# 3.5



# **Environment and Natural Resources**

# Lesson at a Glance

# Aim

To a) help peacekeeping personnel connect environment and peacekeeping and b) clarify duties of personnel to reduce the mission's harmful environmental impacts.

## Relevance

- The environment affects all humans; in turn, we affect the environment
- Good management of the environment and natural resources benefits peacekeeping
- There is a link between natural resources and conflict

The environment affects people, and people affect the environment. Environment and natural resources management are relevant to all peacekeeping personnel. Climate change is a big challenge and the UN commits to reducing its environmental impact.

Sound environment and natural resources management achieves different things. It:

- Improves health and well-being for mission personnel through quality services in water supply, sanitation, waste management and electricity
- Reduces harmful effects to local people and environment
- Leads to cost savings for mission budgets and Member State resources

The Security Council mandates some peacekeeping operations on natural resources, directly and indirectly. The root causes of many conflicts are environment and natural resources.

# **Learning Outcomes**

#### Learners will:

- Define "environment" and the "do no harm" principle
- Explain why it is important to consider, manage and protect the environment and natural resources in peacekeeping operations
- Identify natural and cultural resources that a peacekeeping operation can affect
- Explain personal responsibilities and actions of all peacekeeping personnel to follow the Environmental Policy and the 4Rs – reduce, reuse, recycle and recover

# Lesson Map

# Duration: 45 minutes total

20 minutes: presentation 25 minutes: interactive exchange or activity

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# The Lesson



# **Starting the Lesson**

Introduce the following (using the Introductory Slides):

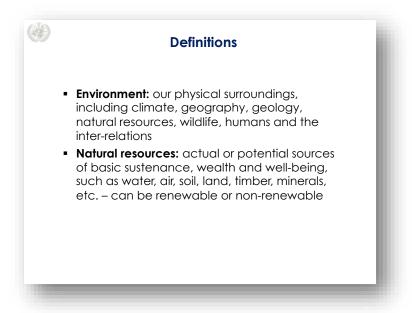
- Lesson Topic
- Aim
- Relevance
- Learning Outcomes
- Lesson Overview

The "Do No Harm" principle is covered at the beginning of Lesson 3.5. Participants may ask about it. Be ready to briefly introduce the "Do No Harm" principle before the lesson. References in the lesson text build an incremental understanding of the principle. You may want to introduce the "Do No Harm" principle in a deliberate, phased way.

Ask participants to share ways they protect their home environment. Through the lesson, transfer those familiar and "common sense" practices in life to the mission.

## **Definitions**

#### Slide 1



# **Key Message:** The **environment** is our physical surroundings.

**Environment** covers climate, geography, geology, natural resources, wildlife, humans and relationships among all these. Some people use the word "environment" to mean "situation" or "context", for example political environment, security environment.

**Natural resources** are sources of basic life, wealth and well-being. They include water, air, soil, land, trees and minerals. Natural resources may be renewable or non-renewable, depending on the time for regeneration.

Cultural resources are cultural heritage.

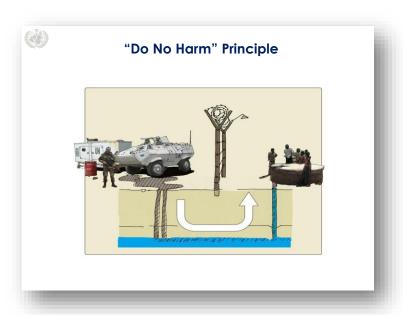
**Intangible cultural resources** include oral traditions, performing arts and rituals.

**Tangible cultural resources** include those which are:

- Moveable: paintings, sculptures, coins, manuscripts
- **Not moveable:** monuments, archaeological sites
- Underwater: shipwrecks, underwater reefs, ships, cities

# "Do No Harm" Principle

#### Slide 2



Key Message: Caring for the environment and natural resources is important. The environment affects all humans. In turn, we affect the environment.

## A peacekeeping operation can affect a local environment more than local people:

- Numbers of people, concentrated in one place;
- Amount of water needed and waste
- Quantity of buildings and vehicles

The diagram shows how UN peacekeeping operations can impact the local environment and the health and safety of local populations:

- Soil pollution from UN vehicles diesel or lubricants can seep into the ground and reach the water table
- Local people may draw water from a well in the same water table contaminated by a mission's hazardous waste

A fence aboveground does nothing. Common natural resources like land and water do not follow fences or other human-made demarcations.

The "Do No Harm" principle means showing respect for the natural environment. Peacekeeping personnel should not:

- Harm animals or plants
- Overuse, misuse or pollute the environment or natural resources
- Harm cultural, historical, religious or architectural sites
- Litter

# Importance in Peacekeeping

#### Slide 3



**Key Message:** It is important to consider, manage and protect the environment and natural resources in peacekeeping operations.

#### This is because:

- Peacekeeping personnel deploy to places with fragile environments and scarce natural resources. A host country and local communities have reduced capacity to take care of the environment.
- Protecting the environment will help keep the peace. It is part of direct and indirect mandates and helps protect the health and safety of personnel and local people.
- It upholds the UN's reputation. It is important for UN credibility to walk the talk on sustainability and addressing climate change. Maintaining this reputation helps the mission's relationships with local people and communities.
- It helps mission effectiveness. Results include a) greater efficiency and cost savings and b) improved safety, health and well-being of mission personnel.
- It's part of the job. The UN expects all personnel to act responsibly towards the environment as part of the job. Due to its scale and size, the environmental impacts of UN peacekeeping operations are great. Everyone has responsibilities and contributions to make to reduce harmful impacts of mission activities and improve working and life spaces. These responsibilities are both common sense, like what we do at home, and required by UN policies and directives.

# Fragile Environments and Scarce Natural Resources

#### Slide 4



**Key Message:** Post-conflict situations where missions deploy have fragile environments and scarce natural resources. Water and land use may be contested.

Most missions are in Africa and the Middle East, where **little water is available for each person**. The picture is taken in Darfur.

**Deforestation, competition for fertile land and poor access to clean water** are common problems in conflict and post-conflict settings.

**Effects of Armed Conflict:** Sometimes, **serious environmental and cultural impacts** occur directly from armed conflict:

- Fumes from burning oil
- Bombed land
- Waste from weapons
- Destroyed buildings
- Contaminated water
- Damaged cultural heritage

**Reduced Local Capacity:** In post-conflict settings, national and local capacities for environmental management are often weak. Examples are: collection of waste, recycling, disposal in landfills, wastewater treatment plants.



Inform participants that the 6<sup>th</sup> of November is the "International day for preventing the exploitation of the environment in war and armed conflict".



**Key Message:** Peacekeeping missions affect the environment. Missions can be the largest users of natural resources like water, land and energy in a given location because of size. The "Do no harm" principle requires peacekeeping personnel to not over consume, misuse or pollute natural and cultural resources.



Ask participants to recall the definition of "environment" – it includes natural resources. Consider brainstorming with participants the impact peacekeeping operations can have on the environment. Brainstorm different examples of natural resources. Following this, introduce the content, covering any gaps.

The impact of UN peacekeeping operations on the environment is extensive. A peacekeeping operation affects:

**Water:** Water is for personal consumption and site-specific communal activities. For example, kitchens, toilets, laundries, washing equipment and sometimes air conditioning.

**Energy:** Fuel is a big cost for UN peacekeeping operations. Missions rely almost only on petrol and diesel fuel for generators and the 17,000-vehicle fleet, as well as jet A1 fuel for the 257 UN aircraft.

**Solid and hazardous waste:** A peacekeeping mission creates significant amounts of solid and hazardous waste. Solid waste can include office refuse, construction debris, scrap metal and food refuse. Hazardous waste encompasses medical products, used oil, tires, batteries, electronic waste, stocks of chemicals, explosives and ammunition.

Wastewater: Liquid waste or wastewater include "black water", sewage from toilets and "grey water", wastewater from showers, sinks and laundry. Improper treatment and disposal of wastewater may cause environmental and health problems for UN staff and local communities.

Wildlife: UN missions can threaten local ecosystems, including plant and animal species, in various ways that further harm livelihoods of nearby communities. Examples include:

- Unregulated hunting or fishing
- Purchase and possession of dead or live animals and plants
- Construction of structures that block wildlife corridors
- Clearing natural habitats

Coastal and island resources: Coral reefs need to be protected, not broken and taken

Historical and cultural resources: Setting up a UN peacekeeping base camp can uncover historic structures, areas of cultural importance and archaeological sites. Actions of peacekeeping personnel can also accidentally damage or destroy historical or cultural resources.

Cultural and historical resources may not seem a priority, but they are. Examples are: places of worship, ancient settlements, cemeteries and intangible heritage like artifacts.

