



Sri Lanka Institute of Information Technology
User Research

Project Name: SDG – Zero Hunger

**User Experience Engineering
SE3050**

Topic: Kill Hunger

Group ID: SEJ008

Reg No:	Name:	User Type
IT20666538	M.G.W Bhagya	Writing article/vlogs about the donations and get user attractions and help to give the idea about the application.
IT20230692	Arachchi S.C.S.	Request donations from donors and get donations through the app for children's home
IT20660352	Wijesooriya P.L.P.G.D.S.	Managing leftover food in hotels and restaurants and donating it to those in need through the app.
IT20137250	Rajapaksha R.C.P.	The process of collecting surplus food by donors and obtaining it by animal rights activists.

Folders containing interviews / video conference:

<https://drive.google.com/drive/folders/1vTDwWshAbd0Y7m-wJ-9l6w-FHh0ztP5f?usp=sharing>

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Introduction

Kill hunger is an app that it can use for sustainable development goal under Zero hunger Topic. Due to the events like COVID-19 outbreak, the war between Ukraine and Russia that happened not only for Sri Lanka but all over the world in the recent past, the whole world is facing different types of crises in these days. Among them, People feel the food crisis the most. So, we choose to find the solutions for this matter. We all want our families to have enough food to eat that is safe and nutritious. A world with zero hunger can positively impact our economies, health, education, equality and social development. It's a key piece of building a better future for everyone. Additionally, with hunger limiting human development, we will not be able to achieve the other sustainable development goals such as education, health and gender equality.

Under the Zero Hunger We mainly focus on 4 categories belongs to this solution that we can gave.

- Animal Right Activist
- Children's homeowners
- Food Donors
- Article Writers

Why we solve this problem?

Extreme hunger and malnutrition remain a barrier to sustainable development and creates a trap from which people cannot easily escape. Hunger and malnutrition mean less productive individuals, who are more prone to disease and thus often unable to earn more and improve their livelihoods. There are nearly 800 million people who suffer from hunger worldwide, the vast majority in developing countries. And homeless animals are always around us. They either not have home and enough food to survive. In this application we pay the attention them as well. We use for that as method of decrease the waste of food in the hotel and restaurants, they can donate their food for stray animals feeding as well as animal activist can receive that food and donate for animals.

The above-mentioned areas will be mainly focused while the implementing the application.

- Persona - IT20137250

As an animal right activist

He or she wants care of needy animals and provides them with nutritious food. Lack of time and not always being able to provide food are the main problems they face. Donors post surplus food through this link and he or she can get the required food through this link.

- Persona - IT20230692

As a warden of the children's home,

she wants to full fill the children's needs. if the warden faced some problems, such as not having enough food for children, some medications not available, or sometimes may be more expensive medicine situation she can get a solution through this mobile app.

- Persona – IT20660352

As an owner of the hotels and restaurant,

In the hotels and restaurants, he owns, a large amount of food is left at the end of the event every day. He works to contribute to meeting the food needs of people who need food without letting this food go to waste. This app makes it easy to make this process more successful.

- Persona -IT20666538

As an Article/Vlog author

She will write an articles/vlog about ongoing and exciting donations, donor's details after successfully done the donations. Main purpose of article author is giving an idea/knowledge about for readers and it will help to increase the donor's and help seekers. So, using this feature we can promote application among the peoples.

Goals

These are the goals that we must achieve by implementing this application.

According to our functionalities.

Animal Activist

The purpose of the user research is to find out the needs of the animal rights activist for this application. Using this user research, issues such as providing good food to the animals, managing, and utilizing surplus food items thrown away during festivals, finding out the cost of caring for and maintaining helpless animals, managing time, and finding ways to get the relevant food. In doing so, using this user research, I want to clarify those requirements. Also, want to know if have had this kind of experience before and get some suggestions about it.

Warden of children's home

The goal of the warden research is that ensure the requirements of as a receiver for this application. we took the supplying good foods, improve the health of children, education, finding special children and moving them for special treatments, manage staff and work with friends. those are the main goals and I need to clarify those requirements. Also, I needed to know if any previous experience has other than this, I want to get some suggestion from warden.

Hotel owners

The goal of the Hotel Owner research is that ensure the requirements of as a food donor for this application. Reducing food waste in hotels. Hotel management. Distribution of leftover food to needy people. Helping poor and needy families. Those are the main goals and I need to clarify those requirements. Also, I needed to know if any previous experience has other than this, I want to get some suggestion from hotel owner.

Article Author

The goal of article author in our system is to inform the other people what are we doing here and how can they join with us to do the donations or help to others or as hotel owners or as an animal activist what can you do in our system. As well as this must be help for us to increase the donors. I can write the article using different languages for easy to understand for readers.

Research Questions

T20137250 – RCP Rajaparksha

- What is the animal rights activist's expectation regarding the daily feeding process for the animals?
 - Does an animal rights activist have previous experience using the app?
 - Are all elements required or not?
 - How can an animal rights activist use Google Maps to meet their needs?
 - How easily can an animal rights activist receive donations?
 - Can they handle every feature in one application?
 - How do they currently manage work as an animal rights activist?
 - How do they currently manage their time as an animal rights activist?
- How do they provide healthy food for animals?

