

Reduction of Organic Waste through Source Separation

A Guide for Raising Awareness



CCET guideline series

Reduction of Organic Waste through Source Separation A Guide for Raising Awareness

Authors

Miho Hayashi (Institute for Global Environmental Strategies, IGES), and Premakumara Jagath Dickella Gamaralalage (IGES)

Peer Reviewers

Iyngararasan Mylvakanam, Regional Coordinator, Chemicals, Waste and Air Quality, West Asia Office and Sarah Al-Jarjees, Expert, UNEP, West Asia Office

Acknowledgment

This guideline was prepared by the IGES Centre Collaborating with UNEP on Environmental Technologies (CCET) under the project titled "Sustainable Solutions of Compost from Organic Waste in Iraq" in consultation with the policy makers and experts in Karbala City. The authors would like to thank all involved for their valuable contributions.

Copyright

© Institute for Global Environmental Strategies, 2022.

All rights reserved.

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. CCET would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing to CCET.

Disclaimer

Although every effort is made to ensure objectivity and balance, the publication of research results or translation does not imply IGES endorsement or acquiescence with its conclusions or the endorsement of IGES funders. IGES maintains a position of neutrality at all times on issues concerning public policy. Hence conclusions that are reached should be understood to be those of the authors and not attributed to staff-members, officers, directors, trustees, funders, or to IGES itself.

IGES
Institute for Global
Environmental Strategies

CCET
IGES Centre Collaborating with
UNEP on Environmental Technologies

CCET guideline series

Reduction of Organic Waste through Source Separation
A Guide for Raising Awareness

June 2022

Contents

- 1. Introduction** 1
 - 1.1 Organic waste management 1
 - 1.2 Awareness raising for behaviour change 2
 - 1.3 Social change towards proper waste management 3
 - 1.4 Training of Trainers 4

- 2. Designing an awareness-raising programme** 5
 - Module 1. Introduction to training 5
 - Module 2. Develop an awareness-raising strategy 6
 - Module 3. Develop a Programme Outline 12
 - Module 4. Find partners and form coalitions with other stakeholders 13
 - Module 5. Identify the target audience and tailor the initiative appropriately 14
 - Module 6. Create and deliver key messages for your target audience 14
 - Module 7. Consider the most effective methods to raise awareness 16
 - Module 8. Consider the timing 17
 - Module 9. Monitor and evaluate the progress and impact 17

- References** 18

1 Introduction

1.1 Organic waste management

The global amount of waste is increasing rapidly along with growth in the world's population and accelerating urbanisation (World Bank, 2018). Waste management faces serious challenges, particularly in urban areas, and considerable efforts are required to limit overall amounts of waste produced and negative impacts on the environment and public health, as well as mitigate the effects of climate change and the financial costs of waste management (UNEP, 2019). To overcome these challenges, waste management is currently undergoing a paradigm shift from disposal to waste prevention, resource recovery and recycling, as shown in Figure 1, which illustrates the waste hierarchy.

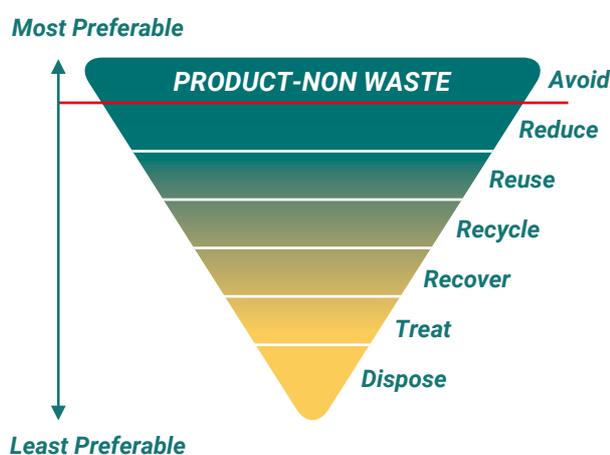


Figure 1: Waste hierarchy

Source: European Commission, 2008: modified

Organic waste, generally composed of food waste and green garden waste, makes up the biggest fraction of total waste generated and generally ends up at open dumps (World Bank, 2018). According to an initial estimate in 2011, one third of the food produced annually in the world for human consumption, equivalent to around 1.3 billion tons, was lost or wasted (FAO, 2018), while 135 million suffer from acute hunger largely due to man-made conflicts, climate change and economic downturns. The COVID-19 pandemic could now double that number. (WFP, 2020).

The direct disposal of organic waste in dump sites results in the generation of malodours and leachate, i.e., contaminated liquid, and pollutants soil and ground water, and creates a health risk for surrounding communities. When dumped organic waste is covered with earth, it is then broken down by microorganisms under anaerobic conditions, resulting in the generation of methane, a powerful global greenhouse gas (GHG) 28 to 36 times more potent than carbon dioxide (EPA, 2021), contributing to global warming.

Separate handling of the organic fraction as well as proper treatment by applying composting, anaerobic digestion or other means such as mechanical-biological treatment are therefore critical according to the principles of the sustainable waste management hierarchy and circular economy (Figure 2). Separation of organic waste from other waste at source is thus an integral part of such efforts, enabling to reduce waste and recover value from separated waste through the production of quality composting and energy recovery.



