

## **Outline for a two-day training module on the Urban Waste, Energy, and Agriculture**

### **nexus:**

#### **Day 1:**

##### **Session 1: Introduction to Urban Waste, Energy, and Agriculture Nexus**

Definition of the Urban Waste, Energy, and Agriculture nexus  
Importance of the nexus for sustainable development in urban areas  
Global trends and challenges

##### **Session 2: Waste-to-Energy Technologies for Urban Areas**

Overview of waste-to-energy technologies suitable for urban areas  
Types of waste suitable for energy production in urban areas  
Comparison of different technologies

##### **Session 3: Urban Agriculture and Waste Management**

Types of waste suitable for urban agriculture  
Conversion technologies for urban waste management and urban agriculture  
Best practices for urban waste management and urban agriculture

##### **Session 4: Anaerobic Digestion for Urban Waste Management and Agriculture**

Overview of anaerobic digestion for urban waste management and agriculture  
Benefits of anaerobic digestion for energy production and urban agriculture  
Anaerobic digestion systems and technologies suitable for urban areas

##### **Session 5: Biogas and Other Forms of Renewable Energy for Urban Areas**

Overview of biogas and other renewable energy sources suitable for urban areas  
Benefits of renewable energy for urban areas  
Integration of renewable energy systems in urban areas

#### **Day 2:**

##### **Session 6: Urban Waste and Agriculture Policies**

National and international policies related to urban waste and agriculture  
Regulatory framework for waste-to-energy and urban agriculture  
Role of stakeholders in policy development and implementation

##### **Session 7: Case Studies**

Successful waste-to-energy and urban agriculture projects from around the world  
Key strategies and outcomes

##### **Session 8: Waste-to-Fertilizer Technologies for Urban Areas**

Overview of waste-to-fertilizer technologies suitable for urban areas  
Types of waste suitable for fertilizer production in urban areas  
Conversion technologies for waste-to-fertilizer in urban areas

##### **Session 9: Integrated Urban Waste, Energy, and Agriculture Systems**

Overview of integrated urban waste, energy, and agriculture systems  
Benefits of integrated systems for urban areas  
Case studies of successful integrated systems in urban areas

##### **Session 10: Group Work**

Participants will be divided into groups to develop an integrated urban waste, energy, and agriculture system

##### **Session 11: Conclusion and Future Actions**

Recap of key points

Discussion on next steps and how to apply the knowledge gained from the training

The training should also include site visits to waste-to-energy and urban agriculture facilities in urban areas and discussions with experts to provide hands-on experience for the participants. Interactive activities, case studies, and group discussions should be included to encourage active participation and engagement of the participants.