Natural resources: includes natural occurring substances such as air, water, minerals, plants and fossil fuels that man uses. Most of the products and services offered by CBT are based on natural resources, and therefore, it is important that CBTEs ensure that the natural resources at their disposal are effectively managed.

We use natural resources in our daily activities at home and when running CBT ventures. The efficient management of the shared natural resources and the proper disposal of pollutants are important targets in ensuring resource efficient technologies.

Sustainable management of natural resources is important.

What can we do?

1. A starting point in the management of natural resources is the establishment of a natural resources inventory. This is simply a recording of all the natural resources that is found in the area where a CBTE undertake its activities. The CBTE members and other important stakeholders can map up these resources. A simple inventory of natural resources is illustrated in Table 8.1:

Table 8.1: Sample of Natural Resources Inventory

<table>
<thead>
<tr>
<th>Section 1: introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 2: water Resources</td>
</tr>
<tr>
<td>Rivers, lakes and other water bodies</td>
</tr>
<tr>
<td>Section 3: Soils</td>
</tr>
<tr>
<td>Soil Type</td>
</tr>
<tr>
<td>Slope</td>
</tr>
<tr>
<td>Section 3: Habitats and Wildlife</td>
</tr>
<tr>
<td>Significant Biodiversity Areas</td>
</tr>
<tr>
<td>Forests</td>
</tr>
<tr>
<td>Grasslands and shrublands</td>
</tr>
<tr>
<td>Section 4: Climate</td>
</tr>
<tr>
<td>Climate conditions</td>
</tr>
<tr>
<td>Climate Projections</td>
</tr>
<tr>
<td>Section 5: Land</td>
</tr>
<tr>
<td>Land Cover</td>
</tr>
<tr>
<td>Conservation areas</td>
</tr>
</tbody>
</table>

2. Develop an environmental policy for the CBTO. An environmental policy is a statement about an organisation’s environmental position and values. A publicly displayed policy shows
stakeholders that a Community-based tourism organisation has considered its environmental performance and has adopted best practice or is working towards improving its environmental performance. Like most tools, the environmental policy should involve community members during its creation and each CBT member must understand its components. A sample of an environmental policy is illustrated in Table 8.2. The community can modify it to fit their requirements.

Table 8.2: A template of an environmental policy

<table>
<thead>
<tr>
<th>CBTO x Environmental Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;CBTOx&gt; aims at achieving continual environmental improvement through implementing a management system with objectives and targets</td>
</tr>
</tbody>
</table>

Under this policy, environmental consideration will play a key role in support of our plan to promote protection and conservation of natural resources while providing our customers with the highest quality products and services.

<CBTOs>'s objectives under this policy are the following:
- Ensure there is environmental consideration in all business operations
- Demonstrate commitment to our, community and leadership in our industry in the protection of the natural environment

To achieve these objectives <CBTOs> has committed to:
- Compliance with all applicable environmental and health & safety laws, regulations and codes of conduct and apply responsible standards where regulations do not exist
- Manage business operations with the aim of preventing incidents and controlling emissions and waste with utmost consideration for the environment
- Improve employee and visitor awareness and concern of the environment through training and communication of this policy
- Respect the culture and customs of the local people and ensure that guests are briefed on socially acceptable and unacceptable behavior
- Promote social responsibility to the community through sustainable use of resources which directly benefits the local people
- Strive towards continuous improvement of operations by stimulating innovations and environmentally friendly alternatives and technologies

<CBTOs> will ensure compliance with this policy promoting utmost concern for the environment in all its operations.

This policy shall apply to all of <CBTOs>'s chains, business units, employees, and contractors in service to our business.

Signature:……………………………………………………………..
Name:………………………………………………………………
Position:……………………………………………………………..
DD MMMM 20YY
8.2: SCP Practices on Water for CBT

Sustainable Consumption and Production (SCP) is a holistic approach to minimizing the negative environmental impacts from consumption and production systems while promoting quality of life for all. (UNEP 2011)¹

The Situation

It is possible that water is the most important substance in preserving life. For instance, it is a known fact that humans can survive for weeks without food but only for a few days without water. The world is about 70% water, but only 2.5% of this water is fresh water. Furthermore, a vast majority of fresh water is trapped in permanent ice and snow. In fact, only 1% of fresh water is available in usable form such as in lakes, ground water, rivers and springs.

