



Community Empowerment and Support Initiatives (CESI) – UK The National Lottery, Community Fund Together for Our Planet initiative "Ex-British Gurkhas Climate Action at Households" Final Report January 2023



Session 1: Introduction to the Project

Objective of the project:

The main aim of the project is to increase awareness of climate change and its impacts on individuals, and households in the Royal borough of Greenwich. The project would help support ex-British Gurkha community to understand the roles they can play to minimize the effect of climate change by reducing their carbon footprint.

Focused activities of the project were to organise workshops to create awareness of the ex-British Gurkha community about climate change, Cop26 climate conference resolution, and the role of individuals, households, and community to reduce carbon footprint by reducing households' consumption and wastage in 250 ex-Gurkha households; training and mobilising volunteers on Climate action at households level and finally develop community networks of ex-British Gurkha community and their families to bring them together to reduce effects of climate change in different wards of the Royal borough of Greenwich,

Three virtual workshops (zoom video conferences) were held in the month of April, June, and July 2022. In addition, three physical workshops were organized in the months of August, October, and November 2022. Altogether, a total of 250 people including 110 women attended the workshops.

The workshops covered the following areas:

- 1 Introduction to the project
- 2 What is Climate Change?
- 3 UK's major contributors to net greenhouse emissions
- 4 Impacts of Climate Change
- 5 What is Carbon Footprint?
- 6 Governments efforts to reduce Carbon Footprint
- 7 What a household can do to reduce Carbon Footprint
- 8 Protect Green Spaces
- 9 Climate Change Action: Roles of households and volunteers trained by the project

Participants were informed about the project funded by the National Lottery, Community Fund under the "Together for Our Planet initiative". They were also informed about the three criteria of Fund which this project has addressed; that are:

- Development of longer-term climate action within communities
- It encourages communities to plan for the climate emergency to consider what climate action could mean to them and why it matters to 250 Ex-British Gurkha community and the climate change and its effects on the Planet Earth,
- It celebrates the importance of community-led climate action and encourages more people to get involved.

Session 2: What is Climate Change?

In this brainstorming session, participants were asked to list what they knew about climate change. They came up with a long list of the factors which contributed to the climate change eventually resulting in the rise of temperature. The list included pollution in the cities due to motor cars, air pollution, wastes, debris, congested living, as compared to countryside.

Resource person initiated the session adding on the outcomes of the brainstorming session and said that the Climate change is a long-term change in world's temperatures and weather patterns, which can be a natural phenomenon, but the contemporary changes are fast due to human activities such as:



Industrial revolution and use of machines which require burning of coal, oil and gas led to rapid climate change.

Burning oil, coal, and gas to run industry and transport and make buildings warm and mechanised the agriculture practices which release carbon dioxide are the main sources of greenhouse gas emissions.

Greenhouse gas emitted by humans forms a blanket cover around the Earth which catches the heat from sun thus raising the temperatures. It's like a burning firewood in a room without ventilation.

Animals and landfills are the major sources of methane gas emissions which contribute to the rise of temperature of the earth we live.

Finally, deforestation is also a major contributor of climate change as we lose the forests there are fewer plants absorb the carbon emitted from the industrial activities and modernisation of cities.

Session 3. What are the UK's major contributors to net greenhouse emissions?

In this session, the total contributors to the Greenhouse Emissions in the UK were discussed. According to BBC (Department for Business, Energy, and Industrial Strategy), the major contributors to net greenhouse emissions in the UK are transport (27%), Energy supply (21%), Business (17%), Homes (15%), Agriculture (10%), and others (10%). The government had already announced a ban on new petrol and diesel cars from 2030, and that all the UK's electricity will come from renewable sources by 2035.

Session 4: What are Impacts of Climate Change?

In the fourth session of workshop, the impact of climate change was discussed which included the following:

- Air pollution
- Dry weather
- Intense droughts
- Frequent wildfire
- Rise in temperature
- Food scarcity
- Increase desert.
- Floods
- Rising sea levels due to melting polar Ice
- Catastrophic storms
- Declining biodiversity.

