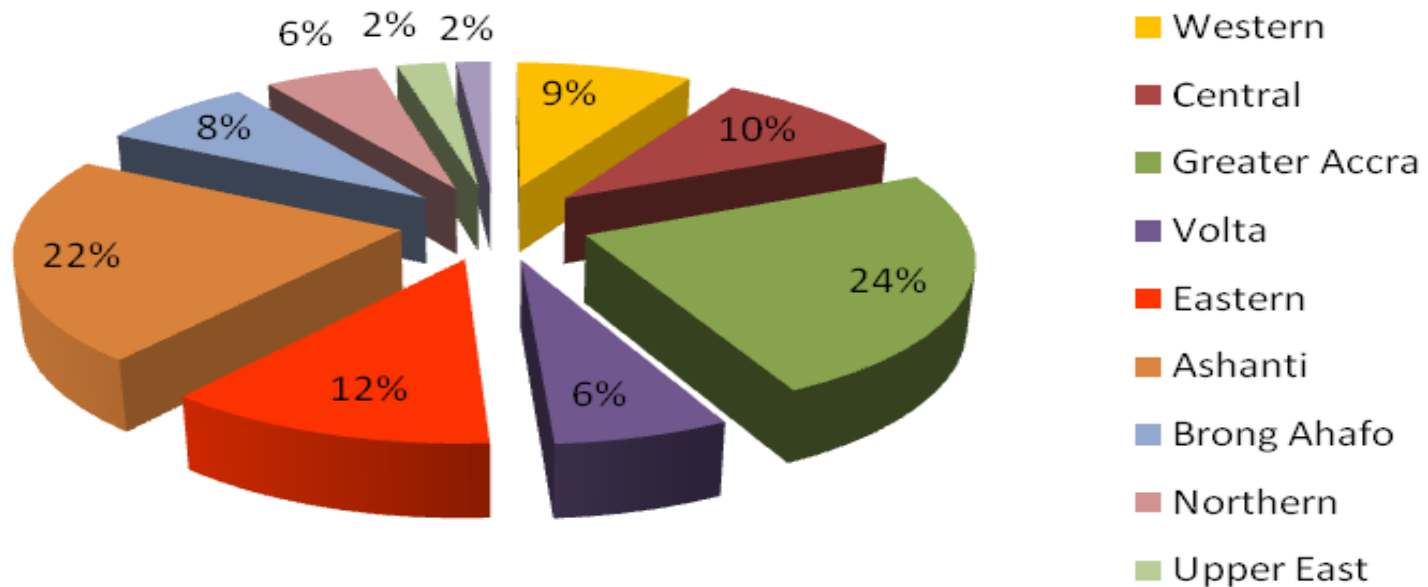
	Mango	Oranges	Tomato	Okra
Harvesting	0- 9	0.4 - 1.8	4.9 – 6.4	16.6
Postharvest Handling	5 - 12.3	2 -2.3	2.7- 5.5	--
Transport to storage	0- 6.94	0 - 0.6	3.1 – 3.6	--
Storage	5.4 -16.6	0	3.3 - 3.9	--
Transport to market	0 -3.2	0-2	0.9 - 20	--
Marketing/ distribution	0 - 23.8	0-1	1.6- 2.9	2.3/6.3 (wholesale/retail)
Total PHL (%)	36 -61	3-7	16.5 -42.3 Mean: 29.4	25.2



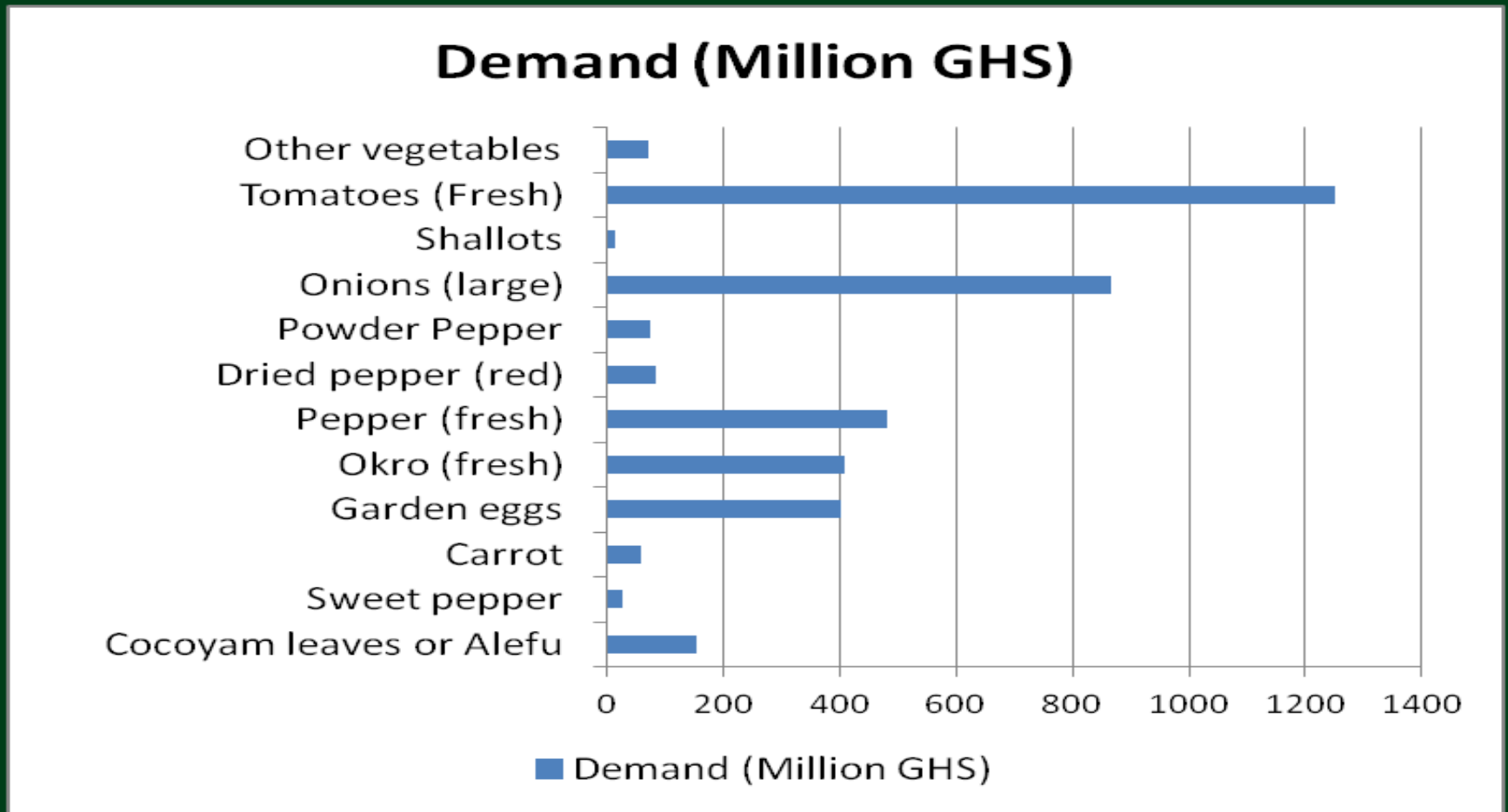
Increased processing  
and preservation can  
contribute to reduction  
in PHL

# Household Demand for Vegetables (2017)

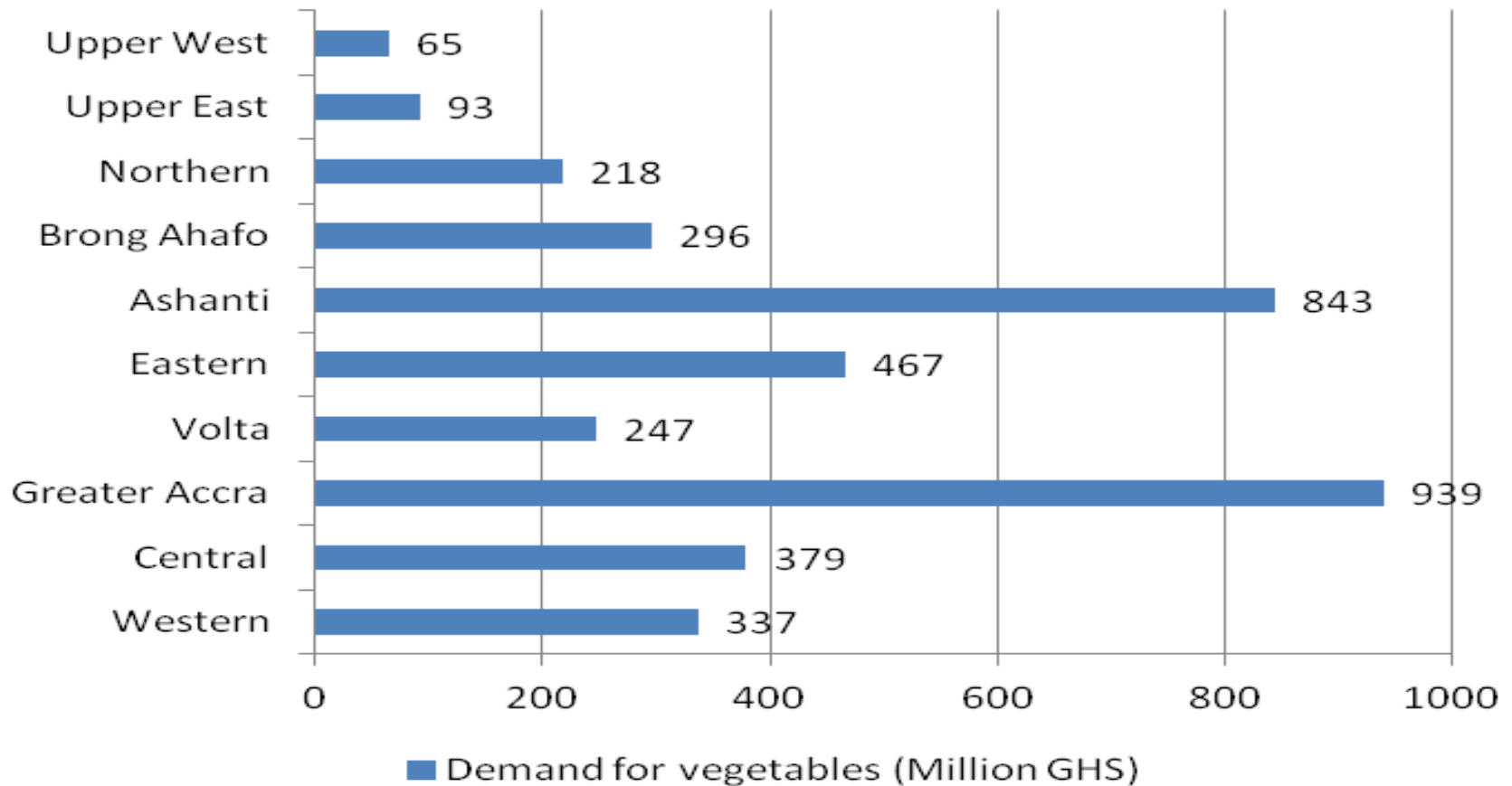
**Distribution of demand for vegetables**  
*GHS 4 Billion national demand*



