



ANNUAL REPORT

2022/23

Compiled By: Yangji Doma Sherpa

CONTENTS

MESSAGE FROM THE BOARD AND CEO

ACRONYMS

INFOGRAPHICS

CHAPTER 1: SPCC AT A GLANCE

- 1.1 Our History
- 1.2 Our Works
- 1.3 Working Areas
- 1.4 Work Stations
- 1.5 Executive Board

CHAPTER 2: ENVIRONMENT POLLUTION CONTROL AND SUSTAINABLE WASTE MANAGEMENT PLAN

CHAPTER 3: OUR WORKS IN THE MOUNTAINS AND PEAKS

- 3.1 Waste management of permit required mountains and peaks
- 3.2 Waste management at Everest Base Camp
- 3.3 Management of garbage collected by Mountain Cleanup Campaign 2023
- 3.4 Attendance of Liaison Officers at SPCC's Office
- 3.5 Khumbu Icefall Route Construction Project
 - 3.5.1 Khumbu Icefall Route Construction for Spring 2023
 - 3.5.2 Accident in Khumbu Icefall
 - 3.5.3 Icefall Doctors' Training:
 - 3.5.4 Support received for Icefall Doctors:
- 3.6 Monitoring of Illegal Climbers in NMA Peaks
- 3.7 Fixing ladders over crevasses in Island Peak

CHAPTER 4: OUR WORKS ALONG THE TREKKING TRAILS

- 4.1 Construction and Management of garbage bins
- 4.2 Cleanup of Trekking Trails
- 4.3 Management of toilets at Topdada
- 4.4 Trek Achievement Certificate (TCA)

CHAPTER 5: OUR WORKS IN SETTLEMENTS

- 5.1 Daily garbage collection and management at Namche, Lukla and Toktok
- 5.2 Partnership with community partners in various settlements
- 5.3 Consultation meetings held with local residents of Kharikhola and Paiya:
- 5.4 Waste Collection, Segregation, Transportation and Diversion

CHAPTER 6: OVERCOMING CHALLENGES: RECYCLING IN THE KHUMBU REGION

- 6.1 Post-Consumer PET Plastic Recycling
- 6.2 Carry Me Back (CMB) Project
 - 6.2.1 Carry Me Back (CMB) Project Autumn 2022
 - 6.2.2 Carry Me Back (CMB) Project Spring 2023
 - 6.2.3 Carry Me Back (CMB) concept extended to Gokyo

CHAPTER 7: FINANCIAL HIGHLIGHTS

CHAPTER 8: OUR PARTNERS

MESSAGE FROM THE BOARD AND CEO

With great pleasure, we would like to share with you our Annual Report 2022/2023 and provide an update on our major achievements with all of our partners, employees, communities, stakeholders and well-wishers.

SPCC has been actively engaged in waste management efforts in the Khumbu Region for almost 30 years. We are honored to be entrusted by the Khumbu Pasang Lhamu Rural Municipality (KPLRM) to develop the "Environment Pollution Control and Sustainable Solid Waste Management Plan" for the region. With the goal of implementing the Plan, we are constructing a Material Recovery Facility (MRF) near Namche Bazaar with financial assistance from the local government. The facility will further segregate and process recyclables into forms better suited for transporting it to Kathmandu.

The fiscal year 2022/2023 has been extremely busy, as the 2023 spring season saw a record number of climbers on Everest. Our icefall doctors have once again performed a fantastic job of preparing and maintaining the route for hundreds of climbers making their way up to Mount Everest, Mount Lhotse, and Mount Nuptse. In the Spring Season 2023, SPCC effectively managed a total of 60,488 kgs of waste generated by expedition groups at Everest Base Camp. An additional 8,954 kgs garbage was brought down by various expedition teams from higher camps above the Everest base camp as per the 8 kg garbage rule.

The Carry Me Back (CMB) project achieved significant progress, with over 2,589 volunteers transporting 4,789 kgs of recyclables from Namche Bazaar to Lukla during spring and autumn campaigns. Throughout the major settlements, all trekking trails, and base camps, we carried out our waste management operations as usual in FY 2022/2023.

We acknowledge and express our sincere gratitude to Khumbu Pasang Lhamu Rural Municipality, Sagarmatha National Park, Buffer Zone Management Committee, Nepal Mountaineering Association, our community-based partners, the local communities, donors and volunteers for their unwavering support. Together, we continue to strive for a cleaner Khumbu Region.



Lama Kazi Sherpa
Chairperson



Tshering Sherpa
CEO



ACRONYMS

ATCF	Adventure Travel Conservation Fund
BZMC	Buffer Zone Management Committee
CBO	Community-based Organizations
CMB	Carry Me Back
EBC	Everest Base Camp
ESA	Everest Summiteers Association
GMG	Garbage Management Group
HAT-J	Himalayan Trust of Japan
KCC	Khumbu Climbing Center
KPLRM	Khumbu Pasang Lhamu Rural Municipality
MoCTCA	Ministry of Culture, Tourism and Civil Aviation
NMA	Nepal Mountaineering Association
NMGA	Nepal Mountaineering Guide Association
SNP	Sagarmatha National Park
SPCC	Sagarmatha Pollution Control Committee



Waste Management Infrastructures:



Waste Collection and Diversion

Garbage Collection Services

Provides door-to-door garbage collection services to 169 households including lodges, restaurants, cafés and shops at Namche and Lukla

Garbage Collected and Managed

FY 202/23:
Peaks (> 2,800 kgs)
Mountains (>75,000 kgs)
Settlements (>155,000 kgs)

Carry Me Back (CMB)

5,844 volunteers participated and 10,107 kgs waste transported for recycling since 2019.

Garbage Recycling

65 tons of garbage from mountains and settlements of Everest Region have been transported to Kathmandu for recycling since 2016.



Oversees garbage management

69 Mountains/Peaks and 30 settlements of Khumbu Region

Local Partners:

Works with 21 local partners including women's group, youth group and garbage management groups in various settlements

Staffs:

22 permanent staff and 50 seasonal staff for management of garbage in the Everest Region

CHAPTER 1

SPCC AT A GLANCE

1.1 Our History

Since Sir Edmund Hillary and Tenjing Norgay Sherpa successfully climbed Mount Everest in 1953, the Khumbu Region has become a popular tourist destination attracting thousands of mountaineers and trekkers from around the globe. In the late 1980s, solid waste management concerns had been a major concern due to the lack of clear norms and regulations for the disposal of waste generated by tourists. Our patron late Venerable Ngawang Tenzing Jangpo (Tengboche Rinpoche) mobilized the local people of Khumbu to take initiative for long-term pollution control in the Khumbu Region. This led to the formation of the “Sagarmatha Pollution Control Committee” (SPCC), a local non-profit and non-governmental organization, in 1991. The Ministry of Tourism, Culture and Civil Aviation (MoCTCA) and WWF Nepal provided early financial support for the establishment of SPCC. The SPCC is legally registered under the District Administration Office in Solukhumbu district (Registration no- 20) and also registered with the Social Welfare Council (Registration no-10989).

1.2 Our Works

SPCC has been actively engaged in waste management efforts in the Khumbu Region, which form the Sagarmatha National Park and its Buffer Zone and also encompass the core Everest trekking area. Through the development of appropriate waste management infrastructures and the integration of sustainable waste management practices, such as establishing a system for waste segregation, strengthening community involvement in waste management, disseminating public education, and looking for opportunities for waste reduction, reuse, and recycling, SPCC has been instrumental in addressing the challenges of waste waste management in the Khumbu Region.