IT20230692 – Arachchi S.C.S

- How is the warden expectation about the reduce their special requirements?
- Did warden have previous experience about the using app?
- Do all the features are required or not?
- How to use the google map for warden fulfill their requirements?
- How warden receiving donations easily?
- Can they handle every feature in single application?
- Currently how do they manage the work as a warden?

T20660352-P.L.P.G.D.S.Wijesooriya

- What are the reasons and expectations for food donation?
- What are the reasons and expectations for food donation?
- Is this a successful solution for hotel food management?
- Even a busy person can easily make a food donation in minimum time through the app.
- How much food can be donated per day?
- How is the quality and standard of donated food?
- Are there any improvements that need to happen in the app from the food donor's side?
- Is this a successful solution for hotel food management?
- Even a busy person can easily make a food donation in minimum time through the app.
- Are there any improvements that need to happen in the app from the food donor's side?

IT20666538-M.G.W Bhagya

- How to find the details about the donors?
- How to find the experienced article author in this field?
- How we find the easy way pass the details to write?
- Do we categorize the articles into animal hunger and children's hunger?
- How we attract the readers for read the articles?
- Is this achieve our goals?
- What are the reasons and expectations for article writing?

Test Objectives

The following objectives were focused.

- Identify the exact user's requirements that need to be fulfilled through the app.
- Identify whether the selected functionalities require further improvements.
- Check whether the user requirements are fulfilled by the applications.
- Apply language guidance for user's better understand and make it easier to handle the application.
- Identify the shortcomings of functions by interviewing those related personas.
- Identify the more things to add the related functions by interviewing those related personas.
- Establish a user performance baseline and satisfactory levels after using the application.
- Compare with these related other applications to get more efficient application
- Create user-friendly interfaces to make easier to handle this app to users.
- Create navigations easier to understand how this application navigate with each user interfaces.

Methodology

After picking two individuals from the list of personas, user research was undertaken to discover pain areas and test the aforementioned hypothesis. The user experience research methods selected were user interviews and consumer feedback collected via a distributed Google form (Questionnaires). These methods were inexpensive, straightforward, and efficient, in contrast to costly methods such as usability lab studies and ethnographic field research, which were either far more costly or time-consuming.

Interview

- All the members were selected four persons who best match for their personas and each and every team member was interviewed their related persons by their place (Working or Home).
- One interviewer was interviewed by our one team member.
- The majority of the questions answered throughout the interview were closed-ended so as to focus on the matter at hand. However, open-ended questions allowing users to express their opinions were also included.
- We decided to visit their places and interview them because that would help us to prove the interview was truly done by the related persons.
- A script was written prior to ensure that all components of the test objectives were covered.
- While one member conducted the interview, the other took notes and ensured that all requirement gathering goals were covered.

Procedure for the interview

- A brief explanation of the application that was about to be implemented was provided to the team member.
- Participants were asked a series of questions to determine if they met the demographic requirements of the persona.
- Then, we were informed on the tasks that needed to be performed. The facilitators also informed the participants that their performance will be timed and evaluated based on their ability to complete the application efficiently. Additionally, they were instructed not to depart from the work at hand and not to deviate from the specified path in order to accomplish the allocated application.
- Participants were urged to steer the team through their thought process while they performed the activities so that a viable concept could be reached.
- All ideas and the recording procedure were captured.
- After the completion of the entire procedure, the employees were asked to respond to a number of questions requiring a retrospective view.

The persons who were interacting with interview process

- **Interviewee**

- The person who was selected to fixed for interview. He is the person who has good knowledge and experienced about specify function.

- **Interviewer**

- One of our team member who was ready to interview his persona related person to get more information about his function.

- **Team members**

- While interviewer and interviewee were interviewed, team members check that all components of the test objectives were covered.

Interviewing

Interview Link:

Four interviews were done to determine the pain points from the user's perspective. In this section, the protocol and code of conduct for the interview will be addressed.

- In order to accomplish this, a script was drafted that detailed all of the system's features.
- The primary purpose was to comprehend the challenges that a typical program user encounter.
- We were trying get more information by using interviewing methods.
- We were interviewed our interviewers by visits their places.

Interview 1 Script (IT20137250)

--Welcome the user,

--Hii, Let's catch up with Imesha to know more about her career path and her life in general.

--Questions to get an understanding of the user's demography,

1. Mrs.Imesha a brief introduction about you.

2. Imesha, it's difficult to know where to start with such a high-achieving successful career women, but I guess, my first question has to be-Looking back, are there any indications from your childhood that foreshadowed your becoming an animal right activist?

3. You were very much an animal person and animal lover. Do you think that this had an impact on what you wanted to do and make happen in later life?

4. What are the reasons for thinking so?

--Ok, now let's get to the main purpose of this interview.

--Questions to understand how the user thinks about receiving the donation process using an app and identifying the user's problem.

5. I know you are a busy person and you are unmarried. So are you able to feed such a large group of animals on a regular basis? Is there time for that? If you inform us about it.

