

TURN THE TIDE

NEWSLETTER

Green Psyche Environmental Association,
Faculty of Livestock, Fisheries & Nutrition
Wayamba University of Sri Lanka



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WHY? A NEWSLETTER.

From the Senior Treasurer's Pen,

It is with great enthusiasm that we present the third issue of Turn the Tide, the official bimonthly newsletter of the Green Psyche Environment Association, Faculty of Livestock, Fisheries, and Nutrition, Wayamba University of Sri Lanka.

This publication continues to serve as a vibrant platform for youth engagement on pressing environmental and sustainability challenges. Anchored around four thematic pillars—Biodiversity, Climate Change, Food and Nutrition security, and Green Entrepreneurship—Turn the Tide seeks to raise awareness, spark critical conversations, and inspire meaningful action.

A notable feature of our newsletter, Eco Insights, brings the voices of experts into dialogue with our readers, offering innovative ideas and practical solutions. Through this segment, we aim to guide and empower young minds to contribute to a collective vision of a greener, more sustainable future.

As we mark our third issue, I am heartened by the growing participation of students across faculties and universities, as well as the expanding enthusiasm of our readership. It is inspiring to see Sri Lankan youth stepping forward to explore their roles in addressing environmental issues and becoming catalysts for positive change.

We hope Turn the Tide continues to ignite a sense of purpose and responsibility among our readers, encouraging them to lead with vision and commitment in building a resilient, sustainable world. Thank you for being a part of this journey. Together, let us truly turn the tide.

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THE VITAL ROLE OF BEES IN SUSTAINING GLOBAL BIODIVERSITY

Diversity and behaviour

Bees are winged insects that share a close relationship with wasps and ants. They belong to a group known as *Anthophila* within the superfamily Apoidea. There are more than twenty thousand identified species of bees, which are divided into seven main families. These families include *Apidae*, *Megachilidae*, *Halictidae*, *Andrenidae*, *Colletidae*, *Melittidae*, and *Stenotritidae*.

Bee species display a wide variety of behaviours. While species such as honey bees, bumblebees, and stingless bees live in organized social colonies, most species are solitary in nature. This includes types such as mason bees, carpenter bees, leafcutter bees, and sweat bees.



In Sri Lanka, approximately one hundred fifty bee species have been recorded. These species belong to thirty-eight genera and are grouped within four different families. In the Northern Hemisphere, the most frequently encountered bees are the sweat bees, which are part of the *Halictidae* family. They collect nectar as a source of energy and gather pollen for protein and other essential nutrients. Pollen is particularly important for feeding their young. Bees have several natural predators such as primates, bee-eaters, dragonflies, and beewolves. Pollination by bees is vital for both natural and agroecosystems.

Pollination and ecosystem services

Bees are specialized pollinators with physical adaptations like scopal hairs and pollen baskets for efficient pollen collection. Through coevolution, bees and flowers influenced each other: flowers evolved longer tubes for nectar, and bees developed longer tongues. Bees also form mutualistic relationships with mites, which may consume fungi on pollen, benefiting both species.



Bees play an essential and irreplaceable role in pollination, the process of transferring pollen from the male to the female parts of flowers, enabling fertilization and the production of fruits and seeds. Over three-quarters of flowering plants and many global food crops rely on pollinators, with bees being the most effective. In natural ecosystems, bees support biodiversity by aiding plant reproduction, which in turn sustains wildlife with food and habitat.

Promoting genetic diversity

Bees also play a crucial role in promoting genetic diversity within plant populations. By transferring pollen between different individual plants, especially in cross-pollinating species, bees facilitate the mixing of genetic material. This process is crucial for the survival and long-term adaptability of plant species. Genetic diversity helps plants resist diseases, pests, and changing environmental conditions. It also enhances their ability to adapt to new challenges, ensuring that plant populations remain healthy and resilient.

Without bees and their role in pollination, plants would be more vulnerable to genetic stagnation, which could limit their survival and growth.



