Report for January to December 2020 on KRA1: Agriculture Assessment on Majuro Atoll and action plan

1. **2020 summary of activities**;

Number of Visits:	20 days of site surveys conducted
Number of people surveyed:	280
Number of communities selected for home garden program:	Berrak Tur Tieti Alwal Lokonmok Imaaaj
Equipment Purchased	4 chain saws 30 raised bed wicking systems 5 garden nets for pest control
Number of people trained in home gardening	20

The schedule of activities conducted in 2020 is shown below

January	February	March	April	May	June
Sign Contract		Begin agriculture survey of DUD	Continue survey	Continue Survey	6 month report due
July	August	September	October	November	December
Order 30 home gardens built	Pilot small training program with community	Hold meeting to discuss training program	Develop training program for communities	Select communities to be targeted first for gardens based on survey results	6 moth report due

The Action Plan for the period up to December 2022 is shown in Annex 1.

2. **Agricultural assessment – January 2020 to June 2020.**

In March 2020 to May 2020 a team of 10 agriculture agents were sent out house to house on Majuro atoll. They targeted the downtown or DUD area on the atoll. The survey questions were gathered from a standardized survey from Australia and mixed with other atoll specific survey questions from MNRC survey on households. In total, 280 houses were surveyed. We used a program from Marshall Islands Epidemiology and Prevention Initiatives to collect data on the 280 surveyed. We then scored each question to determine which household was most likely to care for a home garden system. The highest scores were then placed into a waiting list to be called on when we open gardening classes to the community.

The main issues identified during this assessment were;
1) Lack of Gardening space
2) High Reliance on imported foods
3) Lack of pest control knowledge

After analysis of data, several villages were chosen based on space, high-risk population density and desire to learn gardening. These areas are Berrak, Tur, Tieti, Alwal, Lokonmok and Imaaj villages. We expect to reach over 200 people by focusing on these villages with home garden wicking systems. During this assessment, we noticed a decrease in space available for a large wicking system as was designed for Jaluit Atoll. Therefore, we redesigned the wicking raised bed system to be smaller by 2 feet. This will allow people to place the system up against their houses and out of reach of domestic animals and neighbors. We also noticed that the average family size living in one household is much larger on Majuro than it is on Jaluit. Therefore, we increased the number of wicking systems needed for each house. On Jaluit, only one system is needed to supply a family, on Majuro they will need at least two wicking systems to supply the needs of one family household.

3. Agriculture discussion on training system to be used and piloting of training system with small groups

During this reporting period of July to December 2020 we discussed how a training program would be done and what would be included in such a program. This training program is meant to help ensure the success of each new home garden placed in the DUD area. Most people are not familiar with planting gardens or caring for them. We decided to included the following topics; pest control, soil mixture, garden placement, harvesting and replanting, cooking with vegetables. A small group of 20 people were trained using this program and were found to be able to understand basic gardening techniques. More training will be needed over several weeks to ensure that the people know how to grow the vegetables successfully.

4. Plans for future gardening

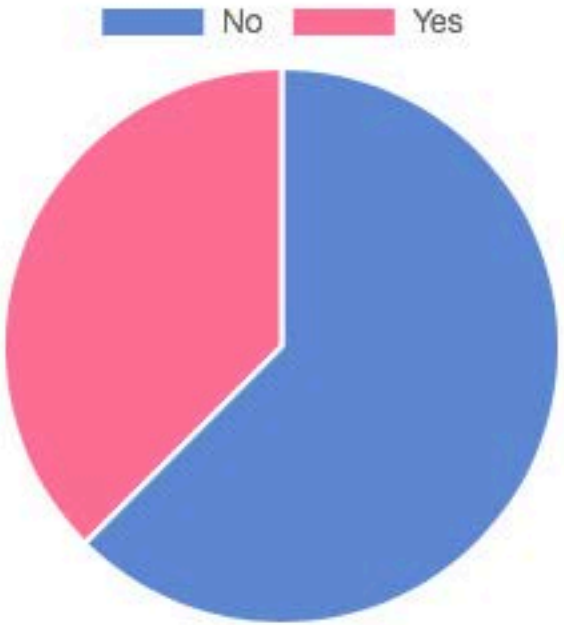
Plans include establishing over 30 home gardening in DUD area and conducting at least 5 training sessions with local communities to care for the gardens. The training sessions will focus on enhancing traditional gardening techniques and using some more modern types of pest control such as dishwashing soap. Cooking classes will play a key role in making this project sustainable so that people not only grow the vegetables but also eat them.