6. What food do you usually feed your pets?

7. If you buy food from the store, you have to spend extra money for it, right?

8. Would it be useful for you if we make this app to receive more food that is collected at a wedding or any other event?

9. Have you used an app like this before?

10. Or has this kind of leftover food been obtained to give to the animals before?

11. Did you have any deficiency in the food or was it in good enough condition to feed the animals?

--Questions about how to catch after selecting your donations,

12. What is your preferred method of receiving donations? for example,
go to a donation spot or, getting to the desired location items.

13. We want to add google Maps to this app. So, is it ok for you or do you have any suggestions?

--Questions to understand how the user thinks about the success or failure of the application.

14. Well, with the introduction of this app, can the process you expected through it be successful?

15. Well, tell me if you have any ideas or suggestions that you think can be added to this app.

16. Are you satisfied with this app?

17. Finally, Do you recommend the app for anyone?

--Thanks to the user

Interview 2 Script (IT20230692)

--Welcome the user,

--Questions to get an understanding of the user's demography,

- Madam, first of all, Tell us bit about yourself briefly...
- so, it means you have a lot of experience in this field. According to that what are your goals as a warden?
- Have you received donations before? if so, how did you do that?
- Have you used an application to obtain aid for the children's home?
- Can you describe your experience while using the application?
- Did you faced any difficulties using that app?

--Questions to get an understanding about the lack of global sign in

- Did you find the lack of global sign-in in the application annoying?
- Do you think the current signup and sign-in method is safe and well-authenticated?
- Do you have any suggestions for that rather than login in with a phone number? like
Facebook Authentication
Google Authentication
Username Password
- Do you have any suggestions for improving the app trust? like
donners and receivers are authentication.

--Questions about how to catch after selecting your donations

- We want to add google Maps to this app. So, is it ok for you or do you have any suggestions?

---Questions to understanding how the user thinks about receiving donations process using an app

- According to the Sri Lankan global nutrition reports, over 17.3% of children under 5 years of age are still malnutrition.

So, what do you think about the situation?

- So in that situation, we like to reduce malnutrition through this mobile app. it's like you can get the donations and request your needs from the donators.

So what do you think about this mobile solution?

- What kind of features do you expect from our app?
- What is your preferred method of receiving donations? for example,
go to a donation spot,

getting to the desired location items

- Finally, Do you have any suggestions for our app?

--Thanks to the user

Thank you for allocating some of your valuable time and share your valuable ideas with us.

Interview 3 Script (IT20660352)

--A brief introduction about the app and its purpose for User.

--Welcome the user,

--Questions to get an understanding of the user's demography,

- Mr. Perera , first of all, Tell us bit about yourself briefly...

--Questions to get an understanding of the user's Food Donation,

- Mr. Perera , why did you turn to food donation?
- How long have you been doing food donation?
- How much food is wasted daily?
- What causes this food waste?
- Have you donated leftovers before?
- If food has been donated, what is the Method?
- What caused the previous method to fail?
- How did you find out about this app?

--Questions to get an understanding of the app's success is related to the user's tasks,

- The success of this app considering the previous process
- Have you studied the functionality of this app?
- Mr. Perera ,What are the facilities provided in this app to make your work easier
- Accordingly, are you satisfied with the functionality of this app?

--Questions to get an understanding of The goals that the user hopes to meet through this application,

- The main goal that this app aims to achieve
- Other goals that this app hopes to achieve
- Your message to the society through this process

--Questions to get an understanding of The feedback given by the user about the app,

- Are you satisfied with this app?
- Mr. Perera , What weaknesses do you see in this app?
- Is this app user friendly? What do you recommend from your side to make it easier
- Mr. Perera , What are the future improvements to this app?

Interview 4 Script (IT20666538)

---Welcome the user,

----A brief introduction about the app and its purpose for User and introduce to him, who we are what is the purpose of us.

--Questions to get an understanding of the user's demography,

#Before we enter to our main topic, Mr. Gamage Can you tell a little bit about you.. Like who are you, where are from, what is your career...

#When we inquired about you, we got to know that you are a teacher as well as an article writer. Do you engage in article writing as a hobby? Or as a job?

#How long have you been writing articles?

#Can we tell you about your experience in writing an article?

--Questions to get an understanding of the Article Writing

#Do you like to write vlogs in newspapers and on a website?

#Do you have experience writing articles in an application or website before?

#What methods do you use to write articles?

#Do you think it would be good if we make an application for something like this and write articles from it and do an awareness program?

--Questions to get an understanding of the goals that the user hopes to meet through this application,

#The major objective of this application

#Other objectives this application wants to accomplish

#Your message to the community via this procedure

Is this app user friendly? What do you recommend from your side to make it easier

--Questions to get an understanding of the feedback given by the user about the app,

#Do you think that what we used for informing people using this article method is good?

#Using this article writing, our purpose of this is give idea about what our application done and promote our application, will it success?

#Any suggestions do you have to give us to make this application better?

--Thanks to the user

Thank you for allocating some of your valuable time and share your valuable ideas with us.