Rare plant conservation

Certain bee species, especially specialist bees, only pollinate specific plants. These bees often have coevolved relationships with rare and endemic plants, meaning they rely exclusively on these plants for their food and the plants depend on the bees for pollination. These specialized interactions help conserve biodiversity by enabling the reproduction and survival of rare and often endangered plant species. By pollinating these plants, bees help preserve ecosystems that are both biologically rich and ecologically important, contributing to the overall health and stability of local and global biodiversity.

Ecological succession

They play a vital role in ecological succession by supporting the growth of pioneer plants in disturbed environments. These plants, which rely on bees for pollination, help restore damaged ecosystems and create conditions for more complex species to grow. As plants thrive, they provide food and habitats for various organisms. Pollinated plants also produce organic matter, enriching the soil and supporting microbial communities. Through these processes, bees contribute to nutrient cycling and soil health, indirectly enhancing biodiversity and aiding in the development of healthy, diverse ecosystems.



Mutualistic networks

Bees are integral to the mutualistic networks in ecosystems, where plants and pollinators interact in ways that benefit both parties. These networks are often complex, involving many different species of plants and pollinators. Bees help maintain the balance of these networks by ensuring that pollination happens between the right species. When bees pollinate plants, they also support other organisms that rely on those plants for food and shelter. Population diversity of pollinators ensures that the entire ecosystem remains stable and resilient. If bees were to disappear, the entire food web could be disrupted. Bees pollinate a wide range of crops, from fruits and vegetables to nuts and seeds. This diversity of crops benefits not only farmers but also the broader ecosystem, as it encourages a mix of plant species in agricultural landscapes.

Conservation priority and community action

Bees worldwide face population declines due to habitat loss, pesticide use, diseases, and climate changes. Unlike honey bees, many native species have unique roles in pollination and depend on specific plants. Conservation efforts should prioritize preserving natural habitats, planting native flowers, reducing pesticide use, and creating nesting spaces. Community initiatives like wildlife gardens and green corridors support bee health. Education and awareness about local bee species and sustainable practices are crucial for long-term impact. By planting native species, avoiding harmful chemicals, and supporting conservation efforts, we can protect bees and maintain ecological balance.



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**NURTURING NATURE'S DIVERSITY
FOR BETTER TOMORROW**

AN UNSEEN THREAT WITH GLOBAL REACH

What if the greatest threat to our planet was invisible?

Microplastics—tiny fragments from more considerable plastic waste—silently infiltrate every corner of our environment. In the ocean, on land, in the atmosphere, and even inside our own bodies, these tiny contaminants are more than just a marine concern. They are harmful to the environment (especially by causing global warming), but they hide or go unnoticed like sneaky attackers.

Plastic's Climate Cost Starts Early

From the moment plastic is produced, its climate impact begins. The plastic sector alone contributes more than 3% of global greenhouse gas emissions—a number set to double by 2060. But it doesn't stop at manufacturing. As plastic decomposes into microplastics—especially in landfills and oceans—it releases methane and ethylene, two potent greenhouse gases that intensify global warming.

The outcome? A vicious cycle where climate change accelerates plastic pollution, and plastic pollution fuels climate change.

Broken Ecosystems, Broken Defences

Even more alarming, microplastics disrupt ecosystems crucial for carbon regulation. Ocean plankton—nature's carbon sinks—are dying after ingesting microplastics, weakening the ocean's ability to absorb atmospheric CO₂. On land, contaminated soil harms plant health and microbial life, slowing down carbon capture. Microplastics are quietly dismantling the systems designed to protect us from climate collapse.

From Awareness to Action

So, what can we do?

The solution isn't just in cleanups—it's in changing the story. Say no to single-use plastics like straws and cups. Support plastic-free innovations. Urge businesses to adopt circular economies. And above all, raise your voice.

