

Food Security Focus

**NEAT** 

Nexus Environmental  
Assessment Tool

# The Nexus Environmental Assessment Tool (NEAT+)

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Will Rynearson  
william.rynearson@un.org

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[neatplus.org](https://neatplus.org)

[ecentre.org/resources/neat/](https://ecentre.org/resources/neat/)

**UN**   
environment  
programme



**JOINT  
ENVIRONMENT  
UNIT**

TOGETHER  
FOR A BETTER  
RESPONSE.

**Humanitarian crises are increasingly  
driven by environmental  
emergencies.**

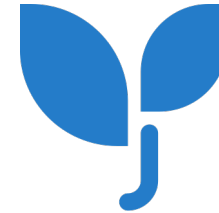
# UNEP/OCHA Joint Environment Unit (JEU)

## Environmental Dimensions of Emergencies



### **Environmental Emergencies**

- Coordination
- Mobilisation
- Training
- Over 200 missions
- Over 100 countries



### **Sustainability of Humanitarian Action**

- Policy review and coordination
- Guided learning
- Humanitarian tools
- [www.eecentre.org](http://www.eecentre.org)
- [www.ehaconnect.org](http://www.ehaconnect.org)

# The Nexus Environmental Assessment Tool (NEAT+)

UN Secretary-General's Award finalist, 2019  
Winner of IAIA Institutional Award 2020



## What

A simple environmental project-level screening tool for humanitarian contexts.



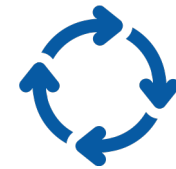
## How

Combines environmental data with site-specific activity-based questions.



## Result

Automatically analyzes and flags priority environmental risks which are standardized and comparable.



## When

After life-saving needs have been met. Before project implementation or expansion.

# NEAT+ Purposes

## Programmatic

- Project screening, design & proposal
- Project monitoring and evaluation
- Base for subsequent EIAs

## Organizational

- Baseline for broader mitigation plans
- Audit purposes
- Fundraising
- Baseline for global operations comparison