Session 5: What is Carbon Footprint?

To help participants understand how much greenhouse gas (carbon dioxide and methene gas) we emit which are responsible for the rise of temperature, the Carbon footprint concept was discussed. It was made clear that a carbon footprint is the total amount of carbon dioxide and methane gases (greenhouse gas) that we create from our activities such as house, travel, food. Participants were asked to calculate their carbon footprint by remembering their activities such as:

- how many miles they travelled by bus. train, plane, car,
- · how much energy they you used,
- what food they ate and
- · how much money they spent on shopping.

Following calculator was used to calculate individuals carbon footprint. What is your carbon footprint? | Carbon Footprint Calculator (nature.org)

Session 6: What are governments doing to reduce Carbon Footprint?

Participants were made aware that UK government and the governments around the world have agreed on measures to keep the temperature low and by reducing greenhouse gases significantly by 2050. This will make world a net zero emitters.



In this connection participants were informed that the UK government hosted a summit for world leaders, <u>called COP26</u>, in November 2021, where countries set out their carbon reduction plans for 2030.

Participants were also informed many countries have pledged to get to net zero by 2050.

The UK Government has backed up their target of net zero emissions by 2050 by announcing a ban on all gas boilers. The ban, scheduled to start as early as 2025, is a major step towards the target.

Net zero means not adding to the amount of greenhouse gases in the atmosphere.

It was mentioned that making deep cuts in emissions will require switching away from burning fossil fuels and towards using electricity generated from low-carbon sources. This includes.

- phasing out coal-fired power plants,
- vastly increasing use of wind, solar, and other types of renewable energy, and
- taking measures to reduce fossil energy use for transportation, heating buildings, and operating industrial facilities.
- increasing forest cover
- farming with methods that capture carbon in soil.
- better coastline protection.

Almost every country has embarked on <u>tree planting as a cheap way of reducing carbon</u>, although there may not be enough space for the number required. <u>Carbon capture and</u> storage has also been suggested as another solution.

UN Climate Change Conference of the Parties

Under the United Nation Climate Change programme, a summit of world leaders is held annually. This summit is called UN Climate Change Conference of the Parties or COP.

In 2015, COP 25 was held in Paris. Countries agreed climate change can only be tackled by working together, and in a landmark agreement they pledged to try to keep global warming to 1.5C.

Note: Net zero means not adding to the amount of greenhouse gases in the atmosphere.

In 2022, COP27 held in Egypt.

Session 7: What a Household can do to reduce Carbon Footprint?

It was made clear that a person could make a great contribution to climate change by reducing his/her own carbon footprint. A total carbon emission by an individual in a day from all activities including driving, flying, eating, drinking, heating, and use of lights) is called carbon footprint.

It was mentioned that a person on average in the UK has a carbon footprint of about 5.5 tonnes per year – global greenhouse gas emissions are about 50 billion tonnes". – BBC

Our contribution to the campaign of climate change would be to reduce our carbon footprint by reducing carbon emission from what we eat, how we travel, how we use energy to make our home warm and lighting in the home.

Data of BBC (source: Centre for Research into Energy Demand Solution) was discussed to provide options to the participants for reducing carbon footprint. Average reduction per person per year in tonnes of CO2 equivalent would be as follows.

Options	Reduction of CO2 equivalent (tonnes)
Car-free lifestyle	2.04
Refurbish/renovate your house	0.895
Battery electric car	1.95
Vegan diet	0.08
One less long-haul flight per year	1.68
Heat pump	0.795
Renewal energy	1.6
Improved cooking equipment	0.65
Public transport	0.98
Renewal -based heating	0.64

In the above table, top of the list is living car-free, which saves an average of 2.04 tonnes of CO2 equivalent per person annually. This is followed by driving a battery electric car - 1.95 tonnes of CO2 equivalent per person annually - and taking one less long-haul flight each year - 1.68 tonnes of CO2 equivalent per person.