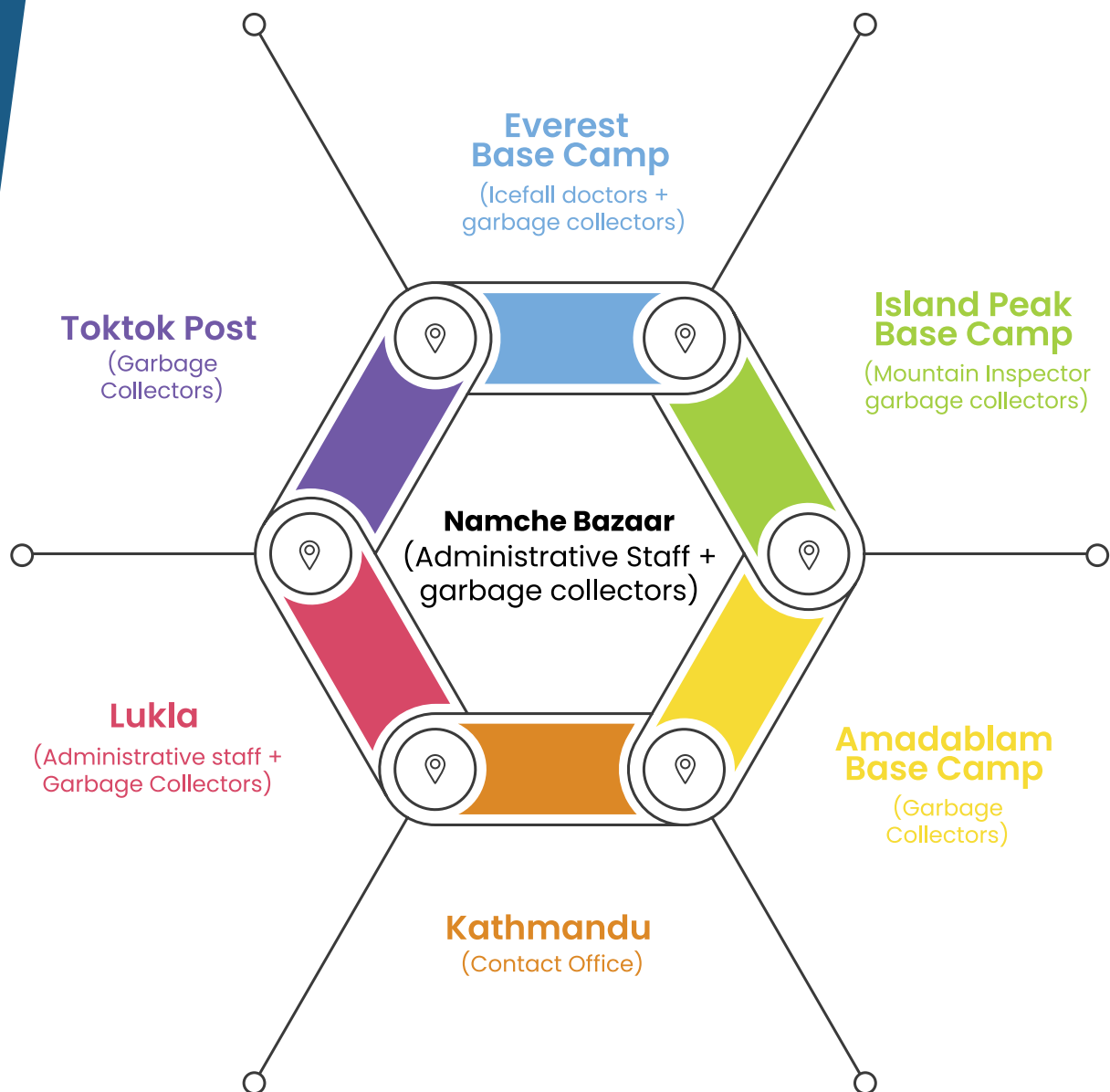
The SPCC also set the Khumbu Icefall climbing route, under contract with the Ministry of Culture, Tourism, and Civil Aviation (MoCTCA) since 1997. In addition, the SPCC monitors illegal climbing, verifies climbing permits, and implements waste management strategies in the base camps of the peaks and mountains of the Khumbu region, including Mt. Everest. In close collaboration with the local communities, we also manage waste in settlements and along trekking trails. We carry out all aspects of waste management, including construction of infrastructures, garbage collection, transportation, segregation, and diversion/disposal. Our current focus is to maintain Khumbu clean by developing and implementing waste management activities in accordance with the “Environment Pollution Control and Sustainable Waste Management Plan 2023” of the Khumbu Pasang Lhamu Rural Municipality.

1.3 Working Areas

Our working areas cover the entire wards (1, 2, 3, 4 and 5) of Khumbu Khumbu Pasang Lhamu Rural Municipality, which also includes the Sagarmatha National Park and Buffer Zone areas. Our waste management activities cover all the trekking trails, base camps of mountains and peaks, high passes and all settlements located in the Khumbu Pasang Lhamu Rural Municipality.

1.4 Work Stations

SPCC head office is located at Namche Bazaar. We have several branch offices and seasonal offices located at various settlements and base camps. Currently, SPCC employs 22 permanent staff and more than 50 seasonal staff to conduct our programs.





EXECUTIVE BOARD

2022-2026

ADVISORS

Mr. Ang Phurba Sherpa

Mr. Sonam Gyaljen Sherpa

Mr. Ang Dorjee Sherpa

EXECUTIVE MEMBERS

Mr. Lama Kazi Sherpa
Chairman

Mr. Dawa Gyaljen Sherpa
Vice-Chairman

Mr. Pemba Tshering Sherpa
General Secretary

Mr. Nima Tashi Sherpa
Treasurer

MEMBERS

Mrs. Nima Doma Sherpa

Mrs. Chheten Doma Sherpa

Mr. Tenzing Dorjee Sherpa

Mr. Nanga Dorjee Sherpa

Mr. Sonam Dorjee Sherpa

Mr. Fulopsang Sherpa

Mr. Nga Temba Sherpa

CHAPTER 2

ENVIRONMENT POLLUTION CONTROL AND SUSTAINABLE WASTE MANAGEMENT PLAN

The SPCC has been tasked by the Khumbu Pasang Lhamu Rural Municipality (KPLRM) to prepare an environmental pollution control and management plan to address various environmental pollution arising in the rural municipality, particularly solid waste. To conduct consultation meetings and create the plan for the rural municipality, the SPCC hired Mr. Nabin Bikash Maharjan as an independent consultant.

In collaboration with KPLRM, SPCC held consultation meetings with a range of Khumbu Pasang Lhamu Rural Municipality stakeholders, including local government representatives, National Park representatives, the Buffer Zone Management Committee, women's groups, youth groups, and lodge operators. These meetings were held in Namche on September 19, in Khumjung on September 20, and in Lukla on September 22. Similarly, a consultation meeting was held in Kathmandu on September 27, 2022. Participants included the National Assembly member Honorable Sonam Gelzen Sherpa, the Chair and Vice Chair of the Khumbu Pasang Lhamu Rural Municipality, SPCC Advisor Mr. Ang Dorjee Sherpa; SPCC board members and representative of Department of Tourism and other stakeholders based in Kathmandu.





The consultant has created a “Environment Pollution Control and Sustainable Solid Waste Management Plan” for the Khumbu Pasang Lhamu Rural Municipality (KPLRM) based on desk research, input from consultation sessions, and field visits. The waste management plan was developed based on a complete circular economy model. In order to ensure that any waste generated is handled as a resource rather than being thrown away, the plan places a strong emphasis on minimizing waste generation, maximum reuse, and recycling.

As the local government’s partner organization for waste management, SPCC will collaborate closely with the government and relevant parties to execute the waste management plan in a phase wise approach. SPCC intends to establish a comprehensive recycling program by investing in infrastructure and technologies to support waste collection, sorting, processing, and transportation; introducing source segregation through outreach and education programs; fostering stronger partnerships and collaborations with various stakeholders; and enacting supportive policies and regulations in close coordination with governmental bodies. We believe that putting the Environment Pollution Control and Sustainable Solid Waste Management Plan into action will safeguard the environment, improve public health, generate green jobs, and enhance the Region’s appeal to tourists.