Figure 3: The Seven Steps to Social Change

Source: Robinson, 1998

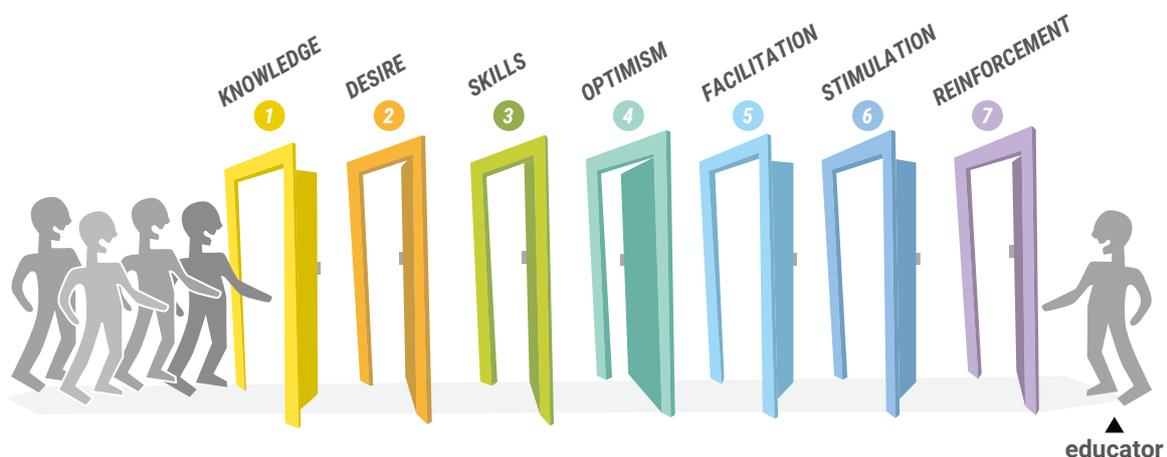


Figure 4: Opening the Seven Doors to Social Change

Source: Robinson, 1998

1.3 Social change towards proper waste management

According to Roust, Bolton and Dahlen (2016) increasing public participation is a major challenge in source separation. They studied programmes carried out in Sweden on source separation, in operation since the early 1990s, which had adopted different collection methods to recover materials at source for recycling. They comment that recycling behaviour should

be designed as part of a waste management system, requiring ever higher levels of household participation. Awareness-raising programmes consist of assessing existing sorting behaviour, classifying relevant interventions and evaluating the quantitative effects of such interventions. A motivation-ability-opportunity-behaviour model shows that motivation is important factor but does not in itself achieve environmentally-friendly behaviours, and that ability and opportunity are also required to bring about appropriate

behaviours (Premakumara *et al.*, 2021). Additional factors such as the availability, access and convenience of recycling systems, i.e., raising the number of opportunities to source-separate waste at the household level are also important. It is also essential to consider the experiences and attitudes towards sorting from the perspective of households, as well as to ensure households are equipped with the requisite knowledge and ability to sort waste as per requirements. Thus, a well-designed, thoughtfully presented awareness-raising programme based on local socioeconomic and environmental conditions as well as available resources is both the ideal to be aimed for but also arguably a challenging task.

1.4 Training of Trainers

The Training of Trainers (ToT) model is intended to engage master trainers in coaching new trainers who are less experienced in particular topics or

skills, or with training overall (see Figure 5). ToT workshops can be used to build a pool of competent instructors who can then pass on their learning to others. Such workshops generally involve new participants observing an experienced trainer, then completing related exercises and practicing teaching segments to other participants. The main goal of ToT is to facilitate instructors in the effective presentation of information, to respond to participant questions, effectively listen to all opinions, and lead activities and discussions that reinforce learning (CDC, 2021). Sufficient time to ensure the effective transfer of knowledge also needs to be considered.

To introduce source separation of organic waste, municipal staff in charge of waste management operations need to undertake training in order to play a core role in planning and implementing effective awareness-raising activities with clear and concise messages to target audiences.