Jan2020	Feb2020	Mar2020	Apr2020	May2020	June2020	July2020	Aug2020	Sept2020	Oct2020
Sign contract		Conduct baseline survey on Majuro				6 month report due	select 5 communities to target with home gardens	conduct gardening classes at wellness center	establish 15 home gardens
Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	June 2021	July 2021	August 2021
conduct gardening classes at wellness center	establish 15 home gardens	6 month report due	conduct gardening classes at wellness center	establish 15 home gardens	conduct gardening classes at wellness center	establish 15 home gardens	conduct gardening classes at wellness center	6 month report due	conduct gardening classes at wellness center
Sept 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	June 2022
establish 15 home gardens	conduct gardening classes at wellness center	establish 15 home gardens		6 month report due	conduct gardening classes at wellness center	establish 15 home gardens	conduct gardening classes at wellness center	establish 15 home gardens	conduct gardening classes at wellness center
July 2022	Aug 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022				
6 month report due	conduct gardening classes at wellness center	establish 15 home gardens	conduct gardening classes at wellness center	establish 15 home gardens	final report due				

Majuro Agriculture Assessment and Survey SUPA 2020

B1 Do you grow any vegetables or crops in your garden?

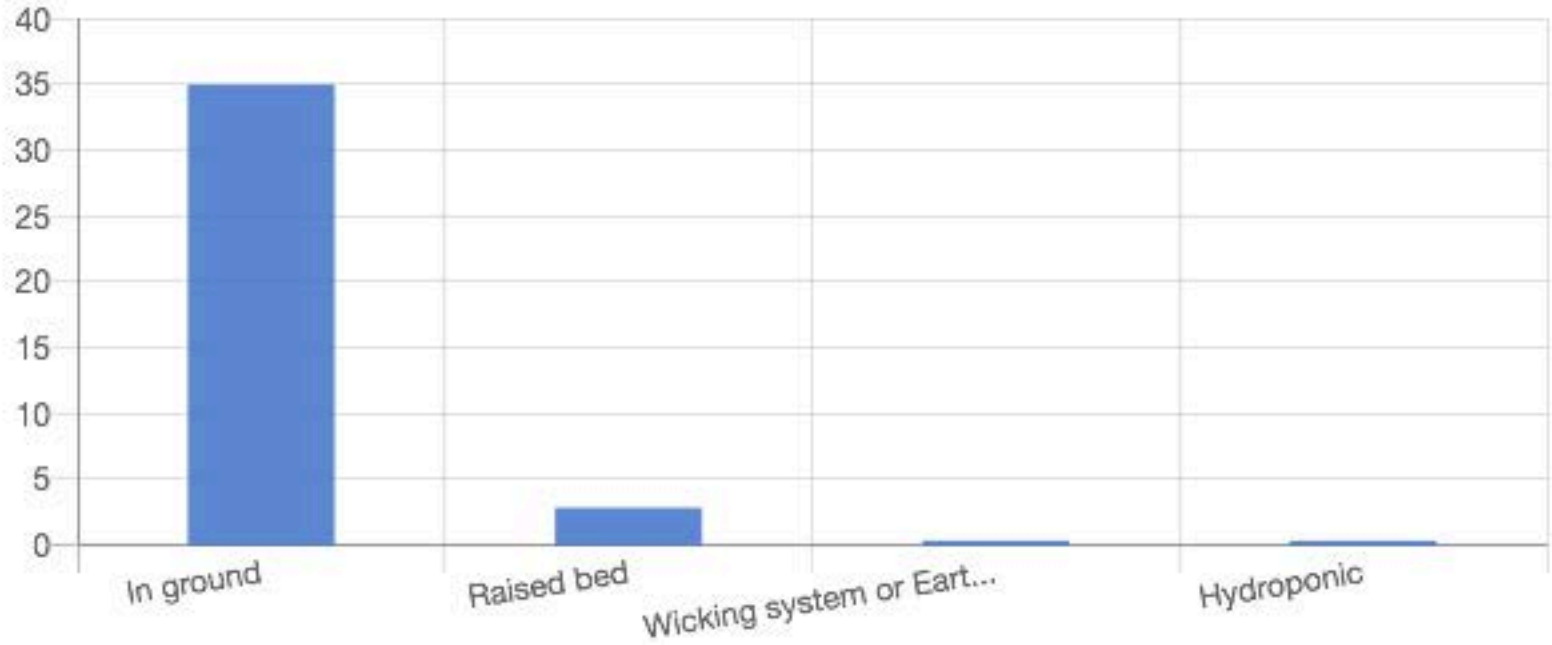
TYPE: "SELECT_ONE". 280 out of 280 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
No	175	62.5
Yes	105	37.5

B3 What kind of gardening do you do?

