Creating Local Integrated Management Plan

In Task 6-2, the team created integrated management plans for simulated cities. These plans outlined ways for a community to manage mosquitoes and mosquito-borne diseases. It is important to create a management plan that is specific to your location. It is also important to create a management plan that combines a variety of methods. Combining together multiple methods helps address all the different perspectives of the problem (social, economic, environmental, ethical). A plan that combines many different methods is called an integrated management plan (IMP).

In this task, the team will create a variety of integrated management plans for your local community. Using the list of management methods from Task 6-2, the team will develop a variety of IMPs for different budgets (wealth units). From these scenarios and budgets, groups will make suggestions for how the local community should develop their integrated management plan.

In this task, the team will be focusing on the following question from the question map.

• What are the social, environmental, economic, and ethical considerations of various mosquito management and control plans?

1. Go to the Task 6-3 folder and get the list of management options. There is only one version of this task.

2. Read through the list of management options.

3. Note the wealth units for each management option.

4. Divide the team into groups, individuals, or work together as a whole team.
5. Using the list of management options, create three integrated management plans for your local community, using the following budgets.
   • 150 wealth units
   • 100 wealth units
   • 50 wealth units

6. For each plan, determine how you are addressing the different perspectives of the problem (social, economic, ethical, environmental).

7. As a team, discuss the following:
   • Share and discuss your integrated management plans for your community.
   • Provide the reasoning for why you selected the methods for each budget level.
   • Compare and contrast plans from different groups.
   • Based on your plans, how could this information be useful when thinking about the problem question: How can we ensure health for all from mosquito-borne diseases?
   • How could you best communicate this plan to local community members? Be creative and think about a communication plan that you think would work for local people.

Hooray! You completed Task 6-2. Check it off the task list. Go to Task 6-3!
Task 6-3 Creating Local Integrated Management Plans

Mosquito Management Options

(Create your integrated management plan from the items on this list.)

Spray Pesticides

- Use larvicides to target mosquito larvae in water storage containers and other manufactured and natural habitat sites (cost = 15 wealth units)
- Use adulticides to target adult mosquitoes (cost = 15 wealth units)

Conduct Surveillance

- Regularly monitor water storage containers and identified mosquito habitats throughout city (10 wealth units)
- Regularly monitor mosquito population numbers and types throughout city (5 wealth units)
- Regularly monitor mosquito eggs on imported manufactured goods (such as used tires, water storage basins, and disposable plastic containers) across major seaports of the country (10 wealth units)
- Regularly monitor water storage containers and identified mosquito habitats throughout human neighborhoods located near major seaports of the country (10 wealth units)

Disrupt the mosquitoes’ ability to breed

- Improve street cleaning and garbage services throughout the city (5 wealth units)
- Improve water storage and supply services throughout the city (15 wealth units)
- Regularly clean identified mosquito habitats throughout the city (10 wealth units)

Use biological controls

- Introduce mosquito-eating fish and copepods into water storage containers (10 wealth units)
- Introduce genetically modified mosquitoes into the city (15 wealth units)
- Introduce Wolbachia-infected mosquitoes into the city (10 wealth units)
Trap mosquitoes

- Set out and maintain mosquito traps throughout the city (10 wealth units)
- Set out and maintain mosquito traps throughout the major seaports (10 wealth units)

Individual and household control

- Install window and door screens on all buildings (10 wealth units)
- Cover all beds with mosquito netting (15 wealth units)

Education and public outreach

- Increase public education programs throughout the city to teach about personal protection and city-wide management strategies being used to control mosquitoes (15 wealth units)
- Increase communication with the public throughout the city using educational billboards, social media campaigns, and public service announcements to build mosquito awareness (5 wealth units)

Government and Policy Updates

- Create new government policies to help poverty-stricken areas affected by mosquito-borne diseases in the city (5 wealth units)
- Develop tax incentives for people, organizations, and companies that help clean up mosquito habitats around their properties (10 wealth units)
- Create or update policies on education and research about mosquitoes in the local community (10 wealth units)

Research

- Fund new research on mosquitoes and new mosquito management technology for the city (5 wealth units)
- Fund increased research on the social and economic components of the mosquito problem in the city (5 wealth units)

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