Questionnaire

- It was easier to examine the data after distributing a questionnaire that consisted primarily of questions with quantitative responses.
- The questionnaire was included 15 questions in one section.
- questions were included primarily to gain a sense of the demographics of the users.
- To see if there was a correlation between the demographics of the users and how they felt about the application, general questions such as age group and gender were asked.
- The subsequent questionnaire included the four most important features of the program with an emphasis on the user experience.

Google Form Link:

https://docs.google.com/forms/d/e/1FAIpQLSdWoG0hYQFiBy0TDKXpUFGiBXyINs4G5xv1aKTa pmXicHmC3w/viewform?usp=sf_link

Thought process behind making the question.

- The questionnaire is one section with including all the functions requirements were questioned.

○ Demographic questions

According to get an understanding about the user's demography questions such as

- Age group
- Province, you live in
- Occupation
- Monthly income
- Numbers of family members

By gathering qualitative category data, it is feasible to determine if there is a correlation between them and the degrees of satisfaction.

○ Functionality target Questions

- All the questions were specifically designed to address the certain functionalities.
- Questions were separated to our four functionalities and that mainly focus to how to fulfill our requirements analysis and gathering.
- Questions are focus on children's hunger, homeless animal's hunger, how can hoteliers to participate for this process and write a vlog series for donations.
- Finally, we have been asking from people if we implement this type of application with using this feature, will it be successful.

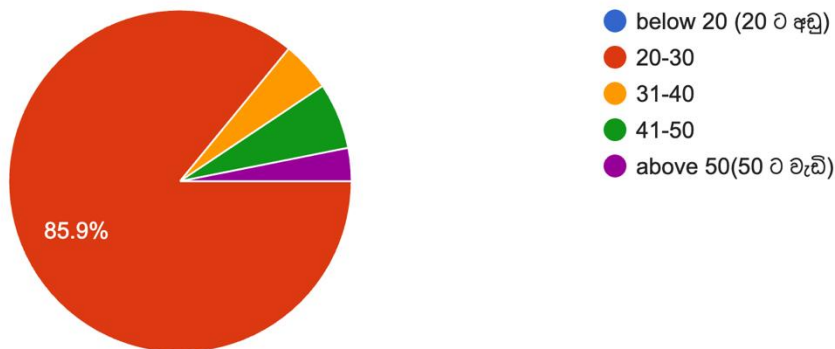
How the questionnaire should be distributed and data collection process

- The questionnaire is planned to be distributed online since it was created using google forms
- The main method is to distribute through WhatsApp groups
- Also, other social media platforms such as Facebook and Instagram are planned to be used
- One other method of data collection is online forums

Questions & Responses

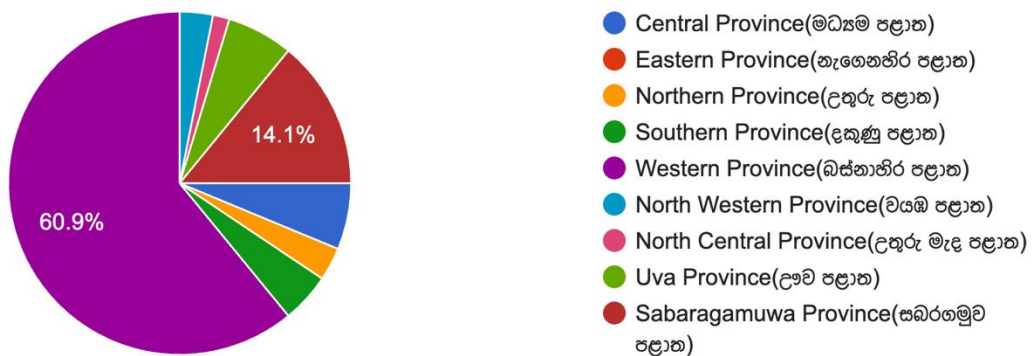
1. Age group (in Years)?වයස් කාණ්ඩය (වසර වලින්)?

64 responses



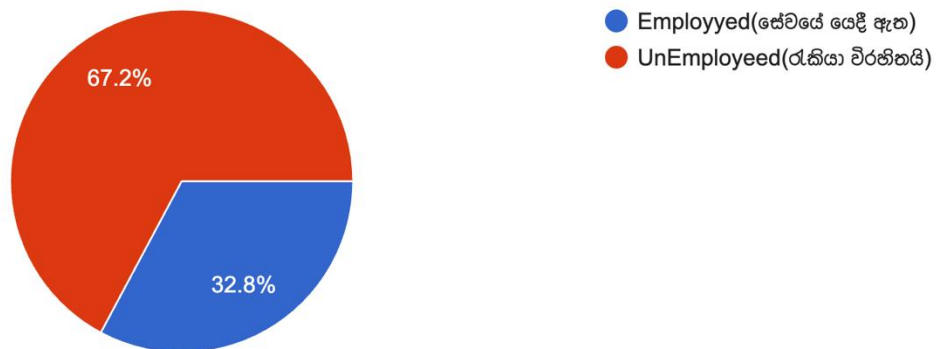
2. The Province you live in ?(ඔබ ජීවත් වන පළාත?)