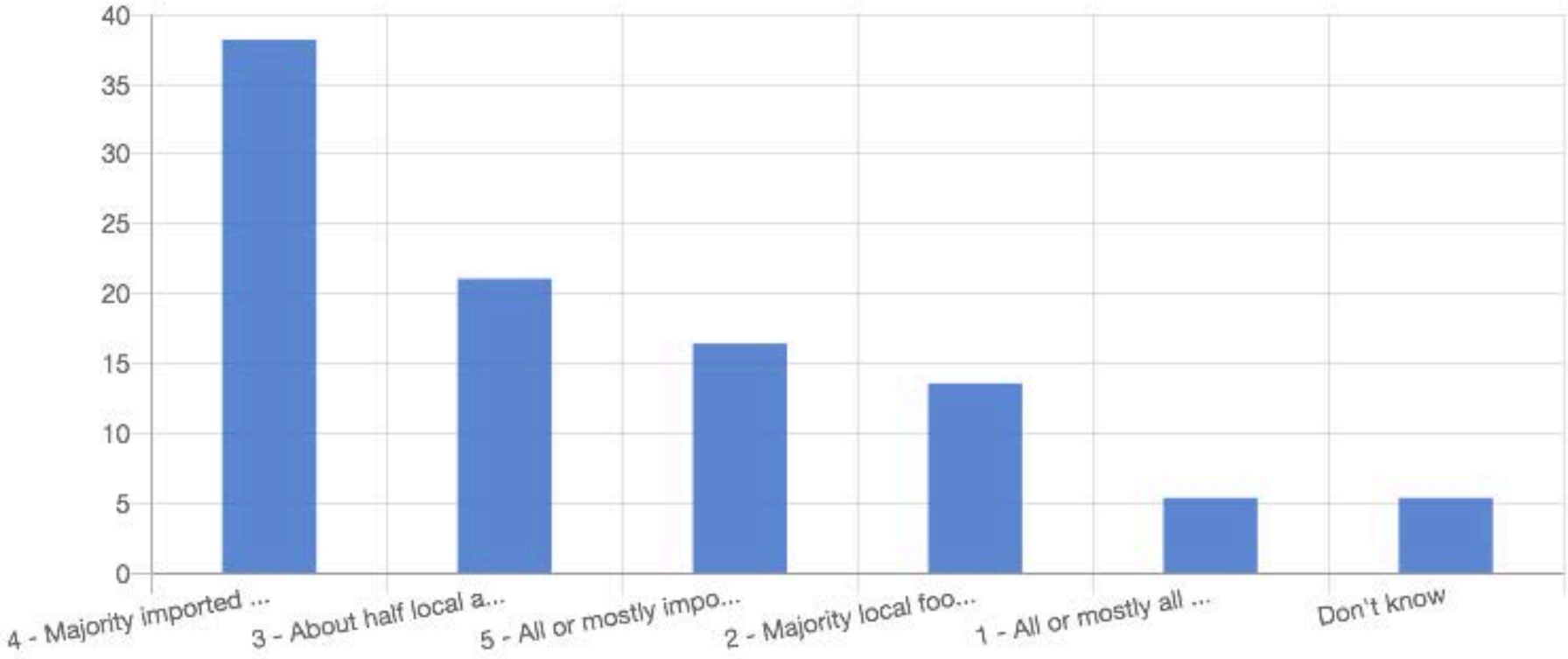
TYPE: "SELECT_MULTIPLE". 105 out of 280 respondents answered this question. (175 were without data.)



Value	Frequency	Percentage
In ground	98	35
Raised bed	8	2.86
Wicking system or Earthbox	1	0.36
Hydroponic	1	0.36

B6 How much of your regular diet is made up of local/traditional foods (such as local fish, taro, breadfruit, banana, pandanus, etc)?