# Household Demand for Vegetables (2017)

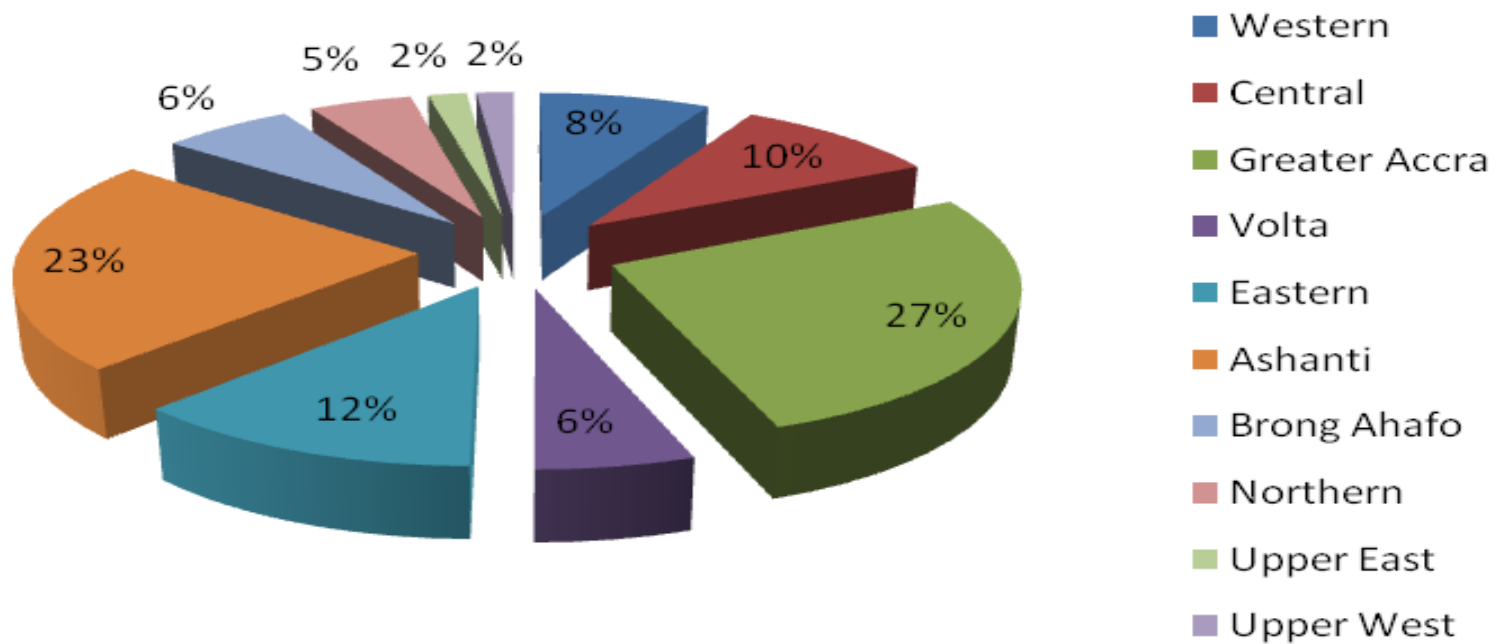


# Household demand for vegetables (2017)

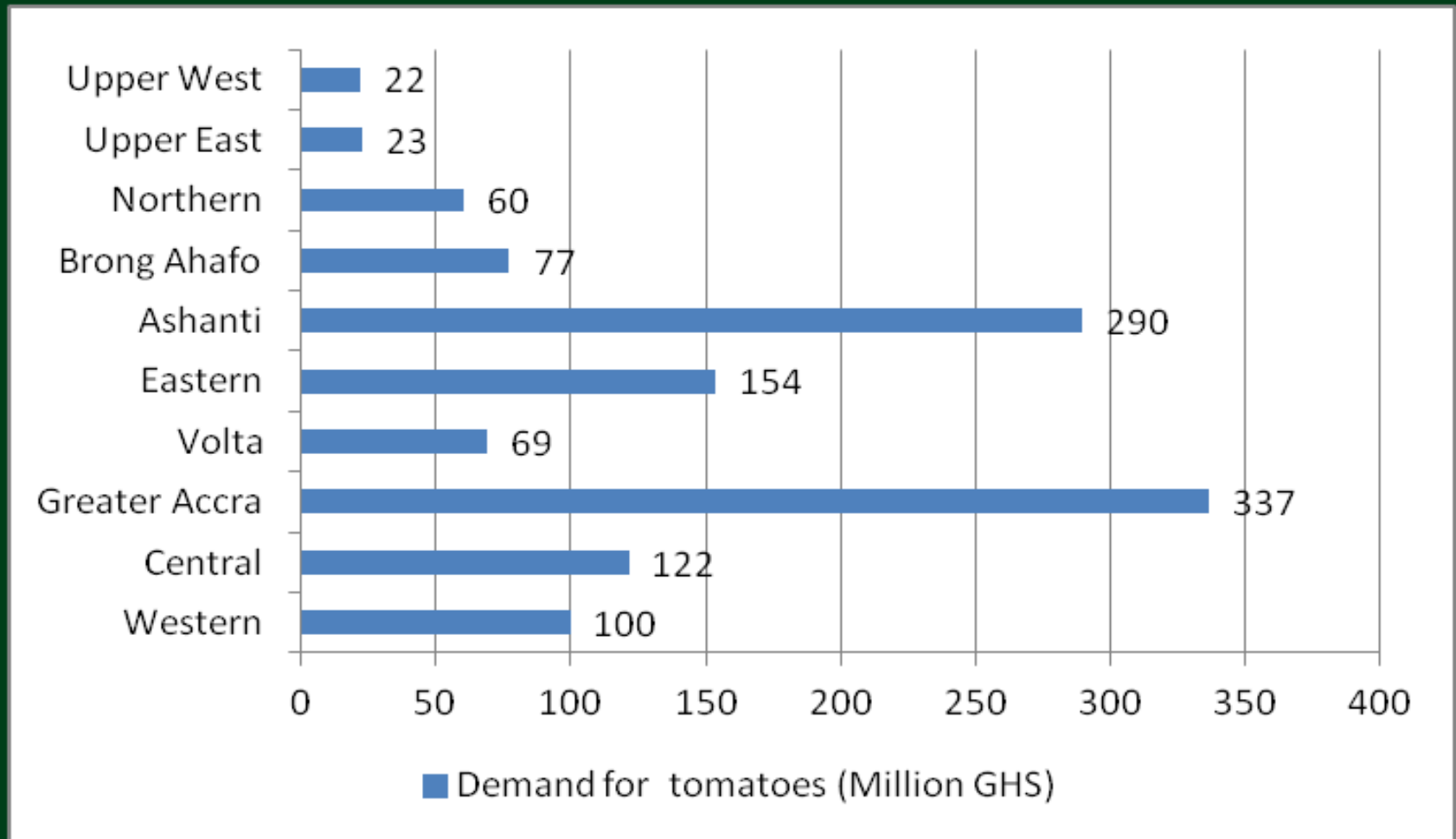


# Household demand for Tomatoes (2017)

**Distribution of demand for tomatoes**  
*GHS 1.3 Billion national demand*

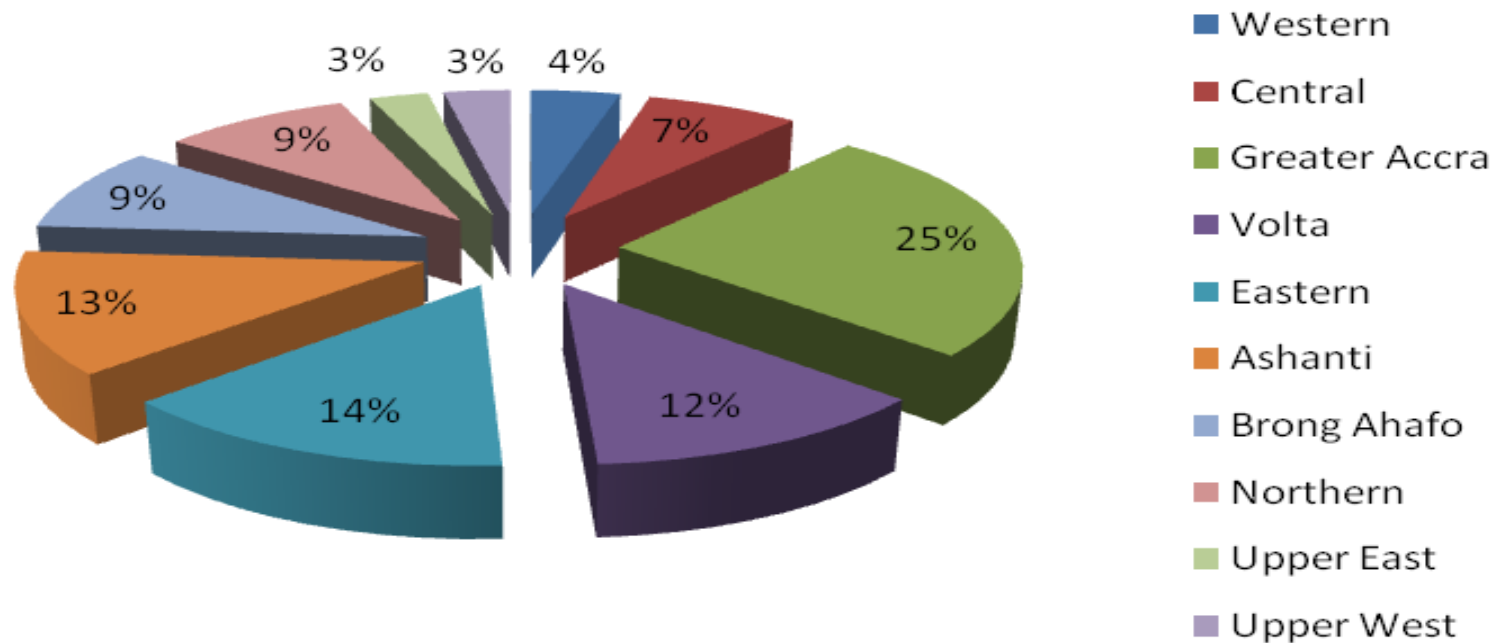


# Household Demand for Tomatoes (2017)



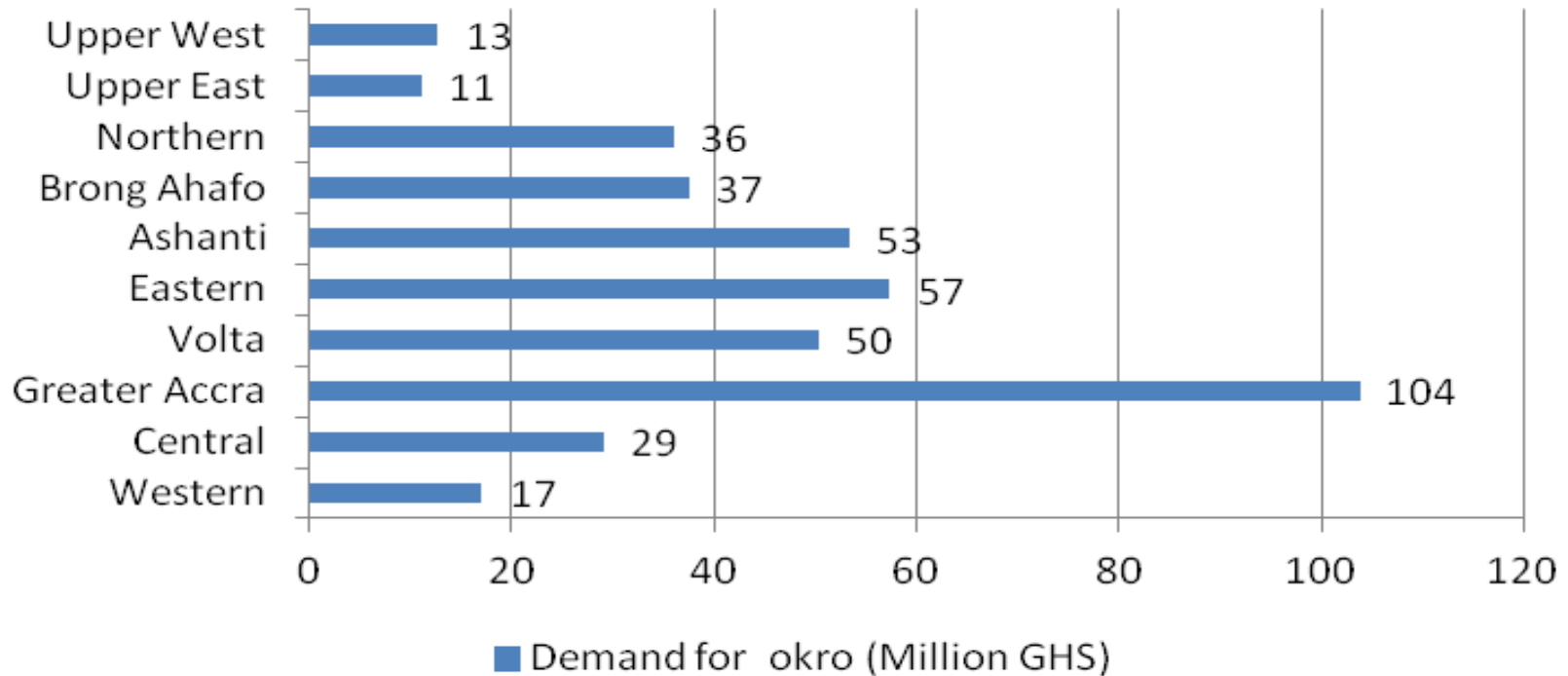
# Household Demand for Okro (2017)

