

Vector Control Products Regulatory landscaping in Pacific Island Countries

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About IVCC

The Innovative Vector Control Consortium (IVCC) is a not-for-profit public-private partnership that aims to save lives, protect health, and improve prosperity by enabling the development and delivery of innovative vector control tools to prevent malaria and other vector-borne diseases. Established in 2005 and funded by leading global health donors, IVCC works with industry, academia, and public health stakeholders to drive the development of new insecticides, vector control products, and resistance management strategies, helping ensure effective and sustainable disease prevention solutions for vulnerable populations.

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1. Introduction

The unique geography and highly diverse ecosystem of the Pacific Island countries (PICs) are home to 423 known mosquito species. Vector-borne diseases such as malaria, dengue, Zika virus, Lymphatic filariasis and chikungunya remain serious health threats across the PICs. Unprecedented outbreaks of arboviral diseases along with surges of malaria in Papua New Guinea, Vanuatu and Solomon Islands poses serious public health concerns in the Pacific Island countries. Effective disease control depends on timely access to quality-assured vector control products (VCPs) like residual insecticides for spraying, larvicides and insecticide-treated nets (ITNs).

PICs face significant challenges in vector control regulations due to limited regulatory capacity, diverse disease burdens, remote settings and reliance on international frameworks. Most PICs have basic pesticide regulation but there exists the opportunity to further develop comprehensive systems for VCPs.

Table1: Vectors and malaria endemicity

S. No.	Country	Vector	Malaria Endemic
1	American Samoa	Aedes spp.	Non endemic
2	Cook Islands	Aedes spp.	Non endemic
3	Fiji	Aedes spp.	Non endemic
4	French Polynesia	Aedes spp.	Non endemic
5	Guam	Anopheles sp. & Aedes spp.	Non endemic
6	Kiribati	Aedes spp.	Non endemic
7	Marshall Islands	Aedes spp.	Non endemic
8	Federated States of Micronesia	Aedes spp.	Non endemic
9	Nauru	Aedes spp.	Non endemic
10	New Caledonia	Anopheles sp. & Aedes spp.	Non endemic
11	Niue	Aedes spp.	Non endemic
12	Northern Marianas Islands	Anopheles sp. & Aedes spp.	Non endemic
13	Palau	Aedes spp.	Non endemic
14	Papua New Guinea	Anopheles sp. & Aedes spp.	Endemic
15	Samoa	Aedes spp.	Non endemic
16	Solomon Islands	Anopheles sp. & Aedes spp.	Endemic
17	Tokelau	Aedes spp.	Non endemic
18	Tonga	Aedes spp.	Non endemic
19	Tuvalu	Aedes spp.	Non endemic
20	Vanuatu	Anopheles sp. & Aedes spp.	Endemic
21	Wallis and Futuna	Aedes spp.	Non endemic

Source: PacMOSSI¹

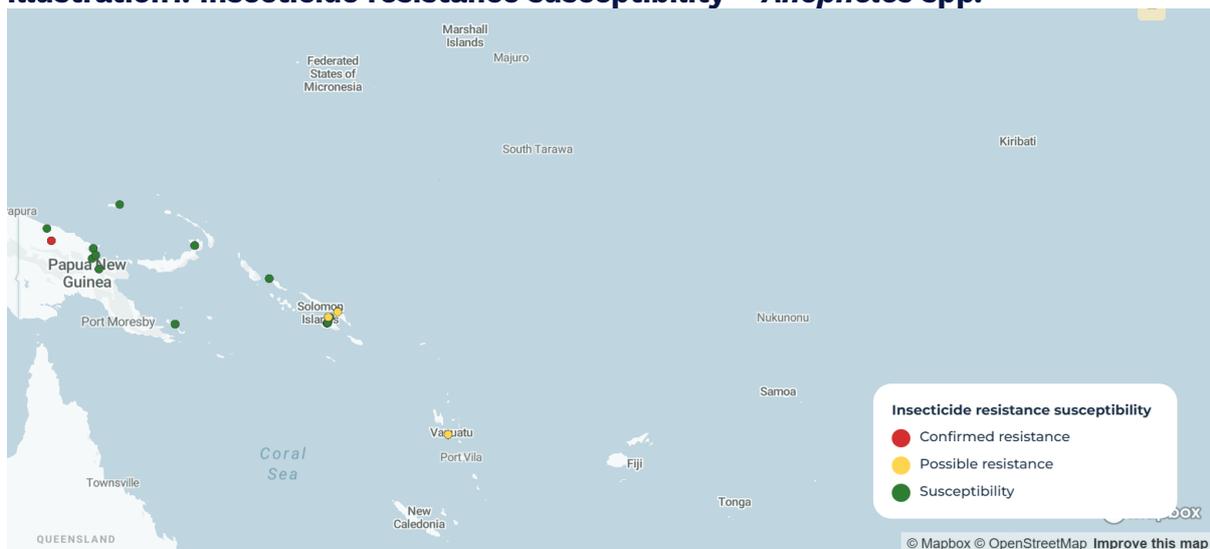
This report outlines the regulatory landscape governing the **registration and approval of vector control products** in 13 selected Pacific Island Countries and areas. This report may be expanded to include additional countries of the region, if deemed informative.