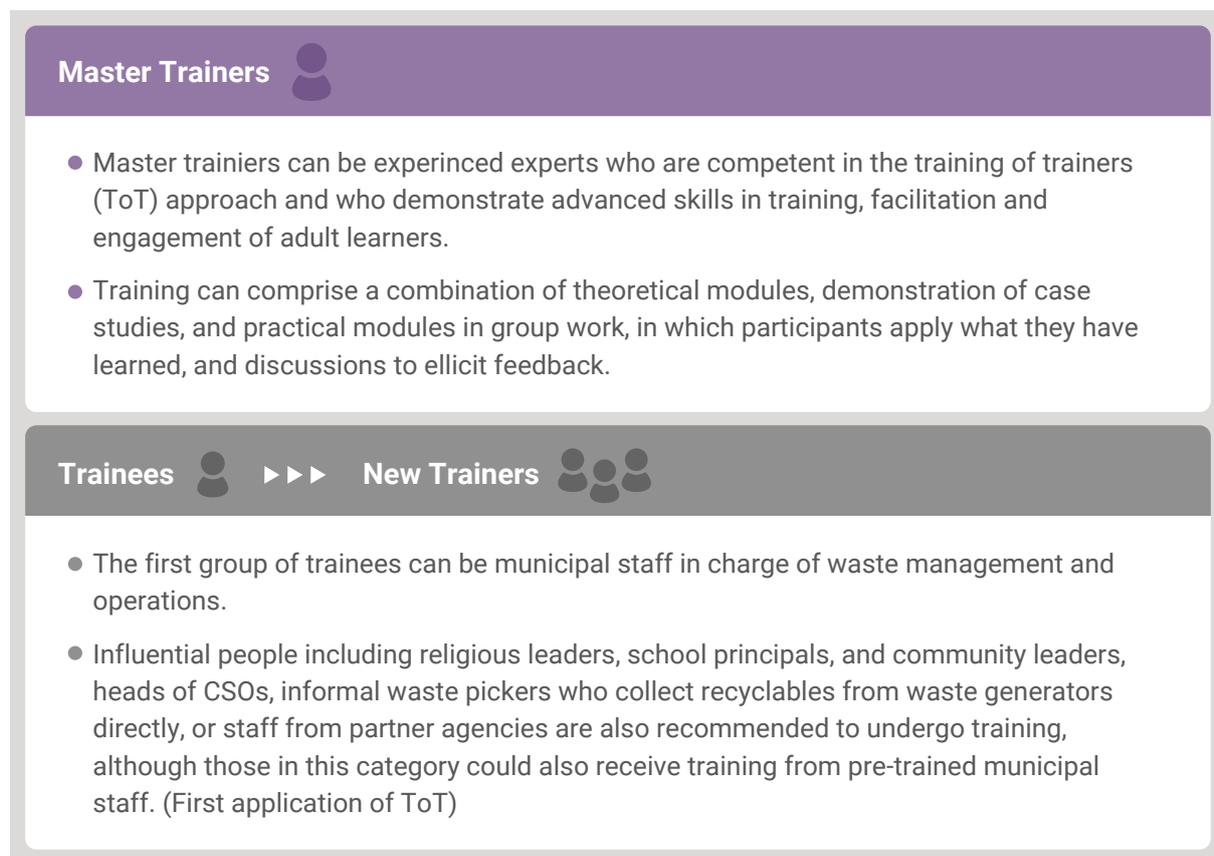


Figure 5: The role of trainers and trainees under ToT approach

Source: developed by Author

2 Designing an awareness-raising programme

The TAP Network (see the SDG Accountability Handbook) details a number of actions required to raise awareness of the SDGs. Such actions are useful in designing awareness-raising programmes.

1	Introduction to training	
2	Develop an awareness-raising strategy	
3	Develop a Programme Outline	
4	Find partners and form coalitions with other stakeholders	
5	Identify the target audience and tailor the initiative appropriately	
6	Create and deliver key messages for your target audience	
7	Consider the most effective methods to raise awareness	
8	Consider the timing	
9	Monitor and evaluate the progress and impact	

Figure 6: Key steps of awareness raising programme

Source: TAP Network, modified

Module 1 Introduction to training

At the beginning of the training, trainers will discuss with participants (trainees) basic information such as general issues encountered in organic waste management, the purpose of the training, training

methodology and timing, as well as expected outcomes in terms of development of various skills and knowledge.

Suggestions for practical exercises:

- Pre-assessment—identifies pre-training knowledge, skills, and interests of the participants to determine or inform the training design.
- Prep-work—provides participants with the knowledge and background needed before the actual ToT.
- Adult learning principles—provides insights into how adults learn and can help instructors be more effective in their practice and more responsive to the needs of the learners they serve.
- Skills practice and feedback—provides opportunities for the practice of selected training activities or content by having participants present to other participants, who then provide feedback.
- Action planning—takes participants through the process of creating a plan outlining the sequence of steps or activities required in order for a strategy to succeed.
- Planned follow-up support—provides ongoing and targeted follow-up support once a professional development event has been completed to strengthen the knowledge and skill level of participants. Follow-up support is intended to reinforce the transfer of learned strategies or skills to ensure they are retained and applied effectively.

Source: CDC, 2021

A | Confirm overall purpose, objectives and outcomes

When planning to promote an awareness raising programme, it is important to begin by clarifying the overall purpose, objectives and outcomes aimed for. Normally, awareness raising programmes involve a dialog with society that aims to persuade people to adopt an interest, perhaps unfamiliar to them, in supporting a move, change or action that would not normally happen. In this case, the main issue to tackle is the separation of organic waste at source generated from households, schools, offices, and commercial sectors (municipal organic waste).

Having a detailed understanding of the issue on which you will be building your awareness-raising strategy is critical in the earliest planning stage. You need to decide what and who you want to influence in the programme by conducting research and analysis to understand the context, root causes and consequences, partners and target audiences. Only then can you develop a robust argument and provide the necessary evidence to back it up.

B | Gather initial data to understand the organic waste flow

At this stage, it may be useful to collect some initial information through research or considering logistics. Gathering data and evidence about waste flows (such as amounts and composition from source to disposal) and waste management systems (waste generation sector, current collection, transportation, treatment and disposal methods, frequency, and capacity) will help develop messages, and monitor and evaluate progress

and results. The research can involve the Internet, desk reviews, interviews, on-site surveys, focus group discussions and so on. The participatory methodology creates favourable conditions for participants to express themselves in a safe environment. In so doing, participants are able to identify the causes and alternatives to current habits in order to overcome the issue.