**Distribution of demand for okro**  
*GHS 400 million national demand*



# Household Demand for Okro (2017)

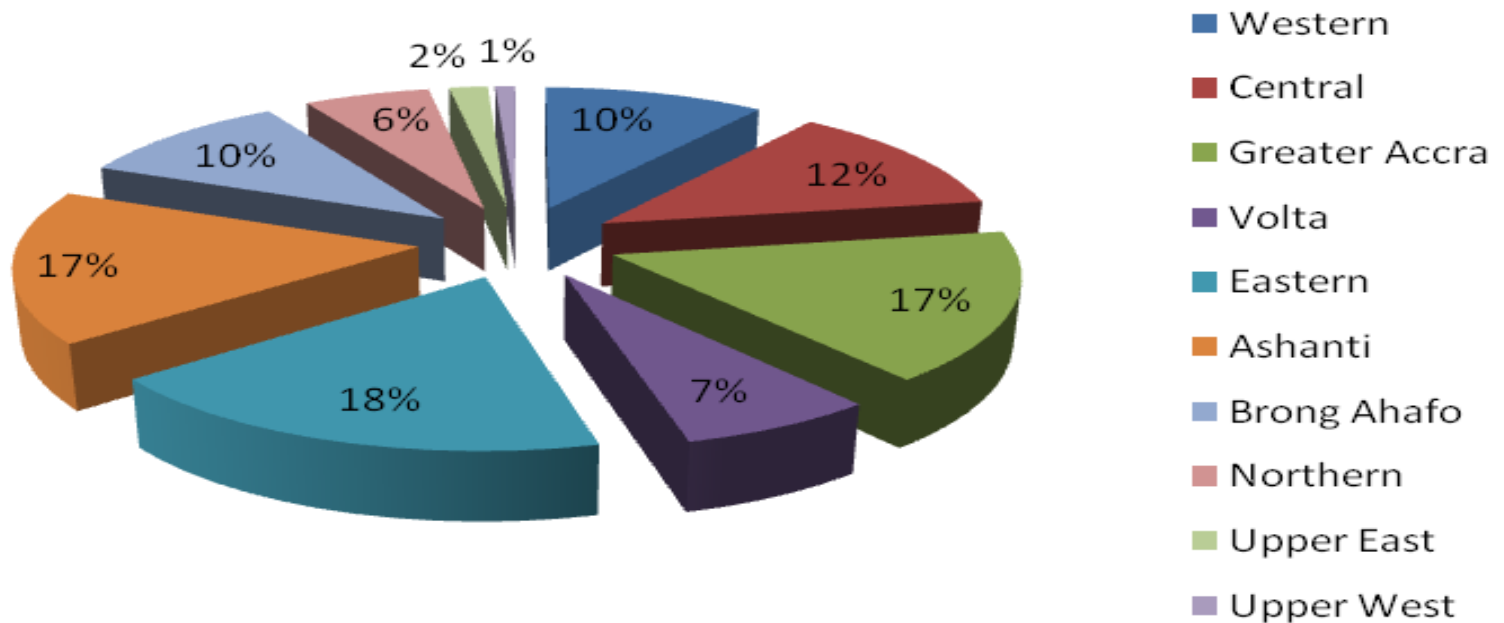
## Demand for okro (Million GHS)



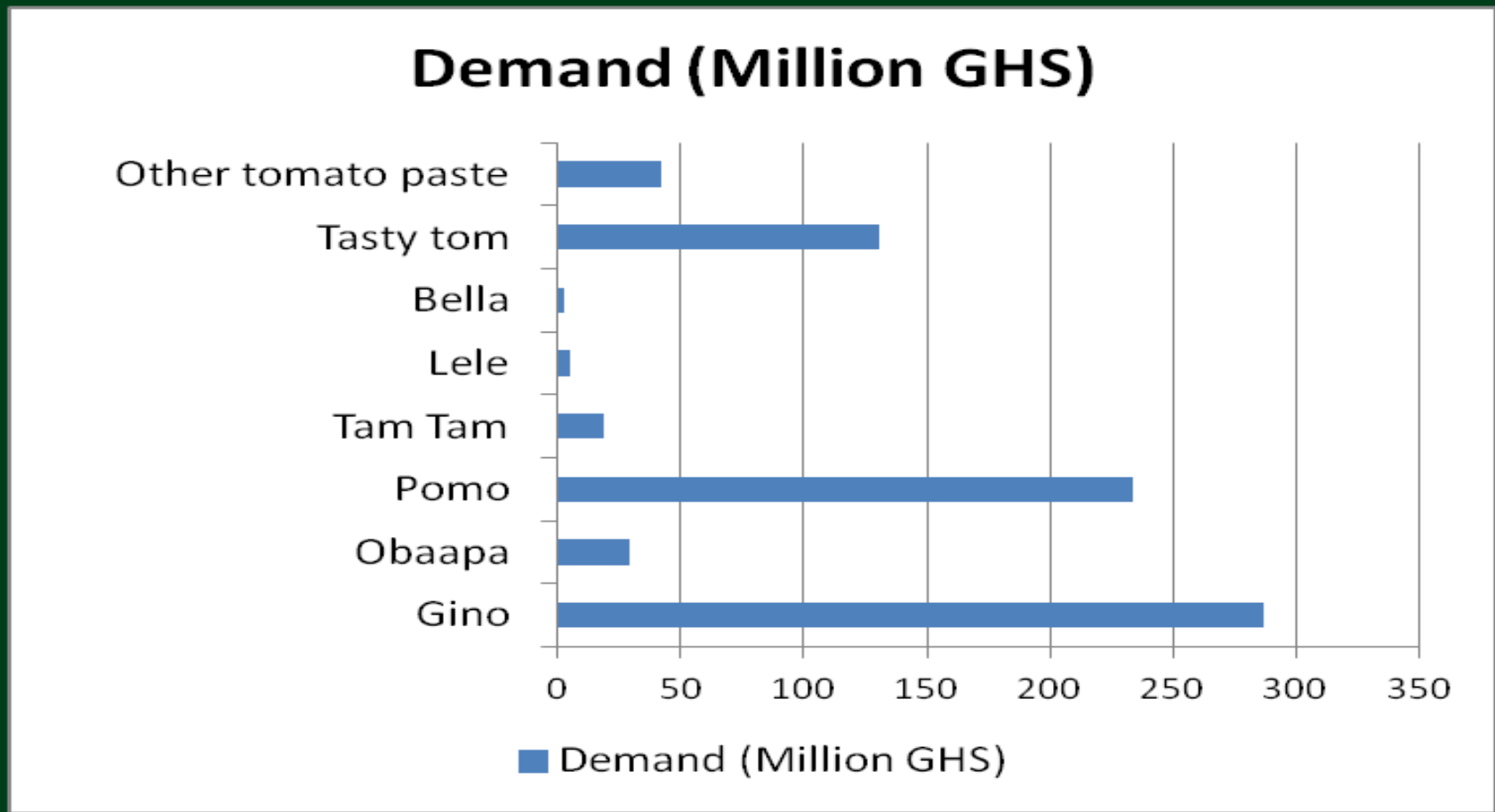


# Household Demand for Tomato Paste (2017)

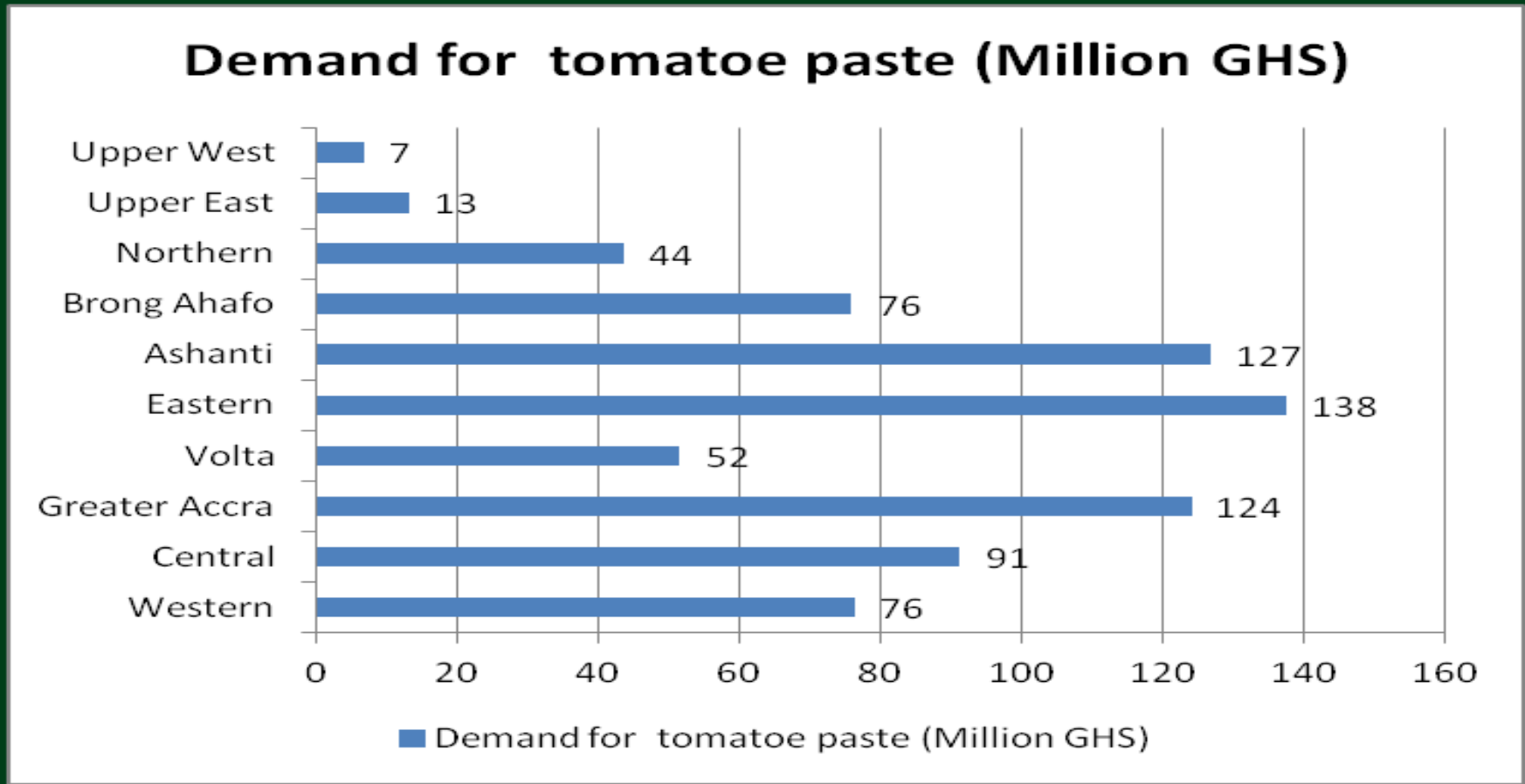
**Distribution of demand for tomatoe paste**  
GHS 750 million national demand