## Advocacy

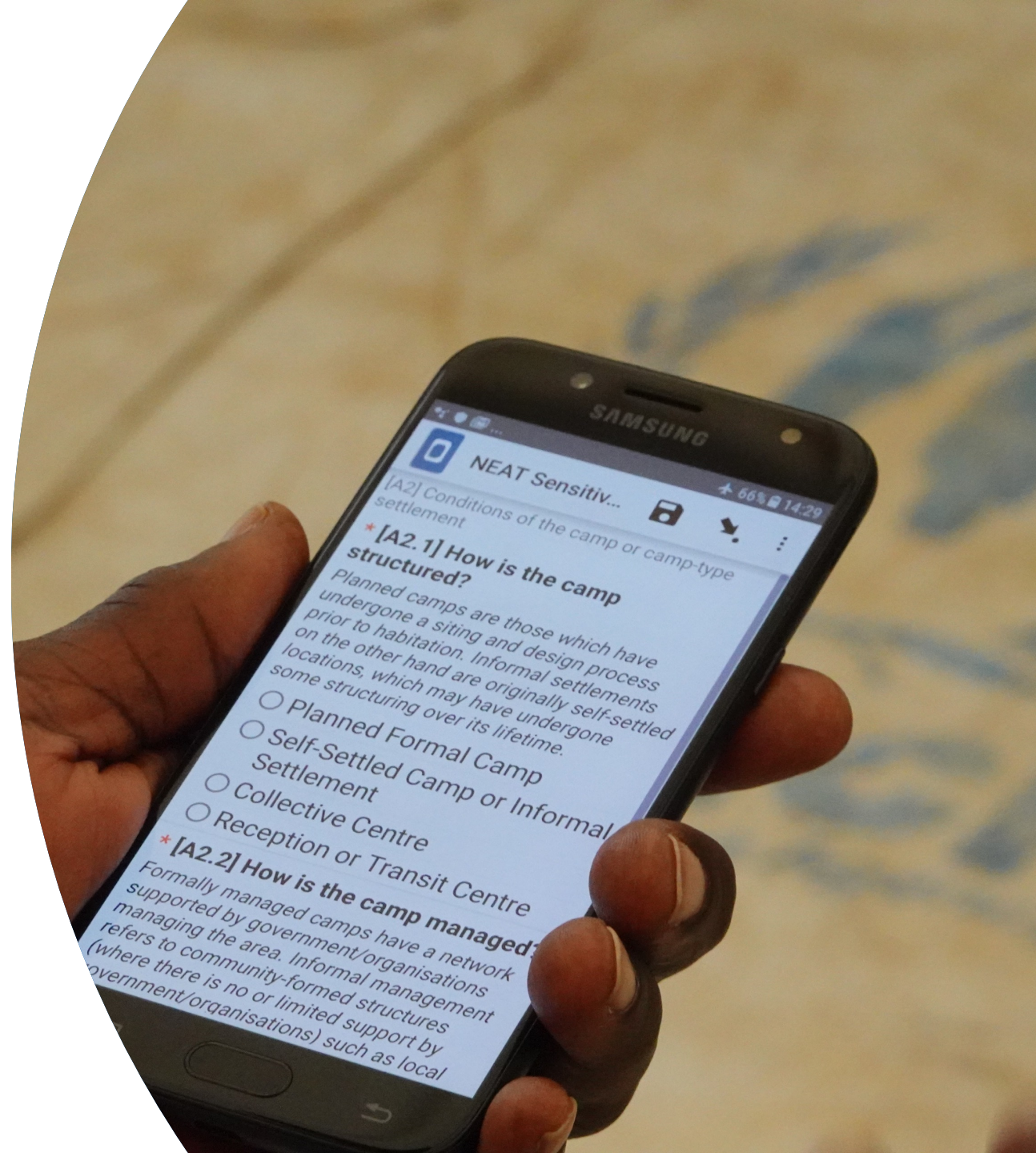
- Awareness
- Communication
- Advocacy

# NEAT+ Applications

- **NRC:** Field pilots in Uganda and Myanmar
- **UNHCR:** piloted in numerous locations, used as baseline for operations. Urban NEAT+ pilot carried out in Brazil and Colombia in November 2020
- **IFRC & ICRC:** piloted in several locations, Arabic tool under development.
- **IOM:** tested in Nigeria
- **Solidarites:** tested in Myanmar
- **ACF:** tested in Middle East and Africa
- **ACTED:** piloted in several locations

## 2021 Update

- **ICRC Iraq:** piloting in Economic Security and WatHab project locations
- **ACF:** Continuing to test in Yemen, Chad, Bangladesh
- **DRC:** Tested in Ethiopia and Kenya
- **Handicap International:** Included in projects in Central & Latin America
- **Alima:** testing in CAR
- **Solidarités:** Lebanon & Burkina Faso