Cemeteries have important meaning to people from almost all cultures. UN personnel must not trespass or damage them, even by accident.

# Example of a case to avoid: Vandalism of ancient cave paintings – MINURSO, Western Sahara

In 2007, MINURSO military observers vandalized several prehistoric archaeological sites in the Western Sahara. Disciplinary action was taken against two MINURSO personnel. The mission had to pay remediation costs. To avoid similar action, the mission has briefed all incoming staff on cultural heritage.

# Example of a case to promote: Rehabilitation of Timbuktu Library – MINUSMA, Mali

In 2015, MINUSMA undertook a Quick Impact Project (QIP), with the United Nations Educational, Scientific and Cultural Organization (UNESCO). This involved the rehabilitation of Imam Essayouti Manuscripts Library in Timbuktu. A suicide bomb attack in the neighbourhood in September 2013 had damaged the library.

The pictures relate to these examples.

# Protecting the Environment to Keep Peace

#### Slide 6



**Key Message:** The picture shows artisanal diamond mining in the forests on the outskirts of Freetown, Sierra Leone. Natural resources contribute to violent conflicts.

They contribute in three main ways:

- 1. **Revenues from natural resources can fund conflicts.** Primary commodities are oil, diamonds, minerals and timber. Civil wars fueled by high-value, extractable "conflict resources" include: Cambodia, the Democratic Republic of the Congo (DRC), Côte d'Ivoire, Liberia and Sierra Leone.
- 2. **Tensions over the control of scarce resources fuel violent conflicts.** Fertile land and water are conflict drivers in Darfur, Afghanistan and the Middle East.
- 3. Marginalization and environmental damage motivate violent conflict. Local people do not see the economic benefits from natural resource extraction. Examples: copper mining in Bougainville (Papua New Guinea) and oil extraction in the Niger Delta (Nigeria).

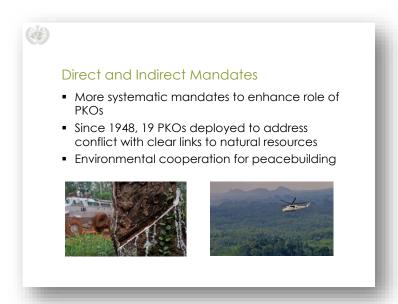
#### Climate change – a threat to peace and security

**Climate change** is the warming of the Earth by burning fossil fuels, which releases greenhouse gases such as **carbon dioxide** (CO2) into the atmosphere. The effect is a change to the global climate. An international climate change conference in Paris in 2015 set a global goal of limiting temperature rise to 1.5 degrees.

Potential consequences of climate change are momentous for wildlife, fish, birds and people. Increasingly, the effects of climate change threaten international peace and security. Water availability, food security, disease, coastal boundaries and population movements aggravate existing tensions and create new conflicts.

Climate change is a "threat multiplier which exacerbates existing trends, tensions and instability" posing both political and security risks.

#### Slide 7



**Key Message:** Peacekeeping mandates link to natural resources. The picture on the left shows UNMIL peacekeeping personnel moving into a rubber plantation to secure it from ex-combatants who had illegally tapped rubber. The picture on the right shows a UN helicopter being used to conduct a rapid biological assessment.

Since 1948, the UN has deployed nineteen (19) **peacekeeping operations to address conflict with clear links to natural resources.** These include current operations: UNMIL, UNOCI, UNAMID, MONUSCO, UNISFA, UNMISS, MINUSMA and MINUSCA

Countries are mostly in Africa, Asia and the Middle East. Resources include diamonds, timber, minerals, land, water and oil.

## Patrols and Expert Panels:

- Peacekeeping patrols have combated wildlife crime and illicit trade and provided security in areas with contested natural resources
- Sometimes, missions support an Expert Panel to advise, monitor and report to the Security Council on commodity sanctions

## Peacebuilding:

- Environmental cooperation can be effective for peacebuilding
- Peacekeeping operations can capitalize on natural resources to contribute to stability and early peacebuilding. Examples are through employment, livelihoods, economic recovery and reconciliation. See examples of Civil Affairs and DDR programmes.

# Example - MINUSMA: Mali

MINUSMA is a first in two ways, it:

- Has a mandate for cultural preservation
- Is the first mission mandated to: a) manage the environmental impacts of its operations and b) operate mindfully near cultural and historical sites

## Example - UNAMA: Afghanistan

- Pistachio reforestation gave livelihoods to ex-combatants
- Ex-combatants and people in vulnerable groups were hired to reforest pistachio woodlands and conifer forests
- Partners established the Afghan Conservation Corps (ACC). Partners included: the Government of Afghanistan, UNAMA, USAID, UNOPS

#### Since 2003, ACC has

- Planted hundreds of thousands of seeds and trees
- Rehabilitated irrigation canals and retaining walls
- Improved community capacity for resource management
- In 2006, the biggest pistachio woodland site estimated that revenues from their harvest went up by 65%

## Example - UNIFIL: Lebanon

- The UNIFIL Civil Affairs unit supported a QIP on reforestation of over 10,000 trees such as walnut, olive, carob, berry, laurel, pine and acacia.
- Reforestation helped:
  - Fruit production
  - A boost to the bee-keeping industry
  - Shared green space for the community
  - o Confidence-building

# **UN Reputation and Better Partnerships**

#### Slide 8



**Key Message:** The UN has a good reputation as a partner for peace. Upholding a good reputation means **better partnerships** with local people and communities through trust and acceptance.

Individual and mission activities affect public perception and acceptance. This is especially the case when peacekeeping operations take place in areas where natural resources are already under stress. Additional stress to the local environment and people works against mission mandate. Also, credibility depends on the measure of respect shown for local settings and local people.

## Examples – UNAMID and UNMISS

- In Darfur, brick production increased dramatically for construction of UNAMID (2004-2008). A UNEP study found that wood consumption to meet demands for peacekeeping and relief agencies was about 52,000 trees lost per year!
- To stop deforestation and pressure on scarce natural resources of wood and water in Darfur, soil blocks are an alternative building material. They do not need kiln firing, reducing fuelwood use, and requiring 30% less water than traditional bricks.
- Following UNAMID, UNMISS has also used soil blocks.



# **Key Message:** Every action and inaction matters.

Large actions and inactions stand out. Even small actions by individual peacekeeping personnel are noticed and judged. For example, littering and idling a vehicle engine.

Improper handling of waste (including wastewater) can pose health and environmental hazards for UN personnel as well as the surrounding local community. Wastewater discharged into water bodies pollutes. This:

- Causes serious health problems
- Affects economic assets fishing, agriculture

If there is a major incident (e.g. fuel spill or disease outbreak), the public will see the UN as the main culprit, damaging UN reputation as a partner for peace.

## Example- MINUSTAH, Haiti

In 2010, cholera broke out in Haiti. People identified the UN as the source. The outbreak still affects people in the country and the UN.

The lethal disease killed nearly 9,000 people by March 2015. More than 736,000 cases were suspected in a population of 10 million. Whether or not the UN was legally responsible, Haitians saw the presence of peacekeeping personnel as the cause.

Haiti remains the country with the highest number of deaths from cholera. The UN Country Team, MINUSTAH, and other international organizations continue to support prevention, treatment and recovery efforts.

The lasting lesson is that UN peacekeeping must be environmentally responsible.



Participants may be interested to know about the **Polluter Pays Principle**. The Polluter Pays Principle means those who cause the pollution should pay the costs to clean up and repair the damage done.

Both pictures show positive examples of current field practices that must become standard.

The picture on the right shows the partnership between MINUSMA and the local community on waste management. Local communities in Mali are using a MINUSMA truck to collect litter in Gao.

The picture on the left shows UN owned WasteWater Treatment Plants (WWTPs) installed to treat wastewater on-site. Treated water is recycled to water vegetation, control dust, wash vehicles.

# More Effective, Efficient Missions with Healthy and Safe Personnel

#### Slide 10



## **Key Message:** The benefits of reducing peacekeeping's environmental impact are:

- Increased financial savings for missions
- Improved safety and security for local communities
- Improved safety and security for UN peacekeeping personnel

"Greening the Blue" is the UN system-wide campaign to move towards climate neutrality. The UN commits to:

- Reducing greenhouse gas emissions of its activities
- Managing its environmental footprint, e.g. water and wastewater

**Peacekeeping missions have an environmental impact.** Missions currently led by DPKO and supported by DFS have the largest environmental footprint in the UN system.

"Greening the Blue Helmets" is a motto, which reflects the UN's commitment to ensure peacekeeping personnel have a lasting positive impact on the environment – not a negative one.