CHAPTER 3

OUR WORKS IN THE MOUNTAINS AND PEAKS

Khumbu Region is home to some of the magnificent and tall mountains on earth including Mt. Everest, the highest peak in the world. Some of the popular mountains for climbing in the Region include Mt. Everest, Mt. Lhotse, Mt. Nuptse, Mt. Amadablam, Mt. Pumori, Mt. Baruntse, Mt. Thamserku etc. Climbers need to acquire permits from the Department of Tourism (DoT) under the Ministry of Culture, Tourism and Civil Aviation (MoCTCA) to climb these mountains. Each year, hundreds of climbers come to Khumbu Region to climb these mountains.

Similarly, many popular peaks regulated by the Nepal Mountaineering Association (NMA) are located in the Khumbu Region, such as the Island Peak, Lobuje Peak, Kyazo Ri, Pharchamo etc. Climbers need to acquire a permit from NMA to climb these peaks.

For many years, SPCC has been working with the Department of Tourism (DoT) for managing garbage at the base camp of mountains and also setting up the Khumbu Icefall Route for climbers attempting to reach the summit of Mt. Everest. SPCC also works with the Nepal Mountaineering Association (NMA) to manage garbage generated by climbers climbing peaks registered under NMA and monitoring illegal climbers.

3.1 Waste Management of permit required mountains and peaks

SPCC is the authorized local organization responsible for monitoring garbage in the permit-required mountains under MoCTCA and NMA registered peaks through “permit registration, garbage declaration and clearance system”. As per the system, all expedition groups/climbers are required to register their permit at the SPCC office and declare their equipment and food list. With the aim of going paperless and to reduce in person office visits for permit registration as a precautionary measures during the COVID pandemic, SPCC set up an online permit registration system for the NMA peaks and launched the system from 1st of October 2021.

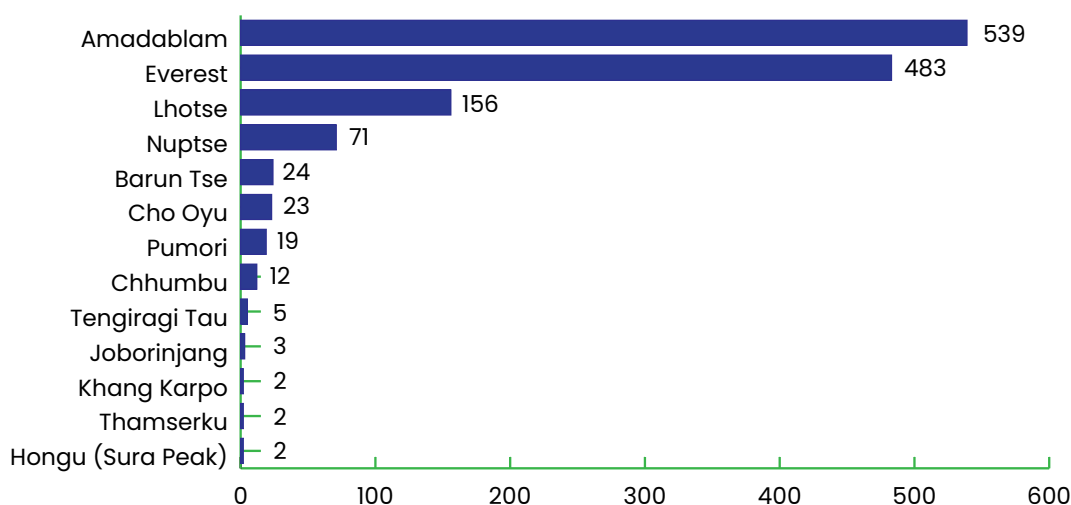
Upon completion of their climbing period, each group must submit all burnable and non-burnable garbage to our office at Namche, Lukla or our representative at Everest Base Camp, Island Peak Base Camp, Lobuche Peak Base Camp and Amadablam Base Camp. Upon receipt of garbage, the SPCC issues a garbage clearance certificate required to get garbage deposit refunds from the DoT and/or NMA. SPCC manages the burnable garbage in Khumbu and transports recyclable garbage to Kathmandu for further treatment at recycling centers. We also manage human waste generated by climbers during their stay at Everest Base Camp, Lobuje Peak Base Camp and Island Peak Base Camp.



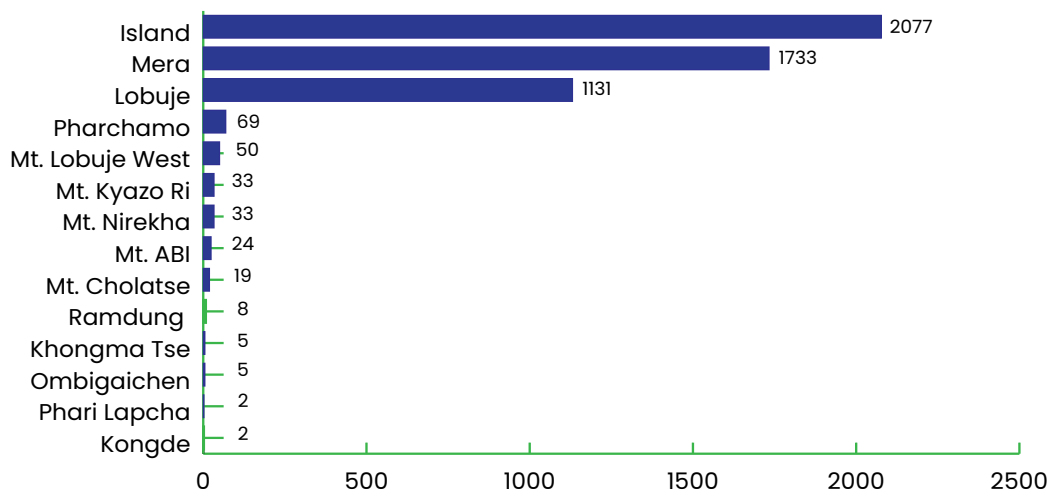
RULES FOR CLIMBERS AND EXPEDITION GROUPS IN KHUMBU

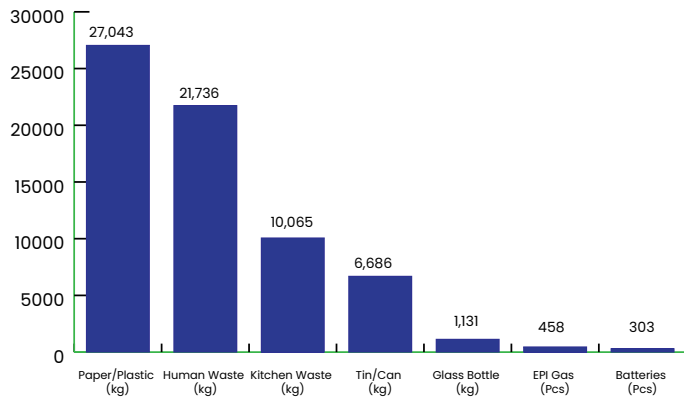
1. Garbage should be segregated into burnable, non-burnable and biodegradable categories at the base camp. All garbage must be handed over to SPCC to get a garbage clearance certificate.
2. Every climber ascending beyond Everest's base camp must bring back at least 8 kg of garbage, and climber ascending above Amadablam base camp must bring back 3 kg of garbage.
3. Human waste (toilet) produced at the base camps must be collected in portable plastic barrels
4. Burning or burying garbage at the base camps is strictly prohibited.
5. Painting on rocks is not allowed.
6. SPCC can check your permit any time during the expedition period.

