CWA 2024
CARIBBEAN WEEK OF AGRICULTURE
"Climate Smart Agriculture for a Sustainable Future"

CONCEPT NOTE

Title: Enhancing Pesticide Sustainability: Paving the Way for a Greener and More Productive Future

1. BACKGROUND

The agricultural sector plays a critical role in meeting the increasing global food demand, but it is facing significant challenges due to the pressures of growing food demand and the adverse impacts of climate change. Pesticides are important for managing pests and ensuring crop productivity, but they can also pose serious environmental, health, and sustainability concerns if not handled properly. The challenges are further complicated by the changing dynamics of pests due to climate change, which affects the effectiveness of pesticides and increases the vulnerability of ecosystems. Therefore, adopting integrated and climate-resilient pesticide management practices is essential for a sustainable and productive agricultural future.

Implementing eco-friendly pest control methods and promoting biodiversity in agricultural landscapes are important steps towards sustainable pesticide management. These practices play a crucial role in establishing a balanced ecosystem where natural predators can regulate pest populations, thereby reducing the need for chemical interventions. This is particularly significant for the preservation of biodiversity and the maintenance of soil health, both of which are indispensable for long-term agricultural productivity.

Reducing reliance on chemical pesticides through innovative solutions, such as biological pest control and precision agriculture, mitigates environmental harm and protects human health. Pesticide exposure has been linked to various health issues, including respiratory problems, skin conditions, and even more severe long-term effects such as cancer and neurological disorders. Therefore, adopting sustainable pesticide management practices is critical in protecting farmers, agricultural workers, and nearby communities from these health risks.

Moreover, vulnerable groups such as children, pregnant women, and the elderly are at a higher risk of the adverse effects of pesticide exposure. Minimizing pesticide use and managing it in the most sustainable way possible can significantly reduce the health risks for these groups. Furthermore, the promotion of personal protective equipment and the provision of education on safe pesticide handling practices are crucial steps in ensuring the safety of those involved in agriculture.

By prioritizing sustainable and climate-smart approaches to pesticide management, the agricultural sector can adapt to changing conditions and contribute to long-term food security while safeguarding the environment and human health. This approach ensures the continued productivity of crops in the face of climate change and upholds the well-being of current and future generations, ultimately fostering a healthier and more resilient agricultural system.

2. OBJECTIVES:

- To discuss the challenges and opportunities associated with pesticide use in the context of climate change.

- To highlight the importance of integrating climate-resilient practices into pesticide life cycle management.
- Promote integrated pest management (IPM) strategies that minimize environmental and health risks.
- Foster knowledge sharing and stakeholder collaboration to develop and implement climate-resilient pesticide management practices.

3. KEY THEMES:

- **Impact of Climate Change on Pest Dynamics**: Understanding how climate change affects pest populations, pesticide resistance, and the overall efficacy of pesticides.
- **Sustainable Pesticide Life Cycle Management**: Discussing approaches to manage pesticides from production to disposal in an environmentally sustainable manner, offering a promising future for the agricultural sector.
- **Integrated Pest Management (IPM):** Promoting IPM techniques that integrate biological, cultural, and mechanical control methods alongside judicious pesticide use.
- **Policy and Regulatory Frameworks:** Examining the role of policies and regulations in promoting sustainable and climate-resilient pesticide practices.
- **Innovative Technologies and Practices:** Showcasing cutting-edge technologies and practices that enhance pesticide efficacy and reduce environmental impact in the context of climate change.

4. TARGET AUDIENCE:

The session is designed for agricultural policymakers, researchers, extension agents, industry representatives, and other stakeholders involved in pesticide management and sustainable agriculture.

5. FORMAT AND ACTIVITIES:

The session will be interactive and includes:

- Keynote Presentations:Expert speakers will provide insights into the latest research and trends.
- Case Study Presentations: Real-world examples demonstrating successful implementation of sustainable and climate-resilient pesticide practices.

- Q&A Sessions: Opportunities for the audience to engage with experts and discuss specific concerns.

6. EXPECTED OUTCOMES:

- Increased awareness and understanding of the relationship between pesticide management and climate change.
- Identification of best practices and innovative solutions for sustainable pesticide use.
- Strengthened networks and partnerships among stakeholders for collaborative action.

- Recommendations for policymakers to support the adoption of climate-resilient pesticide management practices.
- Development of actionable strategies and tools that stakeholders can implement in their respective fields.

7. CONCLUSION

The future of agriculture depends on finding a balance between food production and environmental and health considerations. Integrated pest management and climate-resilient strategies offer a promising way to achieve this balance. This comprehensive approach requires cooperation among farmers, researchers, policymakers, and the global community to ensure a resilient and food-secure world.

Date and Venue: [To be determined]

Organisers:Caribbean Agricultural Health and Food Safety Agency (CAHFSA) ,Coordinating Group Of Pesticide Control Boards of the Caribbean (CGPC).

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