In Sri Lanka, small steps can spark big change. Imagine student-led refill stations replacing bottled water. Picture campaigns that turn beach cleanups into art installations or introduce microplastic testing in local waterways. These aren't just gestures. They're declarations of responsibility.

This Is Our Climate Story

The climate story is no longer distant or invisible. It's personal. It's plastic. And it's happening now. Let's stop treating microplastics as just litter. They are climate disruptors, health hazards, and ecological saboteurs. By recognizing their role in the climate equation, we can take stronger, smarter action.

Because every plastic particle we prevent today means a cleaner, cooler, and fairer tomorrow.

Let's turn the tide—one micro-action at a time.

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**CHANGING THE CLIMATE STORY:
AWARENESS TO ACTION**

FOOD AND NUTRITION SECURITY

REDISCOVERING TRADITIONAL WISDOM FOR A HEALTHIER SRI LANKA

In recent years, the dietary patterns of Sri Lanka's younger generation have shifted drastically. Influenced by globalization, urban lifestyles, and digital media, fast food has become the go-to choice. Instant noodles, greasy burgers, and overly spicy street foods like kottu dominate youth diets—often prioritizing taste and visual appeal over nutritional value.

This transformation is not without consequences. The erosion of traditional, wholesome food habits raises serious concerns about long-term health and national food security. Alarming, food vlogs and social media influencers have become key drivers of this change, regularly promoting highly processed meals, artificial flavors, and imported snack brands.

Yet, social media can be part of the solution—not just the problem.

Reclaiming the Digital Narrative

We can flip the script. By using digital platforms to highlight Sri Lanka's rich culinary heritage, we can make healthy eating both trendy and accessible. Short, engaging content on TikTok, Instagram, or YouTube featuring traditional dishes—such as kurakkan (finger millet), kola kenda, or jackfruit-based meals—can captivate young audiences. Add easy-to-follow, budget-friendly recipes and a personal touch, and you have a recipe for positive change.

Creative visuals, quick facts about nutritional benefits, and stories behind ancient recipes can help reconnect Gen Z with their roots. Sharing elders' food wisdom, regional culinary traditions, and the sustainable aspects of local ingredients can make cultural pride a core part of healthy eating.

Small, consistent actions spark big shifts

Healthy eating habits don't have to be preachy—they can be part of everyday life.

Whether it's preparing a home-cooked meal in a vlog, reviewing a local 'kola kenda' stall, or simply choosing fruits over fried snacks, your actions can inspire others. Food is social—so let it be inclusive and fun. Host a cooking session with friends, share traditional meals, or start a casual chat on food choices.

Everyday Awareness

Let's Talk Labels: Even quick scrolls on WhatsApp or Facebook can be powerful moments of awareness. Flyers, infographics, or reels that educate on reading food labels, reducing ultra-processed foods, or understanding the hidden sugars and salts in "junk food" can build health literacy—one post at a time.

The Time is Now

It's time to rethink what it means to be modern. Rediscovering and celebrating our traditional food heritage is not a step backward—it's a smart, sustainable leap forward. Let's be the updated version of this unique trend—one that blends digital savvy with nutritional wisdom, taste with tradition.

Let's nourish ourselves. Let's nourish our nation. One wholesome meal at a time.



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**SUSTAINING TOMORROW: EMPOWERING
NUTRITION FOR ALL**

A DIGITAL STEP TOWARDS A GREENER TOMORROW

In a world grappling with climate change, pollution, and dwindling natural resources, the need for environmentally conscious business solutions has never been greater. Enter green entrepreneurship—an inspiring path where innovation meets sustainability, and profit is aligned with purpose.

What is Green Entrepreneurship?

Green entrepreneurship goes beyond traditional business goals. It's about building ventures that are both economically viable and environmentally responsible. These entrepreneurs create solutions that minimize harm to the planet—whether by reducing pollution, conserving resources, or encouraging eco-conscious habits. In today's context, green entrepreneurship isn't just a trend—it's a necessity.