The UNESCO World Water Report (2017) reports that the pressure of water resources has largely increased due to the increasing demands of a growing global population on food, fiber and energy. By 2030, the world is projected to face a 40% global water deficit under the business-as-usual (BAU) scenario.² Furthermore, 20% of fresh water sources are being overexploited.

Making deliberate efforts in conserving water in a CBT can make more water accessible for other users and wildlife, especially in water stressed areas. Furthermore, saving on water can assist in the reduction of water bills.

How can CBTO deal with topic?

The scale of the water challenge in tourism is significant. In tourism, water is especially used in lodging (mostly spent on guest consumption, landscape and property management and laundry activities), and food service. A CBTO can promote SCP practices in water by:

1. Track your water usage and related costs

| Water tracking sample sheet | Source: adapted from TravelFoundation |

1 http://www.un.org/sustainabledevelopment/sustainable-consumption-production/
2 http://unesdoc.unesco.org/images/0023/002318/231823E.pdf
2. Check **leaks** in taps and pipes: If identified, ensure that leaks are repaired. One leak can cause wastage in hundreds of litres per day.

3. Avoid using **running water** to rinse dishes while washing. You can fill one sink/basin with soapy water and another with rinsing water to avoid water wastage especially when washing dishes if your CBT product offers food.

4. Adopt **water-saving appliances** e.g. low flow showerheads or taps. In general, efficient equipment are more costly compared to conventional showerhead, but the CBTO will end up saving money from the reduced water use.

5. Collect **rain water** in tanks if applicable.

6. Encourage guests **not to let running water** when brushing their teeth or shaving. This can be done by effective signage and communication.

7. Encourage visitors **to reuse towels and sheets** using innovative incentives (e.g. briefs or reward schemes) if running accommodation facilities.

Join us to be a friend to our planet

Whether you are traveling or at home:
- ✓ Turn off your water while brushing your teeth can save 25 gallons a month
- ✓ Shorten your shower by a minute or two saves up to 150 gallons per month
- ✓ Turning off the water while washing your hair can save up to 150 gallons a month
- ✓ Let us know if you find leaky taps or toilets

Help Save Our Planet

Dear Guests,
Every day millions of gallons of water are used to wash towels that have only been used once.

**You can make a difference:**
- A towel hanging up means "I will use again";
- A towel on the floor means "please exchange".

Thank You for Helping Us
Conserve the Planet’s Vital Resource

Save water sample reminder 1

Save water sample reminder 2

8. Water plants **early during the day** and/or at dusk if running a lawn or garden. Avoid watering plant when it’s windy as it would waste water.

9. Use **mulching and organic manure** (they hold water better) for plants

10. Use **full loads** in the washing machines or dishwashers to maximize on the use of water.

11. Install a **water meter** to monitor your water use

12. Collect feedback and suggestion from your guests on your water, energy and resource actions

We value your ideas!

We are committed to engaging our guests and employees to participate in our endeavours to save our planet. Should you have any comment or suggestions on our sustainability measures, please fill the space below and leave the form at the Front Desk.

I have ideas concerning conservation and/or management of

- [ ] Water  
- [ ] Energy  
- [ ] Waste  
- [ ] Other resource

Together, we can secure a better life for the generations to come.
Thank you for your participation!

Customer feedback sample template
8.3: SCP Practices on Energy for CBT

The Situation

Energy is used in tourism has become a hotspot for tourism research in the past. The use of energy in tourism can be divided into transport related purposes and destination-related purposes. In many cases, visitors use fossil fuels (in airplanes and vehicles) to travel to their destinations. In the same way, destination-related activities such as accommodation, food, and tourist activities also use different forms of energy. Consequently, the use of energy often leads to the emission of Green House Gases that contribute to global warming and climate change. Record-breaking temperatures, melting ice caps and more frequent coastal flooding, prolonged droughts, and damaging storms are just some of the intensifying risks we face as our planet continues to warm.

According to the Environmental Protection Agency of America, energy efficiency can assist individuals and institutions to reduce their energy usage. Energy efficiency means delivering the same (or more) services while using less energy. The tourism sector, including CBT, should aim at enhancing their energy efficiency processes.