# Household Demand for Tomato Paste (2017)

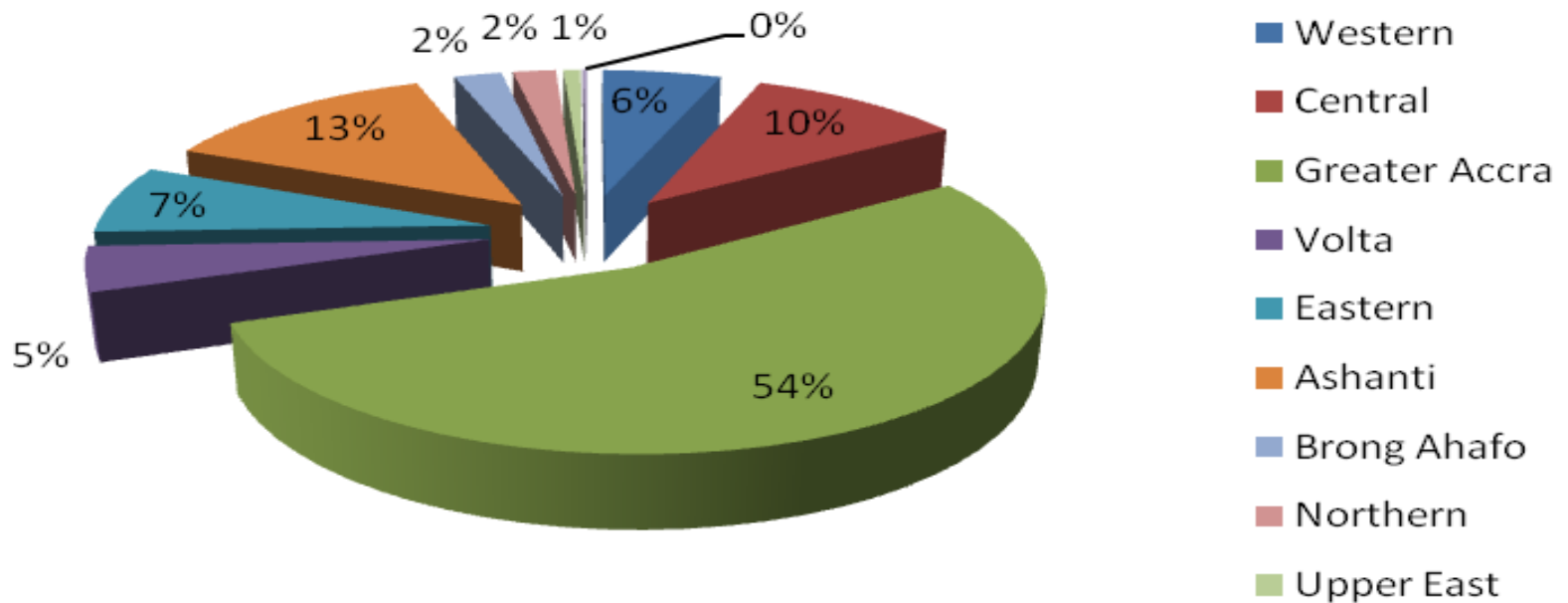


# Household Demand for Tomato Paste (2017)

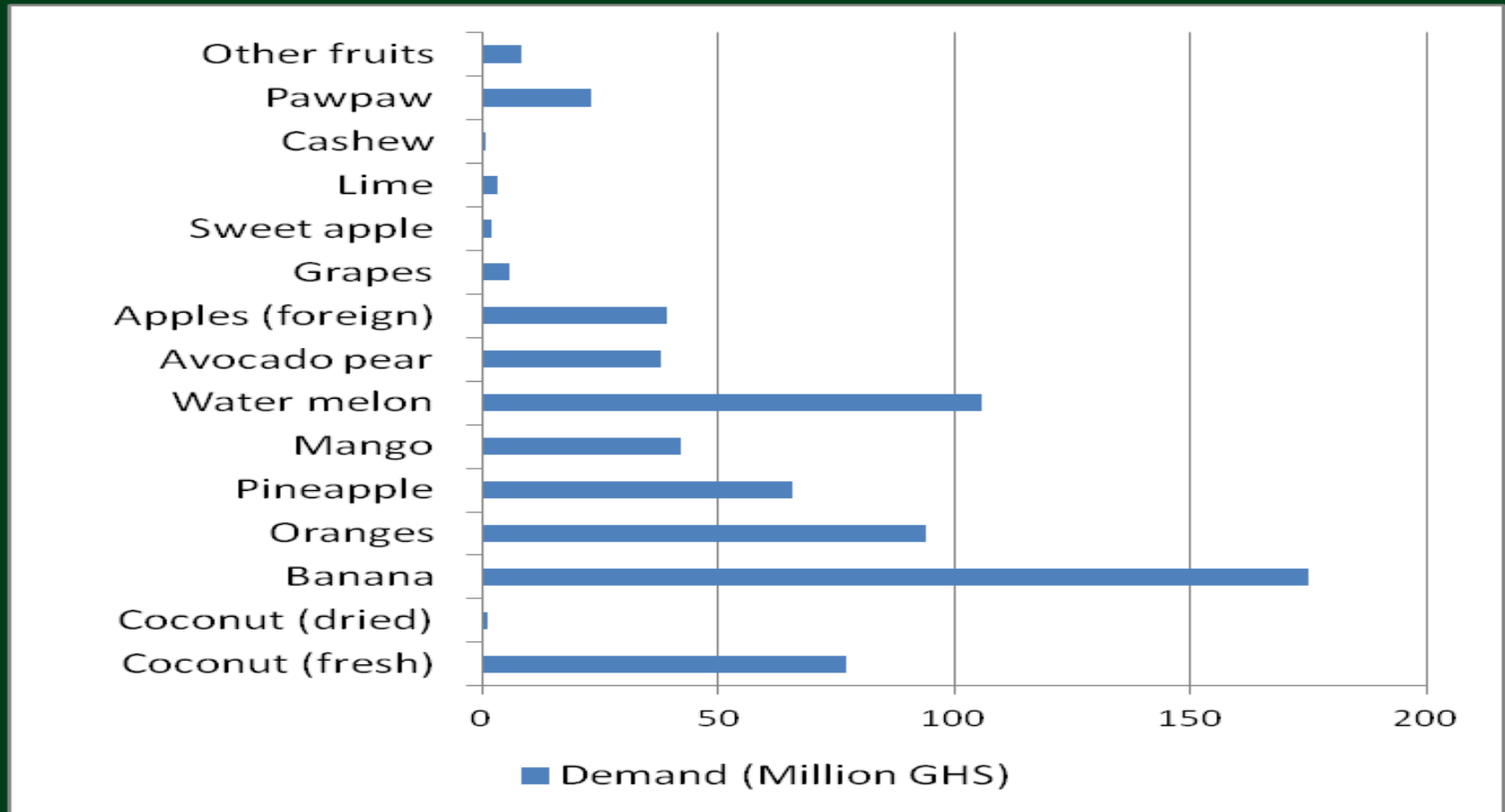


# Household Demand for Fresh Fruits (2017)

**Distribution of demand for fresh fruits**  
*GHS 700 million national demand*

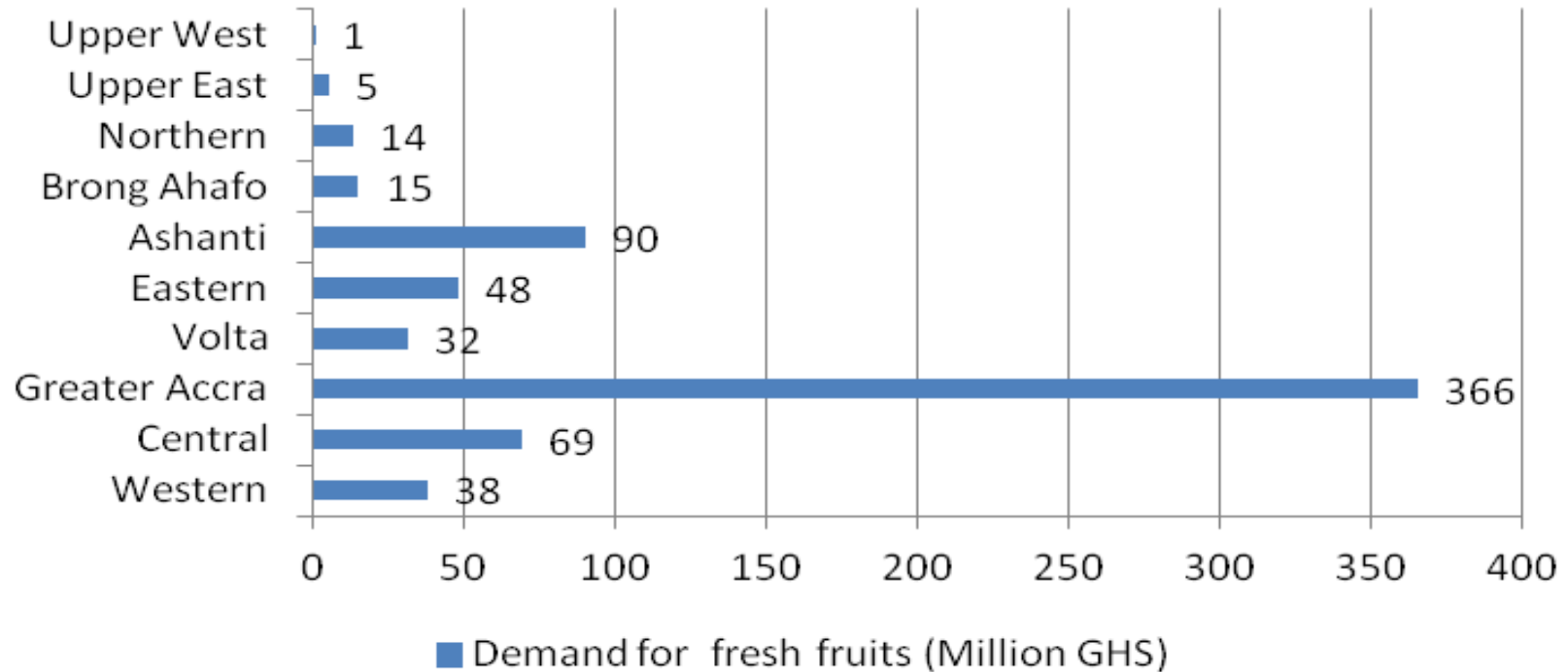


# Household Demand for Fresh Fruits (2017)



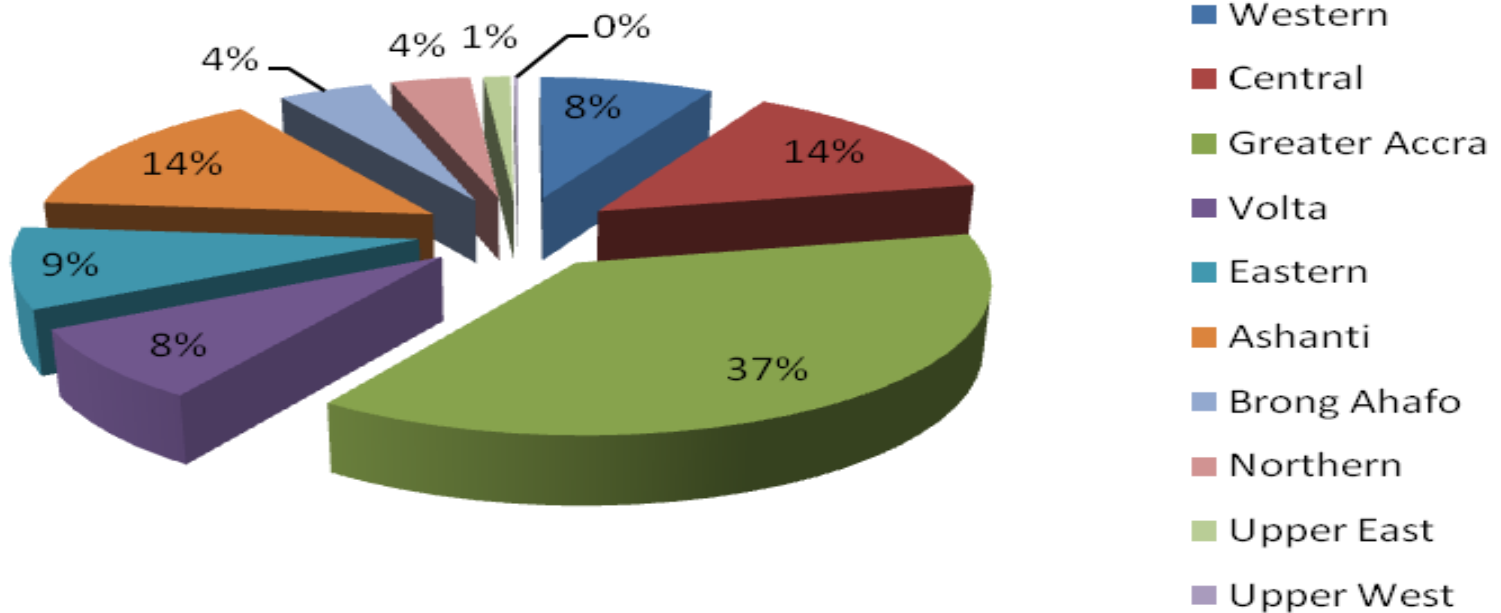
# Household Demand for Fresh Fruits (2017)