¹ [Home - PacMOSSI](#)

- Federated States of Micronesia
- Fiji
- Kiribati
- Nauru
- Niue
- Palau
- Papua New Guinea
- Republic of the Marshall Islands
- Samoa
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu

The need for newer vector control products is accentuated not only due to the diverse vector control population but also the emergence and spread of insecticide resistance into the malaria vector species in PICs. Pyrethroid resistance is already well established in *Aedes* vectors in the Pacific.

Illustration1: Insecticide resistance susceptibility – *Anopheles* spp.



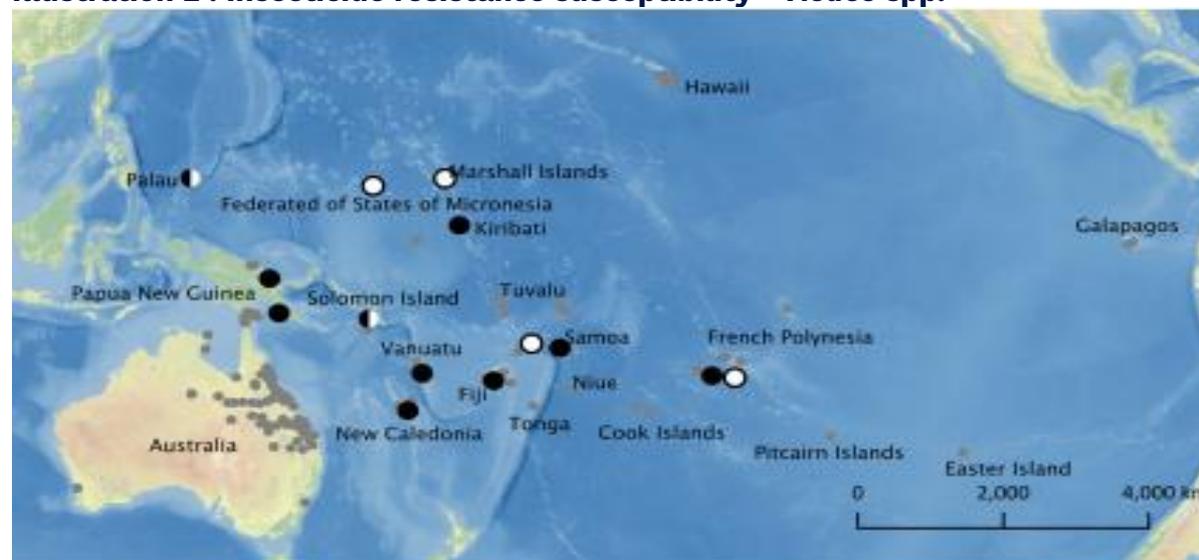
Source: IRMapper

The National Toxics Network (www.ntn.org.au) have published a paper on *Highly Hazardous Pesticides in the Pacific*² have provided a list of low quality and highly hazardous pesticides that are currently registered and imported into many of the listed countries in the Pacific. Island countries indicate that the regulatory processes in these countries are limited in capacity and constrained for resources. Limited regulatory capacity, limited resources in enforcement mechanisms, and gaps in quality control at points of import can create conditions that allow unregistered, counterfeit, or substandard pesticide products to enter the market.

² [Final-HHPs-in-Pacific-report-reissued-1.pdf](#)

Therefore, the need for regulatory strengthening cannot be stated more emphatically.

Illustration 2 : Insecticide resistance susceptibility – *Aedes* spp.



* *Aedes aegypti* Pyrethroid resistance: ○ Susceptible ◐ Intermediate ● Resistant

Source: Seok S., et al³

2. Cross-Cutting Regulatory Insights

2.1. Regulatory Capacity Variation

There is significant variation in national capacity for product registration in the region:

- Countries like **Fiji**, **Papua New Guinea**, **Palau**, and **Vanuatu** have some form of formal registration system.
- Smaller countries such as **FSM**, **Kiribati**, **Nauru**, **Niue** and **Republic of Marshall Islands** formal pesticide regulations are evolving and rely on regional or international assessments.

2.2. Dependence on International Endorsements

Countries show varying degrees of reliance on international endorsements:

- Some countries prefer or accept Stringent regulatory authority approvals – APVMA, US EPA etc. Countries such as Guam and American Samoa exclusively rely on US EPA regulatory processes and decisions.
- **There is no explicit statement on the acceptance of WHO Prequalification (PQ)** of public health pesticides but it is anecdotal evidence that WHO PQ listed products are preferred or interest is expressed in procuring WHO PQ listed products.