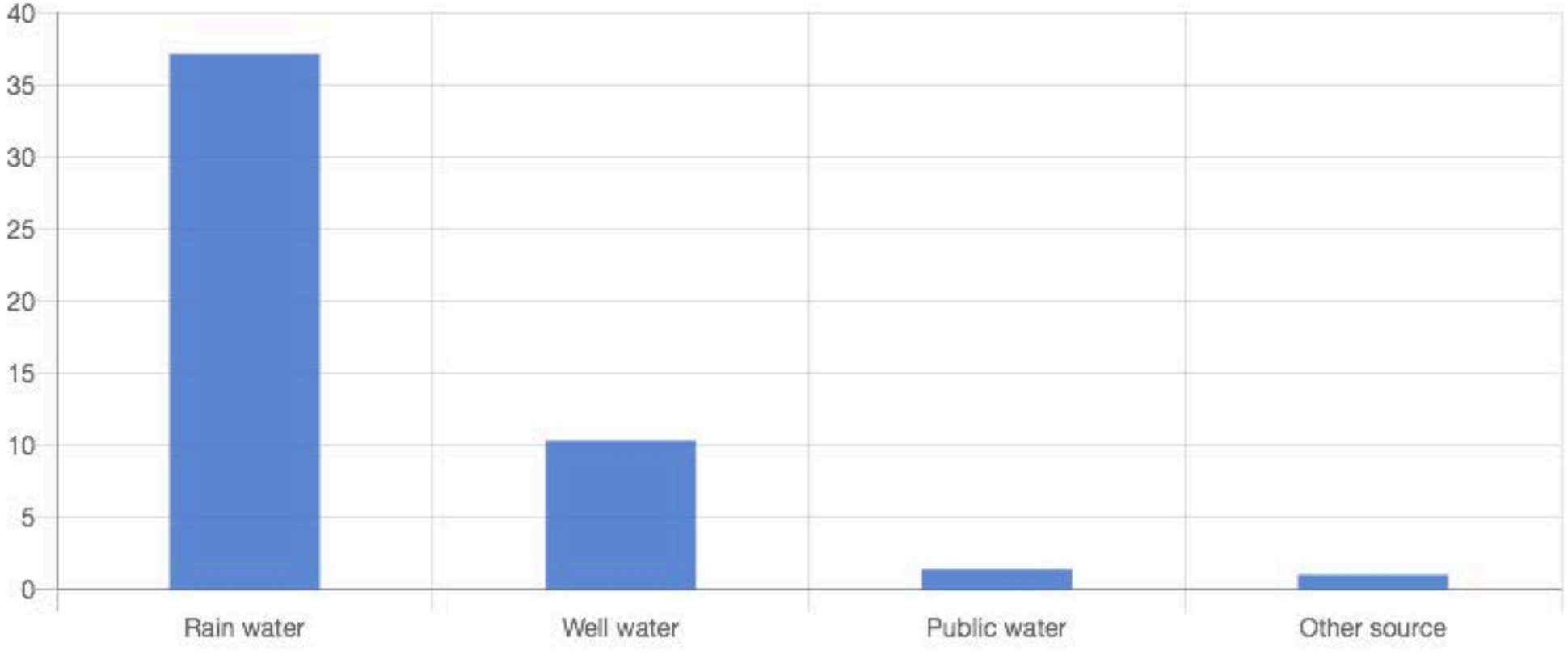
TYPE: "SELECT_ONE". 280 out of 280 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
4 - Majority imported food but some local food	107	38.21
3 - About half local and half imported food	59	21.07
5 - All or mostly imported food	46	16.43
2 - Majority local food but some imported food	38	13.57
1 - All or mostly all local food	15	5.36
Don't know	15	5.36

B7 What is the main water source you use to water the plants?