# Rural and Urban NEAT+



## R-NEAT+

Built in 2018 for camp and rural settings. Built upon Excel and Kobo Toolbox

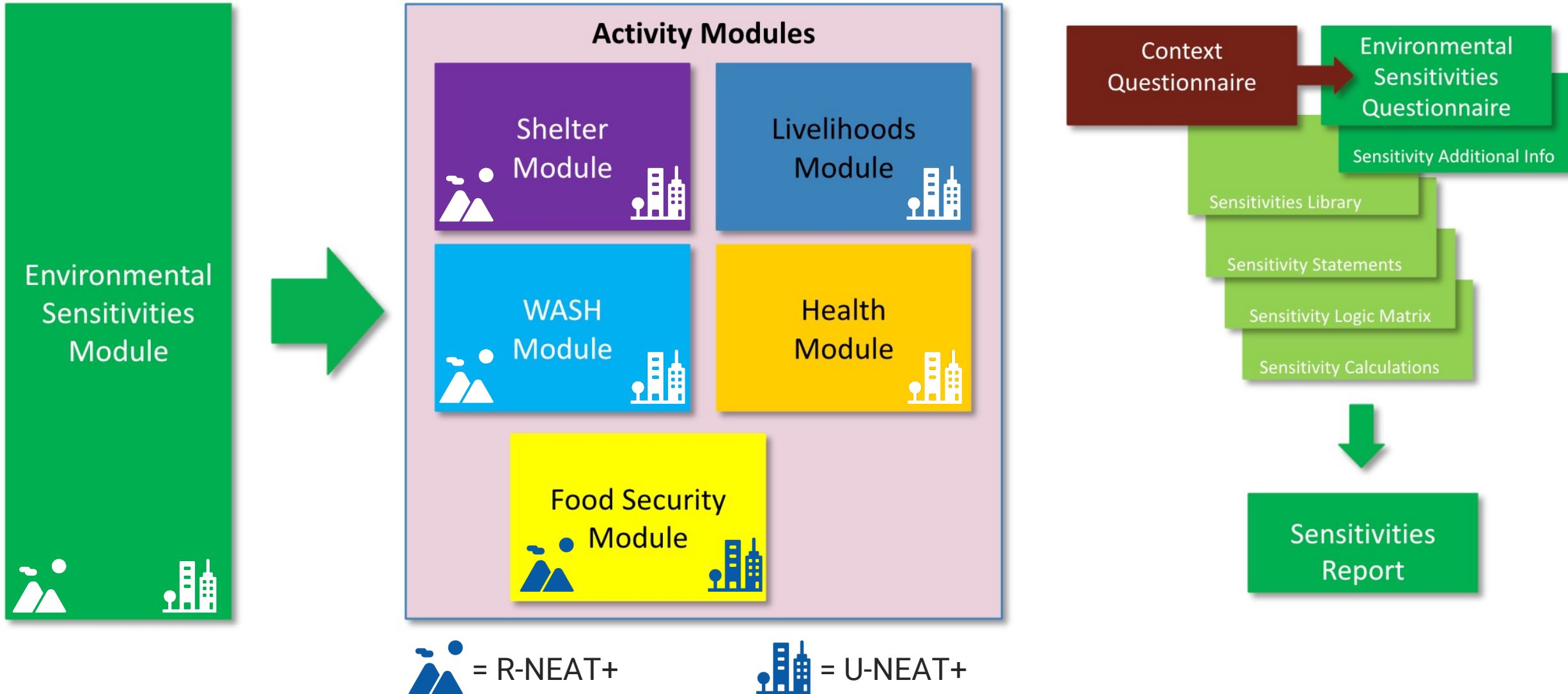


## U-NEAT+

Built in 2021 for humanitarian operations in urban areas. Built upon a custom cloud platform.



# NEAT+ Technical Structure





# Checklist



**Latest version of the R-NEAT+ .ZIP file**



**Internet connection for downloading and Kobo deployment**



**Project manager / field level personnel with familiarity with environmental context**



**Activity specialists (WASH, Shelter, etc.) if completing activity modules**



**Decide who will be in charge of Kobo deployment and downloads (only a few per team)**

### Environmental Sensitivity Analysis



Nexus Environmental Assessment Tool

- 1
- 2
- 3
- 4
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Assessment of: Test project	Date of Assessment: 21-Dec-20
Assessment completed by: Vathanya	Location: Kabul
Organisation completing assessment: OCHA	Country: Afghanistan