How Technology Powers the Green Shift?

Technology is one of the strongest tools available to green entrepreneurs. It doesn't always require high-end innovation—sometimes, a simple website, a mobile app, or even a well-run social media page can spark meaningful change. Digital platforms can help to promote eco-friendly products and services, connect communities with sustainable alternatives, raise awareness through campaigns and storytelling and support behaviours like recycling, energy conservation, or ethical consumption.

Apps that track carbon footprints, platforms that encourage reuse, and online marketplaces for green goods are just a few ways digital tools can amplify the impact of green ideas.

Real-World Inspirations

Across Sri Lanka and the world, young innovators are already combining technology with sustainability:

- A youth-led e-commerce store selling reusable and plastic-free products
- A mobile app helping users find local recycling centers

- A digital campaign urging schools to ditch single-use plastics
- Online tutorials on composting or growing vegetables at home

These initiatives often begin as small projects but can scale into movements—powered by digital connectivity and a strong sense of purpose.

Why Youth Are the Game-Changers?

Sri Lanka's youth are uniquely positioned to lead the green entrepreneurship movement. We're a generation born into a digital age, deeply aware of environmental issues and armed with the skills to do something about them. Whether it's coding an app, managing a blog, launching an online store, or creating compelling reels—our digital voice has the power to drive real change.

All it takes is passion, creativity, and a commitment to making a difference.

Building a Purpose-Driven Future

Green entrepreneurship isn't just about saving the planet—it's about shaping a smarter, fairer, and more sustainable world. When we blend technology with nature-focused thinking, we create solutions that are forward-thinking and compassionate. Every small step—from sharing an idea online to starting a green venture—contributes to a brighter future.

Let's use our digital skills for good. Let's lead with purpose. Let's build a greener tomorrow, together.

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SUSTAINABLE SUCCESS: INNOVATING FOR A GREENER TOMORROW

EXPERT VOICES FOR A GREENER TOMORROW

Shipwreck Biodiversity

Shipwrecks as artificial reefs

Shipwrecks, often the result of natural disasters, wars, mechanical failures, or accidents, become underwater structures that serve as artificial reefs. Over time, these wrecks evolve into rich marine ecosystems, closely resembling natural coral reefs and attracting a wide variety of marine life. Historically, ships were powered by human effort, wind, and coal. With the advent of fuel-powered vessels, the sinking of such ships had short-term negative impacts on the marine environment due to onboard fuel. However, in the long term, they have proven beneficial to the ocean by fostering biodiversity and supporting complex ecosystems.

From disaster to eco-system

When a ship sinks, it is first colonized by microorganisms such as bacteria and algae. These initial colonizers provide food and shelter for small invertebrates such as barnacles, anemones, and sponges. Gradually, larger species including crabs, lobsters, and octopuses, and reef fish such as groupers, snappers, and jacks, begin to inhabit the wreck. Coral polyps eventually settle and form colonies, leading to the growth of hard corals that take decades to fully develop. These corals of various shapes provide habitats for small fish, breeding grounds, and shelter for their predatory species. As corals and other marine organisms gradually encrust the structure, the shipwreck transforms into a thriving living reef.

Environmental and economic benefits

This developing ecosystem offers a warm, stable habitat for a wide range of microorganisms, plants, and animals. It contributes significantly to both the environment and the economy. Through photosynthesis, marine plants and algae increase oxygen levels in both the ocean and the atmosphere.

The increase in fish populations supports the fishing industry, while the vibrant marine life and coral-covered structures enhance the appeal of marine tourism.



Visual highlights of the Erakkandi shipwreck.