The picture on the left shows soil samples for an Environmental Baseline Study in Mombasa. The picture on the right shows solar water heaters on top of ablution units in Kinshasa.

Reducing the environmental impact of peacekeeping is important in its own right. Economic, social and environmental benefits come from a) managing water and waste and b) using resource-efficient technologies.

Environmental and waste management directly affect health and safety of UN personnel and local people. Without sound environmental management, especially of waste, peacekeeping operations risk a public health epidemic.



Inform participants that the website www.greeningtheblue.org is a one-stop shop on creating a more sustainable UN.

#### Slide 11



Key Message: As an organization, the UN needs to improve its practices. All areas can improve throughout the mission's life cycle: start-up, operations and closing.

#### Water, Waste, Energy:

- The picture shows remote VHF (very high frequency) repeaters with solar panels in UNMIT (Timor-Leste).
- Careful site selection and building orientation in camp design can lead to energy savings and efficiency.
- About 400 Waste Water Treatment Plants (WWTPs) have been installed globally, treating wastewater on-site and recycling water for reuse.
- Synchronized, hybrid diesel-PV generators reduce consumption, emissions and waste.
- A peacekeeping mission can hand over low-impact equipment and facilities to a host country when it closes.

#### Wildlife – Flora and Fauna:

- Flora are flowers and plants; fauna are wildlife.
- The picture shows confiscated ivory.
- Preserving local flora and fauna benefits human well-being.

- Diverse ecosystems are the healthiest and most able to recover after a disaster.
   Protect indigenous diversity.
- Stray dogs should be vaccinated against rabies and neutered to control population growth. Do not poison or otherwise harm.
- Poachers target peacekeeping personnel and others for their buying power.
   Avoid wildlife crime, which is illicit trade of endangered species.

## **Waste Management:**

- The picture is from MINUSTAH. It shows proper storage of hazardous materials, with:
  - Area marked as hazardous and flammable
  - Closed drum containers with contents marked
  - Drums placed under roof and on top of concrete flooring as protection against soil contamination
- Missions need to manage waste disposal sites well. A secure area deters food scavengers (dogs, cats, cockroaches). Sites near airports and landing strips can attract birds that disrupt aviation.
- Proper management of waste is essential for health and safety
- Source reduction is key. Even non-hazardous solid waste is difficult to handle in large volumes, especially when there are no recycling facilities in the host country.
- Hazardous waste requires extra care: wastewater, medical waste, ammunition, oils and lubricants, electronic waste.

#### Fuel Efficiency and Renewables:

- The picture shows a fuel lorry after attack.
- The <u>daily cost</u> of fuel for DPKO/DFS supported operations was US \$1.27 million in 2014-2015.
- Peacekeeping depends on fossil fuels for vehicles, aircraft and most power generation.
- Combatants may target fuel deliveries, leading to loss of life.
- Energy efficiency and use of renewable energy results in cost savings, cleaner air and reduced greenhouse gas emissions (GHG).

#### Carbon Footprint:

- A carbon footprint is the total amount of greenhouse gases produced, usually expressed as carbon dioxide (CO2). Greenhouse gases contribute to global warming, i.e. climate change.
- The UN must reduce greenhouse gas emissions through efficiency and renewable energy.
- Peacekeeping accounted for 56% of the total UN carbon dioxide emissions in 2008
- Peacekeeping will continue to produce the most greenhouse gas emissions in the UN. Reasons are:
  - o Its size it has the largest budget, the most personnel
  - o The location of work it is often spread over harsh, remote locations

## It's Part of Our Job

#### Slide 12



**Key Message:** It is **part of your job** to act with responsibility toward the environment.

In sustainable development and addressing climate change, it is important for the UN to **walk the talk** and **lead by example.** Peacekeeping – especially given its size and scale – needs to join in "greening the blue".

This was most recently highlighted in the HIPPO Report. HIPPO stands for the High-Level Independent Panel on Peace Operations.



See the section on "Responsible Presence" in the HIPPO Report.

Each individual peacekeeping personnel contribute to a lighter carbon footprint.

All peacekeeping personnel should incorporate environmental and natural resources management in their work.

Choose to "think green".

## **Directives and Policies**

#### Slide 13



**Key Message:** Numerous directives link UN peacekeeping operations to environment and natural resources management.

#### These include:

- Security Council resolution 1625 (2005)
- Security Council Presidential Statement 2007: On the maintenance of international peace and security, with reference to natural resources and conflict
- Security Council Presidential Statement 2011: On the maintenance of international peace and security, with reference to climate change and security

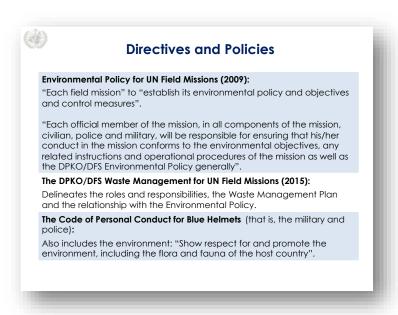
#### The 2007 Security Council Presidential Statement stated:

"...UN missions and peacekeeping operations deployed in resourceendowed countries experiencing armed conflict could play a role in helping the governments concerned, with full respect of their sovereignty over their natural resources, to prevent the illegal exploitation of those resources from further fuelling the conflict".

#### In addition:

- Chief Executives Board decision in 2007: established the Environmental Management Systems (EMS)
- Global Field Support Strategy launched in 2010: states "reduce the in-country environmental impact of peacekeeping and field-based special political missions"

- Secretary-General's call for UN Climate Neutrality by 2020: advocates "net zero carbon footprint"
- Sustainable Development Goals: the Post-2015 Development Agenda that follows the Millennium Development Goals (MDGs), 2000-2015



**Key Message:** Policies guide UN peacekeeping personnel on the environment and natural resources management. All mission personnel need to be familiar with these policies.

They include:

## DPKO/DFS Environmental Policy for UN Field Missions (2009)

- Signed by DPKO Under-Secretary-General in 2009.
- "ALL personnel shall conduct themselves in accordance with the Policy".
- "Each field mission" is to "establish its environmental policy and objectives and control measures". These include mission-level policies, directives, SOPs, Action Plans and Committees. This is for ALL phases of operations.

#### DPKO/DFS Waste Management Policy for UN Field Missions (2015)

- "Proper waste management throughout a mission's life cycle [...] is an important part of a sustainable field mission".
- Key actions:
  - o **Reduce** quantity of goods and material brought into the mission likely become waste
  - Properly manage goods and material already in the mission to prevent them becoming waste

- o Reuse, recycle or repurpose all possible waste
- o Properly **dispose** of any remaining waste
- The mission remains ultimately and fully responsible for its own waste

# The Code of Personal Conduct for Blue Helmets (military and police)

 "Show respect for and promote the environment, including the flora and fauna, of the host country".

# **Roles and Responsibilities**

#### Slide 15



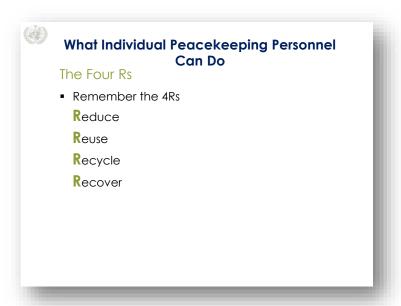
**Key Message:** All peacekeeping personnel have a role to play in environment and natural resources management.

Specific responsibilities lie with:

- USGs DPKO and DFS
- SRSG/HOM
- Force Commander
- Head of Police Component
- DMS/CMS, Appointed Official in Military
- Appointed Official in Police
- Environmental Officer
- Waste Management Officer
- Medical
- Engineering
- PDU
- CMU
- All personnel

# What Individual Peacekeeping Personnel Can Do

### Slide 16



Key Message: All peacekeeping personnel should "think green". They must conduct themselves in accordance with the four "Rs" – reduce, reuse, recycle, recover.



Get participants to brainstorm the four "Rs" with examples. Discuss how they would practice these at home. Encourage participants to share experiences.