Issues of High Concern	Issues of Medium Concern	Issues of Lower Concern
There is a high concentration and/or number of people. The potential environmental impact is greater.	There may be a weakened or poor governance system. There may be low capacity for environmental management.	The community may have low self-sufficiency. There may be a greater demand (and impact) on the local environment.
The community may not be socially cohesive. This can prevent collective action and lead to social conflict.	This area may be at risk of soil erosion from water.	The environment has fragile ecosystems. Further assessment is required to determine if loss of biodiversity is accelerating.
The environment has high biodiversity value. Vulnerable and/or rare flora and fauna may be at risk.	This area may be at risk of flooding.	Indoor air pollution, caused by poor ventilation and cooking/heating, may be an issue.
The community may be close to a protected/conservation area. There may be legal/social implications.	The area may be affected by (previous) conflict related hazards or pollution.	The area may have poor slope stability. Landslides or mudslides may be a risk.
There are areas of high cultural significance. This can threaten social cohesion.	There may be high and/or unsustainable rates of extraction of resources from the local environment.	This area may be at risk of soil erosion from wind.
The community is close to an international border. Transboundary resource management and/or pollution may be a concern.		Natural resource availability/accessibility may be affected by changing climatic conditions.

# R-NEAT+ Results

## Mitigation Statements

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<b>Affected Community</b>	
<p><i>Communities interact with the environment on multiple levels, with these interactions having environmental, as well as social and economic implications. Environmental impacts therefore also have socio-economic consequences. Vulnerable segments of society and the community are often disproportionately dependent and affected by the environment, and have unequal capacity for adaptation.</i></p> <p><i>The following has been identified as a potential concern:</i></p>	
<b>Large concentration and/or number of people.</b>	
Additional Information	Mitigation Tips
<p>A large and/or concentrated population can exceed the capacity of the local environment to absorb impact coming from the populations. This can lead to unsustainable pressure and potential permanent or long-term degradation of the surrounding environment and overconsumption of natural resources. Social issues are also created when there are high populations competing over limited resources.</p>	<ul style="list-style-type: none"> <li>● Explore alternative settlements and/or consider relocation of part of the camp/settlement occupants to another location</li> <li>● Plan for sustainable use of resources before setting up any temporary settlement, especially regarding shelter construction materials, water management and waste disposal</li> <li>● Plan for introduction and dissemination of fuel-efficient stoves</li> <li>● As soon as practical, establish resource user groups to promote sustainable and fair use of available natural resources</li> <li>● Plan for community green spaces such as tree covered areas or gardens that provide shade and a sense of community</li> <li>● Plan land use to reduce exposure to wild animals (e.g. designate buffer zones or protected areas)</li> <li>● If possible, keep camp populations below 20,000 and locate sites at least 15km from ecologically sensitive areas and neighboring camps</li> <li>● Consult <a href="https://www.eecentre.org/covid-19/">https://www.eecentre.org/covid-19/</a> for more information about COVID-19 and zoonotic diseases in humanitarian situations</li> </ul>
<b>Social conflict and uncooperative behavior</b>	
Additional Information	Mitigation Tips
<p>An absence of a sense of community can encourage people to act in their self interest, at the detriment of the wider population and contrary to the common good. The shock of a crisis often disintegrates social structures and established trust relationships that formally or informally govern environmental behavior. Addressing those issues and resolving them would help foster better cooperation and eventually lead to more effective projects (where participants become owners), increasing trust and credibility. High social cohesion will bring more volunteers and wider technical competence, improving cost effectiveness.</p>	<ul style="list-style-type: none"> <li>● Create mixed community level structures that are involved in decision making</li> <li>● Promote "integrated" livelihood activities (persons of concern + host communities) to encourage social cohesion</li> <li>● Discuss issues of concern with community leaders</li> <li>● Set up social projects and consider involving host communities as volunteers</li> </ul>

# NEAT+ Technical Structure

## Food Security Sub-Modules

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### **R-NEAT+**

Food Security & Livelihoods

75 questions:

- 14 – Direct Food Assistance
- 21 – Livestock
- 21 – Agriculture
- 19 – Irrigation

### **U-NEAT+**

Food Security

93 questions:

- 09 – General, Barriers and Enablers
- 10 – Food Markets
- 27 – Food and Nutritional Assistance
- 10 – Institutional Feeding Programmes
- 19 – Urban Livestock and Agriculture
- 18 – Food Systems