## Demand for fresh fruits (Million GHS)



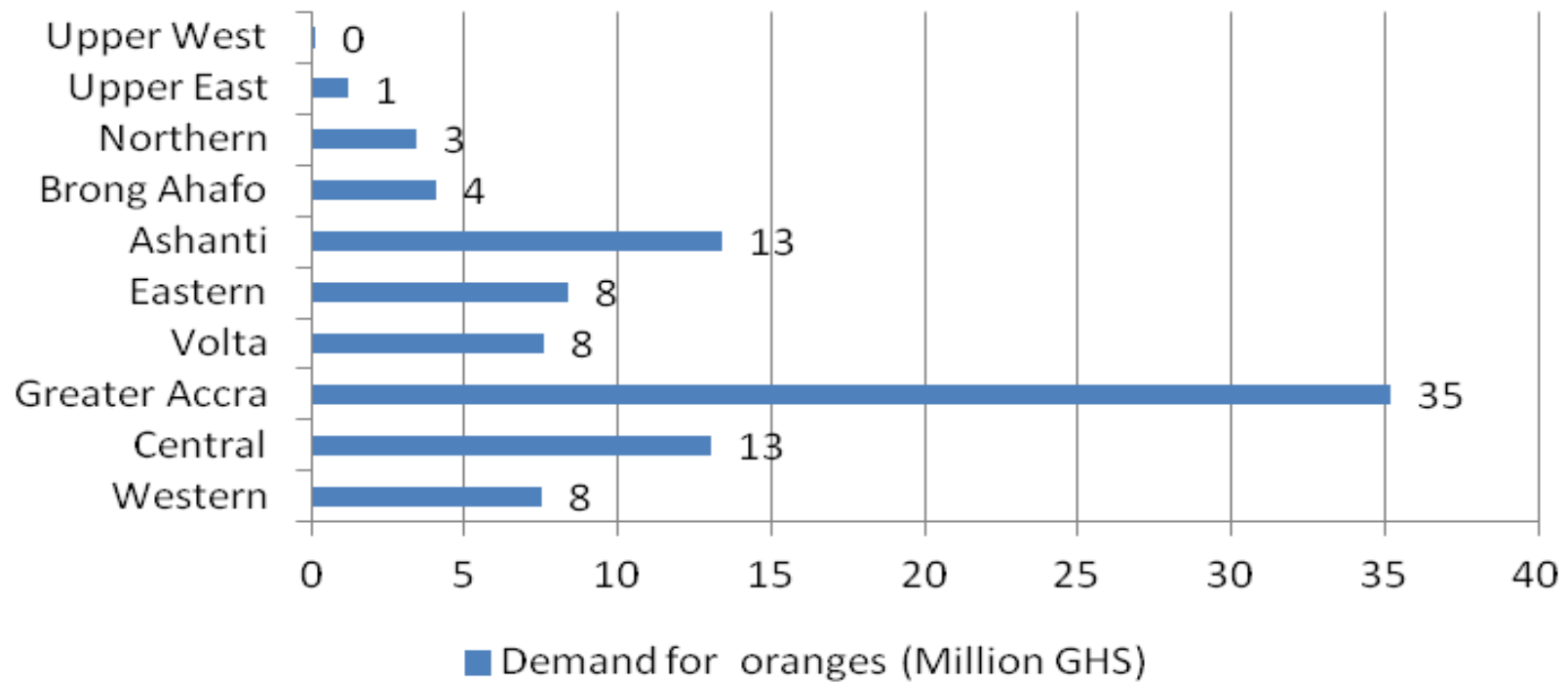
# Household Demand for Oranges (2017)

**Distribution of demand for oranges**  
*GHS 94 million national demand*



# Household Demand for Oranges (2017)

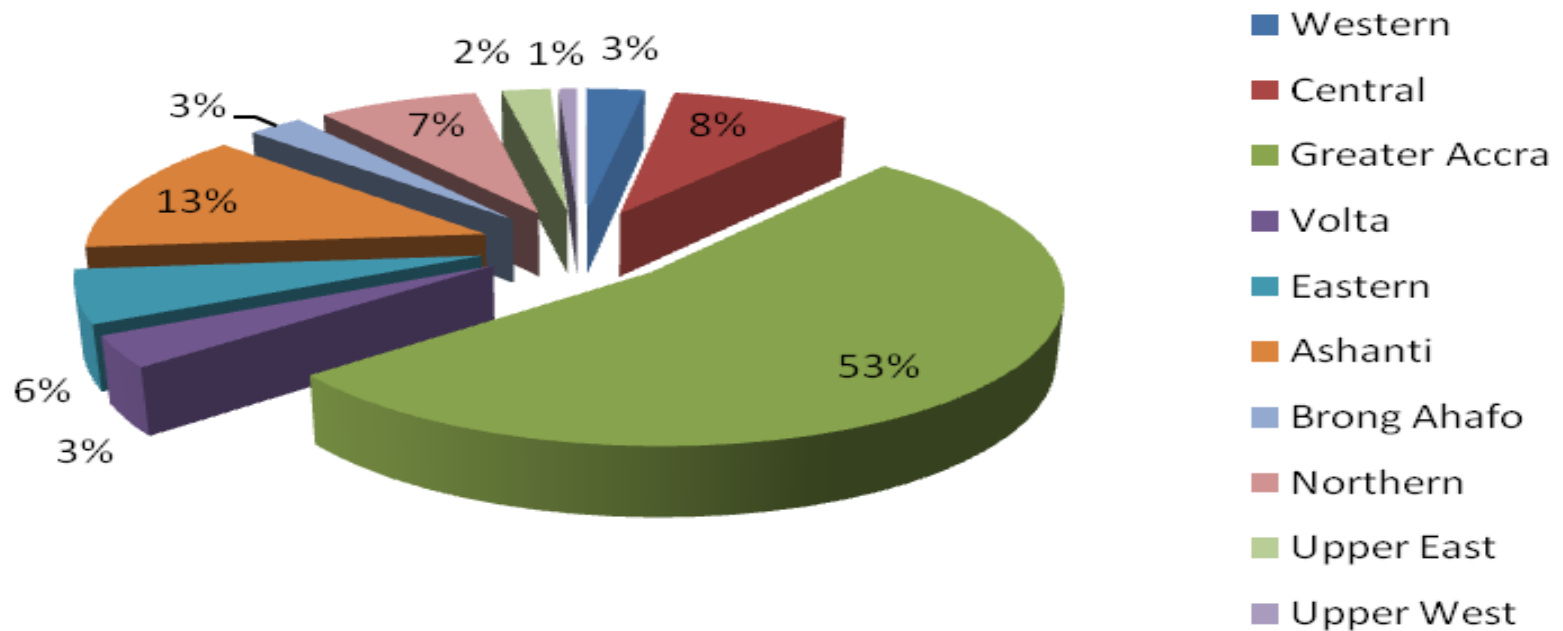
## Demand for oranges (Million GHS)