64 responses



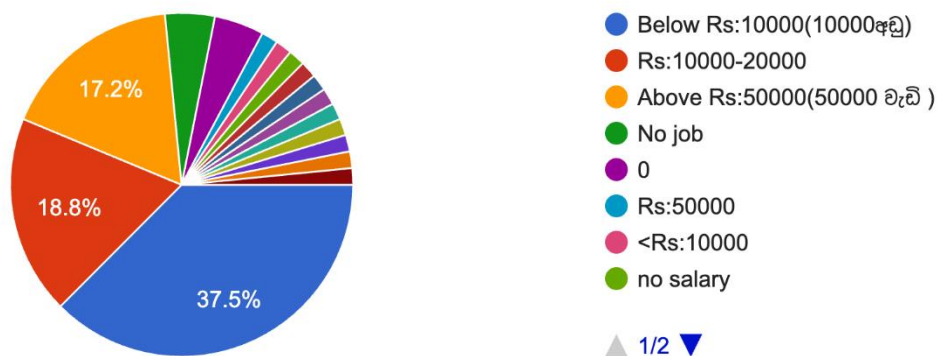
3. What is your occupation? (ඔබේ රැකියාව කුමක්ද?)

64 responses



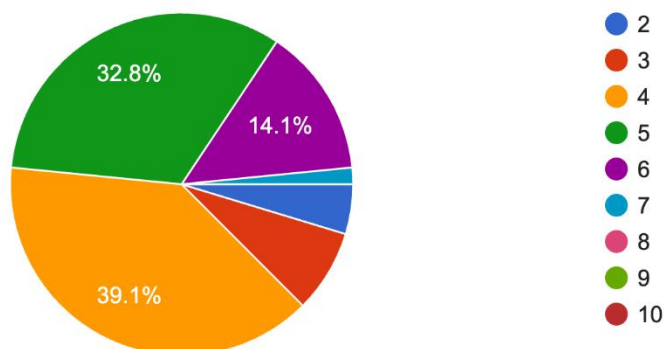
4. What is your monthly income? (ඔබේ මාසික ආදායම කීයද?)

64 responses



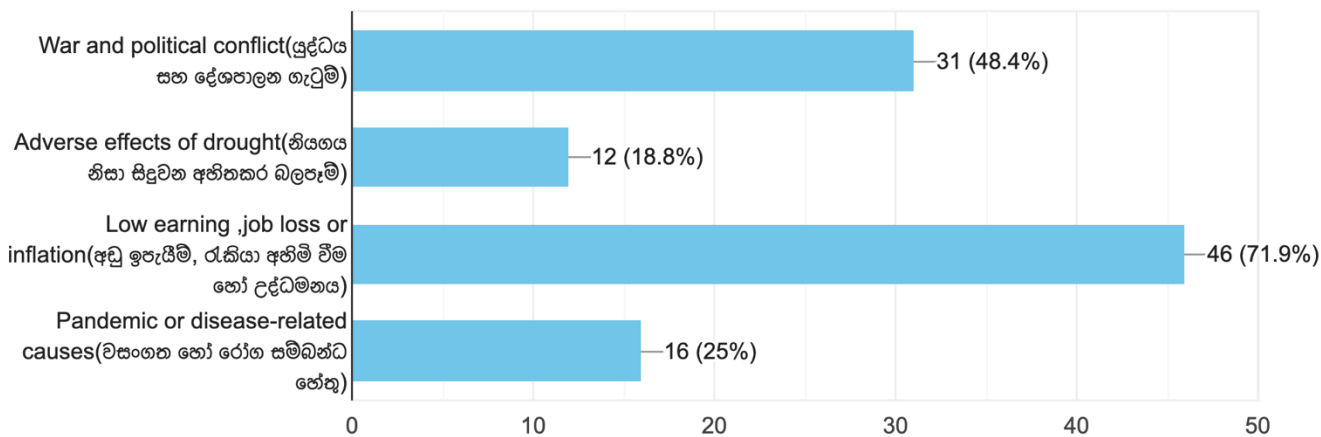
5. Number of family members? (පවුලේ සාමාජිකයන් ගණන?)