**Key Message:** "Reduce" or "Conserve".

#### **Conserve water**

- Turn off the tap when brushing your teeth, washing your face, lathering soap to wash your hands or dishes
- Reduce time taken for showers
- Use water-saving measures for toilets and low-flow aerated showerheads and immediately tell mission support of any leaks

#### Reduce waste

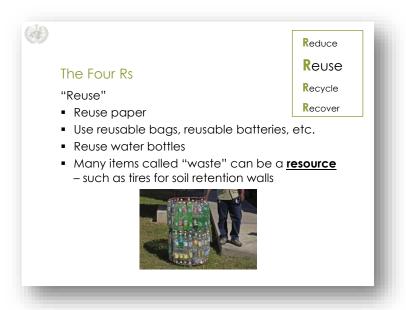
- Use your own water bottle or ceramic mug
- Print smarter. Set default settings to double-sided, black and white printing and print only when necessary

## "Turn it off" to conserve fuel and energy

- Stop idling. Modern engines do not need to warm-up, and restarting the engine does not take more energy
- Turn off the lights and use efficient light bulbs
- Turn off and unplug electrical equipment not in use

# "Turn it off" and set cooling/heating temperatures at practical levels

- Use fans with air conditioning for better cooling and comfort
- Turn off the air conditioner when you leave a room
- Wear layers of clothing to stay warm



# Key Message: "Reuse".

This picture is from MINUSTAH. Plastic bottles have been reused to make a waste bin.

#### You must:

- Reuse paper and print-outs no longer needed or printed by accident
- Use reusable bags, reusable batteries, and other materials
- Reuse water bottles for your next drink or make a waste bin!
- Many items called "waste" can be a <u>resource</u> for example tires for soil retention walls, food scraps for compost



# Key Message: "Recycle".

This picture is from MINUSTAH. These are recycling bins, which can be found in a mission.

#### You must:

- Recycle according to the recycling bins in your mission
- Separate waste, especially hazardous waste. Oil, batteries, cleaning liquids and medical waste must be handled, stored, treated and disposed of properly
- Even recycling can be a challenge in missions reduce waste generation as the first measure
- Make use of Waste Water Treatment Plants (WWTPs) to implement water recycling and reuse
- Make compost. Use scraps from cooking and food made. Use fruit and vegetable peels, grass clippings, sawdust
- Better manage food waste to improve sanitation and protect health and safety



# Key Message: "Recover".

Recover materials or energy from waste which cannot be reduced, reused or recycled.

# Summary

# "Environment" and the "Do No Harm" principle

- The environment is our physical surroundings.
- **Environment** covers climate, geography, geology, natural resources, wildlife, humans and the relationships among these. Some people use the word "environment" to mean "situation" or "context" (e.g. political environment, security environment".

# Why is it important to consider, manage and protect the environment and natural resources in peacekeeping operations?

- Peacekeeping personnel deploy to places with fragile environments and scarce natural resources.
- Protecting the environment will help keep the peace.
- It upholds the UN's reputation.
- It helps mission effectiveness
- The UN expects all personnel to act responsibly towards the environment as part of the iob

## Natural and cultural resources that a peacekeeping operation can affect

- UN peacekeeping operations can have an impact on the environment in the following areas:
  - Water
  - Energy
  - Solid and hazardous waste
  - Wastewater
  - o Wildlife
  - Historical and cultural resources
- In fact, the missions currently led by DPKO and supported by DFS constitute the largest environmental footprint in the UN system.

# Personal responsibilities and actions of all peacekeeping personnel to follow the Environment Policy and the 4Rs – reduce, reuse, recycle and recover

- All peacekeeping personnel have a role to play in environment and natural resources management. This includes proper waste management.
- All personnel must follow the "Do No Harm" principle.
- "Reduce" or "conserve" water, waste, energy and fuel.
- "Reuse" items like paper, water bottles and plastic items use reusable batteries and bags.
- "Recycle" using recycling bins in mission and make use of Waste Water Treatment **Plants** to implement water recycling; reduce waste generation as first measure.
- "Recover" materials or energy from waste which cannot be reduced, reused or recycled.

# Learning Activities

Detailed instructions for each learning activity may be found below. Here is an overview of learning activities for the instructor to choose from:

Number	Name	Methods	Time
3.5.1	Practices, Actions and Responsibilities	Visuals, questions	25 minutes
3.5.2	Environmental Impacts	Visualization, discussion	25 minutes

# 3.5.1 Practices, Actions and Responsibilities

## Method

Visuals, questions

## **Purpose**

To explore environmental issues and good practice in peacekeeping, reinforce collective responsibilities

#### **Time**

25 minutes

Introduction 2 minutes
Group work 10-12 minutes
Reports 10-12 minutes
Close 1 minute

## **Preparation**

- Scan the visuals and support. Pictures are available as part of the presentation slides for the lesson. Images are in four sets:
  - 1. environmental awareness
  - 2. logistics
  - 3. use of natural resources
  - 4. waste management
- Divide participants into four groups. Print one set of images for each group. If the class is large, print several sets for each group.
- Prepare a slide or flip-chart sheet with discussion questions for small groups:
  - 1. What harmful practices and negative impacts do you see?
  - 2. What **good practices** do the images show?
  - 3. What **changes or solutions** can you suggest to improve environmental practices?
  - 4. What are your related **responsibilities?**
- Prepare flip-chart sheets or boards to note points on Roles and Responsibilities.

## Instructions

- 1. Introduce the activity, timing and groups. Hand out the sets of visuals or project the pictures on the slides. Tell groups to tape the images to a flipchart sheet and note points from discussion, for reporting.
- 2. Let people know when the time is almost gone, so groups can finish reports.

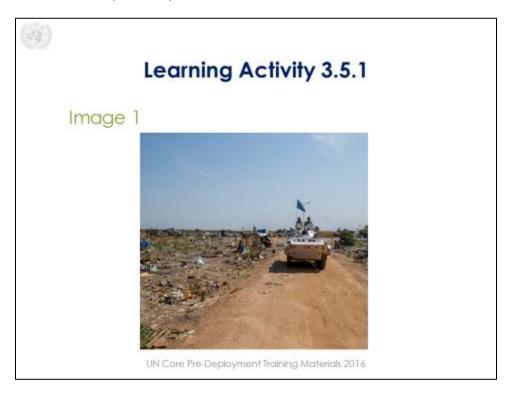
- 3. For reports, ask people to hold points about roles and responsibilities. Get people to stand and move to see posted images for reporting. Invite comments and additions, especially on solutions.
- 4. Gather points about roles and responsibilities when all groups have reported. The photos show different peacekeepers helping with environmental cleanup. Ask participants what they notice. Garbage and litter dot the landscape. Note points on the prepared flip-chart sheets.
- 5. Summarize key messages and close. Key messages include:
  - environmental practices did not use to be on the peacekeeping
  - climate change and other environmental developments mean now they are;
  - every person in a peacekeeping mission can make a difference;
  - do no harm to the environment is a baseline;
  - all are responsible for monitoring their own impact, and suggesting improvements on negative practices.

#### Variation

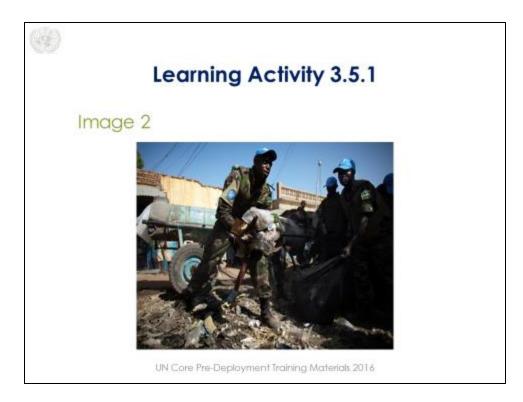
 Invite people with peacekeeping experience to share observations on environmental practices in missions -good and bad.

# Support for 3.5.1 Practices, Actions and Responsibilities

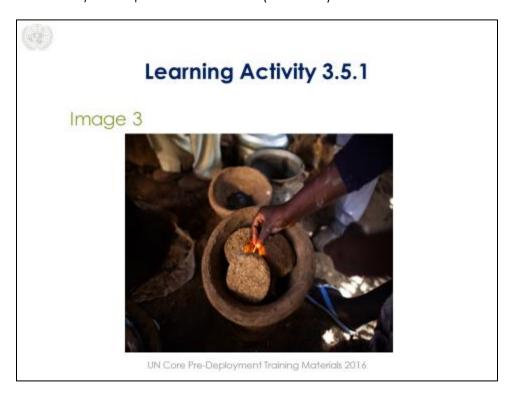
Available as part of presentation slides for the lesson.