Climbers attempting various mountains in the Khumbu Region in FY 2022/23

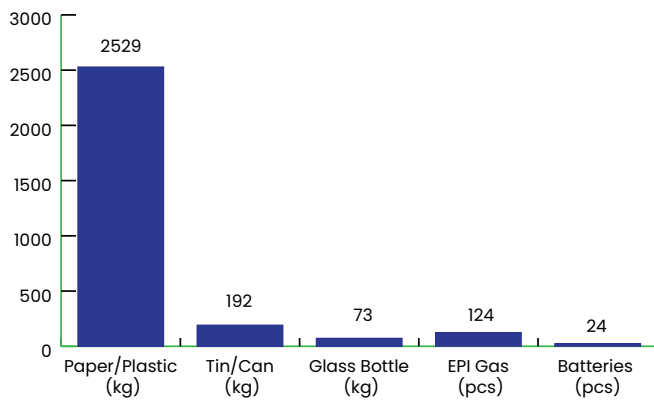


Climbers attempting various peaks in the Khumbu Region in FY 2022/23





Garbage received from expedition groups of Mt. Everest, Mt. Amadablam, Mt. Lhotse and other mountains (FY 2022/23)



Garbage received from climbers of NMA peaks (FY 2022/23)



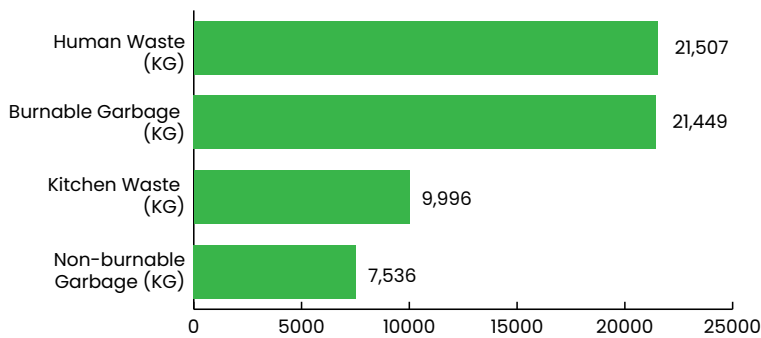


3.2 Waste management at Everest Base Camp

SPCC also manages garbage and human waste generated by expedition teams at EBC in every spring climbing season. Expedition waste comprises climbing equipment and gears (ropes, tents, epi gas, ladders etc.), tins, cans, human waste and kitchen waste. In every spring climbing season, the SPCC mobilized around 25 field staff for the management of garbage and human waste; and inspection of the 8 kg garbage rule near Khumbu Icefall. All garbage generated by expedition teams during their stay at EBC were submitted to SPCC representatives at base camp. Burnable garbage generated by climbers

was transported at our waste management facilities at Namche, and recyclable garbage was transported to Kathmandu for further treatment at recycling centers. All expedition teams are required to use a portable toilet system during their stay at EBC. Our staff took the human waste collected in barrels to a safe disposal site near Gorakshep making sure that human waste is not directly dumped over the glacier at EBC.

In the Spring Season 2023, SPCC received a total of 60,488 kgs waste from expedition groups at Everest Base Camp. Detailed breakdown of waste from EBC in Spring 2023 is as shown in the following chart.

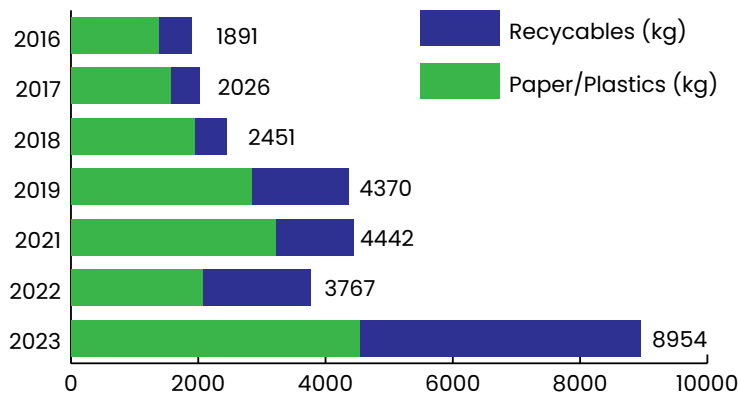


Garbage generated by expedition groups at Everest Base Camp in Spring 2023

3.2.1 Inspection of 8 kg garbage rule for Mt. Everest:

Since 2015, SPCC also inspects the 8 kgs garbage rule formulated by the Nepal government for Mt. Everest, according to which every climber ascending above Everest base camp must bring back at least 8 kg of garbage. We have set up a checkpoint for inspecting the 8 kg garbage rule at the base of Khumbu icefall. The following chart shows the total garbage received from above base camp through the 8 kg rule implemented since 2016.

A total of 8,954 kgs (4,537 kgs burnable and 4,417 kgs non-burnable) garbage was brought down by various expedition teams from higher camps above the base camp as per the 8 kg rule in Spring season 2023.



Garbages brought by expedition teams from above EBC through the 8 kg rule

3.3 Management of garbage collected by Mountain Cleanup Campaign 2023

In 2019, the SPCC, Khumbu Pasang Lhamu Rural Municipality and Nepal Army along with the partnership of various government and non-government organizations launched and successfully conducted the “Mt. Everest Cleanup Campaign – 2019”– the largest joint cleanup initiative made to retrieve discarded garbage and dead bodies from Mt. Everest. After the success of the cleanup campaign in 2019, the Nepal Army has continued the cleanup campaign in various mountains of Nepal including Mt. Everest under the name of “Safa Himal Abhiyan”. The SPCC has continued to support the campaign being conducted on the mountains of the Khumbu Region. SPCC received a total of 2,921 garbage which can be managed locally from Nepal Army collected from the “Mountain Cleanup Campaign 2023”. In addition, the SPCC has also waived the fee for Khumbu Icefall Route for the cleanup campaign team members like in the previous years.

3.4 Attendance of Liaison Officers at SPCC’s office

In coordination with the Department of Tourism, SPCC has maintained an attendance system for liaison officers assigned for various expedition groups at our Namche head office and EBC office. All liaison officers are required to visit the SPCC office at Namche and EBC to confirm their travel at the destination.

3.5 Khumbu Icefall Route Construction Project

Since 1997, SPCC has been contracted by the Ministry of Culture, Tourism and Civil Aviation (MoCTCA) to set the climbing route through the Khumbu Icefall. The Khumbu icefall is the section between Everest Base Camp and Camp II that passes over deep and dangerous crevasses. It is considered as the most difficult and dangerous part of climbing Mt. Everest. In every climbing season, SPCC recruits eight icefall doctors to set up the Khumbu Icefall Route used by mountaineers to climb Mt. Everest, Mt. Lhotse and Mt. Nuptse. Our icefall doctors’ team consist of highly skilled climbing Sherpas from the Solukhumbu Region. Icefall doctors usually open the route in early April and close it at the end of May in the spring climbing season. As the icefall section is very unstable, icefall doctors monitor and maintain the route throughout the climbing period.

The Khumbu Icefall Route fee assessment committee sets the fee for Khumbu Icefall Route. The committee consists of representatives of Department of Tourism (DoT), Nepal Mountaineering Association (NMA), Everest Summiteers’ Association (ESA), Everest Operators’ Association (EOA), Trekking Agents’ Association of Nepal (TAAN), Nepal National Mountain Guide Association (NNMGA) and SPCC. Since Spring 2014, each member of the expedition team has to pay US\$600 for using the route in the spring climbing season and a combined sum of US\$25,000/- for all climbers for setting the route in the autumn and winter season.