Biodiversity associated with shipwreck ecosystems

Both hard and soft corals are commonly found on shipwrecks, including species such as *Acropora clathrata*, *Galaxea fascicularis*, *Sarcophyton*, *Favites melicerum*, and *Acropora latistella*. Frequently observed reef fish include *Pomacanthus imperator* (emperor angelfish), *Rhinecanthus aculeatus* (picasso triggerfish), *Plectorhinchus polytaenia* (ribboned sweetlips), *Zanclus cornutus* (moorish idol), *Pomacanthus annularis*, and *Zebrasoma flavescens* (yellow tang). Invertebrates such as *Asterias rubens* (common starfish), *Phyllidia varicosa* (a type of nudibranch), and the crown-of-thorns starfish (*Acanthaster planci*) are also commonly found.

Ecological insights

Some shipwrecks support hundreds of species within relatively small areas, providing unique opportunities for scientists to study ecological succession and species interactions in marine environments.

However, destructive practices such as fishing with explosives pose a serious threat to the biodiversity of these underwater habitats.

Shipwrecks play a crucial role in enhancing marine biodiversity, transforming once lifeless structures into thriving underwater cities. Protecting and managing these ecosystems is essential to preserve their ecological and economic value for future generations.



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Revolutionizing Food Security: Aquaculture and Genomic Selection

Aquaculture's Role in Feeding the World

Aquaculture has become a cornerstone of the global food system, addressing the rising demand for high-quality, affordable aquatic food. It has surpassed wild capture fisheries, which have plateaued at approximately 90 million tonnes since the 1990s (Bartley, 2022). Over the past two decades, aquaculture production has grown remarkably, tripling from 34 million tonnes in 1997 to 112 million tonnes in 2017. Key contributors to this growth include seaweeds, carp, bivalves, tilapia, and catfish, with freshwater fish alone accounting for 75% of global edible aquaculture volume (Naylor et al., 2021). This growth shows how important aquaculture is for meeting global nutritional needs, highlighting the need to responsibly expand as food and nutrition insecurity increase worldwide.

Genetic Marvels: Transforming Aquaculture for Tomorrow

One of the most promising advancements in aquaculture lies in genetic improvement. Techniques such as hybridization, chromosome engineering, sex reversal, transgenic fish, and selective breeding are revolutionizing the sector. These approaches aim to enhance traits critical to productivity and sustainability, guided by society's evolving demands. While genetic improvements have immense potential, they must be implemented cautiously to mitigate unforeseen negative effects and ensure long-term benefits.

A groundbreaking advancement in this field is genomic selection, a cutting-edge approach that utilizes DNA analysis to identify and enhance desirable traits in fish populations. By estimating breeding values, this method ensures that these favorable traits are passed to subsequent generations, enabling their accumulation through natural heredity. Unlike approaches reliant on genetic mutations, genomic selection focuses on carefully selecting fish with superior characteristics for breeding programs. This technology is especially effective for improving complex quantitative traits such as growth rates, food conversion efficiency, disease resistance, and even the nutritional composition of fish flesh, all of which are typically challenging to measure directly.

Preparing Aquaculture for Tomorrow's Challenges

Looking ahead, the incorporation of full genomic sequences into breeding value estimates holds immense promise, although cost remains a limiting factor. As technological advancements drive down expenses, this approach could revolutionize aquaculture, ensuring it remains a sustainable and effective solution for global food security. By investing in genetic innovation today, we prepare for a future where aquaculture continues to combat food and nutrition insecurity effectively and responsibly.

**Genomic selection fuels sustainable aquaculture,
paving the way for a healthier, food-secure future.**

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Traditional Knowledge in Climate Adaptation among Cinnamon Farmers

Introduction

Cinnamomum zeylanicum – commonly known as Ceylon cinnamon – is native to Sri Lanka and globally renowned for its distinctive aroma and superior quality. Today, Sri Lanka remains the world's leading producer, supplying nearly 90% of the global market, maintaining its leadership through traditional cultivation and quality standards.

Cinnamon thrives in regions such as Kandy, Matara, Kalutara, and Ratnapura, among 14 key districts across the island. While Sri Lanka is home to eight native cinnamon species, only *C. zeylanicum* Blume is cultivated commercially. Among the traditional varieties, "Pani-Miris Kurundu" is especially prized for its sweet-pungent flavor, whereas more recent breeding efforts have introduced high-yielding varieties such as 'Sri Vijaya' and 'Sri Gamunu'.