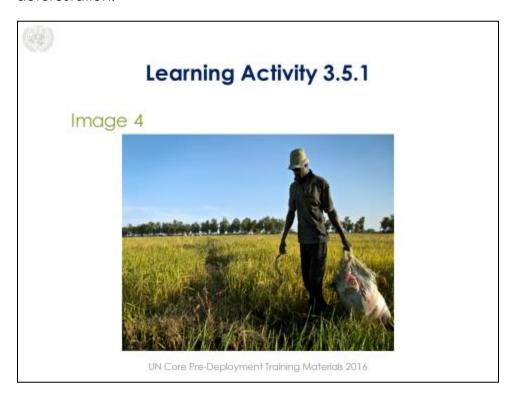
**Description:** UNMISS – regular patrol in Malakal, South Sudan – perimeter of the UNMISS Compound



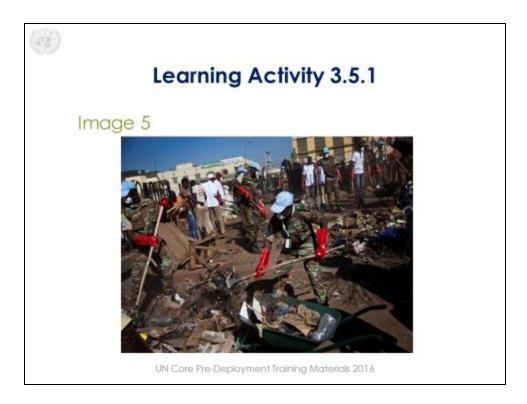
Description: UNAMID peacekeepers take part in clean-up campaign of Amdafasu market in El Fasher, North Darfur. Rwandan troops serve with the African Union-United Nations Hybrid Operation in Darfur (UNAMID).



**Description:** World Food Programme fuel-efficient stoves project, North Darfur. Made in the wanda camp for IDPs near Tawila, North Darfur. Thousands of women at the camp are beneficiaries of the Safe Access to Firewood and Alternative Energy (SAFE) project, run by WFP. Fuel-efficient stoves reduce amount of fuel-wood needed, reducing deforestation.



**Description:** As part of a Quick Impact Project, The UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) funds fuel for water-pumping stations used to irrigate rice fields.



Description: UN peacekeepers from Benin and Malians volunteer to clean up a neighbourhood in Bamako, Mali, as part of activities organized by UN Volunteers.

# 3.5.2 Environmental Impacts

#### Method

Visualization, discussion

# **Purpose**

To discuss specific ways mission and individual activities affect the environment

#### **Time**

25 minutes

# **Preparation**

- Note examples of specific environmental impacts by missions and peacekeepers, on these themes:
  - 1. Water
  - 2. Energy

- 3. Solid Waste
- 4. Hazardous Waste
- 5. Wastewater
- 6. Wild animals and plants/forests
- 7. Valuable natural resources gold, coltan, diamonds, other precious stones
- 8. Historical and cultural resources

# Instructions

1. Introduce the activity. A peacekeeping mission cannot avoid an impact on the environment. It can try to minimize negative impact, and demonstrate good practice.

"The primary role of international peacekeeping forces and aid agencies is to keep the peace and support vulnerable communities during difficult and distressing times. But they also have responsibility to ensure their presence and operations have a minimal ecological footprint and do not aggravate environmental degradation, which may be a dimension of the conflict," said Steiner recently (the head of UN Environment Programme).

"A more environmentally responsible approach requires new thinking and capabilities", notes DPKO's New Partnership Agenda.

- **2.** Ask people to relax. As you name each theme, ask people to imagine or visualize a peacekeeping mission, and day-to-day activities. What effects do individual and mission activities have on the environment?
- **3.** Close the exercise, summarizing key messages.
  - "Environment-blind" is similar to "gender-blind". Both sound neutral, but have negative results.
  - The UN encourages peacekeepers to be aware of a) their environment and b) effects of their actions.
  - Emphasize the four "environmental R's reduce, reuse, recycle, repurpose. "Repurpose" means to find another use for an item. Encourage participants to have as small an environmental footprint as possible.

#### Variation

• Get participants to do independent research on the UN site "Greening the Blue". The site has examples of actions by different UN agencies, funds and programmes. They may get ideas for things peacekeepers can do.

## **Support for 3.5.2 Environmental Impacts**

The points in "Effects of Peacekeeping Actions" column are from http://www.greeningtheblue.org/case-study/blue-helmets-prepare-go-green.

Aspect of Environment	Actions by Peacekeepers and Missions
1. Water	See points under 3-5.
2. Energy	In 2009 DFS completed the field missions' greenhouse gas inventory, part of UN Environment Programme's move to a climate-neutral UN. It looked at greenhouse gases and carbon dioxide equivalent emitted by different sources. These included air travel (commercial, troop rotation, UN flights), road travel, refrigerants, power generation, power purchases. Conclusions were that peace operations emitted about 1 million tons CO2-equivalent in 2008, nearly 2/3 that of the entire UN, 1.7 million tons.
	"Roughly speaking, the study showed that the amount of CO2eq emitted in 2008 for the whole year (about 9 tons per staff member) on a peacekeeping mission was a ton more than that for a resident of the European Union. And when compared to residents of the host countries, the peacekeeping production of CO2-equivalent gases was far greater In short, peacekeeping operations behave like developed countries while operating in developing countries." Peacekeeping operations are not good role models. The goal of DPKO/DFS policy is to "achieve a more environmentally sensitive, ecologically mindful mission footprint."
3. Solid Waste	In Sudan, UNMIS and the Government of Sweden invested
4. Hazardous Waste	\$5 million to introduce technologies for treatment of waste,
5. Wastewater	waste water and efficient use of water and energy in military posts. The goal is 30 percent decrease in water consumption, 25 percent in energy use, and 60 percent of waste volume.
6. Wild animals and plants/forests	"Peacekeeping can inadvertently contribute to environmental degradation in the rush to deploy. In clearing areas for camps, for examples, trees are removed – even in arid environments. In addition to felling hundreds of trees for their camps in Darfur, for example, the UN peacekeeping and humanitarian community decided to help the local economy by purchasing building bricks in situ instead of importing them. This sudden market for bricks and other wood products spurred Darfurians to cut and burn even greater amounts of forest – already in serious decline – to produce them."

	13 missions participate in UN Environment Programme's Billion Tree Campaign. People pledged or planted 118,000 trees.  CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, passed in 1973, and came into force in 1975. Its aim is to ensure international trade in wild animals and plans does not threaten species survival.  More than 35,000 species are protected, to different degrees (5,000 plant species, 29,000 animal species). Overexploitation endangers them all. Peacekeepers are encouraged to avoid purchasing any products or examples of threatened species – check the CITES appendices before buying anything.
	Appendix 1: 1200 species, threatened with extinction. Commercial trade in wild-caught species is illegal. Examples are African bush elephant, all rhinoceros species, and Western gorilla. Appendix 2: 21,000 species. These are not threatened with extinction, but they may be if international trade is not strictly regulated. Appendix 3: 170 species that one member country has asked other CITES members to help control. Examples are African grey parrot, and Lignum vitae or "Ironwood". (Source: Wikipedia)
7. Habitats for wild animals	Conflict can devastate habitats, reducing biodiversity and possibilities for economic recovery.  "Biodiversity" means varying types of biological life. Healthy ecosystems have many different types of life. Peacekeepers can encourage local people to protect biodiversity, as well as avoid damaging it themselves.
8. Valuable natural resources – gold, coltan, diamonds, other precious stones, oil	Valuable natural resources can fuel and fund conflict. Examples are blood diamonds from Liberia, gold and coltan from the Democratic Republic of Congo. ISIS funds terrorist activity by selling oil.
9. Historical and cultural resources	Historical and cultural artifacts may be for sale. One archeologist gives five reasons why not to buy them:  1. They may be fake.  2. If not fake, they may be illegal, according to the 1970 UNESCO convention on cultural property.  3. Such trade helps fuel international conflicts and wars. Examples are Syria, Egypt, and Iraq. "The lucrative antiquities market means conflicts will involve damaging, destroying, or ransoming

	ancient chiects and sites "	
	ancient objects and sites."  4. They may have been looted from archeological sites.  5. They probably can't be donated to a museum, which have tightened up guidelines. "If an artifact doesn't have a spotless history, a museum won't touch it."  Killgrove, Kristina. Five Reasons You Shouldn't Buy that Ancient Artifact. Forbes Magazine. Science. http://www.forbes.com/sites/kristinakillgrove/2015/06/12/five-reasons-you-shouldnt-buy-that-ancient-artifact/	
	During conflict in Iraq, many items from the national museum were looted.	
	In Syria, ancient artifacts have been traded for guns. A smuggler from Syria is quoted in a Time article as saying, "War is good for us We buy antiquities cheap, and then sell weapons expensively." That business, he says, is about to get better. "Fighters allied with the Free Syrian Army units battling the regime of Syrian President Bashar Assad have told him that they are developing an association of diggers dedicated to finding antiquities in order to fund the revolution. The rebels need weapons, and antiquities are an easy way to buy them."	
	Baker, Aryn, Anjar Majdal, Lebanon. "Syria's Looted Past: how Ancient Artifacts are being Traded for Guns". <a href="http://world.time.com/2012/09/12/syrias-looted-past-how-ancient-artifacts-are-being-traded-for-guns/">http://world.time.com/2012/09/12/syrias-looted-past-how-ancient-artifacts-are-being-traded-for-guns/</a>	
10. Environmental laws	Missions are to follow environmental laws of host countries. Where there are none or only a few, missions are to follow multi-lateral environmental agreement, to set minimum standards.	
11. Effects on conflict	Dwindling resources can be a cause of conflict, and UN peacekeeping actions can exacerbate a conflict. DPKO's "New Horizon" agenda notes "threats such as environmental changes threaten many States and contribute to growing political and security instability."	
12. Environmental crises	According to the 2009 Environmental Policy for UN Field Missions, every peacekeeping mission has to develop baselines and objectives for missions on environmental issues, and an emergency management plan for environmental crises.	