3.5.1 Khumbu Icefall Route Construction for Spring 2023

The SPCC’s icefall doctors’ team left for Everest Base Camp from our head office at Namche Bazaar on 26th of February 2023. The 2023 icefall doctors’ team include Tshering Tenzing Sherpa (Base Camp Manager), eight icefall doctors (Ang Sarki Sherpa, Chhewang Nuru Sherpa, Dawa Jangbu Sherpa, Dawa Nuru Sherpa, Mingma Temba Sherpa, Pemba Tshering Sherpa, Sonam Tshering Sherpa, and Tenzing Dorjee Sherpa), two kitchen staff (Nawang Thaten Sherpa and Wangdi Gelbu Sherpa) and one garbage management staff (Sanjiv Tamang). The Icefall Doctors completed the setting of route through the Khumbu Icefall for the 2023 spring expeditions for Mt. Everest, Mt. Lhotse and Mt. Nuptse on 6th April 2023. The team continued to monitor and repair the icefall route till the end of May.



3.5.2 Accident in Khumbu Icefall:

A serac collapsed early on the morning of 12th April 2023 in Khumbu Icefall near Camp I. Three Sherpa guides, Pemba Tenjing Sherpa, Da Tsheri Sherpa and Lhakpa Rita Sherpa went missing in the accident. All three guides are from Tesho village and were working with the Imagine Nepal Treks and Expedition.



3.5.4 Icefall Doctors' Training:

SPCC in partnership with the Juniper Fund conducted Wilderness First Aid Training for icefall doctors at Lukla from 3rd to 5th January 2023. Dr. Nima Namgyal Sherpa provided the first aid training to seven icefall doctors.

The 2023 icefall doctors' team also attended on-site refreshment training at Everest Base Camp from 2nd March to 6th March from Khumbu Climbing Center's instructors prior to setting the route for the Spring season.



3.5.5 Support received for Icefall Doctors:

The SPCC would like to express its sincere gratitude to Hyperlite Mountain Gear for donating gears to our 2023 Icefall Doctors team. We also thank Mr. Ang Tshering Lama for his invaluable coordination.



3.6 Monitoring of Illegal Climbers in Peaks

Since the year 2000, Sagarmatha Pollution Control Committee (SPCC) and Nepal Mountaineering Association (NMA) have been working together on the 'Illegal Climbing Control Project' in the Khumbu Region. SPCC is the authorized local institution responsible for controlling illegal climbers and monitoring garbage in the peaks of Khumbu Region registered under the Nepal Mountaineering Association: Imja Tse (Island peak), Khongma Tse, Kusum Kangru, Kwangde, Lobuje, Mera Peak, Mt. ABI, Mt. Cholatse, Mt. Kyazo Ri, Mt. Lobuje West, Mt. Nirekha, Mt. Ombigaichen, Mt. Phari Lapcha, Pharchamo and Ramdung.



SPCC has set up a check post at Island peak base camp to monitor illegal climbers, manage solid and human wastes. Imja Tse popularly known as Island peak (6,189 m) is the most popular peak of Khumbu Region. Our assigned inspection officer and sub inspection officer check climbing permits of climbers at the base camp. All climbers are required to keep their permit with them during their climbing period. If any of the climbers are found to be involved in illegal climbing, they have to face prosecution as per the laws governing regulations of Nepal. No illegal climbers were reported in this fiscal year.

3.7 Fixing ladders over crevasses in Island Peak

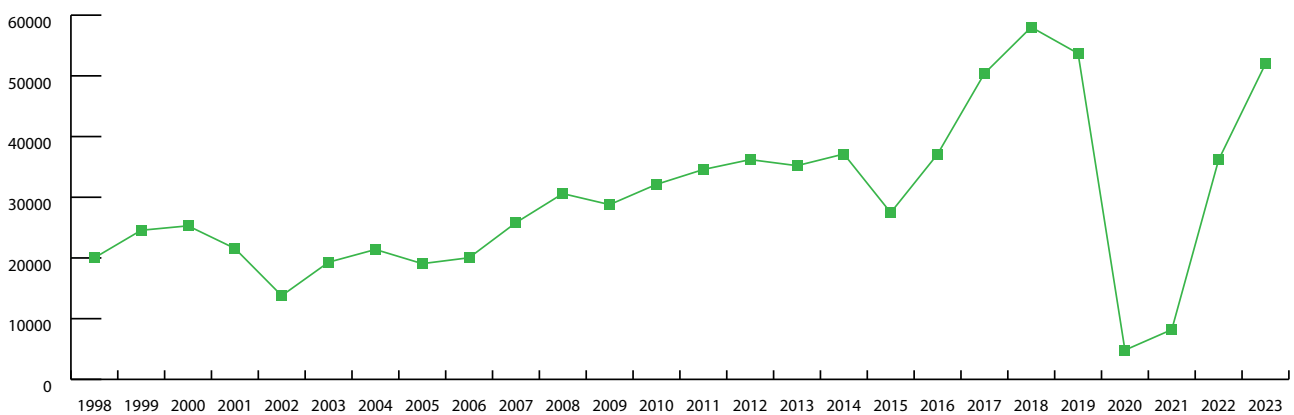
SPCC inspects the climbing route of Island peak at the beginning of every climbing season, and install ladders if wide crevasses appear along the route. Our technical team checked the climbing route of Island peak at the beginning of each climbing season. There were no crevasses seen in the Autumn 2022 season. In the spring 2023 season, two wide crevasses were seen along the climbing route. Our technical team installed ladders over the wide crevasses and continue to monitor the route throughout the Spring climbing season. In this regard, our scope of work is to inspect crevasses along the route and install ladders when required over wide crevasses. Climbers need to use their own ropes and equipment for climbing.



CHAPTER 4

OUR WORKS ALONG THE TREKKING TRAILS

Khumbu Region, popularly known as Everest Region is one of the most popular trekking destinations of the world and is visited by thousands of trekkers each year from all around the globe. Since the first scaling of Mt Everest in 1953, the number of visitors in Khumbu Region has increased greatly: from about 1,400 in 1972-3 to more than 52,000 foreign trekkers in 2023. The enormous increase of visitors to the Everest region during the last quarter century has tremendously supported the local economy. Nevertheless, the pressure exerted from tourism has also resulted in increased environmental degradation from waste. With an increase in the number of visitors, littering of trash along trekking trails has become prominent. SPCC manages wastes along all major trekking trails of Khumbu Region that passes along various settlements, high passes and base camps. Trails waste mostly comprises wrappers, PET bottles and cans.



Foreign Tourist arrivals in Sagarmatha National Park 1998 – 2023

(Source: SNP entrance gate, Jorsalle)





4.1 Construction and Management of garbage bins

With the aim of building a more effective waste collection system along the Region's trekking trails, SPCC has started to build permanent garbage bins along the trails since 2013. Each bin has segregation chambers to collect trash by categories so that these wastes will be properly treated and managed accordingly. SPCC built a total of 115 garbage bins and has been overseeing the maintenance and management of all garbage bins. A total of 105 garbage bins were built at various resting points along the trekking trails and 10 garbage bins were built at nine schools located within Khumbu Region. SPCC's field staff and local partners continuously monitor littering of trash along the trekking trails and manage all garbage bins located along various trekking trails.

Our garbage bin Sponsors:

1. Adventure Travel Conservation Fund (ATCF)
2. AlpenGlow Expedition
3. Alpine Ascents International
4. Club Alpino Italiano
5. Eco Himal - Saving Mt. Everest Waste Management Project
6. Epic Private Journeys
7. Ministry of Tourism, Culture and Civil Aviation (MoCTCA)
8. Nepal Mountaineering Association (NMA)
9. Nepal Tourism Board (NTB)
10. Sagarmatha National Park and Buffer Zone Management Committee (SNP BZMC)
11. Shangri-La Nepal Trek
12. Tenzing Natural Drinks
13. Vertical. Chile
14. World Nomads

4.2 Cleanup of Trekking Trails

In every trekking season, SPCC sends field staff for cleaning up the trekking trails – one at the beginning and one at the end of the trekking season. During the field visits, our field staff collect litter along the trails, empty the garbage bins, and transport the garbage to the disposal site. They cover all major trekking trails passing through major settlements including the high passes, popular base camps.