C. zeylanicum Blume - Commercially cultivated variety in Sri Lanka

In light of climate change, traditional farming knowledge has become crucial for adaptation. Cinnamon farmers utilize indigenous practices to manage climatic variability, offering valuable insights for sustainable agriculture. This field research-based article explores how integrating traditional approaches can strengthen climate resilience in cinnamon farming.

Environmental Factors Essential for Optimal Cinnamon Cultivation

The Successful cinnamon cultivation depends on a combination of environmental factors such as temperature, humidity, rainfall, elevation and soil quality. The crop flourishes in tropical climates with temperatures ranging between 25°C and 35°C and annual rainfall exceeding 1,875 mm. In regions where rainfall is insufficient, irrigation is employed to maintain adequate soil moisture.

Additionally, relative humidity levels between 75% and 85% supports optimal plant development and artificial microclimates can be established in drier zones to maintain these conditions. Elevation is another determining factor, as cinnamon grows best at attitudes below 700 meters above sea level. Cultivating above this altitude can lead to weaker plant development and reduced yields due to unfavorable climatic shifts.

Soil type plays a foundational role in cinnamon farming. In Sri Lanka, red-yellow podzolic soils, common in the wet zone, offer ideal acidic conditions and drainage for cinnamon roots. Sandy and sandy loam soils in coastal plains are also well suited, while managed soils in certain dry zones can support cultivation with proper agronomic practices. However, areas with shallow soils (less than one meter deep), poor drainage, stony compositions or fluctuating water tables are unsuitable due to risks such as waterlogging or salinity.

Similarly, steep slopes exceeding 60% gradient are discouraged due to cultivation and harvesting difficulties. Overall, cinnamon cultivation is most successful when environmental conditions such as climate, soil, and topography are carefully assessed and managed to maintain sustainability and high quality yield.

Climate Change and Its Impact on Sri Lanka

Sri Lanka is particularly vulnerable to climatic impacts due to its geographic location, limited landmass and economic structure. The country increasingly faces multiple climate induced hazards such as floods, droughts, cyclones, landslides and sea level rise which increasingly threaten its ecosystems, agriculture, infrastructure and human wellbeing.

Adaptation to climate change involves modifying natural and human systems to mitigate potential damage or to take advantage of new opportunities. In human systems, adaptation focuses on reducing vulnerabilities and enhancing resilience, while in natural systems, it may involve guided interventions to support ecological balance. Ultimately, effective adaptation fosters sustainability by enabling communities and ecosystems to function under evolving climatic conditions.

Climate Adaptation Strategies among Cinnamon Farmers: Enhancing Resilience in Agriculture

Traditional cinnamon farmers in Sri Lanka have developed effective adaptation techniques to cope with climate challenges:

- **Wind Damage Control:** Farmers tie bushes together and retain one mature tree per cluster ("He Gasa") to reduce wind damage.
- **Sunlight and Airflow Optimization:** They practice "Nelima," the removal of weeds and shrubs, to enhance airflow and sunlight exposure, while avoiding intercropping to promote optimal cinnamon growth.
- **Soil Conservation:** Erosion due to frequent harvesting is controlled through drainage systems, contour bunds, and organic mulch made from cinnamon waste.
- **Nutrient Management:** To address nutrient loss from unpredictable rainfall, urea-based fertilizers are applied between plants ("Alli"), improving uptake via fibrous roots.
- **Disease and Pest Management:** Threats such as rough bark disease, white root disease, and the pink stem borer are managed by pruning, isolating infected plants, improving drainage, and applying chemical treatments. Manual pest removal and covering young plants with clay soil are also used.

Overall, these traditional, climate-responsive methods demonstrate farmers' resilience and are vital for sustainable cinnamon cultivation in Sri Lanka.