C | Understand Organic Waste Management

The major fraction of organic waste is food waste, generated from households in general. Using the food waste hierarchy approach, food surplus and waste can be managed and avoided. This hierarchy considers the three dimensions of sustainability (environmental, economic, and social), which is a more holistic approach to addressing food waste.

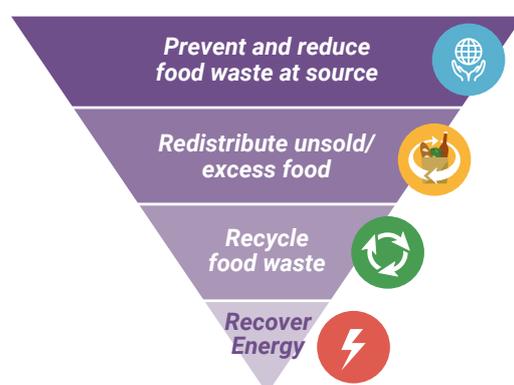


Figure 7: Food waste hierarchy

Source: National Environment Agency, Singapore 2020-b

1. Reduce food waste at the source



Every time food is thrown away, money is also wasted. Growing food takes time, hard work and resources, and wasting food means these

resources are wasted. The ideal approach is to prevent food waste being generated at the outset. Table 1 shows some examples of actions that can contribute to reducing food waste in homes and offices.

Table 1: Some actions to reduce food waste in homes and offices

Occasion	Example actions
Cooking at home	<ul style="list-style-type: none"> • Keep track of what's in your kitchen • Cook just enough • Use off-cuts or the equivalent • Share food with your guests, friends or neighbours • Cook a "use-it-up" meal every week (i.e., which does not involve buying new food until what's available at home is mostly consumed)
Grocery shopping	<ul style="list-style-type: none"> • Check your kitchen before going shopping • Plan your purchases ahead • Consider purchasing food with imperfections
Storing food	<ul style="list-style-type: none"> • Store it correctly • Check your fridge • Store better • Practice "first to expire, first out" • Use a freezer
Eating out	<ul style="list-style-type: none"> • Order only what you can eat • Ask for advice • Downsize your order • Swap sides you don't eat with something you can eat • Share dishes • Don't rush to order more
Parties and events	<ul style="list-style-type: none"> • Provide just enough • Know what your guests are bringing • Cater for less than the actual number of guests • Encourage your guests not to leave any scraps on their plates
Office pantry (mini-fridge or food storage place in office)	<ul style="list-style-type: none"> • Label food with purchase or expiry dates • Set up an "eat these first" area • Set aside a "clear the pantry" day every week • Check before you buy

Source: National Environment Agency, Singapore 2020-c, modified

2. Redistribute excess food

If you have food items that are still consumable but not to be consumed, they can be donated to those in need within your community as long as items are unopened and not expired. This greatly helps prevent food waste and assists those in need at

the same time. If food items are opened or used but still edible, donate them to nearby farmers who can accept them as animal feeds. Naturally, these food items should be free of non-edible items such as poisons, hazardous chemicals, and pieces of plastic or glass. Food waste that cannot be avoided should be recycled where possible.

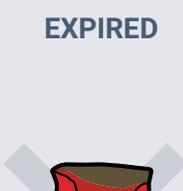
 ITEM THAT CAN BE DONATED	 ITEMS THAT CANNOT BE DONATED
 <p>STAPLES Rice, Noodles, Pasta</p>	 <p>UNLABELLED</p>
 <p>BEVERAGES Hot Beverages, UHT Milk Ready to Drink</p>	 <p>EXPIRED</p>
 <p>CONDIMENTS Oil, Seasoning, Spices, Spreads, Sugar, Syrup</p>	 <p>OPENED</p>
 <p>SNACKS Biscuits, Cereals, Chips, Chocolates</p>	 <p>USED</p>
 <p>CANNED FOOD Beans, Seafood, Fruits, Soup, Meat</p>	
 <p>DRIED/PRESERVED FOOD Beans, Fruits, Vegetables, Meat</p>	

Figure 8: Food donation for those in need

Source: National Environment Agency, Singapore 2020-b

3. Segregate and recycle food waste



To ensure the successful implementation of food waste recycling or treatment, it is crucial for food waste to be properly segregated from non-food waste items. Food waste can be recycled into useful resources or products such as animal feed, compost or fertilizer, or biogas for energy generation, instead of being incinerated. Composting is a natural way to recycle food waste or agricultural organic waste. Insects, worms, bacteria and fungi all help transform organic

materials into compost. Segregating food waste for treatment also provides other benefits such as reduced odours and pest nuisances at premises and contamination of recyclables, which allows greater resource recovery.

If composting can be made economically viable, it can generate income and incentivize the operators involved. Alternatively, municipalities may need to subsidize such activity, while considering the costs involved can be offset by the savings realised by avoiding unnecessary waste transport and disposal.

Below is a step-by-step guide to implementing proper waste segregation:

**STEP
1**

Identify the locations within your premises where food waste is generated

- Common locations include kitchens (where food preparation waste such as vegetable trimmings are generated) and dishwashing or tray-return areas (where post-consumer food waste is collected).

**STEP
2**

Decide the location(s) to segregate food waste

- Food waste segregation point(s) can be located independently or co-located with existing waste collection points within premises, such as bin centres or tray-return areas.

**STEP
3**

Set up a segregation process at identified location(s)

- Designate sufficient space for food waste segregation and collection.
- Employ resources and equipment such as garbage bins with clear labels to support food waste segregation and collection.

