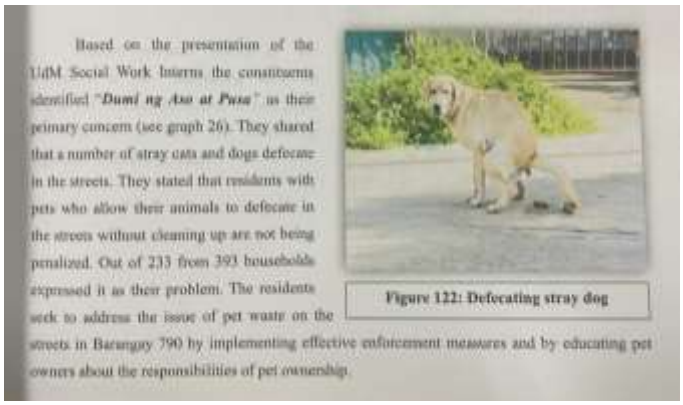
EXTENSION LINKAGES PLATFORM 2025-2030

"Healthy Habitat: Sustainable Community Solutions for Vector and Domestic Animal Management"

Data-Driven-Basis (Needs Assessment)

Barangay 790, located in Zone 86, District 5 of Manila under the administrative district of Sta. Ana, Manila. Its population as determined by the 2020 Census was 1,741. This represented 0.09% of the total population of Manila. Barangay 790 the adopted barangay of the Universidad de Manila.

Data-driven needs assessment (Arellano et. al. 2023) enumerated the top ten (10) problems of Barangay 790 Zone 86. It was revealed that the topmost problem is “Dumi ng Aso at Pusa sa Kalsada”.



Based on the presentation of the UdM Social Work Interns the constituents identified "*Dumi ng Aso at Pusa*" as their primary concern (see graph 26). They shared that a number of stray cats and dogs defecate in the streets. They stated that residents with pets who allow their animals to defecate in the streets without cleaning up are not being penalized. Out of 233 from 393 households expressed it as their problem. The residents seek to address the issue of pet waste on the streets in Barangay 790 by implementing effective enforcement measures and by educating pet owners about the responsibilities of pet ownership.

Figure 122: Defecating stray dog

Figure 1. Result & Discussion from Arellano et al. 2023

Alarmingly, data gathered by the **Extension Linkage Office** in 2022 revealed that **cats and dogs** are the topmost domestic animals being kept in **Barangay 790 Zone 86**.

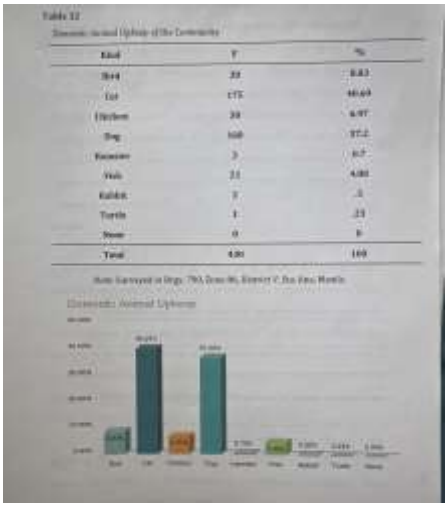


Figure 2. Data on-file in the ELO on Domestic Animal Upkeep of the Barangay 790 Zone 86

This high population of domestic animals, coupled with improper management of pet waste, poses significant risks to public health and environmental sustainability. The issue of defecating dogs and cats and their feces on the streets poses a serious public health, environmental, and sanitation problem that local governments must address. Fecal matter from these domestic animals contains harmful bacteria, parasites, and pathogens such as E. coli, salmonella, and roundworms, which can contaminate water sources and soil, potentially causing serious illnesses in humans. Additionally, pet waste can attract vectors like flies and rodents (Figure 3), which are known to spread diseases, further exacerbating public health risks.

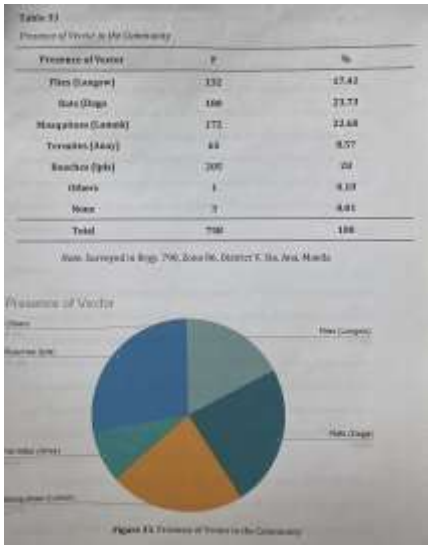


Figure 3. Data on-file in the ELO on the Presence of Vectors in the Barangay 790 Zone 86

These conditions exacerbate the spread of **vector-borne diseases** and contribute to unsanitary living environments, leading to heightened risks for the community.