64 responses



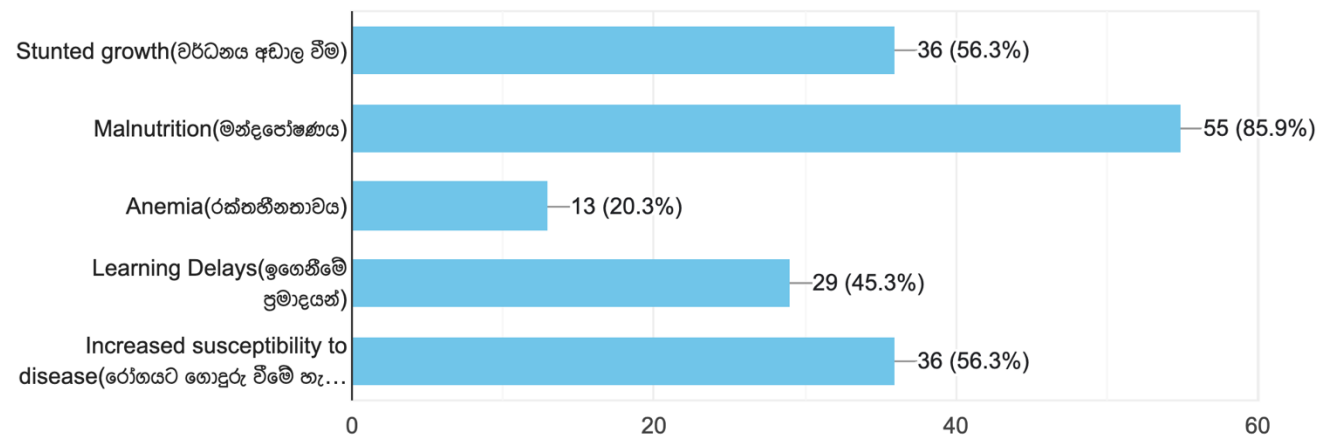
6. What do you think about what are some of the causes of food shortage?(මබ සිතන්නේ ආහාර නිගය ඇතිවීමට හේතු මොනවාද?)

64 responses



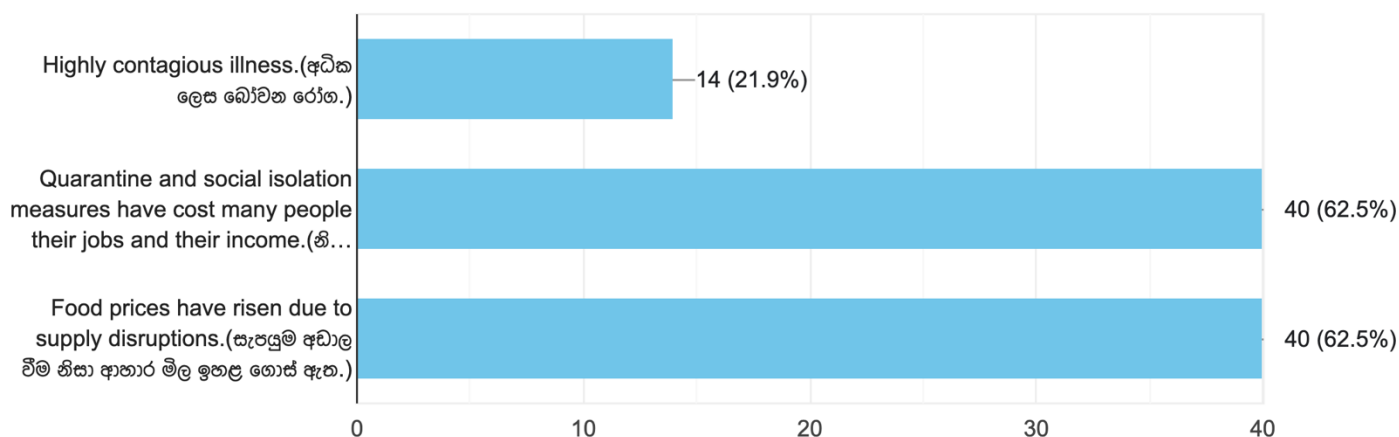
7. What do you think about what are some of the negative consequences of food insecurity or hunger for children?(මබ සිතන්නේ, දරුවන්ට ආහාර අහාර... ආහාර නිගය නිසා ඇති වන අනිතකර ප්‍රතිඵලාක මොනවාද?)

64 responses



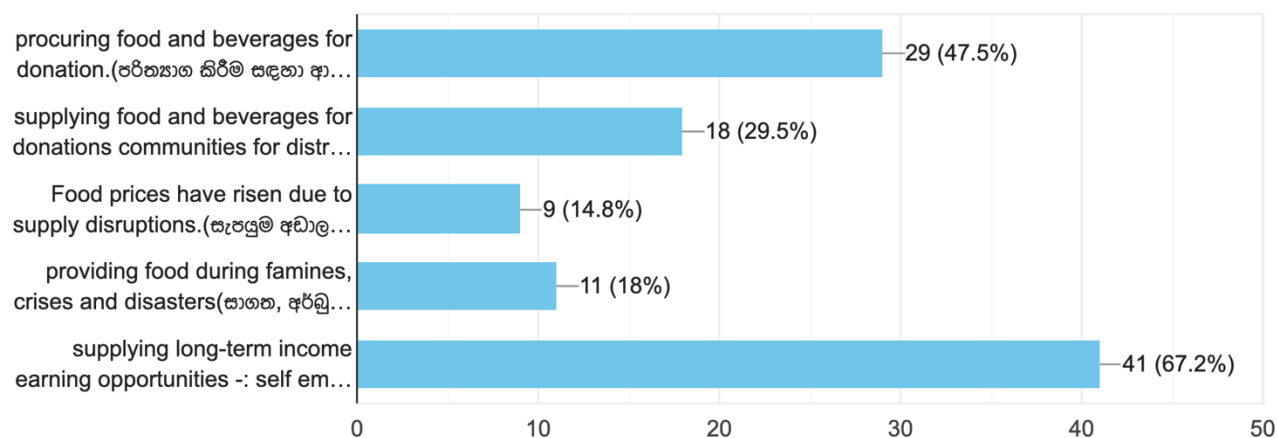
8. What do you think about what impact has covid-19 had on the need for hunger relief? (ඔබ සිතන්නේ, ආහාර නිගයට covid-19 ඇතිකර තිබෙන බලපෑම කුමක්ද?)