**STEP
4**

Set up an appropriate collection system and regulations for segregated organic waste (under the responsibility of municipality).

- Review the current collection system and make necessary adjustments for collecting dates, frequency, routes and vehicles used. Then, obtain consensus from the target audience.
- Make clear and official regulations for enforcement of the new collection system.

Source: National Environment Agency, Singapore 2020-a

D | Analyse key issues

Once the organic waste management issues are fully understood and the relevant information is collected through research, each of the issues

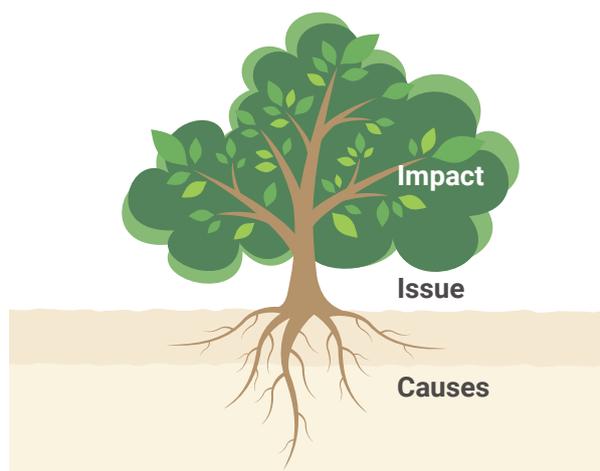
needs analysing in detail. Several tools exist to break the issues down into smaller parts, which are described below.

1. Problem tree

This is a visual method of analysing a particular issue based on mapping different aspects of the problem (WHO, 2019) by asking “Why?” to find the causes and “What happens?” to consider consequences or impacts.

Taking the example of increasing organic waste generation as a key issue, you need to keep asking *why* in order to discover the root causes. Some common causes are:

- **Lack of waste reduction efforts at source**
 - (because of) lack of knowledge on waste reduction at source
 - (because) we feel satisfied with having extra food
 - (because of) lack of awareness about the importance of waste reductionetc.
- **Lack/absence of waste separation practice at source**
 - (because) we do not know why and how to separate the waste
 - (because) we do not have the space to store separated waste
 - (because of) lack of interestetc.
- **Composting not practiced**
 - (because) we do not have a composting facility/kit
 - (because) we do not know how to carry out composting
 - (because) it is costly and not worth doingetc.



- **No or little awareness or knowledge on how food waste impacts the environment or other issues**
 - (because) we have not seen or heard about any problems resulting from food wasteetc.

Next, you need to further analyse why people do not separate waste at source, for example. You may receive responses such as:

- Absence of policy and enforcement
 - Lack of habits or interest in separating waste
 - Lack of current sorting-collection system
 - Lack of knowledge about the consequences of negative impacts
- etc.

The *why* questions are repeated until no further responses are obtained. Then, the question is changed from *why* to *how* to develop subsequent actions. For example, you can ask “How can we start separating waste?” or “What support will facilitate people to start practicing separation?”

Responses to these questions will potentially form the activities that to be carried out in the ensuing programme. This set of activities and objectives then takes on another tree-like form, called an Objective Tree.

2. RAPID framework

When you implement activities with partner agencies, it is important to clearly distinguish the roles and responsibilities among them to enable smooth cooperation, free of conflict and confusion.

The RAPID framework helps in developing an understanding of the policy and political influences of a particular issue, as well as to identify that issue's related stakeholders and policy actors. The RAPID Framework suggests that, by properly delimiting and defining these roles, decision-making processes deliver better results and hold everyone involved accountable (Bain & Company).

 RECOMMEND	The Person or Group that suggests making a Change or Action.
 AGREE	The People or Professionals who would be involved and therefore have to Agree.
 PERFORM	The Professionals who would be in charge of Implementing the Action.
 INPUT	The Professionals in charge of Providing the Information Needed to Decide.
 DECISION	The Person or Group responsible for deciding whether to carry out the Action.

Figure 9: Bain's RAPID framework¹

3. PESTLE analysis

To understand the issue of organic waste management, it is necessary to look at not only the waste itself but also the surrounding environment, as this could affect waste management. This involves the whole waste value chain, ranging from waste generation, collection, transportation and treatment to disposal, which involves many actors with important roles. Moreover, under the circular economy concept, it is crucial to conduct analysis on 3R activities and products made of food waste, such as compost in order to be able to convert as much organic waste as possible to resources with economic value.

PESTLE analysis clarifies the various external forces that can significantly impact on the issue you are handling. PESTLE stands for Political, Economic, Social, Technological, Legal and Environmental factors. Table 2 shows some examples of each factor.