4.3 Management of toilets at Topdada:

SPCC oversees management of public toilets at Topdada and Police Check Post near Namche for providing sanitation facilities for trekkers, guides, porters and local people traveling along the busy trail between Jorsalle and Namche Bazaar. We have also set up drinking water supply at both the locations.



4.4 Trek Achievement Certificate (TAC)

The Trek Achievement Certificate (TAC) was jointly prepared by the Sagarmatha Pollution Control Committee (SPCC), Sagarmatha National Park Buffer Zone Management Committee (SNP BZMC) and Khumbu Pasang Lhamu Rural Municipality (KPLRM). This certificate has been prepared as a souvenir of Khumbu for trekkers visiting the Khumbu Region. It is available for sale at the Police Check Post at the entrance of Namche Bazaar, SPCC office at Lukla and Namche. The cost of the TAC has been revised as Rs. 500 effective from Autumn 2022. All proceeds from the sale of TAC go to the Solid Waste Management Fund to support SPCC's waste management activities in Khumbu.



CHAPTER 5

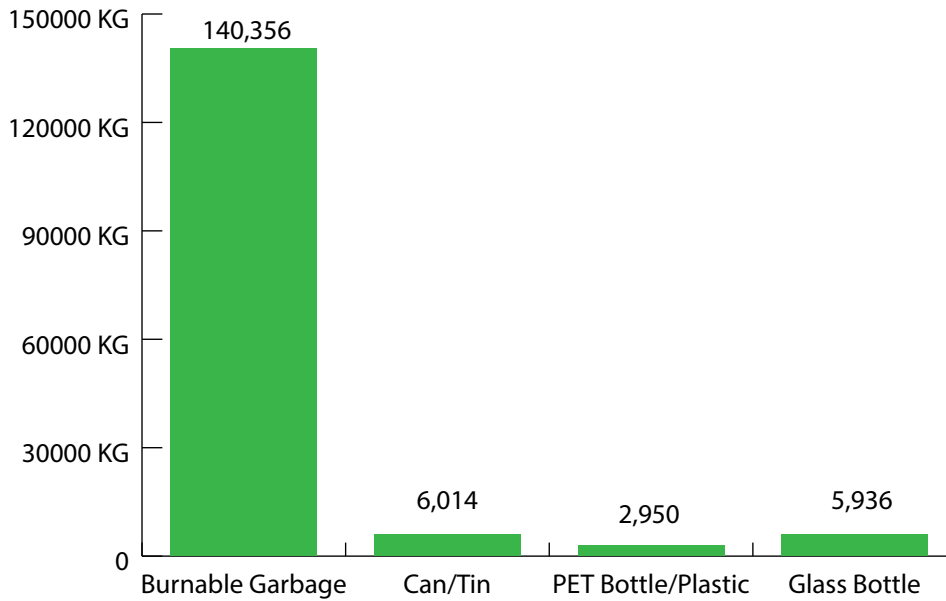
WASTE MANAGEMENT IN SETTLEMENTS

As tourism becomes the main livelihood strategy of the people of Khumbu region, tourism related business enterprises such as lodges, restaurants, bakeries, tea shops and shops are established almost in every settlement. These enterprises produce tons of garbage including tins, cans, packages, PET bottles, papers and kitchen wastes in tourist season. For years, SPCC has been taking various initiatives to address waste management issues in the settlements by developing appropriate strategies to manage garbage produced by business enterprises and local households. Our efforts range from building waste management infrastructures, providing door-to-door services in major settlements, mobilizing garbage management groups (GMGs), and finding solutions for waste transportation and diversion.

5.1 Daily garbage collection and management at Namche, Lukla and Toktok:

SPCC has been providing door-to-door waste collection services in Namche and Lukla – the two major settlements of Khumbu region. Our field staff collect garbage from all households and enterprises, and transport it to our waste management facilities for further treatment. Currently, we provide door-to-door waste collection services to a total of 109 lodges, restaurants, cafés and shops at Namche and a total of 60 households and various business enterprises at Lukla. We also have a field office stationed at Toktok. We mobilized our field staff to collect trash along various trekking trails.





Garbage collected at Namche, Lukla and Taktok in FY 2022/23

5.2 Partnership with community partners in various settlements

With the aim of strengthening community participation in waste management, SPCC created Garbage Management Groups (GMGs) in various settlements, and assigned responsibilities for them. Further, SPCC also extended its partnership with interested existing local organizations, such as youth groups and women's groups. With their partnership and engagement, waste management in various settlements and trekking trails has improved significantly. Currently, SPCC works with over 20 community partners in various settlements located within our working areas. Our local partners conduct regular cleanup programs in their villages, and work directly with SPCC in addressing garbage management issues in their respective settlements. SPCC provides financial and technical support to local partners for garbage management in their settlements.



Name of Community partners receiving financial support from SPCC

S.N.	Name of Community Partners	Name of Villages
1	Hiu Chituwa Samrakshan bachat tatha Rin byabasthapan Samuha	Thamo
2	Phurte Mahila Samuha	Phurte
3	Danphe Mahila Samuha	Phakding
4	Yumchoma Mahila Samuha	Yilajung
5	Shomare Sarsafai Tatha Fohor Byabasthapan Samuha	Shomarey
6	Tengboche Gumba Byabasthapan samuha	Tengboche
7	Dole Pragati Samuha	Dole
8	Tashinga Milijuli Sarsafai Tatha Fohor Byabasthapan Samuha	Lausasa
9	Renjola Milijuli Sarsafai Tatha Fohor Byabasthapan Samuha	Lungden
10	Thameteng Bachat Tatha Rin Byabasthapan Samuha	Thameteng
11	Gorakshep Chetra Sudar Samiti	Gorakshep
12	Lobuje Sarsafai Tatha Fohor Byabasthapan Samuha	Lobuje
13	Dingboche Lodge tatha Hotel Association	Dingboche
14	Pheriche Sarsafai Samuha	Pheriche
15	Machermo Portershelter Sanchalak Samiti	Machermo
16	Gokyo cho Byabasthapan Samiti	Gokyo
17	Khumjung Youth Group	Khumjung
18	Luripeak Mahila Jagaran Samuha	Phortse
19	Sagarmatha Mahila Samuha	Toktok
20	Khumbiyula Mahila Samuha	Monju
21	Sundarpeak Bachat Tatha Rin Byabasthapan Samuha	Thame

5.3 Consultation meetings held with local residents of Kharikhola and Paiya:

Since its establishment in 1991, the Sagarmatha Pollution Control Committee (SPCC) has been continuously working to manage waste in ward no. 2, 3, 4 and 5 of Khumbu Pasang Lhamu Rural Municipality (KPLRM). This year, SPCC has amended the constitution of the organization to expand its working areas to include the entire Rural Municipality by including ward no. 1.

To extend waste management programs in ward no. 1, SPCC in collaboration with KPLRM conducted consultation meetings with the local residents and various organizations on 13th and 14th December in Kharikhola and Paiya villages respectively.



5.4 Waste Collection, Segregation, Transportation and Diversion

SPCC continues to focus on strengthening proper systems for waste segregation at the base camps, along trekking trails and in various settlements so that all types of wastes don't end up in a dumping pit. All our garbage bins constructed along the trekking trails have two compartments for storing garbage according to various categories. As per our garbage declaration and clearance system, all waste generated by expedition groups/climbers needs to be segregated and submitted to SPCC to get a garbage clearance certificate. In major settlements, such as Lukla and Namche, SPCC staff collect and segregate waste at our waste management facilities. In other settlements, our local partners segregate the waste recyclables, such as tins, cans, glass, PET bottles etc. and transport it to our collection centers.