Addressing this issue is essential for achieving and maintaining a **healthy habitat**. Poor animal waste management directly contributes to the spread of vector-borne diseases such as leptospirosis and dengue, especially when combined with unsanitary conditions like stagnant water and improper waste disposal. Furthermore, the environmental impact of chemical vector control methods (like pesticides, fumigation, etc.), as presented in Figure 4, can be mitigated by reducing vector breeding sources, which pet feces can contribute to.

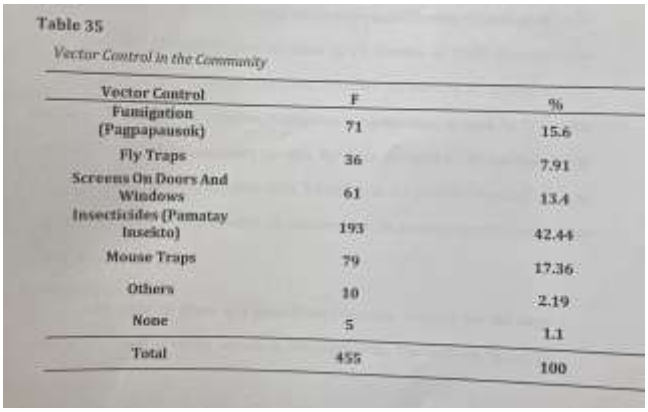


Table 35

Vector Control in the Community

Vector Control	F	%
Fumigation (Pagpapausok)	71	15.6
Fly Traps	36	7.91
Screens On Doors And Windows	61	13.4
Insecticides (Pamatay Insekto)	193	42.44
Mouse Traps	79	17.36
Others	10	2.19
None	5	1.1
Total	455	100

Figure 4. Data on-file in the ELO on Vector Control in the Barangay 790 Zone 86

Local governments can help create cleaner, healthier communities by enforcing regulations on pet waste disposal, promoting responsible pet ownership, and establishing infrastructure for sanitation. This fosters a more sustainable urban environment that aligns with SDG 3 (Good Health and Well-Being) and SDG 11 (Sustainable Cities and Communities), ensuring a safer and healthier community.

The **Universidad de Manila (UDM)** Extension Program chose to pursue the **"Healthy Habitat"** extension platform in Barangay 790 Zone 86 due to the pressing environmental and health issues observed in the community, particularly related to **unsanitary conditions**, **domestic animal upkeep**, and the proliferation of **vector-borne diseases**. Pet waste on streets, stagnant water, and poor waste management significantly contribute to public health risks and environmental degradation. By addressing these concerns, UDM aims to create a cleaner, healthier, and more resilient community through knowledge transfer, promoting sustainable practices, and empowering residents to adopt eco-friendly solutions. This aligns with UDM's commitment to **community well-being** and **sustainability**.

Rationale (Extension Linkages Platform)

The rapid urbanization in Manila and other densely populated areas has led to an increase in challenges related to sanitation, waste management, and public health, particularly concerning domestic animal care and vector-borne diseases. Poor sanitation practices, uncontrolled breeding of domestic animals, and the presence of breeding sites for vectors like mosquitoes and rats have contributed to the spread of diseases such as dengue, leptospirosis, and diarrhea.

The **Healthy Habitat** platform is designed to address these critical issues by promoting eco-friendly and sustainable solutions that improve sanitation, manage domestic animal care, and control vectors without harming the environment. Through community education, innovative practices, and civic engagement, the platform aims to create cleaner, safer, and healthier living environments that contribute to the overall well-being of residents, while aligning with global sustainability goals.

Objectives of the Extension Linkages Platform

To empower communities in Manila by providing knowledge, tools, and sustainable practices for effective domestic animal management and vector control. The platform seeks to:

1. Improve public health by reducing the incidence of vector-borne diseases.
2. Promote responsible pet care and sanitation to minimize environmental contamination.
3. Implement eco-friendly, non-toxic vector control methods.
4. Foster community-led efforts in maintaining cleanliness and eliminating vector breeding sites.
5. Support the long-term sustainability of community health and environmental resilience.