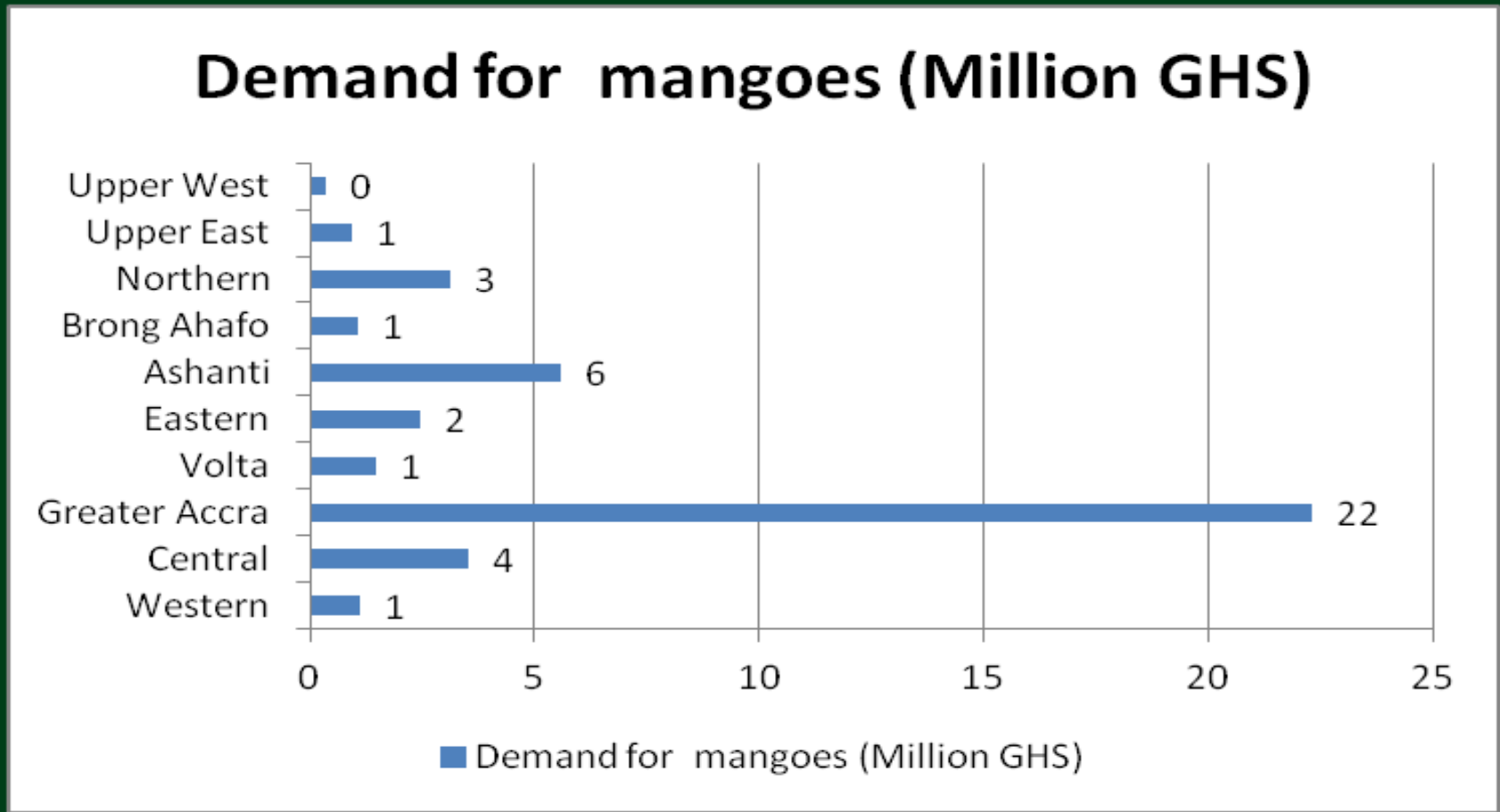


# Household Demand for Mangoes (2017)

**Distribution of demand for mangoes**  
*GHS 40 million national demand*

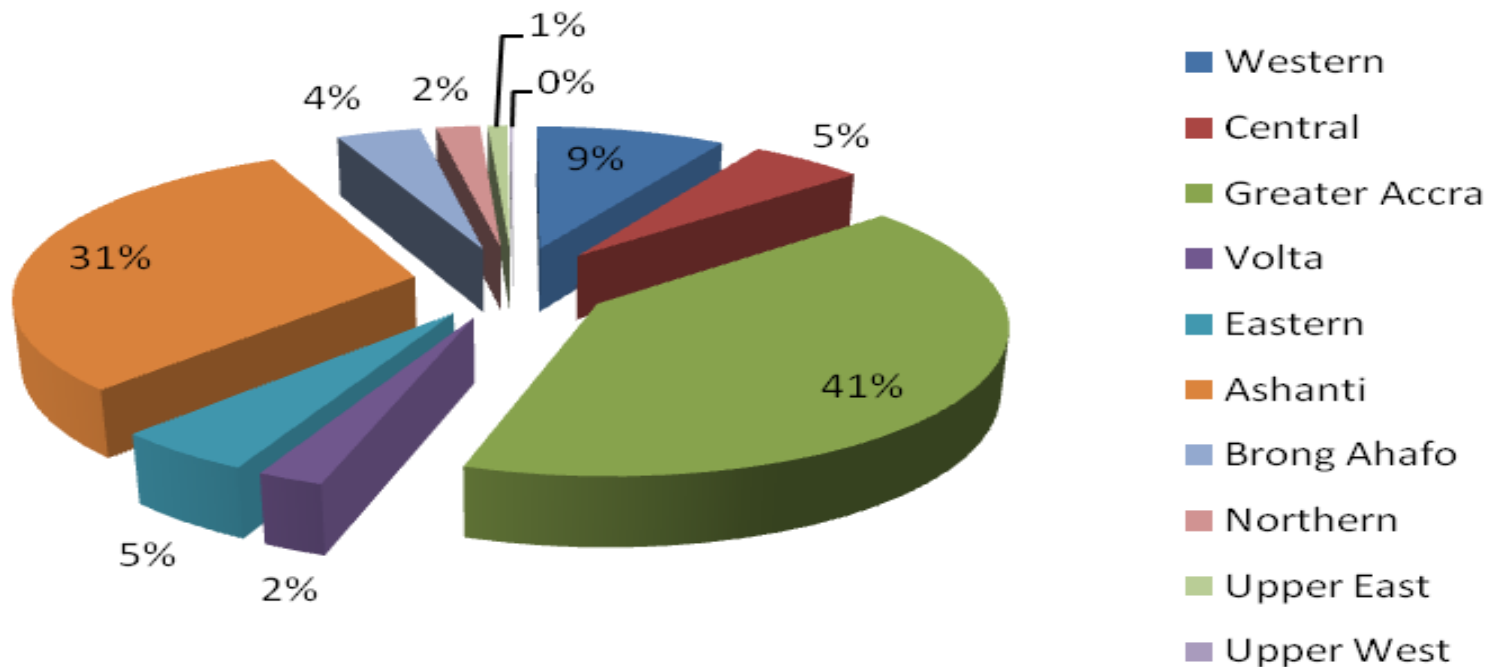


# Household Demand for Mangoes (2017)

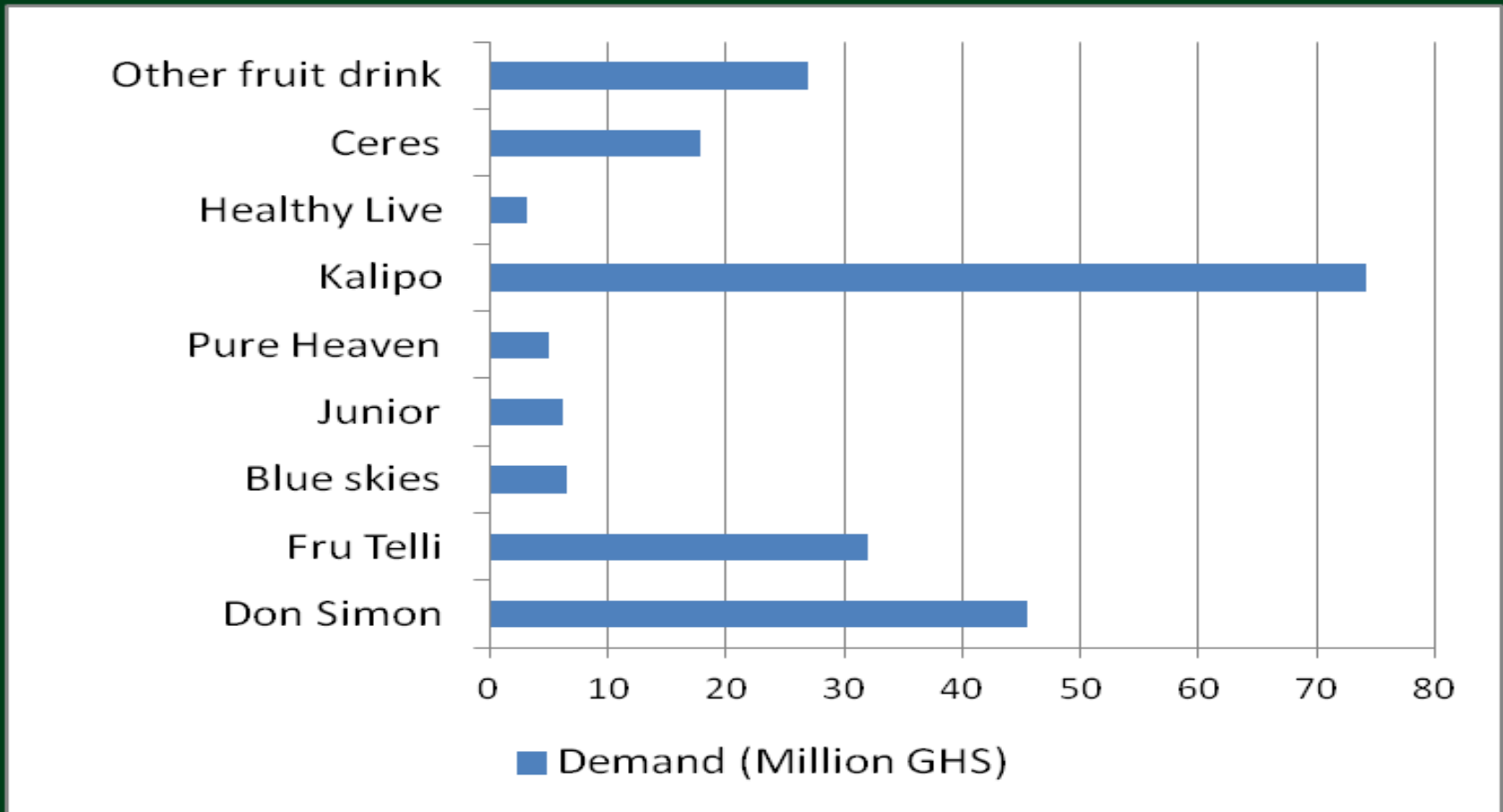


# Household Demand for Fruit Juice (2017)

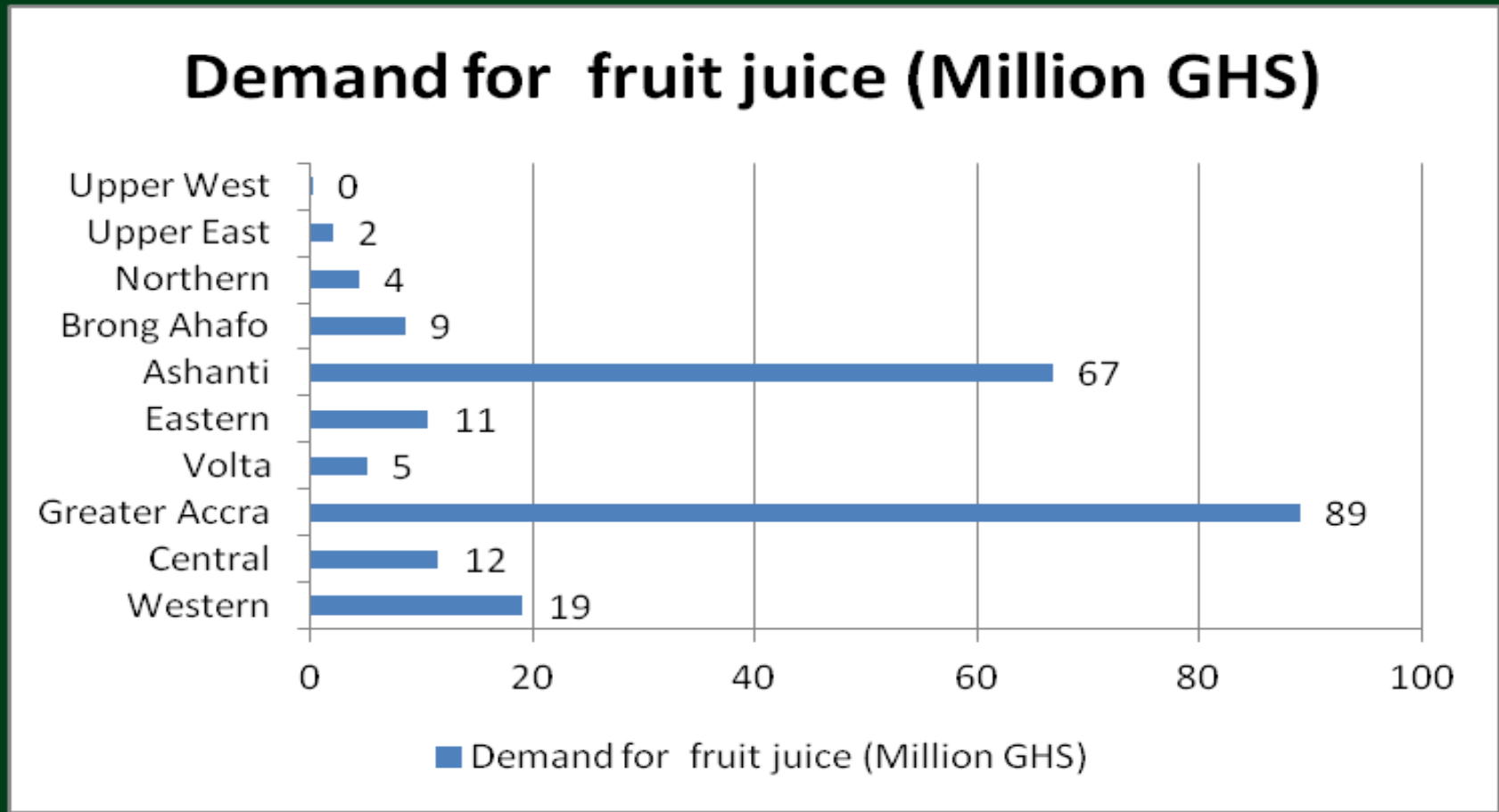
**Distribution of demand for fruit juice**  
*GHS 217 million national demand*