7.1 Reduce consumption.

As per the UN, half of land is used for agriculture, and three-quarters of that land is used to feed and raise livestock. Almost a quarter of global greenhouse gas emissions comes from agriculture and other related land use.

Eat less food and eat more local food products. Local produces don't need to travel long distance therefore use less energy.

Reducing our own food and energy consumption and carbon emission would help reduce the impact of climate change and the planet Earth would be safer for future generations.

7.2 Eat less meat and dairy products.

Livestock being one of the main contributors to the carbon emission. Globally, the UN estimates it makes up more than 14% of all man-made greenhouse gases, including methane.

When we talk about emissions, we usually think of carbon dioxide (CO2). But livestock's emissions also include methane, which is up to 34 times more damaging to the environment over 100 years than CO2, <u>according to the UN.</u>

- Beef produces the most greenhouse gas emissions, which include methane.
- Lamb has the next highest environmental footprint, but these emissions are 50% less than beef. Cattle produce more methane than poultry.
- More than one billion chickens and other poultry were killed for food in the UK in 2018.
- Cutting down consumption of red meat would help reduce carbon emission. Production of red meat uses lot of feed, water, and land. Cows themselves also give off methane emissions (a harmful greenhouse gas).

7.3 Consume more plant-based food.

A quarter of global greenhouse gas emissions come from food production in the world. Of which the production of meat and dairy are the two biggest reasons of greenhouse gas emission. To produce beef, lamb we need larger pastureland mean deforestation, need bulk of animal feed means large area under production of grain to feed animal.

According to some estimates, beef gives off more than six pounds of carbon dioxide per serving; the amount created per serving by rice, legumes carrots, apples or potatoes is less than half a pound. Reductions in meat, fish and dairy and consuming more plant-based food then our greenhouse gas emission will be less.

Production and transportation of food products emits greenhouse gas emissions. So, eat local and seasonal is good idea. Organic food reduces our carbon footprint.

7.4 Buy less and Waste Less

7.4.1 Buy Less

Whatever food, drink, and other products we purchase for our nourishment and other needs are coming either from farm or factories. There involved a carbon emission during production, processing, and transportation. So, think before you buy. Don't go for sale products and

products you don't need. Think about environment and your own carbo footprint before buying them.

7.4.2 Waste Less

Around one third of the food produced in the world for human consumption – around 1.3 billion tonnes – is wasted. This food ends up in landfill, which releases methane gas, speeding up the impact of climate change. Throwing less away food makes economic, as well as environmental, sense. Recipe planning can help you manage your food more effectively.

Food waste accounted for six per cent of greenhouse gas emissions. "Around the world, and in the UK, we waste over a quarter of the food that's produced and all that food has a carbon footprint. We can reduce waste by adapting the following points.

- Don't buy food and drink if you already have stock in your freeze. So, check your stock before you go to shopping.
- Don't buy any bulk food.
- Don't aspire to buy bulk food and drinks which are on sale.
- Don't buy anything without prior planning.
- Don't cook or prepare more that you eat.
- Don't through everything in the bins. As yourself- whether you can re-use them.
- Don't through food waste in the bins, recycle them/make a compost out of them for your garden.
- Don't through electronic items in the bins, re-use them if you can. Give away to the council store.
- Don't through carrier bags, re-use them.

7.5 More energy-efficient Home

Our homes make up about 15 per cent of greenhouse gas emissions in the UK. To reduce your house's carbon footprint, we can do the thing in most effective ways which are as follows.

- Switch to renewal energy sources or green energy for lighting and heating our homes.
- Insulate your home including walls, doors and windows, floors, and lofts.
- Replace old boiler with energy efficient boiler.
- Replace old central heating systems with low-carbon heating. Use heating pump instead.
- Use heating controls.
- Use smart energy meters and monitor the uses.
- Check the energy efficiency rating of your appliances.

