

#### CHILD HEALTH ENVIRONMENT AND SAFETY TRUST





Program Theme: E-Waste Recovery: A Growing Threat to the Environment and Child's Health.

Date: 30th of September 2023.

Venue: Alaka community, Ojoo, Ibadan, Oyo State.

#### **BACKGROUND**

Safe disposal of wastes generated from human activities is a globally recognized problem. However, the magnitude of the problem is higher in countries with little or no adequate regulation and where generated wastes are often discarded in dumpsites and landfills. Due to the lack of official governance, regulation, structure and institutionalisation by appropriate bodies, these dumpsites are usually scavenged by the poor, including children, in search of items of value that can be sold to make a living, thereby increasing their risk of injuries and exposure to morbidity-causing and life-threatening hazardous substances. Hence, the aim of the program was to explore the trends in e-waste recovery, assess the market values, its associated hazards and strategies to prevent exposure to dangers of the work process.

The program took place on 30th of September, 2023, at Alaka community in Ojoo area of Ibadan, Oyo state. The specific objectives were to:

- 1. assess e-wastes' recovery activities amongst wastes scavengers in Ibadan.
- 2. identify injuries/hazards associated with the e-wastes recovery process.
- 3. determine the burden of school children drop-out due to e-wastes scavenging.
- 4. identify risk prevention measures for people working with e-wastes.

#### TARGET POPULATION

The target population for this program are informal e-waste workers with a focus on children and mothers living near the recovery sites.

#### APPROACH ADOPTED FOR THE PROGRAMME

The following strategies were employed to achieve the objectives of the programme:

- Community entry: This was done by approaching and meeting with the spokesperson of the e-waste workers who introduced and helped gathered other people involved in the activity.
- i. **Surveillance:** A survey was carried out via an interviewer administered questionnaire method where socio-demographic characteristics of workers, occupational history and

work activities, attitude of workers towards health and safety in the work environment were assessed.

- ii. Training: A sensitization was carried out by the Mrs Huswah Sideeq-Fakeye, Prof.G.R.E.E Ana, and Mrs Ana via an advocacy and enlightenment session.
- **iii. Intervention:** The survey and training participants were provided with a pair of wool gloves individually which serves as a means of incentive for taking part in the survey and as a form of palliative.

#### HIGHLIGHTS OF THE EVENT

The program started with the surveillance part which took place on the 28th of September 2023, wherein workers at the e-waste recovery sites were interviewed in local languages; Yoruba and Hausa using the prepared instrument. Prior to this, the spokesperson had informed and mobilized the participants, hence it was quite easy to carry out the survey.

The training part of the program took place on the 30th of September 2023, at an open space in community. The program started at 12:30pm with a welcome address from the Program Manager, Mrs Huswah Fakeye, who gave a brief profile of the organisation, focusing on its vision, mission and its work activities. She went further to introduce the executives of the organisation in person of Prof G.R.E.E. Ana who is the President/Founder and the Mrs Margret Ana, the Executive Director.

The training session started with a presentation on the topic "The E-waste Trends" by Mrs Huswah Fakeye where she gave an exposition on what e-waste is and how much of a problem the e-waste's stream is causing the environment despite its economic considerations. She expressed concerns about how most of the electronic wastes generated are often recycled in the informal waste management settings available in low- and middle-income countries like Nigeria.

She went further to discuss the potential harms faced by those who work in these settings and those not directly involved in the work activities but are exposed nonetheless (women and children) as well as harms caused to the environment by their work processes, citing references from the international health agencies such as the WHO and UNICEF. She ended by giving strategies to

employ to prevent the contamination and pollution of the communities where e-waste recycling are being carried out and ways to promote healthy living for all.

The training session was supported by the President, Prof., G.R.E.E. Ana who talked about how important the issues surrounding children's health are, how the improper means of managing wastes generated affect the environment as well as the health of all living things in the environment. He encouraged the participants who believed the purpose of working is to make ends meet for themselves and their dependents and would go to any length to achieve that to take cognizance of their health and environment while trying to achieve that purpose. He focused specifically on parents who work and trade or live around these e-wastes recovery sites

The Executive Director, Mrs Margaret Ana who also doubles as a representative from the environmental agency of the Federal Government of Nigeria known as the National Environmental Standards Regulations Enforcement Agency (NESREA) also contributed to the training by sharing the goal of the agency which is to "ensure a cleaner and healthier environment to Nigerians". Therefore, she urged all participants to adhere to the rules and strategies that have been mentioned in order to live a sound healthier life.

At the end of the training sessions, feedbacks were received from some of the participants who thanked the organizers of the training and promise to abide by the lessons in it in the best manner possible. They further asked that the organization help the e-waste workers in empowering them with some Personal Protective Equipment such as coveralls and safety boots which can limit their exposure to the hazards of their work activities.