# Household Demand for Fruit Juice (2017)

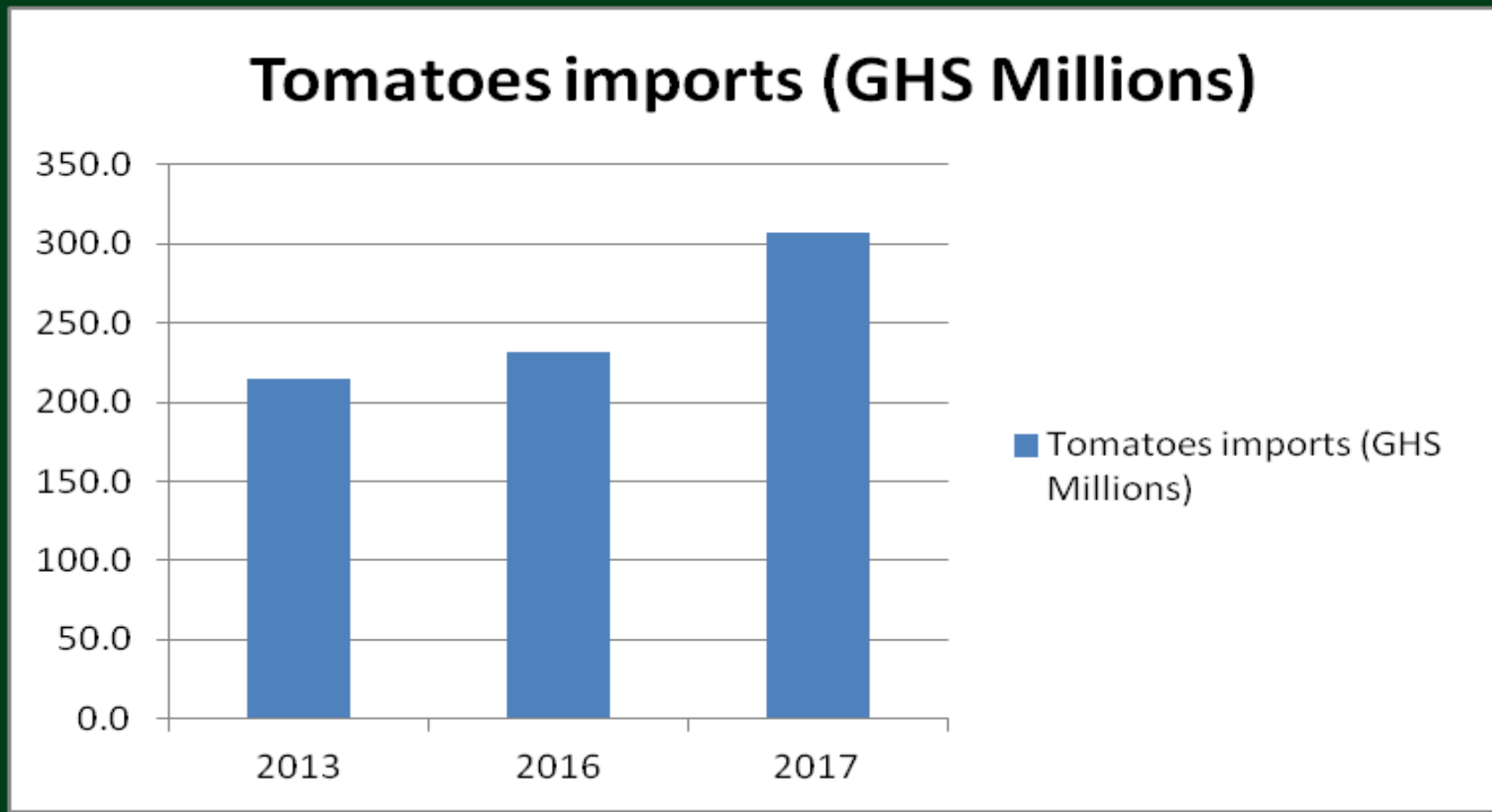


# Household Demand for Fruit Juice (2017)



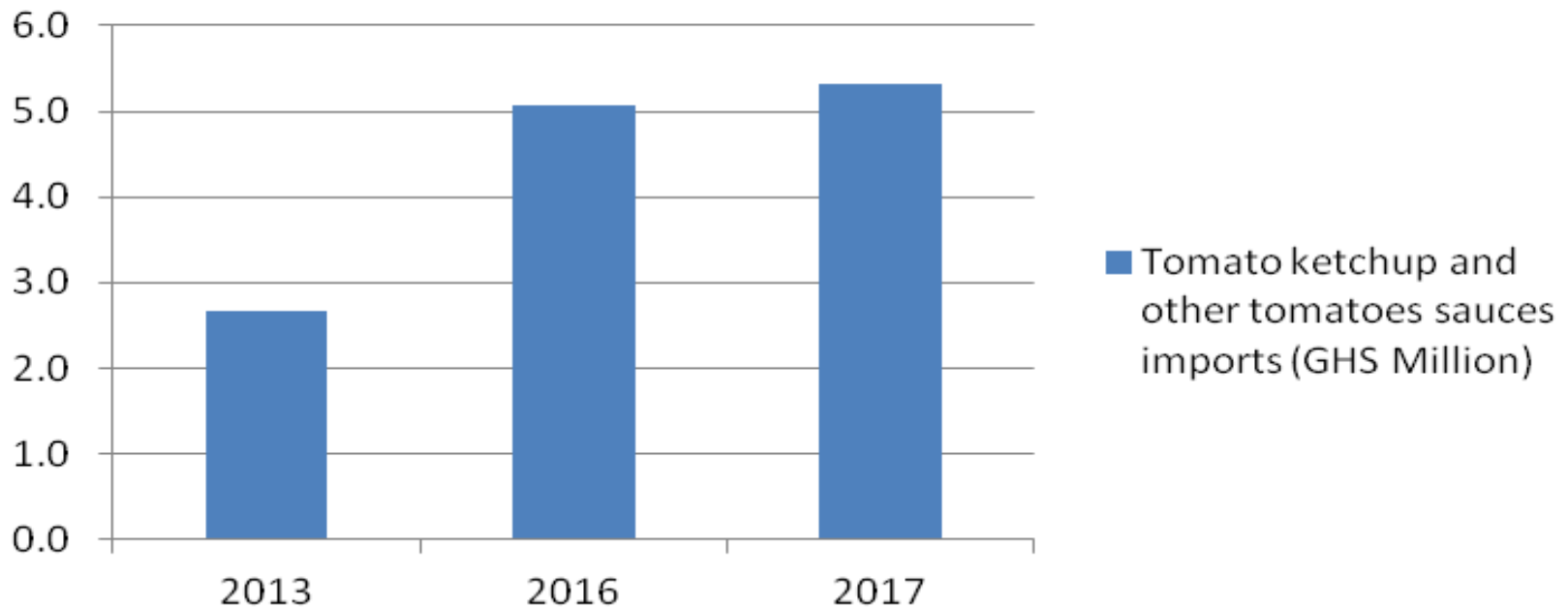
For some raw and processed fruits and vegetables, local production is not able to satisfy local demand

# Imports of Fruits and Vegetables



# Imports of Fruits and Vegetables

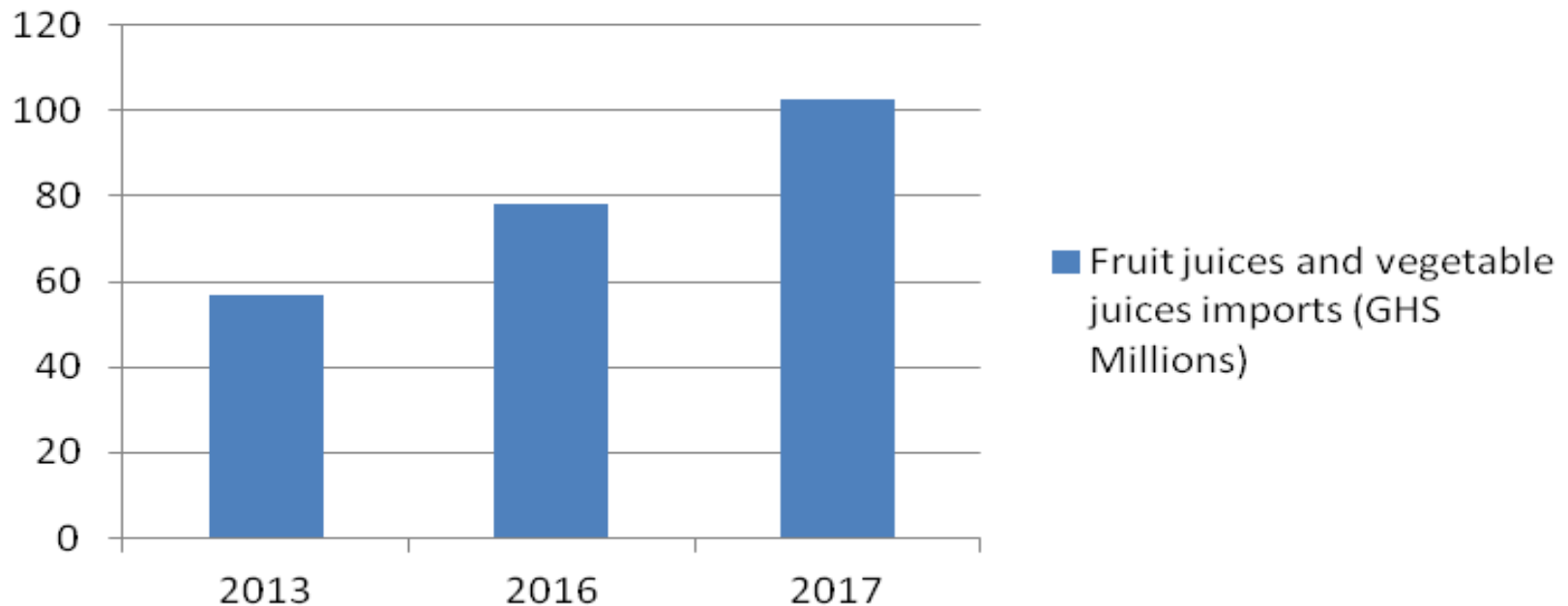
## Tomato ketchup and other tomato sauce imports (GHS Million)