Kitchen waste makes up a significant portion of overall wastes in Khumbu. Kitchen waste is valuable as animal feed, and thus separated from other wastes at household level and fed directly to animals. Apart from kitchen wastes, other burnable garbage is managed at our waste management facilities. Burnable garbage is either incinerated in enclosed burning chambers or dumped in pits. We have built nine enclosed burning chambers at various settlements till this date. However, one of the priorities of the 'Environment Pollution Control and Sustainable Waste Management Plan' is to completely eliminate burning of waste in the Khumbu Region so we have decided to cut down our support for constructing burning chambers.





SPCC has built collection centers for collecting and storing recyclables at major settlements of Khumbu. Waste of recyclable values, such as tins, cans, glass and irons that can be recycled is collected in our collection centers. At this date, we have established twelve collection centers at Lukla, Phakding, Chumoa/ Monju, Namche, Tesho, Lausasa, Pangboche, Pheriche, Mongla, and Dingboche. We have plans to build additional collection centers in other settlements in coming years. We have three waste storage houses located at Syanboche, Namche and Phakding for storing recyclables. Our waste management facility at Namche is equipped with a shredding machine and a can compressor. Our staff segregate and process the recyclables for transporting the recyclables to Kathmandu for recycling through the Carry Me Back (CMB) campaign.

As outlined in the Environment Pollution Control and Sustainable Waste Management Plan, SPCC is constructing a Material Recovery Facility (MRF) at Nyersey near Namche Bazaar with the funding support from Khumbu Pasang Lhamu Rural Municipality (KPLRM) for FY 2079/80. The Material Recovery Facility (MRF) further segregates and pre-processes waste materials in forms more suitable for transportation back to Kathmandu. An MRF is a covered and cement-floored facility that contains (a) adequate storage space for the raw materials, (b) appropriate, repairable waste pre-processing machines that can include shredders (for plastics), compactors (for aluminum and steel cans), and bailers (for plastics, metals, papers), and (c) adequate storage space for all pre-processed waste materials.



CHAPTER 6:

OVERCOMING CHALLENGES: RECYCLING IN THE KHUMBU REGION

SPCC's commitment to environmental stewardship extends beyond waste collection. Since 2016, we have actively collected, sorted, semi-processed, and transported recyclable materials like cans, tins, PET bottles, and glass from various locations in the Khumbu Region to Kathmandu for recycling. The Khumbu Region lacks recycling facilities and convenient transportation, necessitating the transport of all recyclables to Kathmandu for further treatment. SPCC addresses this challenge through a multi-pronged approach:

Collection

We collect recyclables from various sources, including base camps, trekking trails, and settlements.

Partnership with Airlines

Since 2016, Tara Air has generously supported SPCC's efforts by providing free-of-charge airlift of recyclables from Lukla to Kathmandu, a vital contribution to our success.

Transport

While we continue to use traditional modes of transport, such as porters, yaks and zopkyok to transport recyclables in the remote mountain terrain of the Everest Region. We have also launched the "Carry Me Back" campaign. This innovative initiative empowers volunteers to contribute directly to the recycling effort. Volunteers participating in the "Carry Me Back" campaign actively transport collected recyclables from various Pick Up Stations to our Drop Off Station at Lukla.

Kathmandu Processing

Once in Kathmandu, all collected recyclables are delivered to our partner, Blue Waste to Value, in Kathmandu. Blue Waste to Value further segregates these materials at their facility before transferring them to dedicated recycling centers within Kathmandu and elsewhere.

This collaboration ensures a comprehensive and responsible approach to waste management in the Khumbu Region. This initiative has resulted in over 65 tons of recyclables diverted from dumping pits and transported to Kathmandu for recycling since 2016. Continuously seeking to expand our partnerships, we are thrilled to announce that Sita Air will join us as a partner starting next year, further strengthening our commitment to a sustainable Khumbu Region.





6.1 Post-Consumer PET Plastic Recycling

Our waste management efforts extend beyond collection. In Namche, we sort and shred post-consumer PET plastics collected from settlements and trekking trails. These shredded plastics are then transported to Lukla through the “Carry Me Back” campaign, facilitated by dedicated volunteers.

These plastics are airlifted to Kathmandu by our partner airlines, where they are delivered to our recycling partner, Blue Waste to Value. Finally, the plastics are sent to Himalayan Life Plastic in Pokhara for reprocessing into PET flakes. These flakes are then used to manufacture new rPET granules, which in turn are used to create new PET bottles.

This comprehensive recycling process not only promotes a circular economy but also generates valuable employment opportunities.

6.2 Carry Me Back (CMB) Project

The “Carry Me Back” (CMB) project was initiated by Sagarmatha Pollution Control Committee (SPCC) and Sagarmatha Next in partnership with Sagarmatha National Park, Sagarmatha National Park Buffer Zone Management Committee, Khumbu Pasang Lhamu Rural Municipality, Tara Air and Blue Waste to Value. The main aim of the program is to transport semi-processed recyclable wastes, such as aluminum cans, PET bottles, tins etc. from Namche to Kathmandu for recycling with voluntary support from trekkers and guides. The CMB project was successfully tested during the trekking season in Autumn 2019. The CMB project was halted in 2020 and 2021 due to COVID-19 pandemic and restarted in Spring 2022. In the last four trekking seasons, a total of 5,844 trekkers and guides have the chance to take part in the campaign and support environmental protection. With the help of the incredible volunteers, 10,107 kgs of recyclables have been transported from Namche to Lukla. Numerous green jobs were created by the CMB project for both the local and migrant communities in Khumbu.

Table 1: Total participants and recyclable wastes transported through the CMB Project

Season	Year	Total Participants	Amount of waste transported	Types of Recyclable Wastes
Autumn	2019	2,500	4,000 kgs	PET Bottles and aluminum cans
Spring	2022	755	1,309 kgs	633 kg PET bottles; 461 kgs aluminum cans; and 215 kgs Tins;
Autumn	2022	1,024	1,573 kgs	645 kgs PET bottles; 911 kgs aluminum cans; and 17 kgs Tins
Spring	2023	1,565	3,225 kgs	904 kgs PET bottles; 1,592 kgs aluminum cans; and 729 kgs Tins
Total		5,844 participants	10,107 kgs recyclable wastes	

6.2.1 Carry Me Back (CMB) Autumn 2022

The Carry Me Back (CMB) program for the Autumn 2022 season was operated from 21st October till 30th of November 2022. The CMB program for the Autumn season was operated from SPCC's funds. SPCC recruited two waste processing staff at Namche for collecting, sorting, processing and packaging recyclable materials like PET bottles, aluminum cans and tins. We had set up the pickup station at Police Check Point, Misilung near Namche Bazaar where anyone interested can pick up approximately 1 kg bag on his/her way back to Kathmandu and drop the bags at our drop off stations located near Lukla gate. We mobilized one support staff and a volunteer at the pickup station and one staff at the drop off station for running the project. In Autumn 2022, a total of 1,024 volunteers participated in the CMB program transporting 1,573 bags of recyclable garbage to Lukla. Pema Yangkila Sherpa from Namche Bazaar volunteered at Namche to oversee the CMB program for this Autumn season. We are very thankful to Pema and all the volunteers who have participated in the CMB program.

6.2.2 Carry Me Back (CMB) Spring 2023

In the Spring 2023 season, we operated the Carry Me Back (CMB) program from 2nd April till 31st May 2023. The CMB program for this Autumn season is supported by Bally Peak Outlook Foundation and Dell Reconnect through our partner Sagarmatha Next. We had set up the pickup station at Police Check Point, Misilung near Namche Bazaar where anyone interested can pick up approximately 1 kg bag on his/her way back to Kathmandu and drop the bags at our drop off station located near Lukla gate. SPCC recruited two waste processing staff at Namche for collecting, sorting, processing and packaging recyclable materials like PET bottles, aluminum cans and tins. We mobilized two staff at the pickup station and one staff at the drop off station for running the project. In Spring 2023, a total of 1,565 volunteers participated in the CMB program transporting 3,225 bags of recyclable garbage from Namche to Lukla.