The closing remark was made and the programme came to an end by 2.00pm with group photograph and refreshment.

#### **IMPACT**

At the ending of the program, the following impacts were made:

- An increased awareness of e-waste management.
- An improvement in knowledge and decision-making ability of e-waste recovery workers.

## **CHALLENGES**

• **Partnership/Sponsorship:** Inability to secure adequate funding support and partner organizations for the programme.

## RECOMMENDATION

The participants were enjoined to form a task force that will ensure the rules of prevention of environmental pollution and promotion of good health amongst e-waste workers and their community are being complied to.

## **Survey Findings**

## **Social-demographics characteristics**

The socio-demographic characteristics of the e-waste workers who participated in the survey are presented in Table 1 below. The findings showed that the age of the participants ranged between 20-49 years with the e-waste workers in their 20s dominating the highest percentage of 46.2%. All of the respondents practice Islam. More than half of the respondents reported having had secondary school education 61.2%, 23.1% obtained primary education, 7.7% of them had tertiary education while 7.7% of the respondents had non-formal education.

69.2% of the respondents are married while 30.8% are still single. Based on Ethnicity, 53.8% were Yoruba while 46.2% were Hausa with family size of the respondents ranges from 1-7 and a monthly income ranging between №5,000 - №100,000.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency	Percentage
Age (years)		
20-29	6	46.2
30-39	3	23.1
40-49	4	30.8
Religion		
Islam	13	100
Level of Education		
Non-Formal	1	7.7
Primary	3	23.1
Secondary	8	61.5
Tertiary	1	7.7
Marital Status		
Married	9	69.2
Single	4	30.8
Ethnicity		
Yoruba	7	53.8
Hausa	6	46.2

Table 1b: Socio-demographic characteristics of respondents

Variable	Frequency	Percentage
Family size		
1	4	30.8
3	3	23.1
4	4	30.1
6	1	7.7
7	1	7.7
Income per month		
№5,000- №10,000	2	8.3
<b>№</b> 11,000- <b>№</b> 20,000	6	25
<b>№</b> 21,000- <b>№</b> 50,000	1	4.2
<b>№</b> 50,000- <b>№</b> 100,000	10	41.7
№200,000-№500,000	4	16.7
№600,000- №1,000, 000	1	4.2

## Occupational history and activities of respondents.

The survey findings showed that 76.9% of the respondents have been working in the e-waste management sector for more than 5 years and 23.1% have been working for 3-5 years .61.5% of the respondents work for 7 days while others work for 5 days (38.5%) in a work duration of exact 8 hours per day (46.2%) and more than 8 hours per day (53.8%).

The electronic wastes recovered at the workshops were mostly household and office electronics such as discarded televisions, refrigerators/freezers, washing machines, printers amongst others. Resources recovered during the recycling process include copper, iron, brass, zinc, aluminium which are weighed in kilogram and sold.

**Table 2: Occupational history and activities** 

Variable	Frequency	Percentage
How many hours per day do you work for?		
8 hours More than 8 hours	6	46.2
	7	53.8
How many days per week do you work for?		
5 days	5	38.5
7 days	8	61.5
What are the types of wastes do you work on here?		
Household wastes	10	76.9
Metal scraps	3	23.1
What are the resources recovered during the recovery process?		
Copper, iron, brass, zinc, aluminum.	13	100
How do you market these resources?		
Weigh them in kilogram before sales.	13	100

## Attitude of workers toward health and safety in the work environment

The survey findings showed that just majority of the respondents (69.2%) do not make use of the Personal Protective Equipment (PPE) and only about 30% of them protect themselves while carrying out their work activities. The PPE mostly used is overalls, while few people mentioned safety boots and nose covers. Reasons for non-usage amongst the others include unavailability of PPEs, negligence and discomfort.

More than half of the interviewed workers (53.8%) knew e-wastes contain some hazardous constituents and are aware that it has dangerous effect on man causing health problems such as injuries, respiratory issues etc and as well as the quality of the environment.

All of the respondents reported having sustained injuries ranging from cuts to burns during their work activity. However, 61.5% of them reported not having falling sick in the past 3 months and 46.2% reported visiting a health practitioner for medical check-up whenever any health issue arises with about 50% of them claiming they were always home treated.