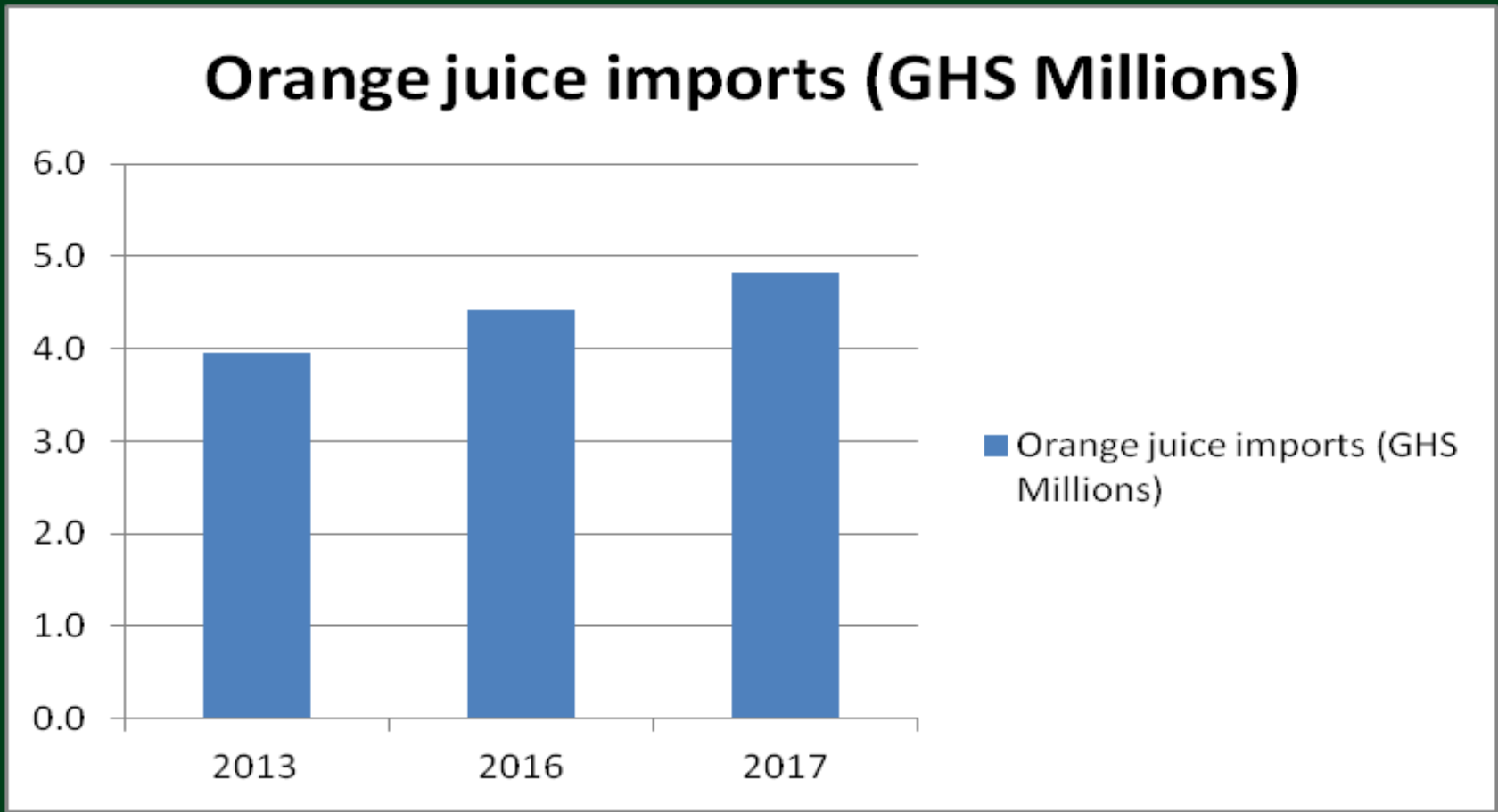


# Imports of Fruits and Vegetables

## Fruit juices and vegetable juices imports (GHS Millions)

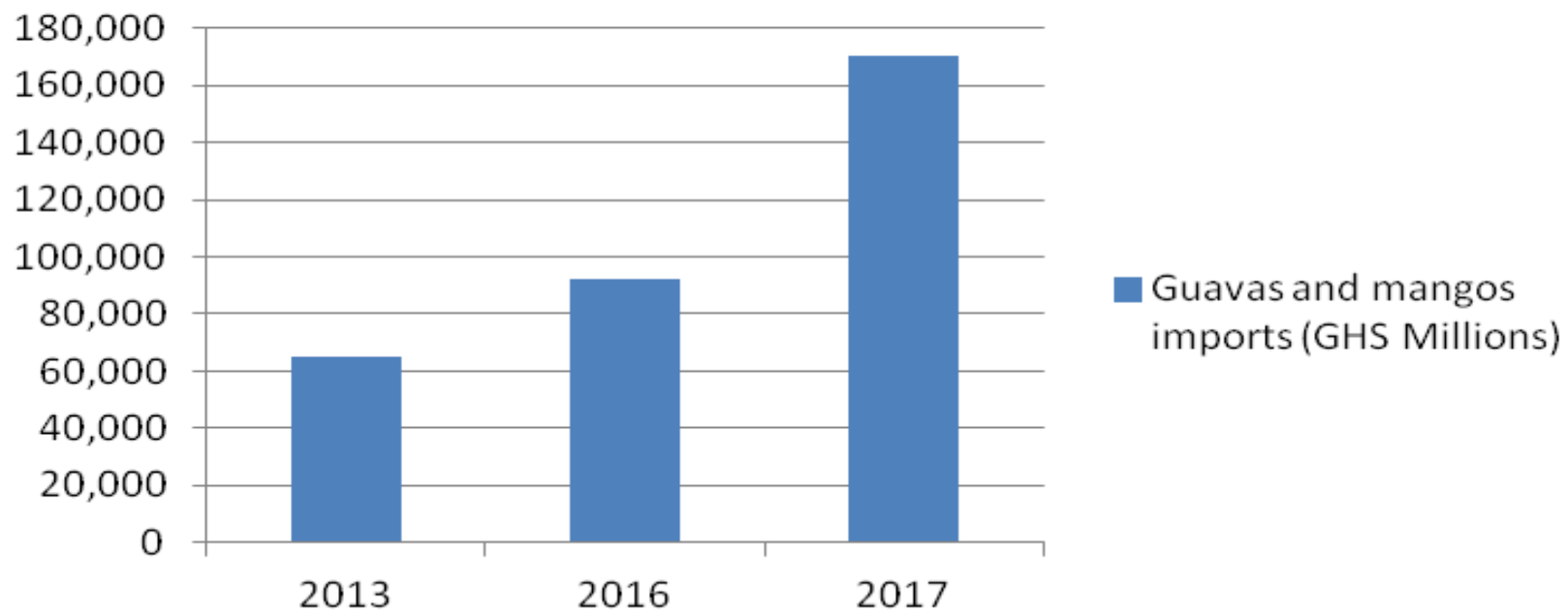


# Imports of Fruits and Vegetables

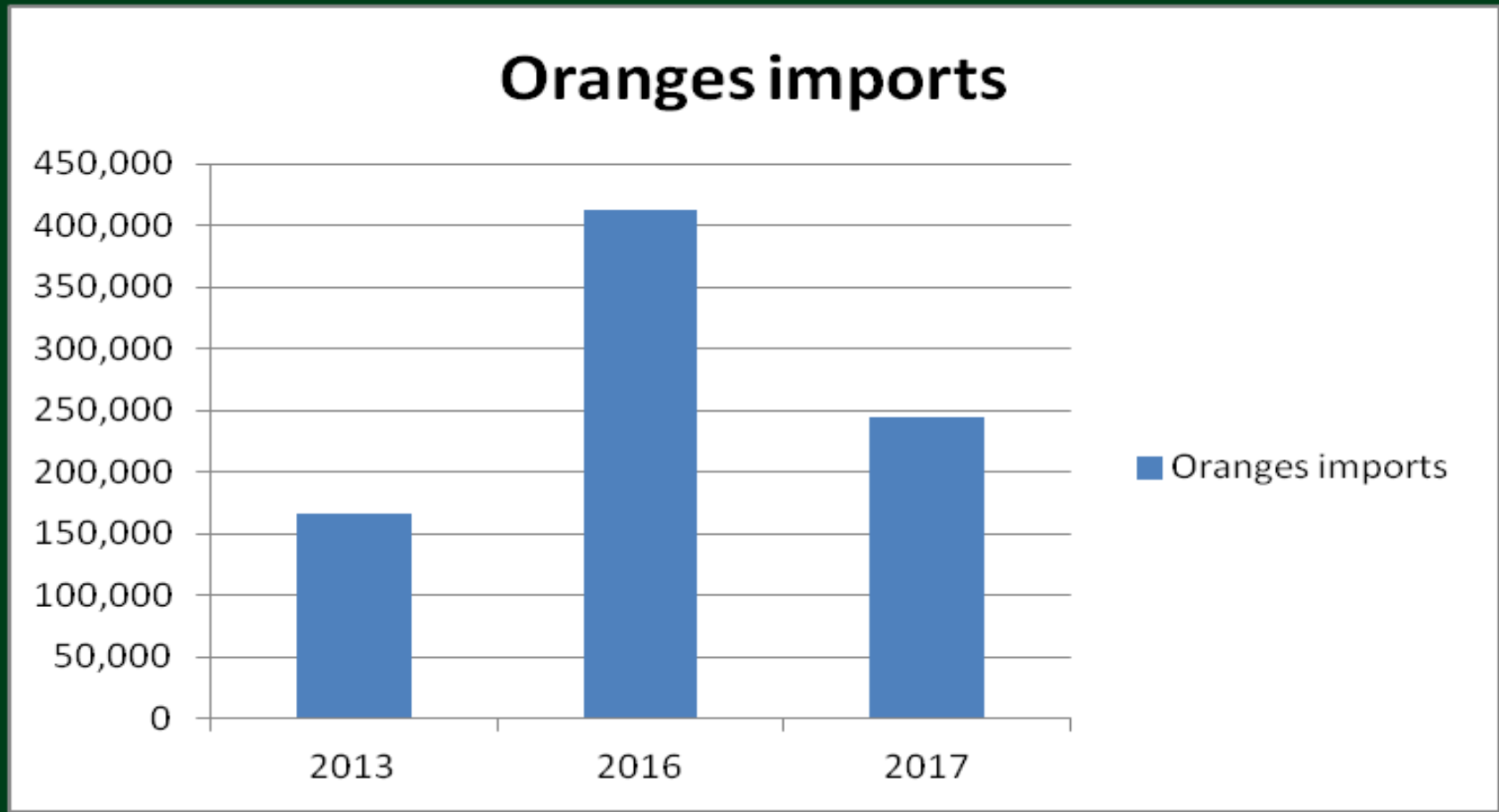


# Imports of Fruits and Vegetables

## Guavas and mangos imports (GHS Millions)

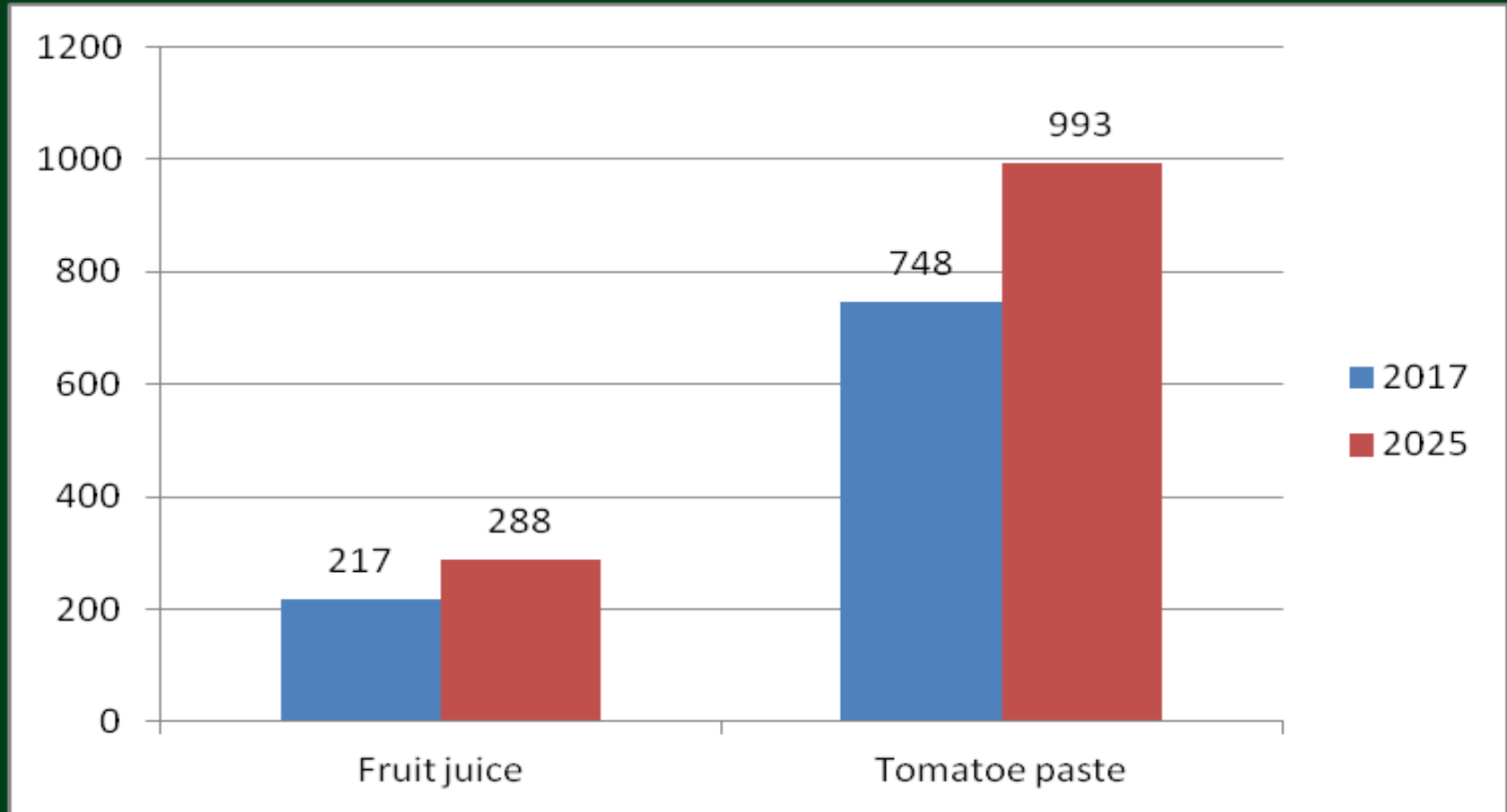


# Imports of Fruits and Vegetables



Demand will grow as GDP grows due to an income elasticity of about .9 for fruits and vegetables

# Projected Demand (2025, GHS Millions)



# Conclusions

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- Reduction in PHL is necessary
- PHL is a business opportunity as demand exists and will expand over time

- Thank You For Your Kind Attention