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Climate Entrepreneurship for Sustainable Development

The climate crisis stands as one of the most pressing global challenges of the 21st century, demanding urgent and innovative solutions that not only promote sustainability but also foster inclusive economic growth.

The climate entrepreneurship

Climate entrepreneurship, a fusion of climate action and business innovation, presents a promising pathway to address the environmental, social, and economic dimensions of regional development (UNCCC, 2021). Entrepreneurs in developing economies are vital to addressing climate change and promoting sustainable and resilient development. Businesses can address climate change by promoting mitigation of climate change drivers or adaptation to climate change impacts (Oraftik, McGregor, Guttentag, & Hume, 2021).

Approaches to Sustainable Regional Development

Two complementary approaches shape sustainable regional development: the product-oriented and process-oriented approaches. The product-oriented perspective values the region provides to its users, while the process-oriented approach focuses on the fundamental processes that occur in the region. The process approach aligns closely to the process of drafting a development strategy in the region and the broader concept of regional planning.

The Coastal Zone of Sri Lanka: A Critical Development Focus

Sri Lanka's coastal zone—comprising 14 administrative districts and covering 25% of the country's land area—is home to 30% of the national population. This region is economically vital, hosting key sectors such as trade, tourism, manufacturing, transportation, and communications, all of which make significant contributions to national GDP. The fisheries sector, while directly contributing 1.4% to GDP, plays a critical role in food security and coastal livelihoods. Tourism, a major economic driver, contributes approximately 8% to GDP and remains a crucial source of foreign exchange.

However, these coastal districts face increasing threats from climate change, including sea-level rise, coastal flooding, cyclones, and prolonged droughts.

A Pathway to Resilient and Inclusive Growth

In this context, climate entrepreneurship becomes essential for promoting sustainable regional development. By fostering innovative business models that integrate climate change adaptation and mitigation with economic opportunity, climate entrepreneurship enhances local entrepreneurial capacity, strengthens environmental resilience, and promotes social inclusion.

This approach offers a strategic path towards regional development that balances economic growth with environmental sustainability.

Climate entrepreneurship not only supports the creation of climate-conscious enterprises but also promotes inclusive, equitable outcomes for vulnerable coastal communities. By bridging the gap between innovative climate solutions and the socio-economic needs of at-risk regions, it paves the way for a more sustainable, resilient, and equitable future.

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The world is flooded with plastic waste

- The global food and beverage industry is a major contributor to plastic pollution.
- Each year, more than 380 million tons of plastic are produced worldwide.
- With plastic packaging alone accounting for 36% of that total.
- Alarmingly, only 9% of all plastic waste has ever been recycled, leaving billions of tons to accumulate in landfills, oceans, and ecosystems.
- Rather than declining, plastic use in the food industry continues to rise.
- If current trends persist, plastic production is projected to account for up to 13% of the global carbon budget by 2050.
- This equivalent to the emissions of 615 coal-fired power plants.
- The packaging sector is consuming roughly 35% of all polymer production globally.
- Today, global plastic production exceeds 400 million metric tons annually.
- Of this, just 9% is recycled, while 50% ends up in landfills, and another 20% is mismanaged, often polluting waterways and landscapes.
- In Europe alone, plastic demand reached 51.2 million metric tons in 2018.
- Out of this, 20.5 million metric tons were used for general packaging, with 8.2 million metric tons specifically for the food sector.
- Microplastics (MPs) in food products are also a growing concern.
- The most commonly detected types—PET, PE, PS, and PP—make up over 50% of all MPs found in consumables.

Building a sustainable future: Green psyche's Milestones

Visual highlights from the 'Connecting to the Sea' program held on April 25, 2025, at Waikkala Beach, Wennappuwa.