How can CBTO deal with topic?

1. Track your energy usage and related costs.

<table>
<thead>
<tr>
<th>Guest Nights</th>
<th>Energy Tracking Sample Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter Reading</td>
<td></td>
</tr>
<tr>
<td>Units consumed</td>
<td></td>
</tr>
<tr>
<td>Cost per Unit</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
</tr>
</tbody>
</table>

   |---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
   | Insert electricity company / tariff here (i.e. % green tariff) | Source: adapted from TravelFoundation

2. Encourage the use of renewable sources of energy, (such as solar, wind and hydro-electricity) if the situation allows. Solar is a cost-effective options for most CBTOs in rural areas for heating and lighting.

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5 https://www.epa.gov/energy/reduce-environmental-impact-your-energy-use
3. Make efforts to use **rechargeable appliances**. The CBT can choose to buy rechargeable batteries and chargers. For instance, a rechargeable torch will make more sense to a CBTO than a torch that will regularly need battery.

4. Encourage the use energy efficient bulbs. Bulbs that are energy efficient can use about 70 to 90 percent less energy than standard bulbs and last 10 to 25 times longer. Although **LED energy efficient bulbs** are more expensive than the normal bulbs, remember that it pays to invest in energy efficiency. In some cases, the money you save in energy costs can pay back the purchase price in just a few years.

5. Make efforts to use other **energy efficient** items such as refrigerators, water heaters, cookers, etc.

6. Use **reusable containers** instead of packing food in paper bags and foils. This is because these materials would require energy to manufacture. In general, less wastes generated by your CBTO will lead to lesser use of energy.

7. Use less hot water by **installing low-flow shower heads**.

8. Practice **energy savings** in the kitchen. For example, by using energy efficient cookstoves, thawing food well before cooking, and avoiding opening the oven unnecessarily while cooking.

9. Practice ‘house’ maintenance activities that can assist in saving energy such as:
   - Dust your lightbulbs: The dust reduces the lighting intensity which could encourage you to buy higher voltage bulbs. Similarly, dusting the solar panel would increase its absorption efficiency.
   - Three or four times a year, pull your fridge away from the wall and give the coils a good vacuuming. Once again, leaving an accumulation of dust and grime means the fridge motor has to work harder.
   - Check the seals on your fridge and freezer to make sure they’re still airtight – otherwise the appliance has to work harder and use more energy to maintain a steady temperature.
   - Keep the fridge door closed – opening it just once can let up to ¼ of the cold air escape. Don’t leave it open while you’re going back and forth to unload your shopping.

10. Work with your community and group to implement these and other energy-efficiency and waste-reduction measures in your environs. Form or join local citizens' groups and work with local government officials to see what measures can be taken for the community. **Remember principles 2 and 3?**

11. Behaviour change: encourage CBT members and visitors to **turn off lights** and other appliances that use energy when not in use.

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6 https://www.epa.gov/energy/reduce-environmental-impact-your-energy-use
8.4: SCP Practices on Waste for CBT

The Situation

Solid Waste Management is a major problem around the world and this is not an exception to Kenya. It results to several challenges from clogged drainage and sewers, waterborne diseases like typhoid, cholera and diarrhea, increased upper respiratory diseases from open burning of the garbage to malaria as they promote breeding places for mosquitoes.

Waste management has been the responsibility of local authorities (County governments). However, county governments on their own cannot manage wastes and CBTOs can participate actively in promoting cleaner environments. For instance, Nairobi generates 3200 tons of waste per day but only 850 tons reach the Dandora dumpsite.

Moreover, proper waste management and eco-innovation have presented entrepreneurial opportunities for individual world over.

How can CBTO deal with topic?

1. Separate waste at the source. Store the waste properly in the compound or house. The storage needs to be well contained within appropriate structures, with a solid floor to prevent leakage and soil contamination.

2. Reduce the waste amount generated by the CBTO. There are various ways of reducing the waste generated including:
   - Buying in bulk rather than individual packages will save you lots of money and reduce waste! Packaging makes up 30% of the weight and 50% of trash by volume. Buy juice, snacks, and other lunch items in bulk and use those reusable containers each day.
   - Choose products that are returnable, reusable, or refillable over single-use items
   - Bring reusable bags and containers when shopping, traveling, or packing lunches or leftovers.