## Evaluation

**Notes on Use:** Types of learning evaluation questions are:

- 1) Narrative
- 2) Fill in the blank/sentence completion
- 3) True-False

Combine in different ways for pre-assessment and post-assessment. Each evaluation type covers different content. No sub-set covers all learning outcomes. Make sure you include learning evaluation questions for each learning outcome when you combine them.

Three main uses of evaluation questions are: a) informally ask the whole group, b) semiformally assign to small groups or c) formally give to individuals for written responses.

The lesson draws together information from different strands: environment, natural resources, peacekeeping. Much is new. Consider learning evaluation with the class as a group, not individually.

- Use "call and response" call a question, get people to build on each other's responses. This is not brainstorming, which goes fast. Encourage people to take time, think about each question.
- Different responses are correct for many questions take one response from each table until the question is answered. Encourage people to add more points, especially from peacekeeping experience. Use information in the Responses column to prompt.

Evaluation Questions for Lesson 3.5		
Questions	Answers	
Narrative Note: Frame narrative evaluations as questions, requests or directions		
Explain main connections     between the environment and     peacekeeping.  Learners will give different answers, and     use their own words. Evaluate for at     least two key points in each category,     for questions 1 and 2.	What people do affects the environment, including in peacekeeping contexts.     The environment sustains life, including in hot countries and missions.     The connection is close – what happens to one changes the other.     Taking good care of the	

- environment is common sense because otherwise we suffer.
- Human activity is changing our environment, with global warming. Every person needs to develop an environmental consciousness and conserving practices.

## Peacekeeping connection

- The UN commits to reducing its environmental impact. It addresses climate change, deforestation, other environmental issues – has to walk the talk on environmental protection, including in peacekeeping missions.
- When peacekeepers join the UN, as staff they take on responsibility to support these all UN obligations, including on the environment.
- Peacekeeping missions use more environmental resources than any other work in the UN. The footprint is big.
  - Transportation, fuel, water, waste, building materials, energy: they add up to a heavy load, on already fragile countries recovering from conflict.
  - The UN has to be part of solutions, not another big problem.
  - The UN often deploys peacekeepers to fragile environments with scarce natural resources. Actions that would not have severe impact on resilient environments badly affect fragile ones.
  - Room for improvement everyone needs to help.

2. Explain main connections

Natural resources connection

between natural resources and peacekeeping.	<ul> <li>Many conflicts start over natural resources: land, water, energy, oil, gems.</li> <li>Illegal sale of natural resources fund others: oil, gold, gems.</li> <li>Conditions of mining blood resources are inhuman: slavery, forced labour, exploitation and violations of people's rights.</li> <li>Terrorist groups raise money by selling natural and cultural resources, antiquities.</li> <li>The UN often deploys peacekeeping missions with fragile, degraded environments affected by climate change.</li> <li>Being aware of how natural resources fuel conflict keeps peacekeepers from unknowingly supporting crime, conflict and destruction by buying them, e.g. diamonds, antiquities.</li> </ul>
3. What are the six actions in the "Do No Harm" Principle for UN peacekeepers?	<ol> <li>respect the natural environment</li> <li>do not harm plants or animals</li> <li>do not overuse or misuse natural resources, or pollute the environment</li> <li>do not harm cultural, historical, religious, or architectural sites</li> <li>do not litter – deal with your waste</li> <li>do not practice open burning</li> </ol> Set a good example. It positively supports the mission in achieving its mandate, and shows respect for the
4. Which of the "4 Rs" of environmental management is the first measure in peacekeeping operations?	Reduce.  Recycling can be challenging in missions. Waste generation is the first measure.  The four "Rs" are reduce, reuse, recycle, recover.

5. How can mission operations negatively affect a local	Examples
environment, health and safety of local people?	Soil pollution from UN vehicles —     diesel or lubricants — can seep into the ground and reach the water table     local people may draw water from a well in the same water table contaminated by a mission's hazardous waste
	Construction needs accelerate deforestation  • mission need for building materials can increase wood cutting for charcoal to make bricks (Darfur example: different kind of brick, positive environmental impact).
6. Who has specific responsibility in a mission for environmental policy, objectives and control measures?	<ul> <li>All personnel: from the top;</li> <li>USGs DPKO and DFS,</li> <li>SRSG/HOM,</li> <li>Force Commander,</li> <li>Head of Police Component,</li> <li>DMS/CMS, Appointed Official in Military,</li> <li>Appointed Official in Police,</li> <li>Environmental Officer,</li> <li>Waste Management Officer,</li> <li>Medical,</li> <li>Engineering,</li> <li>PDU,</li> <li>CMU</li> <li>All personnel.</li> </ul>
7. Describe the waste management policy for UN field missions.	The UN takes full responsibility for its waste.  • Proper waste management through a mission's life cycle is important;  - reduces costs  - helps protect the environment in all mission and UN activities  - improves health and safety – mission and local people

	<ul> <li>improves mission         management, at each stage         of mission cycle</li> <li>Reduce quantity brought to         mission</li> <li>Prevent wasting goods in mission</li> <li>Reuse, recycle, repurpose waste</li> <li>Properly dispose of remaining         waste</li> </ul>
8. What does the Code of Personal Conduct for Blue Helmets (military and police) say about the environment?	"Show respect for and promote the environment, including the flora and fauna, of the host country."
<ul> <li>9. 9.1 The UN has three policies and directives on the environment. What are they?</li> <li>9.2 Why is it importance for peacekeepers to know these?</li> <li>This question is not about policy content: <ul> <li>a) identify the policies</li> </ul> </li> </ul>	<ol> <li>Environmental Policy for UN Field Missions (Ref.2009.6)</li> <li>Waste Management Policy for UN Field Missions (Ref.2015.6)</li> <li>The Code of Personal Conduct for Blue Helmets (military and policy) includes `Show respect for and promote the environment, including the flora and fauna, of</li> </ol>
b) explain why they exist.	the host country".  Why:
Goal is to think about purpose and facts. Separate evaluation questions cover policy content.	<ul> <li>because the policy directs "ALL personnel" to conduct themselves in accordance with the policy:</li> <li>supporting it also supports the mission in key results areas: <ol> <li>improve environmental impact;</li> <li>protect health and safety of UN staff and local community</li> <li>improve public perception and UN reputation</li> <li>ensure legal compliance</li> <li>lead by example</li> <li>the UN asks all staff to know and follow all policy that applies to their work. Even without explicit direction to ALL personnel, the UN expects peacekeepers to be familiar with doctrine that applies</li> </ol> </li> </ul>

to their work and mission.

Doctrine in this usage means all the principles, positions and policy of the UN that guide peacekeeping:

- policy,
- procedures,
- SOPs,
- guidance,
- instructions,
- directives,
- mandates,
- conventions,
- treaties,
- agreements.

Remind people that these continue back to the UN Charter, include international law and mission-specific agreements. Core pre-deployment training introduces peacekeepers to essential ones. Others reinforce the basics.

One reason the UN has continuous learning as a core competency is because staff have to learn a lot, which takes time.

Although the Code of Personal Conduct for Blue Helmets does not apply directly to civilians, knowing it helps strengthen collective resolve for environmental protection.

10. Five main documents guide peacekeeping on environment, natural resources and climate change – directives, decisions and strategy. Name them and one main impact. Note: Some are specifically for peacekeeping, others apply to the UN including peacekeeping.