# NEAT+ Food Security Module Questions

## R-NEAT+

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## R-NEAT+

### Food Security & Livelihoods

75 questions:

- 14 – Direct Food Assistance
- 21 – Livestock
- 21 – Agriculture
- 19 – Irrigation

#### » Direct food assistance sub-module

[F.D.1] Is this a one-off or ongoing activity? \*

- One-off
- Multiple and/or ongoing distributions

[F.D.2] Do provisions minimize cooking time and energy and water consumption? \*

- No
- Yes, and contents reduce cooking time, energy requirements and water
- Yes, but contents do not reduce cooking time, energy requirements and water
- Not applicable: no foods require cooking

[F.D.3] Do provisions satisfy minimum household food needs? \*

- No
- Yes
- Unsure

# NEAT+ Food Security Module Questions

## R-NEAT+

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## R-NEAT+

### Food Security & Livelihoods

75 questions:

- 14 – Direct Food Assistance
- **21 – Livestock**
- 21 – Agriculture
- 19 – Irrigation

#### » Livestock sub-module

[F.L.1] What is the scale of planned livestock activities? \*

- Household sedentary
- Grazing and pastoralism
- Mixed farming
- Industrial production

[F.L.2] Have local communities been consulted? \*

- No
- Yes, consulted about needs and targeting
- Yes, consulted about needs with project designed in a participatory manner considering local knowledge

[F.L.3] Would this project mainly start, renew or expand livestock activities in the area? \*

- New livestock activity
- Renewal of previous livestock activities
- Expansion of existing livestock activities

# R-NEAT+ Results

## Sector Summary

### Baseline Warnings for Activity Modules

- Shelter
- WASH
- Food Security & Livelihoods

## Food Security Module Summary Report

**NEAT +**

Nexus Environmental  
Assessment Tool

Assessment of: Test	Date of Assessment: 22-Nov-21
Assessment completed by: Test	Location: Test
Organisation completing assessment: Test	

Food security relevant environmental issues and considerations previously identified in the environmental sensitivity assessment.	Issue	Relevant Sector
Solid waste management has previously been identified as a potential concern in this area. There may be limited capacity to manage waste generated from packaging. Where possible, minimize the amount of packaging, substitute for paper or cardboard (which is biodegradable), and promote reusable packaging/storage.	Solid waste management	Direct food assistance
Deforestation may be a concern in this area. Wood is often foraged for use as a cooking fuel, leading to unsustainable rates of extraction from the local environment. Fast-cooking foods are recommended, and energy saving practices should be promoted and/or enabled (e.g. soaking, milling, lids for pots, improved stoves).	Deforestation	Direct food assistance
This area may be at risk of water scarcity. Foods which are water-intensive for cooking and preparation may not be suitable and can add to further water stress. Rations which require less water for cooking and preparation are preferable.	Water scarcity	Direct food assistance
Users may be at risk of indoor air pollution. Poor quality fuels and unimproved cookstoves can lead to increased emissions of harmful pollutants. Promote foods which are less energy-intensive for cooking, and if possible provide improved cookstoves and education on techniques to minimize fuel usage and exposure to indoor air pollution.	Indoor air pollution	Direct food assistance
The local population may be engaging in environmentally detrimental livelihood strategies, such as charcoal sale/production. Providing cooking fuels can discourage such practices and reduce environmental impacts. However, also mitigate potential livelihood implications.	Detrimental livelihood practices	Direct food assistance