3. Reuse applicable waste. Reuse means purchasing non-disposable items or it can mean passing an item along to another person for continued use. Examples of reusing include:
   - Rather than using paper towels to clean the house or other CBT activities, you use a washable rag
   - Instead of throwing out the clothes or toys the children in the community have outgrown, you pass them along to a neighbor, charity or church. The CBTO can organize such an exercise in the community.
   - If you are doing remodeling or construction work on your CBTO, consider using excess or demolition materials for other projects.

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8 Ecotourism Kenya Eco-Rating Certification Scheme
9 http://www.wm.com/location/california/san-diego/city/environment/reuse.jsp
4. **Recycle waste at primary source.** According to the NEMA Waste management strategy, recyclable materials in Kenya make up to 50-70% of the total waste stream. However, recycling centres are not common in Kenya. Some of the materials that can be recycled include:

- Aluminum/tin cans
- Empty aerosol cans
- Pie tins
- Cardboard egg cartons
- Computer/white paper
- Milk jugs/plastics
- Juice bottles
- Newspapers/inserts/magazines
- Coupons
- Cardboard/12-pack soda boxes
- Cereal boxes (lining removed)
- Tissue boxes
- Glass bottles/jars
- Laundry detergent boxes/bottles
- Junk mail/magazines/phone books

5. **Composting organic wastes.** Food and yard waste accounts for a significant percentage of wastes thrown in many parts of Kenya. The composted material can be used to enrich the soil for agriculture, pasture or landscaping.

6. **Avoid open air burning** of wastes of any category. Burning waste can be a nuisance to neighbors and can also pollute the environment by releasing harmful chemicals into it. Burning should be done using recommended incinerators.

7. Compliance with **existing laws of waste management** (NEMA and the county government)
8. Presence of effective/adequate **waste water management system** e.g. grey water from the kitchen should flow through grease-traps, use of septic tanks for black water, enzyme biodyesters for optimal sludge digestion etc

9. Participate with **communities** in activities to keep the environment clean. This can involve strategies such as cleaning the environment together.

10. Encourage the visitors and the communities to **practice sustainable waste management**

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12  Ecotourism Kenya Eco-Rating Certification Scheme
8.5: SCP Practices on Food for CBT

The Situation

A growing global population with accelerating urbanization and a deteriorating natural resource base means more people to feed with less water, farmland and rural labour. According to Food and Agricultural Organization (FAO), 1.3 billion tonnes of food are lost or wasted every year while almost 800 million people go hungry. Overconsumption of food has a negative impact to both a person’s health and the environment.

Hotels often say they waste very little food as the plates generally come back clean. However, food waste comes from a variety of sources;

- Spoiled or out of date food
- Peelings & trimmings
- Inedible by-products, e.g. bones, coffee grounds, tea leaves
- Kitchen error
- Plate waste

The food sector accounts for around 30 per cent of the world’s total energy consumption and accounts for around 22 per cent of total Greenhouse Gas emissions. Thus, SCP practices on food can significantly reduce GHG.

How can CBTO deal with topic?

1. Encourage the CBT to adopt menus with lower impacts to the environment. It is advisable to reduce meat and dairy consumption at the CBT as their production has considerable negative impacts to the environment.
2. Avoid the wastage of food. Make sure that food costing and planning are precise. Every time food is wasted, the water, energy, time, manpower, land, fertilizer, fuel, packaging and MONEY put into growing, preparing, storing, transporting, cooking the food is wasted.
3. Switch to more seasonal and local foods
4. Increase the purchase of organic/certified foods and drinks.
5. Engage in activities that can assist in supplementing the food needs of the community. For instance, promoting the development of gardens
6. Avoid using bottled water for guests if possible. The CBTO can invest in a water dispenser where each guest can collect their water.
7. Review stock management and food delivery processes for food items with a short shelf life. Ensure stock is rotated as new deliveries come in.
8. Keep up-to-date on all the good practice being carried out by other businesses by looking online, sites such as WRAP offer innovative ways of promoting SCP practices in food. WRAP can be accessed via http://www.wrap.org.uk/category/sector/hospitality-and-food-service

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9. Work out the cost of the food to waste. If possible, estimate the cost by measuring wastages in spoilage, preparation and customer plate waste.