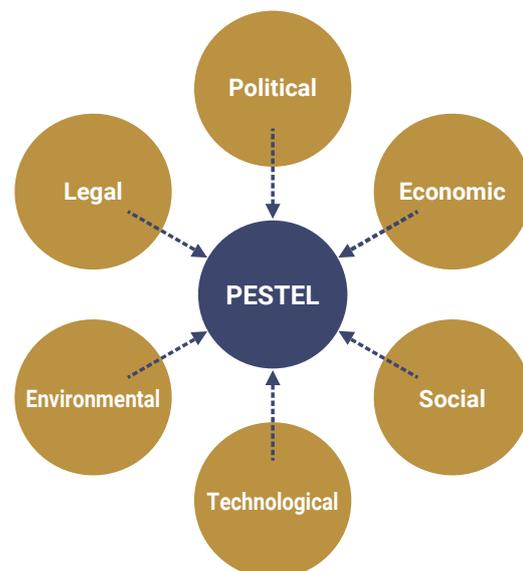


Figure 10: Overview of PESTLE²

1 <https://www.consunt.com/bains-rapid-framework/>

2 <https://corporatefinanceinstitute.com/resources/knowledge/strategy/pestel-analysis/>

Table 2: Examples of PESTEL elements

Political factors	<ul style="list-style-type: none">• Tax policy, tariffs, bureaucracy, changes in government, political stability
Economic factors	<ul style="list-style-type: none">• Market prices of products made of recycled materials, such as compost and biogas, cost of infrastructure and facilities, exchange rates for importing/exporting products, inflation, labour cost, funding raised, subsidy from government
Social factors	<ul style="list-style-type: none">• Cultural aspects, health and environmental consciousness, population growth rates, career attitudes, volunteer spirit, corporate social responsibility (CSR) initiatives
Technological factors	<ul style="list-style-type: none">• R&D activity, automation, technological incentives, rate of change in technology, complexity of maintenance and operation, availability of parts and operators
Environmental factors	<ul style="list-style-type: none">• Weather conditions, temperature, climate change, pollution, natural disasters
Legal factors	<ul style="list-style-type: none">• Laws and regulations at city and national level and their enforcement, licenses & permits, labor laws, intellectual property

Source: CFI, 2021 modified

Module 3 Develop a Programme Outline

Based on further analysis on organic waste management, you need to determine the goals and impacts you want to achieve through the awareness-raising programme as well as the objectives and outcomes that can contribute to achieving the goal(s) and impacts.

- **Goal/Impact – The long-term outcome you wish to achieve.**
The goal or impact should be 'SMART', where:

S (Specific): What exactly do you expect to happen? (*Reduction of organic waste*)

M (Measurable): Will you know when you have achieved it?
(*By measuring the quantity of organic waste at the landfill site*)

A (Achievable): Is it realistic or even possible to achieve your objective, given your resources and time? (*Obtain commitment from each actor to practice what they plan to do*)

R (Relevant): Is it relevant and appropriate for all stakeholders to solve the problem itself?
(*Ask if the objective of the programme is under the mandate of your organization*)

T (Time-bound): By when do you want the objectives or the expected outcomes to be achieved?
(*Set a realistic time period*)

- **Objectives – The short-term outcomes you wish to achieve, or conversion of the first level of cause in the problem tree into an aim.**
- **Expected outcomes – The outcomes that you want to achieve by the end of the activity period; or the conversion of the second level of cause in the problem tree into an aim.**

Awareness-raising activities tend to be more successful and have a greater impact when conducted by a network or coalition. Seeking to identify the individuals or groups with similar interests as yours is the key to achieving your specific goal. It is important to identify who the REAL agents of change are in your chosen agenda. Potential partners include key decision-makers, provincial or national authorities, parliamentarians, the media, CSOs (including women unions and youth associations), NGOs, INGOs, universities, and the private sector (including waste pickers and collectors, waste management operators, recycling operators, manufacturers that use recycled materials) at local, national and/or international levels. They may provide innovative ideas and strategies, and sometimes funds.

Then, consider the extent to which each is associated with your programme goal or issues by researching their objectives and recent activities – in particular:

- Relationships and tensions between the players
- Their agendas and constraints
- Their motivations and interests
- Their priorities – rational, emotional, or personal

It is recommended to consider the following factors in selecting the right partners³:

- Can they influence our target audience?
- Do we have shared interests and objectives?
- Do they increase the legitimacy, credibility and effectiveness of the awareness-raising strategy?
- Do they bring evidence, knowledge or technical expertise?
- Do they bring other resources to the initiative or activities?
- Do they have a global, regional, national or local presence?
- Are their strengths and abilities complementary to ours?

Working in partnership with others has many advantages, while it is still important to be aware of some of the related risks. In order to strengthen the partnership, it is important to:

- Define clearly the vision, strategy, and expected outcomes
- Define clearly the roles and responsibilities of each actor by using different sets of expertise
- Ensure good communication among partners and internally

Table 3: Advantages and disadvantages of having partners

Advantages	Disadvantages
<ul style="list-style-type: none"> • Creating opportunities to learn and share skills, resources and experience • Building new and improved opportunities for influencing potential donors, decision-makers, media contacts and other key stakeholders • Coordinating activities to reduce duplication and reinforce one another's work • Increasing credibility and legitimacy in the eyes of decision-makers and other stakeholders by creating 'one strong voice' • Broadening national- and regional-level presence, thus raising the potential impact on public opinion and mobilisation of public campaigns 	<ul style="list-style-type: none"> • Progress may be slower due to greater time spent convincing each other on issues, instead of convincing decision-makers • Your strategy may be limited to the 'lowest common denominator' consensus in order to ensure partner agreement • Some partners may gain more than they give • If partners leave, the strategy might fracture or disintegrate • Individual organizational profile may be lost and some partners could utilise the shared profile for self-gain

Source: Stakeholder Forum and CIVICUS, 2015

³ UNICEF (2010): modified

Module 5 Identify the target audience and tailor the initiative appropriately

The next step is to understand which people and institutions you need to influence to ensure you achieve the desired impact, which is carried out by conducting a stakeholder analysis to identify influential stakeholders. Below are some tips for selecting the target audience.