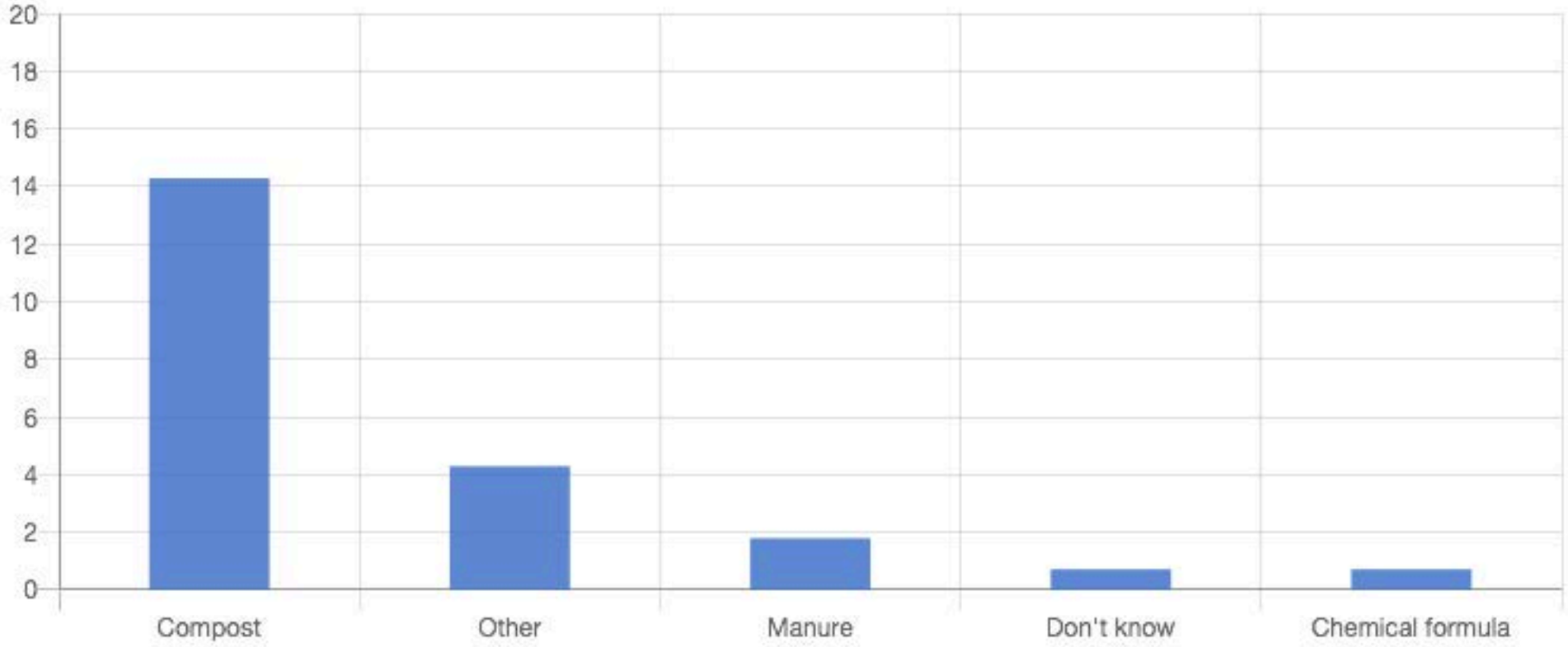
TYPE: "SELECT_MULTIPLE". 105 out of 280 respondents answered this question. (175 were without data.)



Value	Frequency	Percentage
Rain water	104	37.14
Well water	29	10.36
Public water	4	1.43
Other source	3	1.07

B9 Which fertilizer do you use?

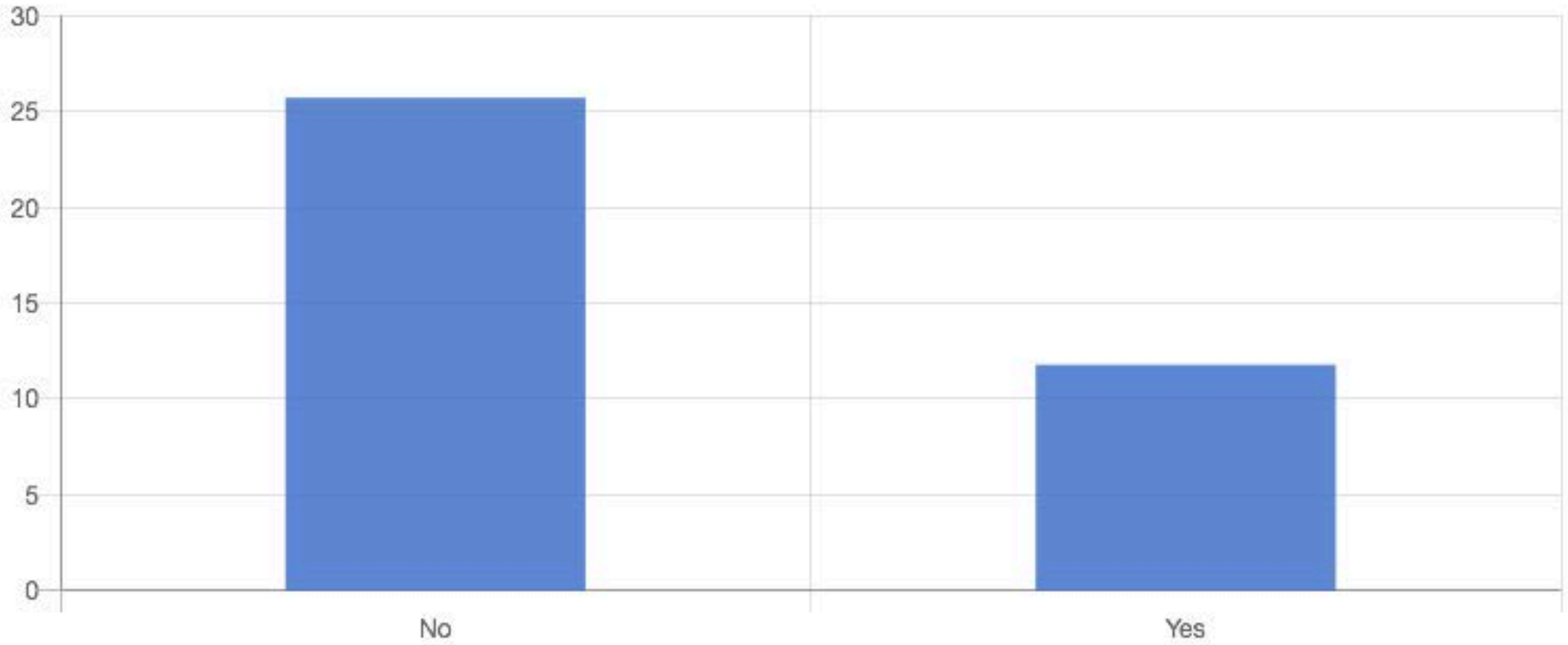
TYPE: "SELECT_MULTIPLE". 45 out of 280 respondents answered this question. (235 were without data.)