64 responses



9. What are some specific steps orientation is taking to help with hunger relief? (ආහාර නිගය සඳහා උපකාර කිරීම සඳහා නිශ්චිත පියවර මොනවාද?)

61 responses



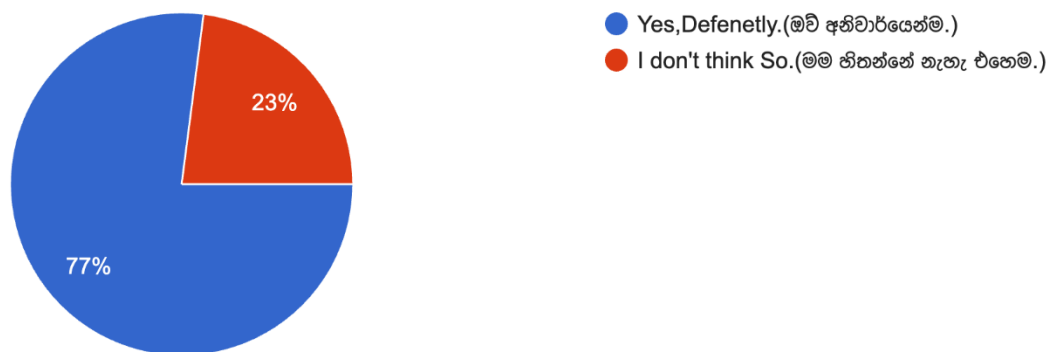
10. if you can't donate. How else can you support the donations and mobilize resources in the community to achieve end hunger goals. What do you t... වඩාත්ම සුදුසු ක්‍රමය කුමක්දැයි ඔබ සිතන්නේ කුමක්ද?

61 responses



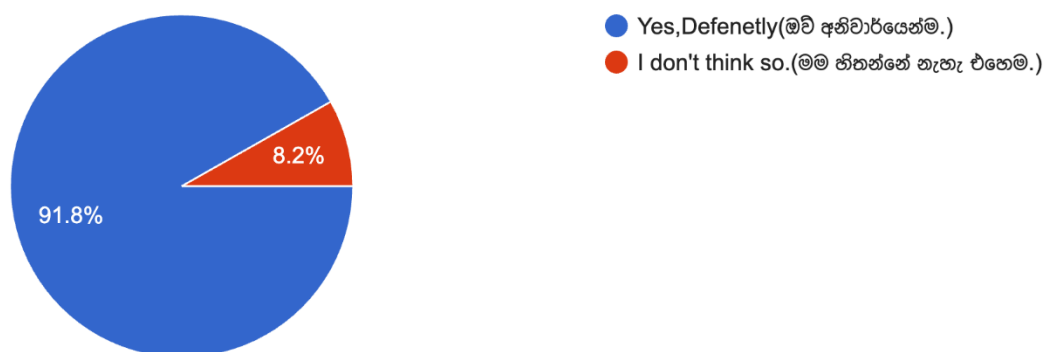
11. There are so many animal activists round if we connect animal activities in this app for consideration animal hunger relief, will it work?(සත්ව ...න් බොහෝ සත්ව ක්‍රියාකාරීත් සිටී, එය ක්‍රියාත්මක වේවිද?)

61 responses



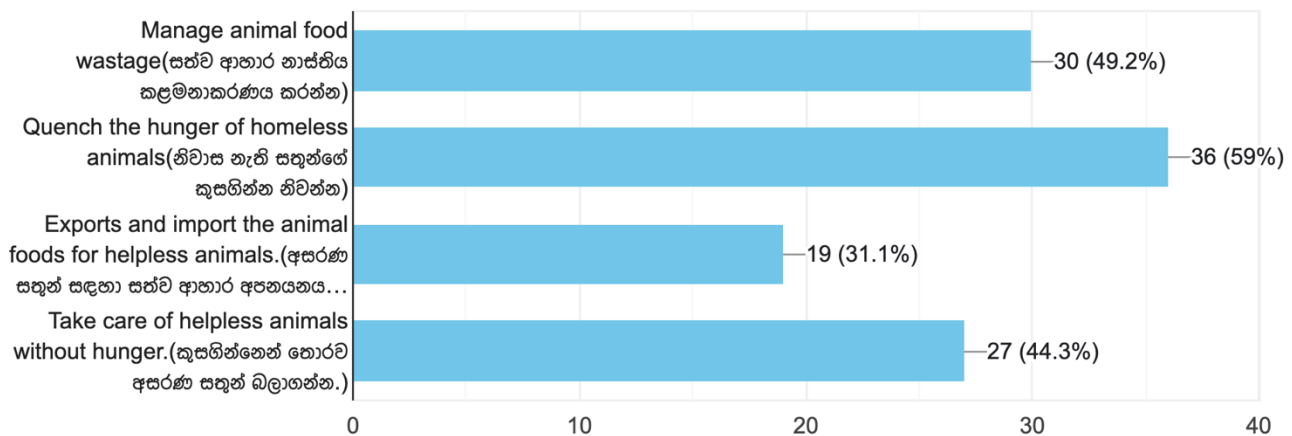
13. For children's hunger relief,If we connect the warden of children's home; Do you think is this helpful for fulfil our purpose?(දරුවන්ගේ ආහාර භීතය...ේ අරමුණ ඉටුකර ගැනීමට උපකාරී වේ යැයි ඔබ සිතනවාද?)