#### **UN SC Presidential Statement 2007**

 in countries with rich natural resources experiencing armed conflict, peacekeeping missions could help governments with sovereignty over natural resources, to prevent illegal exploitation and fuelling the conflict

## Chief Executives Board decision 2007

 established the Environmental Management System (EMS)

-

	Global Field Support Strategy 2010 - reduce in-country environmental impact of missions  SG call for UN Climate Neutrality by 2020 - advocates net zero carbon footprint - Sustainable Development Goals (SDGS) 2015 - the international agenda for sustainable development for 2015 – 2030 - follow Millennium Devt Goals
11. The lesson covers five main UN Security Council statements and resolutions. Name each, the year passed and main thrust.	in place from 2000 – 2015  UN Security Council Presidential  Statement in 2007  - in resource-endowed
12. Give some reasons why peacekeeping will continue to produce most greenhouse gas emissions in the UN.	<ul> <li>Maintenance of international peace and security – climate change and security</li> <li>size –largest budget, most personnel</li> <li>location – remote, often spread over harsh, remote areas and distances</li> <li>missions – need to provide and</li> </ul>

13. List areas of UN peacekeeping environmental impact.	manage all mission requirements  - water, waste, energy  • no decline in conflict - needs for UN peacekeeping is rising, not falling  • Water  • Energy  • Solid and hazardous waste  • Wastewater - blackwater, greywater  • Wildlife  • Coastal and island resources
14. Give examples of solid waste and hazardous waste from peacekeeping missions.	<ul> <li>Historical and cultural resources</li> <li>Solid waste</li> <li>office refuse</li> <li>construction debris</li> <li>scrap metal</li> <li>food refuse</li> <li>Hazardous waste</li> </ul>
	<ul> <li>medical products</li> <li>used oil</li> <li>tired</li> <li>batteries</li> <li>electronic waste</li> <li>stocks of chemicals, explosives, ammunition</li> </ul>
15. Five environmental areas are crucial for a peacekeeping mission and peacekeepers to address. Name them and several points about each.	<ul> <li>Water, Waste, Energy</li> <li>careful site selection, building orientation in camp design</li> <li>Waste Water Treatment Plants – recycling water: about 400 installed globally</li> <li>hybrid generators reduce fuel, emissions, waste</li> <li>hand-over low-impact equipment and facilities to host country when exit</li> <li>solar water heaters</li> </ul>
	Wildlife and Plants – Flora and Fauna      conserving these benefits well-being     diverse ecosystems are healthiest – protect native diversity     avoid wildlife crime, poachers, illicit trade of endangered species

	<ul> <li>no unregulated hunting or fishing, purchase of dead or alive animals, plants</li> <li>no construction of structures that block wildlife corridors or clearing of natural habitats</li> </ul>
	store hazardous materials properly     mark areas as flammable and hazardous     closed drum containers with contents marked     drums protected against soil contamination     waste disposal sites managed – secure area, deter scavengers     waste volume
	increase energy efficiency     use renewables – for cost savings, cleaner air, reduced greenhouse gas emissions
	<ul> <li>Carbon Footprint</li> <li>efficiency and renewables to reduce greenhouse gas emissions</li> <li>includes three kinds of air travel – UN fleet, troop rotation, and commercial</li> <li>peacekeeping accounts for more than 56% of UN total greenhouse gases</li> </ul>
16. What is "Greening the Blue Helmets"?	a) a motto b) UN commitment to ensure peacekeepers have a lasting and positive impact, not a negative one
17. Explain how environmental cooperation can be effective for peacekeeping, with examples.	Peacekeeping operations can capitalize on natural and cultural resources as part of stability and early peacebuilding, through: - employment on environmental projects;

	<ul><li>livelihoods;</li><li>economic recovery</li><li>reconciliation</li></ul>
	Examples  MINUSMA, Mali: first mission mandated to:  a) manage environmental impact, and  b) operate mindfully near cultural and historic sites
	UNAMA, Afghanistan: pistachio reforestation, livelihood to excombatants and vulnerable people
	UNIFIL, Lebanon: reforestation of mixed tree species – helped fruit production, beekeeping, community with shared green space and confidence building
18. What do patrols and expert panels do on the environment and natural resources?	Peacekeeping patrols have:
	Expert panels advise, monitor and report to the Security Council on commodity sanctions.
19. Explain how natural resources are conflict drivers, and give examples.	<ul> <li>Conflicts start over natural resources.</li> <li>Money from natural resources can fund violent conflicts.</li> <li>Disagreements over scarce natural resources can fuel violent conflicts, delay peace.</li> <li>Environmental damage and people being marginalized motivate conflict, especially when natural resource extraction brings people no benefits: e.g.:         <ul> <li>Bougainville and Niger Delta</li> <li>Since 1948, the UN has deployed</li> </ul> </li> </ul>

	19 peacekeeping missions to address conflict linked to natural resources. It deployed 9 current ones since 2000.  • The resources – commodities with value:  - diamonds - timber - minerals - land - water - oil  • The countries with "conflict resources" - Cambodia - Democratic Republic of Congo - Core d'Ivoire - Liberia - Sierra Leone • Climate change – warming  The UN has to safeguard against degrading or exploiting water, land, minerals, air, timber, wildlife, cultural and historical heritage:  a) it's the right thing to do b) it avoids worsening conflict c) it protects livelihood, health and safety of local people
20. How is climate change a "threat multiplier"?	Climate change is a threat multiplier because it aggravates or makes worse existing:  1. trends 2. tensions 3. security risks  Climate change  • warming of Earth by burning fossil fuels which releases greenhouse gases with effect of changing global climate
	<ul> <li>global goals are to limit temperature rise to 1.5 degrees; sounds like a small number but potential effects are momentous</li> </ul>

	Effects of climate change threaten international security, increasingly.  • water availability  • food security  • disease  • coastal boundaries  • population movements  Pressures on natural resources worsen existing tensions, and create new conflicts.
21. Give one good and one bad example of peacekeeping and cultural resources.	Good example Rehabilitation of Timbuktu Library, MINSUMA Quick Impact Project (QIP) with UNESCO  Bad example Vandalism of ancient cave paintings by MINURSO personnel:  • mission had to pay remediation costs  • UN disciplined peacekeepers for misconduct
22. The UN deploys peacekeeping missions to fragile environments with scarce natural resources. Give examples of both.	Fragile environments
23. Describe some serious environmental and cultural impact from armed conflict – direct impact.	<ul> <li>fumes from burning oil</li> <li>bombed land</li> <li>waste from weapons</li> <li>contaminated water</li> <li>mined land – people unable to farm or travel</li> <li>damaged or stolen cultural heritage</li> <li>reduced local capacity for environmental management</li> </ul>

24. Describe different kinds of cultural resources, heritage.	<ul> <li>waste collection, recycling, disposal in landfills</li> <li>clean water supplies</li> <li>wastewater treatment</li> <li>Intangible cultural resources</li> <li>paintings, sculptures, coins, manuscripts</li> <li>Tangible cultural resources         <ul> <li>Not moveable: monuments, archeological sites</li> <li>Moveable: monuments, archeological sites</li> <li>Underwater: shipwrecks,</li> </ul> </li> </ul>
Fill in the	underwater reefs, ships and cities  Blanks
1. The four "Rs" of environmental management are,  2. Of total UN carbon dioxide emissions in 2008, peacekeeping accounted for	Reduce Reuse Recycle Recover  Learners may also answer:  • Reject – don't buy or use products that harm the environment  • Repurpose – adapt things to another use when you don't need it anymore  56%  • around, about, a little more than 50%
3. All parts of the UN need to environmental practices.	Improve, strengthen
4. Three benefits of reducing peacekeeping's environmental impact are:,, and	<ul> <li>saves money for the mission, UN, Member States</li> <li>improves safety and security for local people and communities</li> <li>improves safety and security for UN peacekeepers</li> <li>raise operational excellence</li> </ul>
5 means those who cause pollution should pay for the costs to clean up and repair damage done.	Polluter pays or polluter pay
<b>6.</b> The UN's is at risk	<ul> <li>Reputation as a good partner</li> </ul>

when peacekeeping missions or peacekeepers pollute.  7. Since 1948, the UN has deployed peacekeeping missions to conflicts connected to natural	<ul> <li>Credibility as a world leader and standard bearer</li> <li>Legitimacy in its other work</li> <li>Relationships with local people</li> <li>Nineteen (19) since 1948.</li> <li>Nine (9) current ones established after</li> </ul>	
resources current ones have deployed since 2000.	2000	
8. Missions mostly rely on and for fuel, energy.	<ul> <li>Petrol and diesel fuel for generators and the 17,000 vehicle fleet</li> <li>jet A1 fuel for 257 UN aircraft</li> </ul>	
O The second sec	Fuel is a big cost for UN peacekeeping.	
9. The principle requires peacekeepers to not overconsume, misuse or pollute natural and cultural resources.	<ul> <li>Do no harm principle</li> <li>This covers large and small acts: <ul> <li>not littering or idling vehicles</li> <li>keeping a small environmental foot print</li> <li>avoiding buying illegal conflict resources or cultural artifacts.</li> </ul> </li> <li>Set a good example.</li> </ul>	
	oor a good example.	
10 is the "international day for preventing the exploitation of the environment in war and	November 6.  The UN encourages all peacekeepers to	
armed conflict."  11 are sources of basic life, wealth and well-being.	mark it.  Natural resources – water, air, soil, land, trees, minerals.	
True – False		
Every field mission has to have an environmental policy, objectives and control measures.	True. These include mission-level policies, directives, SOPs, Action Plans, and Committees.	
Waste management isn't an issue in field missions until the peacekeeping operation is getting ready to exit.	False Waste management is a priority through the full life cycle of a peacekeeping mission. This is about health and safety, as well as environmental protection.	