Value	Frequency	Percentage
Compost	40	14.29
Other	12	4.29
Manure	5	1.79
Don't know	2	0.71
Chemical formula	2	0.71

B10 Do you protect the crops against pests?

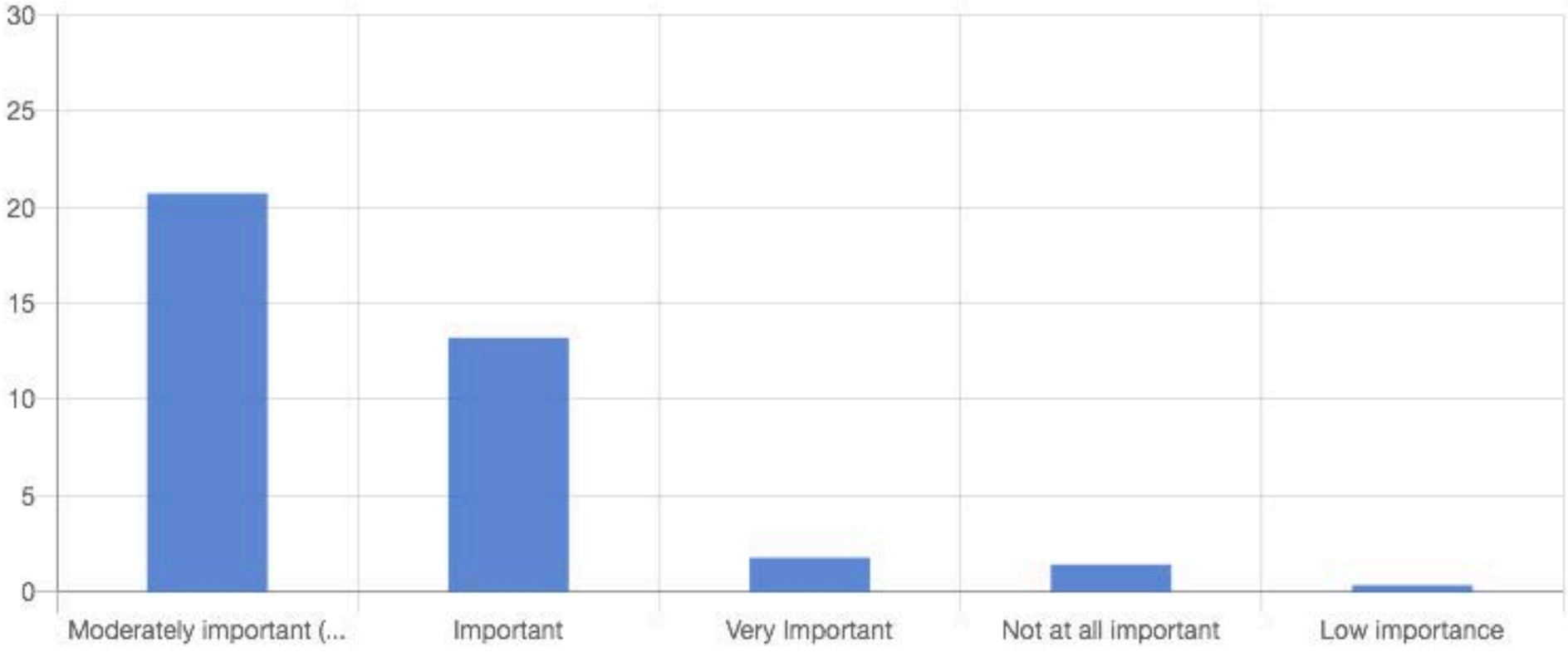
TYPE: "SELECT_ONE". 105 out of 280 respondents answered this question. (175 were without data.)