# R-NEAT+ Results

## Sector Summary

### Direct food assistance

Environmental Concerns	Environmental Sensitivity	Potential Activity Impact	Potential Environmental Risk
<b>Key environmental concerns</b>			
Rates of deforestation may exceed regeneration capabilities. Deforestation may be a risk.	High	High	High
<b>Other environmental concerns</b>			
The environment has fragile ecosystems. Further assessment is required to determine if loss of biodiversity is accelerating.	High	Medium	High
Indoor air pollution, caused by poor ventilation and cooking/heating, may be an issue.	High	High	High
The water resources may have a low regenerative capacity. Water scarcity may be an issue.	High	Low	High
There is low capacity to manage solid waste. Environmental sanitation and disease transmission may be an issue.	Medium	High	High
<b>Mitigation Tips</b>			
<ul style="list-style-type: none"> <li>Multiple or ongoing distributions inherently increase the severity of potential environmental impacts. Given the frequency of activities, addressing and mitigating potential environmental impacts is of a greater concern. Food distributions have higher potential for environmental impacts compared to markets or self-production, and should only be a short-term activity if possible.</li> <li></li> <li></li> <li>Disaster-affected communities may employ unsuitable techniques in the preparation and/or cooking of unfamiliar foods, leading to increased cooking times and energy consumption. This can also lead to food wastage. Select culturally appropriate foods, and if unavoidable provide guidance on appropriate preparation and cooking techniques that reduce energy usage and cooking times.</li> <li>Humanitarian emergencies can reduce access to basic household items such as stoves. Crude or unimproved stoves are not energy efficient. This causes excessive fuel consumption, increasing the risk of deforestation. These types of stoves also generate increased emissions, posing a health risk. Promoting improved stoves is recommended. Complete the energy sub-module in the shelter module if pursuing energy interventions.</li> <li>Humanitarian emergencies can reduce access to basic household items such as cooking pots and utensils. Appropriate pots in a suitable condition improve the efficiency of the cooking process. The use of well-fitting lids reduces cooking time and fuel consumption. Where deforestation is an concern, this can reduce the severity. Disaster-affected communities should have access to pots with lids, and be educated about the benefits of using lids when cooking.</li> <li>Firewood collection and charcoal production can be harmful to the environment, especially in a humanitarian emergency where there are increased caseloads and reduced access to usual energy supplies. This leads to deforestation, damaging ecosystems and increasing vulnerabilities to natural hazards. Additional complementary activities (fuel/stove provisioning) should be considered. Complete the energy sub-module in the shelter module if appropriate.</li> <li></li> </ul>			
<b>Additional Resources</b>			
<b>Green Logistics Guide</b>			<a href="#">Link</a>
The informational page on the Logistic Cluster's website aims to introduce logisticians to green logistics and encourage them to think sustainably in activities related to procurement and transportation.			
<b>EHA Connect Food Security, Livelihoods and Nutrition page</b>			<a href="#">Link</a>
A portal for information and resources on key environmental issues linked to food security, nutrition and livelihoods programming			
<b>EHA Connect Cash page</b>			<a href="#">Link</a>



# R-NEAT+ Results

## Commentary



Question	Response	Commentary
<b>Direct food assistance</b>		
Is this a one-off or ongoing activity?	Multiple and/or ongoing distributions	Multiple or ongoing distributions inherently increase the severity of potential environmental impacts. Given the frequency of activities, addressing and mitigating potential environmental impacts is of a greater concern. Food distributions have higher potential for environmental impacts compared to markets or self-production, and should only be a short-term activity if possible.
Do provisions minimize cooking time and energy and water consumption?	Yes, and contents reduce cooking time, energy requirements and water	Skip
Do provisions satisfy minimum household food needs?	Yes	Skip
Are disaster-affected communities familiar with energy saving food preparation and cooking techniques?	Yes, but only for some contents	Disaster-affected communities may employ unsuitable techniques in the preparation and/or cooking of unfamiliar foods, leading to increased cooking times and energy consumption. This can also lead to food wastage. Select culturally appropriate foods, and if unavoidable provide guidance on appropriate preparation and cooking techniques that reduce energy usage and cooking times.
What type of cookstoves are disaster-affected people currently using?	Mostly crudely self-constructed burners (e.g. three-stone fires)	Humanitarian emergencies can reduce access to basic household items such as stoves. Crude or unimproved stoves are not energy efficient. This causes excessive fuel consumption, increasing the risk of deforestation. These types of stoves also generate increased emissions, posing a health risk. Promoting improved stoves is recommended. Complete the energy sub-module in the shelter module if pursuing energy interventions.
What type of cooking pots are disaster-affected people currently using?	Mostly pots in poor conditions (encrusted, damaged or without lids)	Humanitarian emergencies can reduce access to basic household items such as cooking pots and utensils. Appropriate pots in a suitable condition improve the efficiency of the cooking process. The use of well-fitting lids reduces cooking time and fuel consumption. Where deforestation is a concern, this can reduce the severity. Disaster-affected communities should have access to pots with lids, and be educated about the benefits of using lids when cooking.
What is the primary type of fuel being used for cooking?	Mostly wood or charcoal	Firewood collection and charcoal production can be harmful to the environment, especially in a humanitarian emergency where there are increased caseloads and reduced access to usual energy supplies. This leads to deforestation, damaging ecosystems and increasing vulnerabilities to natural hazards. Additional complementary activities (fuel/stove provisioning) should be considered. Complete the energy sub-module in the shelter module if appropriate.
Is there a planned educational component on energy-saving food preparation and cooking techniques?	Yes, mainly through community-centered events such as workshops	Skip