6.2.3 Carry Me Back (CMB) Concept extended to Gokyo:

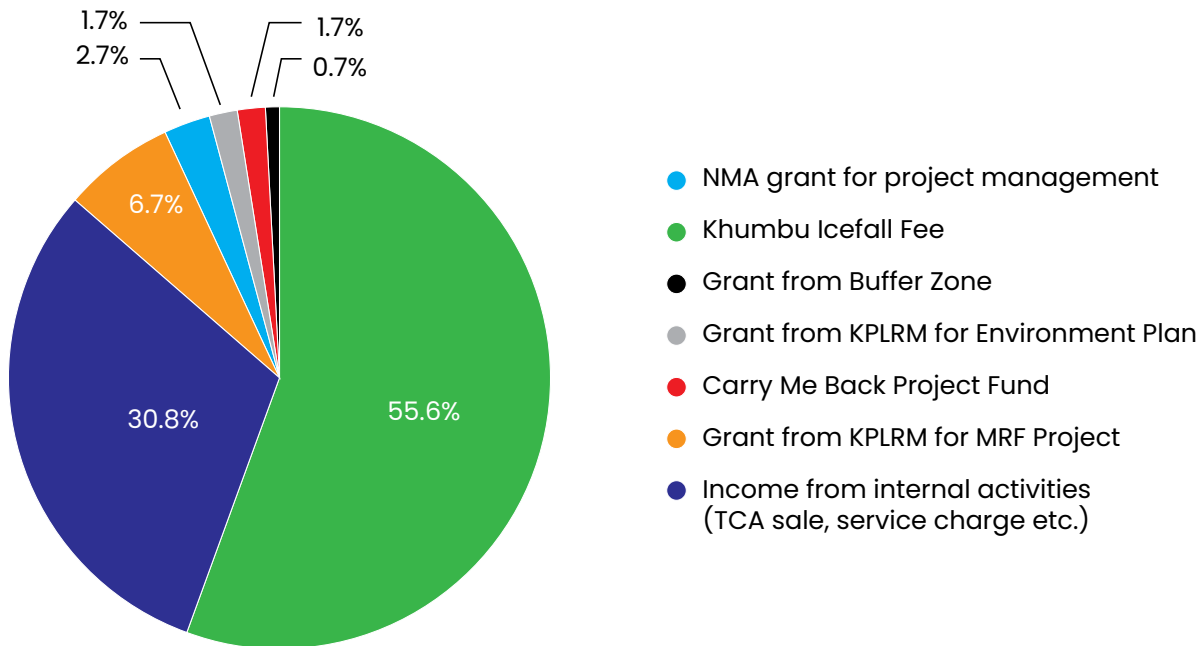
We have also started the CMB project concept to transport recyclables from Gokyo to Lukla by helicopter in partnership with our local partner from Gokyo. We have made bigger bags for transporting recyclables by helicopters and handed them over to our local partner at Gokyo. A total of 52 bags of garbage were transported from Gokyo to Lukla by helicopter in Autumn 2022 and 14 bags of recyclables were transported in Spring 2023.



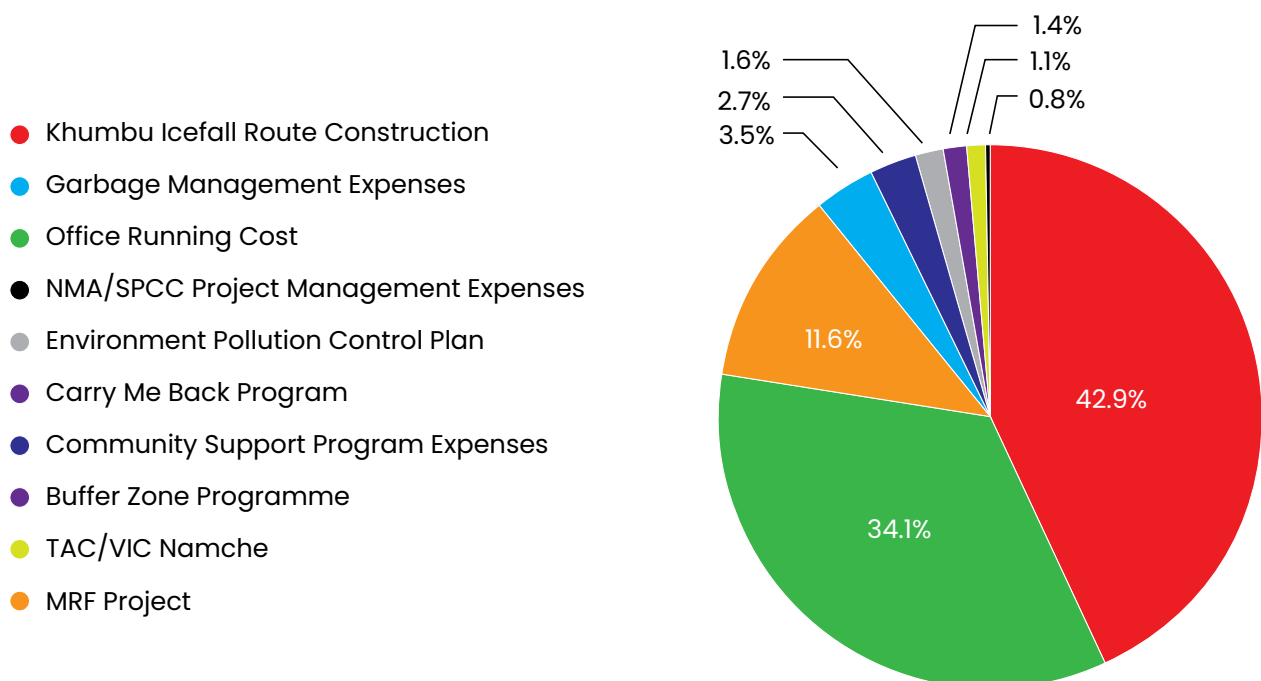
CHAPTER 7

FINANCIAL HIGHLIGHTS

Income sources for the FY 2022/23



Expenses incurred in different activities in FY 2022/23



CHAPTER 8

OUR PARTNERS

Major Executing Partners:

- Ministry of Culture, Tourism and Civil Aviation (MoCTCA)
- Khumbu Pasang Lhamu Rural Municipality (KPLRM)
- Sagarmatha National Park (SNP)
- Sagarmatha National Park Buffer Zone Management Committee (SNP BZMC)
- Nepal Mountaineering Association (NMA)

Other Partners

- Adventure Travel Conservation Fund (ATCF)
- Blue Waste to Value
- Dell Reconnect
- Eco Himal Nepal
- Himalayan Adventure Trust of Japan (HAT-J)
- Himalayan Museum and Sustainable Park/Sagarmatha next
- Khumbu Eco Club Network
- Tara Air
- Tenzing Natural Energy
- World Nomads
- WWF Nepal



Contact Us

Head Office:

Sagarmatha Pollution Control Committee (SPCC),
Namche Bazaar, ward no. 5,
Khumbu Pasang Lhamu Gaunpalika,
Solukhumbu, Nepal.

Phone: +977 38 540457

Email: info@spcc.org.np

Web: www.spcc.org.np

Facebook: www.facebook.com/SPCCNepal

Branch Office:

Sagarmatha Pollution Control Committee (SPCC),
Lukla, ward no. 2,
Khumbu Pasang Lhamu Gaunpalika,
Solukhumbu, Nepal.