Value	Frequency	Percentage
No	72	25.71
Yes	33	11.79

B12 How important is the garden for your household's food supply?

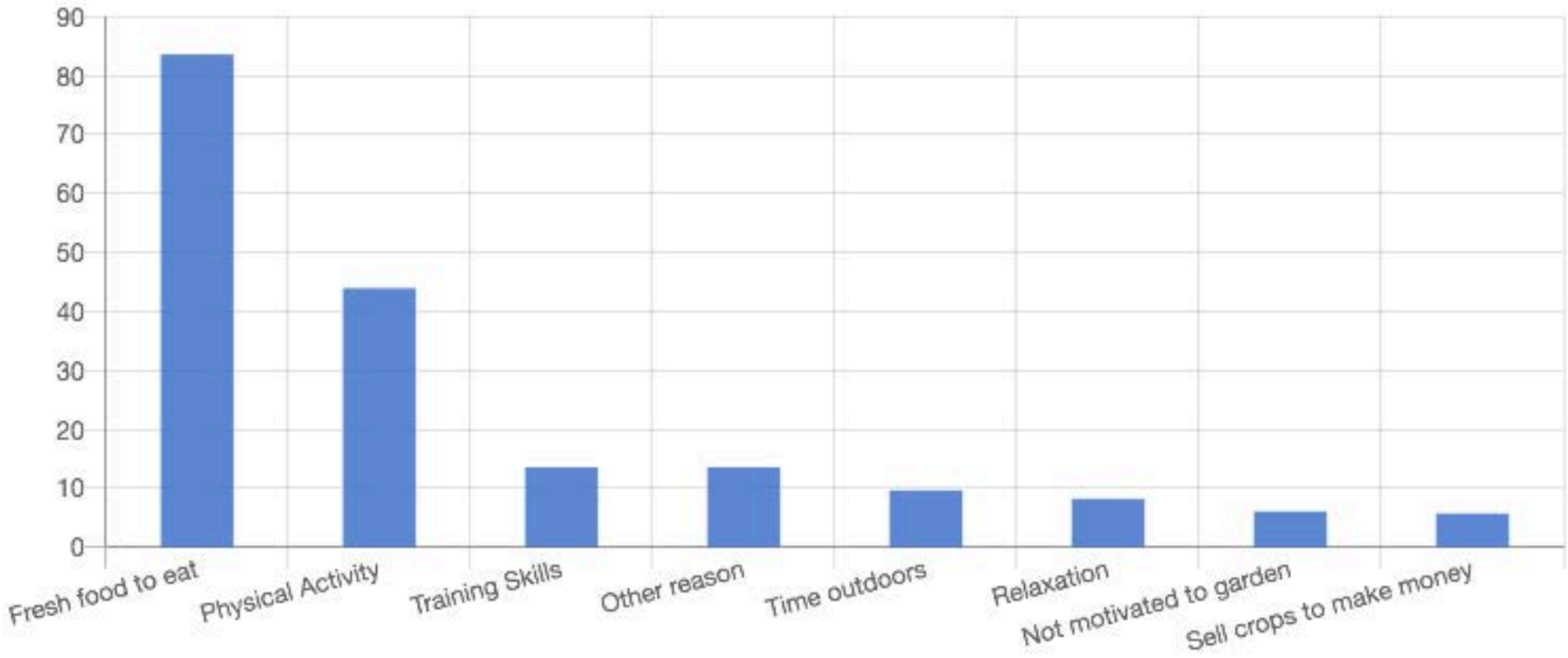
TYPE: "SELECT_ONE". 105 out of 280 respondents answered this question. (175 were without data.)