- Pick only a few targets, in order to direct energy and focus
- Pick ones that might be able to influence each other
- Pick ones that you have the ability to influence

In general, households are the main target as they are the main organic waste generators in a city. The following are also potential target audiences:

- Tourists who use hotels, restaurants, and tourist attractions (who can be reached through tourist associations or the media)
- Local grocery markets (reached through the market union, if any)
- Pilgrims (reached through priests and their assistants)
- Students

Once identified, you may wish to survey or assess the target group's initial level of awareness through small focus group discussions. The results of the assessment can be utilised to tailor awareness-raising activities and appropriate messages and evaluate the impact of the campaign in the future.

Module 6 Create and deliver key messages for your target audience

The key messages you aim to deliver should be clear, concise and consistent to ensure they are not forgotten by the target audience. Based on the analysis done in Module 2, you can develop sub-messages on why it is important and how to implement activities aimed at organic waste reduction and source separation. Educational materials should comprise the following:

- Clear instructions on the types of food waste that can and cannot be deposited into the organic waste bins
- Photographs and pictures to show the expected quality of organic waste to be collected in the organic waste bins
- Clear process flow diagrams to provide the target audience with information on the purpose of organic waste segregation
- Use of local languages to cater to a wider range of target audiences



Tips for creating effective key messages

- Emphasize your central idea of why awareness should be raised and how to achieve the goal.
- Tailor your messages to the specific target group(s).
- Try to localize the issues in your messages so that their relevance in the local or national context and impact on people's daily lives becomes clear.
- Use evidence-based data and arguments in your messages. Numbers and research results can often be very persuasive.
- Include stories in your messages. Storytelling is a powerful means to connect with people on a deeper emotional and rational level and to motivate them to take action.
- Negative approaches that exploit emotions like fear or anger can sometimes mobilise people for a short period but are much harder to use to build organizations or transform society. It is recommended to use positive emotions, as these can invoke hope and inspire society.
- Refer to comparative examples from other cities, countries or regions, if appropriate.
- Avoid using jargon or acronyms that your target group may not understand.
- Include a call to action as to what you want your target group to do, if appropriate.

Source: TAP Network



Tips for delivery of messages

- When delivering your message through a campaign or working with the media, you need to ensure it is effectively conveyed to the target audience and never moves off-message. Be wary of being distracted by other issues, or voices of discontent or opposition. Stick to the positive message you want to get across.
- Pay attention to the importance of eye contact with the target audience, presenting a positive attitude, speaking in a clear voice, gesturing appropriately, and maintaining interest and dispelling confusion.

Source: Stakeholder Forum and CIVICUS, 2015: modified

A range of different methods and tools can be used – individually or jointly to reinforce each other – to raise awareness, including the following:

- Producing educational resources such as reports, studies and infographics
- Holding or participating in events such as thematic discussions, roundtables, seminars, webinars, workshops, conferences, debates, exhibitions and demonstrations
- Utilizing radio, including community radio, which can be a powerful means to spread information and raise awareness, especially in poor and rural areas
- Producing visual materials such as leaflets, posters, signboards, newsletters in which key messages are stated
- Producing audio-visual material such as television, video and documentary film
- Using the Internet, including online forums, petitions, groups and interactive websites, as well as social media platforms such as Facebook, Instagram, LinkedIn, and Twitter
- Using wireless communication such as mobile phones and text messaging, which are highly useful in societies where freedom of information and association is limited
- Engaging with the media, including through press releases, briefings, newspaper articles and opinion pieces, and conducting media campaigns
- Networking (online and offline), including creating and maintaining a network of contacts to share and disseminate information to build awareness
- Gaining support from prominent and famous people, actors, sport players and celebrities
- The arts – including art, satire, spoken word, music, street theatre and comedy – which can be powerful vehicles to raise public awareness and consciousness
- The marketing of goods, including stickers, armbands, bracelets, logos, T-shirts, and caps, which can strengthen solidarity among the target audience

Tips for planning a public campaign



A campaign is an effort to bring about change in terms of awareness and behaviour, and should be of sufficient length and have enough impact to make a difference, but also manageable enough to obtain short-term results. It should form the foundation for future campaigns and actions. However, since conducting campaigns is time consuming and costly, you need to also consider whether the same results could be achieved through other means.

Source: Stakeholder Forum and CIVICUS, 2015

Module 8 Consider the timing

While awareness-raising activities can be carried out at any time, you may wish to leverage publicity around major events which most of the target audience could attend or be involved in, such as religious gatherings and community festivals or relevant international commemoration days, in order to increase the reach and impact of the core message.

The calendar day designated as the International Day of Awareness of Food Loss and Waste (29 September) would provide a good opportunity for mass awareness-raising activities, as it would promote global efforts and collective action towards meeting targets.

Module 9 Monitor and evaluate the progress and impact

According to Stakeholder Forum and CIVICUS (2015), monitoring and evaluation is mainly related to learning from your actions carried out to date and how you went about them, and taking appropriate action if your strategy needs adjusting. Regular monitoring and evaluation will help you assess progress toward the objectives as well as the impact achieved, and ensure you use your time and resources effectively and efficiently.