	Every mission must:
	1) reduce potential waste
	brought to the mission;
	2) properly manage goods so to
	prevent them from becoming
	waste;
	<ol> <li>reusing, recycling, repurposing</li> </ol>
	all possible waste;
	properly disposing of any
	waste left.
3. Part of every peacekeeper's job	True.
is acting responsibly toward the	
environment.	The High-Level Independent Panel on
	Peace Operations
4. A peacekeeping operation does	False
not affect a local environment	Mission impact can be greater:
more than local people.	<ul> <li>numbers of people,</li> </ul>
	concentrated in one place
	<ul> <li>amount of water needed and</li> </ul>
	waste
	<ul> <li>quantity of buildings and vehicles</li> </ul>
	<ul> <li>amount of movement and travel,</li> </ul>
	fuel
5. The public will see the UN as the	True
main culprit when major	
environmental incidents happen,	Cholera outbreak in Haiti is one
e.g. fuel spill, disease outbreak.	example.
	3.3.5 <sub>[</sub> 2.3.5.]
	A big reason peacekeeping missions
	take care of environmental
	management is because failure to do so
	damages UN reputation as a partner for
	peace.
6. Environmental management	False.
guidance for peacekeepers does	Guidance covers respect for the
not cover things like littering, or	environment in all ways, large and small.
	,
idling vehicles.	No act is too small. Local people notice
	inaction or inattention, even in things like
	littering or idling vehicles. Such
	behaviour shows disrespect to local
	people as well as to the environment.
	They negatively affect people's
	perception of the mission as a good
7. The above of the Unit Council	partner,
7. The trend is for the Security	True
Council to give peacekeeping	[ <u>,</u> , <u>, , , </u>
missions more systematic	More systematic mandates are direct

and indirect.
Recent mandates strengthen missions on environmental cooperation for peacebuilding.
These mandates are separate from environmental management policies that apply to how missions operate.
False
Some natural resources are renewable – trees, living things. Populations can grow back.
Some natural resources are not
renewable – or renewal takes so long
that for human purposes they are non- renewable, e.g. oil and gas.

# Commonly Asked Questions and Key Words

Key Words or phrases for this lesson:

Key Word or Phrase	Definition
Environment	The <b>environment</b> is our physical surroundings. <b>Environment</b> covers climate, geography, geology, natural resources, wildlife, humans and relationships among all these. Some people use the word "environment" to mean "situation" or "context", for example political environment, security environment.
Natural resources	Natural resources are sources of basic life, wealth and well-being. They include water, air, soil, land, trees, and minerals. Natural resources may be renewable or non-renewable, depending on the time for regeneration.
	Cultural resources are cultural heritage.  Intangible cultural resources include: oral traditions, performing arts, rituals  Tangible cultural resources include those which are:  • Moveable: paintings, sculptures, coins, manuscripts  • Not moveable: monuments, archaeological sites  • Underwater: shipwrecks, underwater reefs, ships and cities
Climate change	Climate change is the warming of the Earth by burning fossil fuels, which releases greenhouse gases such as carbon dioxide (CO2) into the atmosphere. The effect is a change to the global climate. An international climate change conference in Paris in 2015 set a global goal of limiting temperature rise to 1.5 degrees.
"Greening the Blue"	"Greening the Blue" is the UN system-wide campaign to move towards climate neutrality. The UN commits to:

	<ul> <li>reducing greenhouse gas emissions of its activities,</li> <li>managing its environmental footprint, e.g. water and wastewater.</li> </ul>
Carbon footprint	A <b>carbon footprint</b> is the total amount of greenhouse gases produced, usually expressed as <b>carbon</b> dioxide (CO2). Greenhouse gases contribute to global warming – in other words, climate change.

# Commonly asked questions from participants:

Possible Questions	Possible Responses
Why has natural resources management mandates as a task for peacekeeping operations?	Natural Resources are conflict drivers. Peacekeeping personnel must safeguard against degrading or exploiting water, land, minerals, air, timber and wildlife, cultural and historical heritage. Failure to do so may worsen conflict.
	Peacekeeping operations must protect the health and safety of personnel and local populations, as well as their livelihoods.

## Reference Materials

Below are materials which are a) referenced in this lesson, and b) required reading for instructor preparations:

- Charter of the United Nations
- United Nations Peacekeeping Operations Principles and Guidelines (also known as the Capstone Doctrine)
- Subsequent amendments to the Model MOU between the United Nations and Troop Contributing Countries (A/61/19/REV.1(SUPP))
   (annex contains 10 Rules/Code of Personal Conduct for Blue Helmets "We are the United Nations Peacekeepers" from the UN General Assembly Report of the Special Committee on Peacekeeping Operations and its Working Group on the 2007 Resumed Session (A/61/19 Part III))
   <a href="https://daccess-dds-ny.un.org/doc/UNDOC/GEN/N08/372/78/PDF/N0837278.pdf?OpenEleme">https://daccess-dds-ny.un.org/doc/UNDOC/GEN/N08/372/78/PDF/N0837278.pdf?OpenEleme</a>
- Security Council resolution 1625 (2005) on Threats to international peace and security (S/RES/1625)
- Security Council Presidential Statement 2007: On the maintenance of international peace and security, with reference to natural resources and conflict (S/PRST/2007/22)
- Security Council Presidential Statement 2011: On the maintenance of international peace and security, with reference to climate change and security (S/PRST/2011/15)
- UN Global Field Support Strategy, 2010 (A/64/633)
   <a href="http://www.un.org/en/peacekeeping/documents/GFSS">http://www.un.org/en/peacekeeping/documents/GFSS</a> Fact\_Sheet.pdf
- Sustainable Development Goals
   http://www.un.org/sustainabledevelopment/sustainable-development-goals/
- DPKO/DFS Environmental Policy for UN Field Missions, 2009
- DPKO/DFS Waste Management Policy for UN Field Missions, 2015
- Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations, UNEP, 2012 <a href="http://www.un.org/en/peacekeeping/publications/UNEP\_greening\_blue-helmets.pdf">http://www.un.org/en/peacekeeping/publications/UNEP\_greening\_blue-helmets.pdf</a>

## Additional Resources

#### **UN Information**

The website for UN peacekeeping: <a href="http://www.un.org/en/peacekeeping/">http://www.un.org/en/peacekeeping/</a>

Original Security Council Resolutions on peacekeeping mission mandates: http://www.un.org/en/sc/documents/resolutions/

(You must know the start year, country and resolution reference details for the mission you wish to search for. For this information, identify the name of the mission using the following links: <a href="http://www.un.org/en/peacekeeping/operations/current.shtml">http://www.un.org/en/peacekeeping/operations/past.shtml</a>)

#### **UN Documents**

UN documents can be found on: http://www.un.org/en/documents/index.html (Search by document symbol, e.g. A/63/100)

## **DPKO** and **DFS** Guidance

The repository for all official DPKO and DFS guidance is the Policy and Practice Database: ppdb.un.org (only accessible from the UN network). Official peacekeeping guidance documents are also accessible through the Peacekeeping Resource Hub: http://research.un.org/en/peacekeeping-community

Instructors are encouraged to check for the latest guidance.

#### **UN Films**

UN films can be found on YouTube: https://www.youtube.com/user/unitednations

## **Additional Information**

The PIP provides information on the mission and the local context: <a href="http://peacekeepingresourcehub.unlb.org">http://peacekeepingresourcehub.unlb.org</a>

## **Additional Training Resources**

Resources can be found on the 'Greening the Blue' website: <a href="http://www.greeningtheblue.org/resources">http://www.greeningtheblue.org/resources</a>

The United Nations Institute for Training and Research (UNITAR) provides 'Environmental Training:

https://www.unitar.org/environment

DPKO/DFS Environment Officers at headquarters and in the mission provide additional information or support on issues covered in the lesson.