7.5.1 Efficient use of Energy

Save energy-save money and contribute to the climate change efforts of the world. Participants were asked to list the energy saving habits which would help all of us save energy thereby saving money. Participants agreed to the following points which would help in our contribution to the lowering the emissions.

- Switch off the bulbs with regular energy interventions in your home and at workplace.
- Switch off the appliances such as toasters, heaters, microwave, and others after the use.

- Programme you water heater as minimum hot water is required both kitchen and bathrooms.
- Switch off TV, room heater, computers.
- Use energy efficient bulbs, LED bulbs.
- Check and compare energy bills between the months and seasons and plan how to reduce your energy bills accordingly.

To find out how much you could save, just complete our quick **home energy comparison calculator**.

7.6 Travel Less

Carbon emissions go up as we travel. Still, most of cars and buses use fossil fuel. If we travel less than our carbon footprint would also be low. If you or your children have a car, you can consider replacing them with zero emission electric cars. Electric cars or vehicles have zero emissions which contributes to low carbon emission and improve air quality in the towns and cities we live. Electric vehicles require lower running cost and give us a higher environmental quality. Nowadays people are flying more than before due to a cheaper option that air travel provides.

7.6.1 Fly less.

Nowadays, due to cheap flight options, flying contributes a large amount of carbon emissions. Train journey is better that plane as train produces less carbon that a plane. We can Cut your CO2 emissions by taking the train, by up to 90% said CO2 emissions: Train versus plane (seat61.com). We can calculate how much carbon would a certain mode of transport emits by check on EcoPassenger (hafas.de). Taking fewer flights can make a major contribution to cutting carbon.

7.6.2 Drive less.

Use public transport (bust, tube, DLR, tram, rail) is a better option for us if we want to reduce our carbon footprint. In a major city like London, think before buying a car, you may not need a car. Even if you want one for a short distance driving, go for an electric car. Driving electric is the best option for low carbon option.

Session 8. Respect and protect green spaces.

- Work in your garden or allotment area. Make your garden full of plants. Plant trees and shrubs around your home.
- If you have a flat still you can plant a lot of shrubs and go to work in the allotment if you have one.
- Talk to your family and children about climate change and its impact on us and the world.
- Don't buy the things that you don't need. Consider how the things are produced, processed, and transported to the marketplace.
- Join a green group in the council area.
- Volunteer in the green work in council's garden together with community members



Session 9: Climate Change Action: the role of Households and Community Volunteers

In this session participants were divided into three groups to discuss the role of households and the volunteers to help reduce the carbon footprint.

The findings of the group work are summarised as follows:

The role of a Household to reduce carbon footprint.

- Keep yourself aware of the issue of climate change.
- Make other family and friends aware of the role of the household to reduce its carbon footprints.
- Think about carbon footprint before buying anything including food and drinks.
- Think about carbon footprint before traveling.
- Keep carbon footprint to a minimum level by focusing to reduced food purchase and consumption, transport, energy, and wastage of food and drink.

The role of Community volunteers to reduce carbon footprint.

Volunteers should always be aware that their role is essential to create awareness in the community about climate change and how to reduce carbon footprint. Volunteers trained by the project can play following roles in their wards.

- Create awareness about Climate Change and its effects on the households and community,
- Create awareness of what UK government is doing to reduce emissions.

- Motivate the households in your wards on how to reduce their carbon footprints.
- Help households to plan how to reduce consumption.
- Help households to plan how to reduce purchase of food and drinks.
- Help households on the issue of how to make their home insulated.
- Help households to use mode of transport.
- Help households to reduce energy bill using efficient bulbs, LED bulbs.
- Help households to reduce energy bill using energy efficient appliances.
- Visit households and demonstrate how the households can reduce their carbon footprint. Check appliances, bulbs, heating and home insulation, gardening etc.

Session 10: Carbon Footprint Reduction Action Plan

In this session, participants were asked to make a timebound action plan to reduce their carbon footprints. Followings were the compilation from all workshops.