61 responses



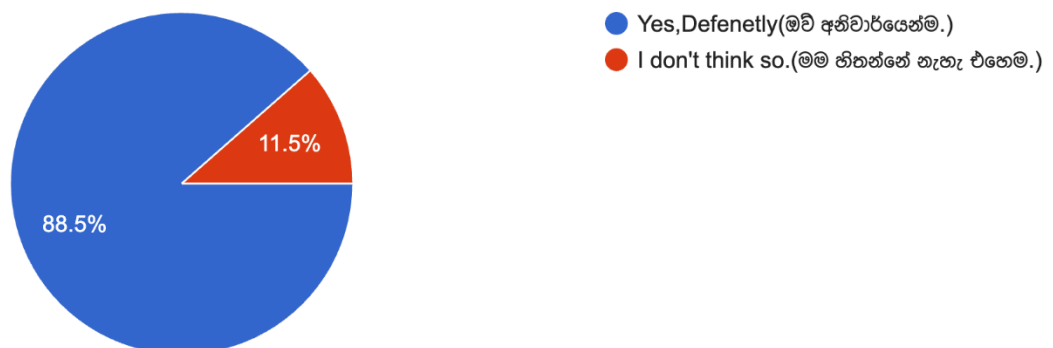
12. What are the goals can achieve when we connect the animal activities for this app?(අපි මෙම යෙදුම සඳහා සත්ව ක්‍රියාකාරකම් සම්බන්ධ කරන විට ප්‍රභා කර ගත හැකි ඉලක්ක මොනවාද?)

61 responses



14. For increase the donors and receivers also give idea about our donations for outsiders, If we write the vlogs about our ongoing donations; Do you... අරමුණ ඉටුකර ගැනීමට උපකාරී වේ යැයි ඔබ සිතනවාද? (මම හිතන්නේ නැතැ එහෙම.)

61 responses



Participant Profiles

The table below provides a breakdown of the participants selected for testing:

Interviewee Name	Demography	Location, Date and Time	Interviewer Name
Mr.Gamage	1. Employed 2. Age - 67 3. Gender – Male 4. Marital Status – Married 5. Location - Colombo 6. Profession –Retired Teacher/Article Author 7. He is an English teacher also he likes write articles and Books.	Location – Gamage’s place Physically Date – 26/09/2022 Time – 13:00 PM.	M.G.W Bhagya
H.B.Imesha Ranathunga	1. Employed 2. Age - 25 3. Gender – Female 4. Marital Status – Single 5. Location - Colombo 6. Profession – Businessman/Animal Right Activist 7. Animal Lover	Location – Imesha’s place Physically Date – 26/09/2022 Time – 13:00 PM.	Rajapaksha R.C.P
Mrs. Gunawardhana	1. Employed 2. Age – 40 – 50 3. Gender – Female 4. Marital Status – Married 5. Location - Meegoda 6. Profession – warden of the children home 7. she love working as a sociality	Location - Sanhinda Children Home, Meegoda, Physically, Date - 26 / 09 / 2022, Time - 14:00 PM.	Arachchi S.C.S
Mr.Reshan Perera	1. Employed(Owner) 2. Age – 25 3. Gender – Male 4. Marital Status – Married 5. Location - Mathara 6. Profession – Owner of Perera Hotels & Resort 7. hotels & Restaurant owner	Perera Beach Resort Office, weligama, Physically, 24/ 09 / 2022, 15:00 PM.	Wijesooriya P.L.P.G.D.S

Protocols

- IT20137250

We went to physically meet the animal rights activist.

After that, we showed the user flow and gave a little introduction to our system.

Checked technical knowledge related to our application.

Then got suggestions and feedback for app features.

- IT20230692

We went to meet the warden physically.

Then we show the user flow and gave a brief introduction to our system as a warden's flow.

check warden technical knowledge related to our app

Then get any suggestions from the warden for the app features.

- IT20660352

We went to meet hotel owner the physically.

Then we show the user flow and gave a brief introduction to our system as our system.

check hotel owner technical knowledge related to our app

Then get any suggestions from the warden for the app features.

- IT20666538

We went to meet the Article Author so visited his home place in kottawa.

Then we show the user flow and gave a brief introduction to our system as an article writers user flow.

check author's technical knowledge related to our app

Then get any suggestions from the warden for the app features.