Value	Frequency	Percentage
Moderately important (Neutral)	58	20.71
Important	37	13.21
Very Important	5	1.79
Not at all important	4	1.43
Low importance	1	0.36

B13 What is your strongest motivation to garden or want to garden?

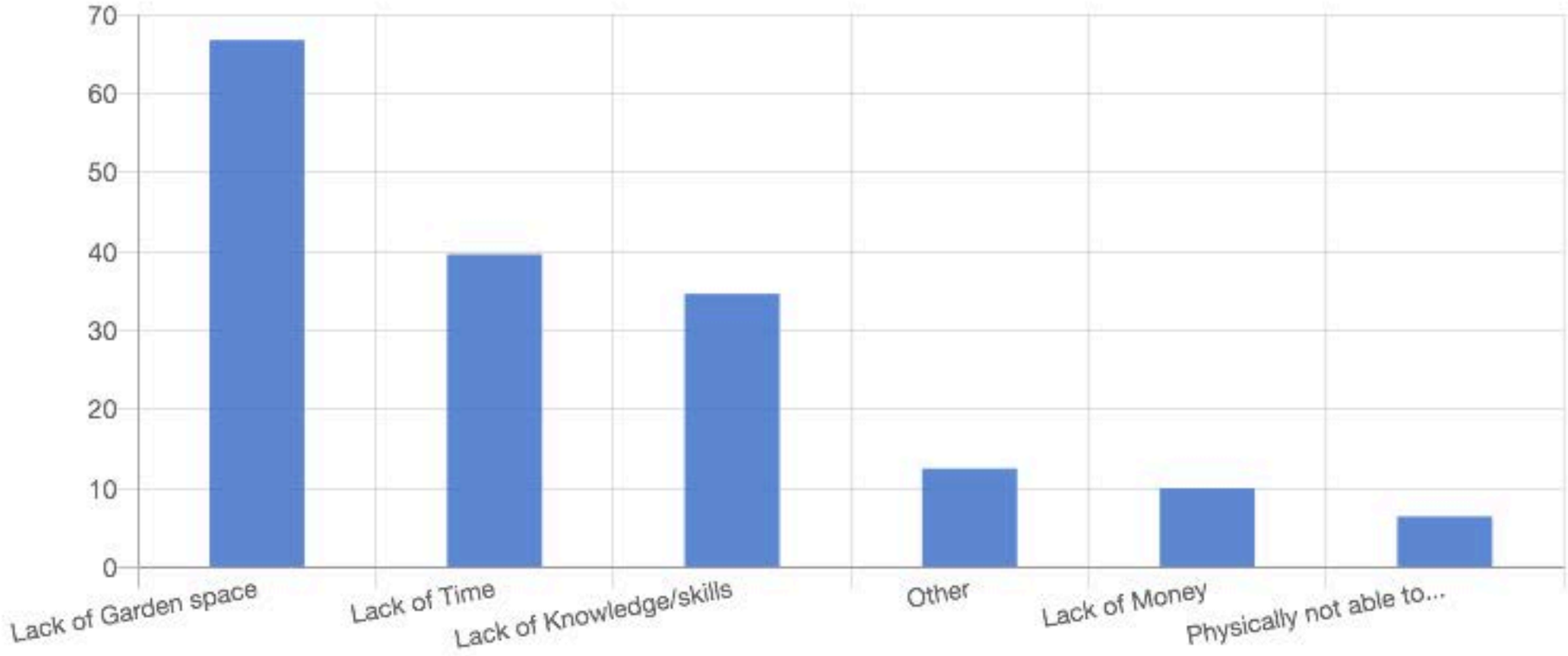
TYPE: "SELECT_MULTIPLE". 280 out of 280 respondents answered this question. (0 were without data.)



Value	Frequency	Percentage
Fresh food to eat	234	83.57
Physical Activity	123	43.93
Training Skills	38	13.57
Other reason	38	13.57
Time outdoors	27	9.64
Relaxation	23	8.21
Not motivated to garden	17	6.07
Sell crops to make money	16	5.71

B15 What are the main obstacles to making your garden better?

TYPE: "SELECT_MULTIPLE". 274 out of 280 respondents answered this question. (6 were without data.)



Value	Frequency	Percentage
Lack of Garden space	187	66.79
Lack of Time	111	39.64
Lack of Knowledge/skills	97	34.64
Other	35	12.5
Lack of Money	28	10
Physically not able to do so (because of age/sickness)	18	6.43


DUD assessment
Q: Do you Garden?
Yes: Green
No: Red