Connecting to the Sea" is a therapeutic program designed to foster a deep, mindful connection with the ocean in a calm, night time setting. It promotes the sea as a natural healer, encouraging participants to experience its restorative power. The program aims to raise awareness of nature's remarkable gifts and nurture a closer, more meaningful relationship with the nature.



Shoreline Orchestra - I



Storytelling



Listening to the sea



Shoreline Orchestra - II



Healing with sea



Thought sharing



We are pleased to have two academics from ITUM join us, with the intention of implementing this program for the benefit of their students and staff.

"LET'S TURN THE TIDE" CALLING ALL AUTHORS!

THE NEWSLETTER PUBLISHED BY,
GREEN PSYCHE ENVIRONMENTAL ASSOCIATION,
FACULTY OF LIVESTOCK FISHERIES & NUTRITION,
WAYAMBA UNIVERSITY OF SRI LANKA

"Turning the Tide" is a periodic newsletter published by the Green Psyche Environment Association of the Faculty of Livestock Fisheries and Nutrition at Wayamba University of Sri Lanka. Its primary objective is to provide an open platform for undergraduates, fostering awareness, discussion, and engagement in environmental and sustainability issues.

We hope this newsletter will inspire youth in Sri Lanka to reassess their social responsibility, gain a clearer understanding of our current environmental trajectory, raise awareness among their peers, and take meaningful actions towards a sustainable future/tomorrow.

We look forward to reading your thought-provoking contributions!

GUIDELINES:

- **Focus on Impact:** Make sure your submission clearly aligns with the theme, delivering a powerful takeaway that leaves a lasting impression.
- **Concise & Captivating:** Limit your piece to 350-400 words, ensuring each word counts.
- **Engage Your Readers:** We prioritize articles that capture attention and inspire action, so craft a message that resonates.
- **Creative Freedom:** While your article structure is up to you, ensure it flows logically and effectively develops your topic.
- **Keep It Simple:** Strive for clarity and simplicity, avoiding unnecessary complexity.
- **Compelling Narrative:** Feel free to inject energy into your writing—craft a lively narrative that keeps readers hooked from start to finish.
- **Seamless Transitions:** Ensure smooth transitions between paragraphs, guiding the reader effortlessly through your thoughts.
- **Polished & Dynamic:** Lastly, make sure your grammar and language contribute to a dynamic, readable style.



KEY THEMES

Biodiversity

"Nurturing Nature's Diversity
for Better Tomorrow"

Climate Change

"Changing the Climate Story:
Awareness to Action"

Food and Nutrition security

"Sustaining tomorrow:
Empowering Nutrition for All"

Green Entrepreneurship

"Sustainable Success: Innovating
for a Greener Tomorrow"

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INTO THE CLUB

VISION

A life-sustaining civilization that ensures a healthy communication triad: human himself, human - human, human - nature.

MISSION

Actively dedicating for the building of the human resource that is required for the sustainable existence of life on Earth.



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OBJECTIVES

- Overcome the over-consumption mindset of Sri Lankans with regard to environment.
- To promote the positive attitudes among Sri Lankans regarding the well-being of the nature.
- To bring about a transformation of the public consciousness leading towards a sustainable lifestyle.
- To mediate the development of agriculture and natural environment aiming at a sustainable lifestyle.
- Creation and promotion of other activities that fulfil the aforementioned mission.
- Reduce the University's ecological footprint, improve quality of life on-campus, create a legacy of sustainability at Wayamba University, enrich the community and contribute to global sustainability.
- Cultivate self-sufficiency, land stewardship, and ethical consumerism in the minds of students and the community.
- Emphasize organic living practices and locally-centered lifestyles.
- Provide education, fellowship, activities, and opportunities through student participation in sustainability.

We gratefully acknowledge the hard work and participation of everyone who contributed to this endeavor.

Editorial board, Turn the tide Newsletter



TURN THE TIDE NEWSLETTER

Green psyche Environmental Association,
Faculty of Livestock, Fisheries and Nutrition,
Wayamba University of Sri Lanka.



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