Carbon footprint Reduction Action Plan	Nos. of Households	By when
Energy Saving		
Switch off lights in room, power to heater, computers, (when it is	250	Immediately
not needed)		
Replace old fridges to low energy consumption	207	Six months
Replace all lights to LED bulbs	210	2023
Make aware of your family members to use less electricity	250	Immediately
Check and compare energy bills and plan how to reduce your	250	Immediately
energy bills.		
Discourage use of air conditioners and fans at home	230	2023
Less use of gas or electricity for cooking, heating, and boiler.	215	Immediately
Programme you water heater as minimum hot water is required	250	Immediately
both kitchen and bathrooms.		
Food and Drinks		
Eat & drink Less	250	Immediately
Eat local foodstuffs	75	2023
Check fridge and stocks regularly	185	Immediately
No bulk purchase of food and drinks	201	Immediately
Promote weekly purchase of food and drinks.	160	Immediately
Travel		
More walking in the local area	55	Immediately
Less use of cars	235	Immediately
Use more of public transport.	250	Immediately
Replace diesel/patrol cars with electric cars	27	2025
Less trip to abroad (fly less)	67	Immediately
Environment/Greenery		
Promote greenery in allotments by planting trees and shrubs.	155	2023
Make flats for green by planning plants in pots	155	2023

Session 11: Participant's feedback on Workshops

Participant's feedback on Workshops

Out of 250 feedback forms received from the participants during the physical workshops and positive feedback during virtual workshops, most of them rated the event was "very useful" (90%) while a 9% considered it "useful". The rate of less useful was quite low at 1%. Similarly, most participants (90%) rated that they have very well understood the climate change and the

role of individual and households, while a 9 % considered it understood well. The rate of less understanding was quite low at 1 %.

Similarly, most of the participants (99%) have recommended that similar type of Climate Change programme should be organised regularly in the future. They have also recommended that programme such as information on climate change, state benefit system, programme related to climate change for women, elderly and youth should be organised in the future.

Volunteers' feedback on outreach activities

All 9 volunteers said that the workshops and volunteering on climate change were first time experience for them. Each volunteer would regularly raise awareness about climate change and the role of individuals and households in their wards within Royal borough of Greenwich. Apart from 250 participants of the project, they will spread the climate change message which they learn in the project to more and more people in their wards. All volunteers committed that they would help support the households in the following measures to reduce their carbon footprints.

- Less use of electricity
- Switch off lights when there is no need of light.
- Insure low power in the fridge.
- Discourage use of air conditioners and fans at home
- Less use of gas for cooking, heating, and boiler.
- Less use of cars
- Less trip to abroad (fly less)
- More walking in the local area
- Use of public transport
- No bulk purchase of food and drinks
- Promote weekly purchase of food and drinks.
- Promote greenery in allotments by planning trees and shrubs.

Annex: Workshop Daily Schedule

Community Empowerment and Support Initiatives Together for Our Planet initiative "Ex-British Gurkhas Climate Action at Households" Community Climate Action Workshop

Start Time: 10:00 AM

Venue: Training Hall of Greenwich Ex-Gurkha Servicemen Association (GGESA), Unit 1, 44

Plumstead High St, London SE18 1SL

Participants: 50 Gurkha people, 09 volunteers.

Programme

Time	Activity
10:00-10:30	Registration and Introduction to the project.
10:30-11:15	What is Climate Change?
11:15- 11:45	What are the UK's major contributors to net greenhouse emissions.
11:45-12:15	Break
12:15-13:00	Impacts of Climate Change
13:00-13:30	What is Carbon Footprint? Governments efforts to reduce Carbon Footprint
	What a household can do to reduce Carbon Footprint?
13:30-14:00	Protect Green Spaces
14:00-14:15	Climate Change Action: Small group session on the roles of households and volunteers.
	Carbon Footprint Reduction Action Plan
14:15-14:30	Feedback collection
14:13-15:00	Lunch