Name: Evalyn Endriga Username: <u>evalynendriga581@gmail.com</u> School: Visayas State University - Main Campus Link: https://www.instagram.com/p/CyTAsruyatW/?igshid=MzRIODBiNWFIZA==

Day 11: Greenest

Title: Cultivating a Sustainable Garden: Enhancing Soils, Climate, and Well-being

Introduction:

Creating a sustainable garden is an excellent way to contribute to healthier soils, a better climate, and the overall well-being of both people and the environment. In this document, we will explore the varieties of plants that will be planted, highlighting their attributes and the reasons behind their selection. Additionally, we will discuss three agricultural and climate-friendly practices that will be implemented to maximize the positive impact of the garden.

Plant Varieties and their Attributes:

1. Native Wildflowers:

Native wildflowers, such as Black-eyed Susans and Purple Coneflowers, are excellent choices for a sustainable garden. These vibrant flowers attract pollinators, including bees and butterflies, promoting biodiversity and enhancing the health of the ecosystem. By providing food and habitat for pollinators, native wildflowers contribute to the preservation of local plant and animal species.

2. Fruit Trees:

Fruit trees, such as Banana and Mangos, offer not only delicious fruits but also numerous environmental benefits. These trees provide shade, reducing the need for cooling, while their roots stabilize the soil, preventing erosion. Fruit trees also contribute to carbon sequestration, helping to mitigate climate change. Moreover, they enhance food security by providing fresh and nutritious fruits.

3. Leafy Greens:

Leafy greens like spinach, and lettuce are packed with essential nutrients and are easy to grow. Adding leafy greens to the garden promotes healthier eating habits and reduces reliance on store-bought produce. Additionally, these plants contribute to soil health by increasing organic matter, retaining moisture, and preventing weed growth.

4. Legumes:

Legumes, including beans and corn, are nitrogen-fixing plants that improve soil fertility. They form a symbiotic relationship with bacteria in their root nodules, converting atmospheric nitrogen into a form that plants can utilize. By incorporating legumes into the garden, we can reduce the

need for synthetic nitrogen fertilizers, which contribute to greenhouse gas emissions during production.

5. Herbs:

Herbs like basil, thyme, and rosemary are not only culinary delights but also invaluable additions to a sustainable garden. These aromatic plants attract beneficial insects, such as ladybugs and lacewings, which help control pests naturally. Growing herbs reduces the need for chemical pesticides, promoting a healthier and more balanced ecosystem.

6. Composting Area:

A dedicated composting area will be established within the garden to recycle kitchen scraps, yard waste, and plant trimmings. Composting not only reduces the amount of organic waste going to landfills but also produces nutrient-rich compost that can be used to enrich the soil. By adding compost to the garden, we improve soil structure, water retention, and nutrient availability.

Agricultural and Climate-Friendly Practices:

1. Water Conservation:

Implementing water-efficient practices, such as mulching and drip irrigation, will minimize water waste and promote healthier plants. Mulching helps retain soil moisture, reduces evaporation, and suppresses weed growth. Drip irrigation delivers water directly to the roots, minimizing runoff and ensuring efficient water usage.

2. Crop Rotation:

Crop rotation involves changing the type of plants grown in a particular area each season. This practice helps prevent the buildup of pests and diseases, maintains soil fertility, and minimizes the need for chemical fertilizers and pesticides. By rotating crops, we promote a balanced and sustainable ecosystem within the garden.

3. Integrated Pest Management (IPM):

IPM is an environmentally friendly approach to pest control that focuses on prevention, monitoring, and the use of natural pest control methods. By encouraging the presence of beneficial insects, using physical barriers, and employing biological controls, we can minimize the use of chemical pesticides and foster a more resilient garden ecosystem.

Conclusion:

By selecting a diverse range of plant varieties with specific attributes, implementing agricultural and climate-friendly practices, and sharing our garden plan on social media, we can inspire others to embrace sustainable gardening practices. Cultivating a sustainable garden not only contributes to healthier soils, a better climate, and improved biodiversity but also provides us with fresh, nutritious food and a deeper connection to nature. Let's work together to create a greener and more sustainable future.