Key Focus Areas

1. **Domestic Animal Management and Sanitation**
   - Educate community members on responsible pet care, including proper waste disposal for cats, dogs, birds, and chickens to reduce environmental contamination.
   - Implement community-based programs for building animal waste disposal systems and promote regular cleaning practices to maintain surrounding sanitation.
2. **Vector-Borne Disease Prevention**
   - Raise awareness about diseases carried by vectors such as roaches, rats, mosquitoes, and flies. Offer educational campaigns on how to minimize the risks of infections like dengue, leptospirosis, and diarrhea.
   - Encourage households to participate in community sanitation efforts to keep the environment clean and reduce the presence of disease vectors.
3. **Eliminate Vector Breeding Sites**
   - Identify and target breeding sites for vectors, such as stagnant water, garbage, and clutter. Organize community clean-up drives and provide sustainable solutions to eliminate these breeding sites.
   - Promote simple and cost-effective practices like rainwater harvesting systems and proper garbage disposal to reduce standing water and waste accumulation.
4. **Sustainable Vector Control Solutions**

- Promote **eco-friendly** and non-toxic methods for controlling vectors, such as natural repellents, biological control (e.g., introducing natural predators), and physical traps.
- Discourage the overuse of chemical pesticides and insecticides and educate the community on the harmful health effects of these chemicals.
- Train residents on sustainable alternatives like fly traps, composting for waste reduction, and integrated pest management (IPM) practices.

This platform ensures the **sustainability** of the community by focusing on long-term, eco-friendly solutions to both domestic animal care and vector control. By transferring knowledge on proper sanitation, disease prevention, and sustainable pest management practices, the platform promotes healthier living environments and reduces the reliance on harmful chemicals for vector control.

Sustainability of the Healthy Habitat Platform: Involvement of NGOs, Private Sectors, and Other Agencies

To ensure the long-term sustainability of the **"Healthy Habitat"** platform, various stakeholders, including **non-government organizations (NGOs)**, **private sectors**, and **government agencies**, must be involved. These groups can support the community in maintaining sanitation, responsible pet ownership, and vector control, even after UDM completes the project.

1. NGOs (Non-Governmental Organizations)
By involving NGOs, the community will have ongoing access to **education, resources,** and advocacy efforts, ensuring that the initiatives related to domestic animal upkeep and environmental health continue long after UDM's involvement ends.

Animal Welfare NGOs. These organizations can promote responsible **pet ownership** and offer education on animal care and waste management. NGOs such as **PAWS** (Philippine Animal Welfare Society) can continue to educate the community on the health impacts of improper pet waste disposal and support initiatives for the **sterilization of stray animals** to reduce their population.

Environmental NGOs. Organizations focusing on **environmental sustainability** can provide technical expertise and resources to ensure continuous improvement in waste management and **vector control**. They can also offer training programs on ecological methods for managing vectors without harming the environment.

2. Private Sector
Private sector involvement ensures the community will have ongoing access to products and services necessary for effective vector control, proper sanitation, and **healthcare support**, making the platform self-sufficient without relying solely on UDM.

Animal Care and Vector Control Businesses. Businesses specializing in **vector control** (e.g., insect repellents, fly traps) and **animal care** products can partner with the community to provide **eco-friendly solutions** for managing pet waste and controlling vectors. Companies can offer **affordable products** or even donate necessary items to support sustainable practices.

Health Agencies and Clinics. Local health agencies and private clinics can continue to offer **health services** related to disease prevention, especially for vector-borne illnesses. They can also promote **public health campaigns** on proper sanitation and responsible pet care.

Waste Management Companies: Partnering with private waste management companies can ensure that proper waste disposal practices, especially related to pet waste, continue. These companies can offer community-friendly solutions such as **scheduled waste collection** and **composting programs**.

3. Government Agencies

With LGU involvement, laws and ordinances regarding **sanitation** and **animal welfare** will be enforced, and the community will be regularly monitored for compliance. This institutional support ensures the longevity of the platform's outcomes.

Local Health and Sanitation Departments: The **local government unit (LGU)** should integrate the practices initiated by UDM into its **public health policies**. Health agencies can monitor **vector control**, enforce **sanitation laws**, and promote awareness campaigns about domestic animal management.

Animal Welfare Agencies: **Bureau of Animal Industry (BAI)** and local **veterinary offices** can continue the efforts by overseeing **responsible pet ownership**, ensuring **vaccination** and **stray animal control** programs are sustained.

A Sustainable Community Post-UDM Involvement

By integrating **NGOs, private sector partners**, and **government agencies** into the "Healthy Habitat" platform, the community can continue to thrive and sustain the improvements made in sanitation, vector control, and domestic animal management. Once UDM leaves, these stakeholders will take on the responsibility of **monitoring, enforcing**, and **continuously improving** the systems established, ensuring a lasting impact on **public health**, **environmental safety**, and **community well-being**.

References

Arellano, Kiano; Calma, Jhaztin Sofia; Capistrano, Sophia Kate; Dela Cruz, Fyka Mae; Domingo, John Robby; Dumalag, Nestor G. JR; Jañola, Czyren Kaizen; Llonor, Divine Jeamine; Rone, Bryan; Villadolid, Ralph Matthew. (2023).Final Output in Field Work Instruction 2: Barangay 790 Zone 86t District 5: Sta. Ana, Manila.

Data-on file. (2022) Center for University Extension Services.

SDG #3

SDG #6

SDG #11

SDG #15