# Results

## U-NEAT+

BACK TO SURVEYS

- Overview
- Sensitivity
- Shelter
- WASH
- FS

### Overview

Test survey

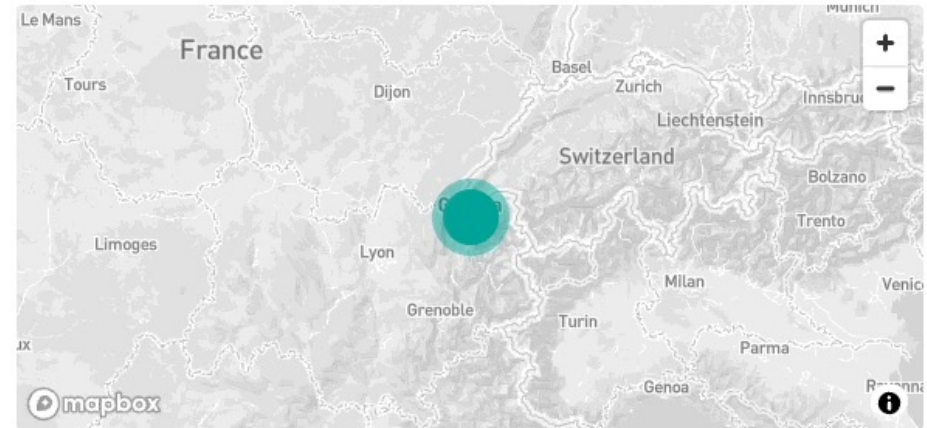
#### Survey Information

Name	Test Survey
Location	Geneva
Organization	UNEP/OCHA Joint Environment Unit (JEU)
Surveyed by	Will
Programme Scale	Test
Created on	10/4/2021
Modified on	10/4/2021

#### Sensitivity Statements Severity Summary



#### Location of Assessment



# FS Activity Module Usage

## Hpa-An Township, Myanmar

- October 2019 pilot test with JEU & NRC
- 5,600 IDPs in Kayin
- Modules tested:
  - Environmental Sensitivities
  - Food Security & Livelihoods (Sein Pa La village only)
- Findings:
  - Large need, low capacity
  - FSL findings matched NRC's mitigation plans
- [Full report](#)



# Pilot test the U-NEAT+

## U-NEAT+ Pilot Testing

- More urban testing is needed to refine the model.
- If you're interested in testing, please sign up here:
- <https://forms.office.com/r/GeCt6ERvjn>

## U-NEAT+ FS Module Review

- Increase accuracy and applicability
- Email [william.rynearson@un.org](mailto:william.rynearson@un.org) if interested/available.





**NEAT** +

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**Thank you!**

**Will Rynearson**  
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