Table 3: Attitude of workers towards health and safety in the work environment

Variable	Frequency	Percentage
Do you wear personal protective equipment while working?		
Yes	4	30.8
No	9	69.2
If yes, what type?		
Overall	4	30.8
Safety Boots	1	7.7
Nose cover	1	7.7
If no, why?		
Because it's not available	5	38.5
I'm not used to it	1	7.7
Discomfort	1	7.7
I don't know	2	15.4
Do you know that E-wastes contain some hazardous constituents?		
Yes	7	53.8
No	6	46.2

Table 3b: Attitude of workers towards health and safety in the work environment

Variable	Frequency	Percentage
Are you aware that E-wastes		
have dangerous effect on man?		
Yes	6	46.2
No	6	46.2
Maybe	1	7.7
If yes, what are the dangerous effects that you know?		
Respiratory problem	3	23.1
Excretory problem	1	7.7
Shock	1	7.7
Cut	1	7.7
No idea	7	53.8
Do you know that E-wastes are hazardous to the Environments?		
Yes	7	53.8
No	6	46.2
Have you ever been injured during work activity?		
Yes	13	100
No	0	0

Table 3c: Attitude of workers towards health and safety in the work environment

Variable	Frequency	Percentage
In the past 3 Months, how often did you get sick?		
Rarely	2	15.4
Once	3	23.1
Not at all	8	61.5
Do you normally consult a health practitioner for medical check-up?		
Yes		
No	6	46.2
	7	53.8
If yes, when last did you visit?		
Last 3 Month	2	15.4
Last 6 Month	2	15.4
Last Year	3	23.1
Others (None)	6	46.2

#### **APPENDICES**

# CHILD HEALTH ENVIRONMENT AND SAFETY TRUST (CHEST) ENVIRONMENT PROGRAM

#### AN ASSESSMENT TOOL FOR E-WASTES RECOVERY SITES

## Theme: E-WASTE RECOVERY: A GROWING THREAT TO THE ENVIRONMENTL HEALTH

Dear Respondent,

We are Child Health Environment and Safety Trust (CHEST), a non-profit and non-governmental organization that builds the capacity of children on sound and sustainable environmental health and safety issues. We need your assistance in providing honest responses to the questions in this questionnaire. We assure you that your responses will be kept confidential. The interview will last for appropriately 20 minutes. Please Kindly tick ( $\sqrt{}$ ) your desired responses, fill in answers in the space provided and provide appropriate responses to oral questions.

## **SECTION A: Socio-Demographics Characteristics**

1.	Sex: Male ( ) Female ( )
2.	Age in years
3.	Level of Education: non-Formal ( ) Primary ( ) Secondary ( ) Tertiary ( )
4.	Marital Status: Married ( ) Separated ( ) Divorced ( )
5.	Family size:
6.	Religion: Christianity ( ) Islam ( ) Traditional ( )
7.	Ethnicity: Yoruba ( ) Hausa ( ) Igbo ( ) Others
8.	Income per month:
SEC	TION B: Occupational History and Activities
1.	How long have you been working in the E-waste sector? Less than 1 year ( )
1-3	years ( ) 3-5 years ( ) More than 5 years ( )
2.	How many hours per day do you work for? Less than 3 hours ( ) 3 hours ( )
	5 hours ( ) 8 hours ( ) More than 8 hours ( )
3.	How many days per week do you work for? 3 days ( ) 5 days ( ) 7 days ( )
4.	What are the types electronic wastes you work on here?

5.	What are the resources recovered during the recovery process?
6.	How do you market these resources?
SE	CCTION C: Attitude of Workers Towards Health and Safety in the Work Environment
7.	Do you wear Personal Protective Equipment while working? Yes ( ) No ( )
8.	If yes, what type? Overall ( ) Safety Boots ( ) Nose cover ( ) Safety Google ( ) Gloves ( ) Others (specify)
9.	If no, why?
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10	. Do you know that E-wastes contain some hazardous constituents? Yes ( ) No ( )
	. Are you aware that E-waste has dangerous effect on man? Yes ( ) No ( ) Maybe ( )
12	. If yes, what are the dangerous effects that you know?
13	. Do you know that E-wastes are hazardous to the Environment? Yes ( ) No ( )
	Maybe ( )
14	. Have you ever been injured during work activity? Yes ( ) No ( ) Not Sure ( )
15	. In the past 3 month, how often did you get sick?
16	. Do you normally consult a health practitioner for medical check-up? Yes ( ) No ( )
17	. If yes, when last did you visit? This Month ( ) Last 3 Month ( ) Last 6 Month ( )
	Last Year ( ) Others (specify)

## PICTURE GALLERY



A cross section of participants during the surveillance session



The Programme Manager addressing the participants



The Founder, Prof Ana addressing the participants



A cross section of participants during the training session.



One of the participants acting as a translator to the present Hausa participants



The Executive Director, Mrs Ana addressing the participants







Participants giving contributions and suggestions



**Participants with CHEST officials** 



**CHEST officials** 



CHEST officials with few of the participants



Participants wearing incentives (gloves) provided



**CHEST officials**