To better measure your progress, use of some form of indicators is recommended to check whether or not you have completed tasks or achieved the objectives and outcomes identified. Questions⁴ to ask include:

- What worked and how well?
- What did not work, and why not?
- What could be improved, and how?
- What worked better than expected?
- How and where have your partners been helpful?
- What disappointed partners?
- What messages have resonated, and have they helped to achieve our objectives?
- What were the barriers to success (external and internal)?
- What facilitated success, including scenarios which were not anticipated?

Table 2: Overview of monitoring and evaluation

	Monitoring	Evaluation
Indicators (example)	<ul style="list-style-type: none"> • Organic waste generation at source and disposal site • Level of impurities contained in sorted organic waste • Level of awareness of target audience in organic waste reduction and waste separation • Level of participation of target audience in waste separation • Amount of compost generated 	
Timing	Continuous throughout the project	Periodic review at significant point in project progress: end of project, midpoint of project, change
Scope	Day-to-day activities, outputs, indicators of progress	Assess overall delivery of outputs and progress towards objectives and impact
Main participants	Project staff and partners, stakeholders	External evaluators/facilitators, project staff, donors, stakeholders
Process	Regular meetings, interviews; monthly, quarterly reviews, etc.	Extraordinary meetings, additional data collection exercises, etc.
Written outputs	Regular reports and updates to project management, partners	Written report with recommendations for changes to project, presented in workshops to different stakeholders

Source: Water Aid, 2007 modified

4 UNICEF (2010)

References

1. Corporate Finance Institute (CFI) (2021), PESTEL Analysis
Available at: <https://corporatefinanceinstitute.com/resources/knowledge/strategy/pestel-analysis/>
2. Ellen MacArthur Foundation (2019). Circular Economy Systems Diagram.
Available at: <https://ellenmacarthurfoundation.org/circular-economy-diagram>
3. FAO 2018, Gender and food loss in sustainable food value chains A guiding note
<https://www.fao.org/3/i8620en/i8620en.pdf>
4. National Center for Chronic Disease Prevention and Health Promotion (CDC), Understanding the Training of Trainers Model
Available at: https://www.cdc.gov/healthyschools/tths/train_trainers_model.htm
5. National Environment Agency, Singapore 2017, LOVE YOUR FOOD- A Handy Guide to Reducing Food Wastage and Saving Money
6. National Environment Agency, Singapore 2020-a, Food Waste Segregation and Treatment guidebook
7. National Environment Agency, Singapore 2020-b, Food Waste Reduction and Recycling Resource Kit
8. National Environment Agency, Singapore 2020-c, LOVE YOUR FOOD, A Handy Guide to Reducing Food Wastage and Saving Money
9. Premakumara, D.G.J, Ghosh, S. K, and Onogawa, K (2021). Source separation in municipal solid waste management: Practical means to its success in Asian cities. Waste Management and Research (WM&R), 1-11. <https://doi.org/10.1177/0734242X211049606>
10. Robinson, L (1998). The Seven Doors Social Marketing Approach
11. Roust, K, Bolton, K and Dahlén, L (2016). A Procedure to Transform Recycling Behavior for Source Separation of Household Waste. Recycling, 147–165; doi:10.3390/recycling1010147
12. SDG Goal 2: Zero hunger, <https://www1.undp.org/content/singapore-globalcentre/en/home/sustainable-development-goals/goal-2-zero-hunger.html>
13. Stakeholder Forum and CIVICUS, 2015. ADVOCACY TOOLKIT INFLUENCING THE POST-2015 DEVELOPMENT AGENDA
Available at: http://civicus.org/images/stories/SD2015%20Post-2015%20Advocacy%20Toolkit_FINAL.pdf
14. TAP Network, SDG Accountability Handbook, Raising Awareness through Public Outreach Campaigns
Available at: <https://www.sdgaccountability.org/working-with-informal-processes/raising-awareness-through-public-outreach-campaigns/>
15. UNICEF (2016), Advocacy Toolkit: A Guide to Influencing Decisions that Improve Children’s Lives.
Available at: <https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/UNICEF%20Advocacy%20Toolkit.pdf>
16. United States Environmental Protection (EPA) 2021, Basic Information about Landfill Gas
<https://www.epa.gov/lmop/basic-information-about-landfill-gas>
17. Water Aid (2007), The Advocacy Sourcebook.
Available at: www.wateraid.org/~media/Publications/advocacy-sourcebook.ashx
18. WHO (2019), Problem analysis approaches
Available at: <https://apps.who.int/wash-health-toolkit/contents/uploads/2019/05/Tool-10-Tool-Problem-analysis-approaches-for-the-planning-process.pdf>
19. WHO (2020). Global Report on Food Crises
Available at: <https://www.wfp.org/publications/2020-global-report-food-crises>
20. World Bank (2018). What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Washington, DC. <https://openknowledge.worldbank.org/handle/10986/30317>



IGES Centre Collaborating with UNEP
on Environmental Technologies (CCET)

2108-11 Kamiyamaguchi, Hayama,
Kanagawa 240-0115, Japan
Tel: +81-46-855-3840
www.ccet.jp | www.iges.or.jp/en