³ Seok S, Raz CD, Miller JH, Malcolm AN, Eason MD, Romero-Weaver AL, Giordano BV, Jacobsen CM, Wang X, Akbari OS, Raban R, Mathias DK, Caragata EP, Vorsino AE, Chiu JC and Lee Y (2023) Arboviral disease outbreaks, *Aedes* mosquitoes, and vector control efforts in the Pacific. *Front. Trop. Dis.* 4:1035273

3. Country-by-Country Regulatory Overview

The regulatory frameworks for registering and approving vector control products—such as insecticides and larvicides—vary across the Pacific Island nations. Below is a brief summary for each of the 13 countries.

Table2: Regulatory processes in Pacific Island Countries

Country	Regulatory Processes	Comments
Federated States of Micronesia (FSM)		This is a federation of four semi-autonomous island states. The island states have provisions created under the FSM Environmental Protection Act under which measures to regulate use and storage, import of toxic chemicals or other harmful substances. The country relies on regional guidelines and international standards to manage these products. The Department of Health and Social Affairs oversees public health initiatives, including vector control, and collaborates with regional organizations to implement best practices.
Fiji		Fiji regulates pesticides under the Pesticides Act 1971 and the Pesticides Regulations 1972. The Registrar of Pesticides located in Koronivia Research Station under Ministry of Agriculture is responsible for the registration and control of pesticides, ensuring that only approved products are imported, distributed, and used. The Pesticides Registration Board evaluates products for efficacy and safety before approval. Every importer or person formulating a pesticide shall apply for registration of such pesticide on the appropriate form and furnish information on toxicological, method of analysis, efficacy and draft label.
Kiribati		Kiribati has limited pesticide registration system procedures. It is not clear if there are any regulatory process for Vector control products. The Ministry of Health does not have a mandate or resources to regulate vector control products and vector control products or pesticides are imported into Kiribati without much regulatory procedures.
Nauru		Nauru does not have specific legislation or regulatory bodies dedicated to pesticide registration. The Ministry of Health coordinates vector control activities, adhering to international standards and regional practices for managing vector control products
Niue		Niue has not established a formal pesticide registration system. The Head of Niue Biosecurity Authority, Department of Agriculture, Forestry and Fisheries, Ministry of Natural Resources is

		responsible to take decisions on importation of hazardous chemicals substances.
Palau:		Pesticides imported and sold in Palau is regulated by the Palau Environmental Quality Protection Board under the regulations promulgated Pesticides Regulations 2021. Pesticides that are shipped through US or US Territory doesn't need advance notice.
Papua New Guinea (PNG)		PNG's Environmental Contaminants Act, 1978 governs the registration and use of insecticides. The nodal office for registration and regulatory process is the PNG Conservation and Environmental Protection Agency (PNG CEPA) and it oversees the importation and use of pesticides, ensuring compliance with safety and efficacy standards. The Department of Health also plays a role in vector control strategies.
Republic of the Marshall Islands (RMI):		RMI does not have specific legislation for pesticide registration. However, Pesticides and Persistent Organic Pollutants (POPs) Regulation, 2004 provide regulatory guidelines under the Pesticides and Toxic Chemical substances regulations 2004 to be regulated under the Environmental Protection Authority. However, these regulations are not put to practice. Furthermore, these regulations do not specifically indicate that products that are used for public health are regulated. It refers pesticides under a universal use pattern category. The Ministry of Health and Human Services manages vector control efforts, depending on international standards and regional partnerships to regulate vector control products.
Samoa		Samoa's Pesticides Act 1999 provides a framework for the registration, importation, and use of pesticides. The Ministry of Agriculture and Fisheries administer this Act, ensuring that only approved products are utilized. The Pesticides Technical Committee evaluates products for safety and efficacy. The Ministry of Health develops strategies to tackle appropriate vector control measures based on WHO GVCR (Global Vector control Response).
Solomon Islands		The Pesticides Act 1985 regulates the registration and use of pesticides in the Solomon Islands. The Ministry of Agriculture and Livestock Development administers this Act, ensuring the safe and effective use of vector control products. The Pesticides Advisory Committee assesses products before approval.
Tonga		The Kingdom of Tonga regulates pesticides as per the Pesticides Act (revised 2016) . The Ministry of Health oversees vector control activities, relying on

		international guidelines and regional collaborations to manage the use of vector control products.
Tuvalu		Tuvalu registers and approved pesticides under the Pesticides Act, 2022. The Agricultural officer under the Ministry of Agriculture is the Registrar of Pesticides and is responsible in granting approval for registration of the product. The Department of Health manages vector control programs, depending on international standards and regional agreements to regulate vector control products.

 No regulations / Guidelines or authority

 Some form of regulations and authority exist

 Regulatory authority, guidelines & process exists

In summary, while some Pacific Island nations have established regulatory frameworks for the registration and approval of vector control products, many rely on international standards and regional collaborations due to the absence of specific legislation. The variance in developed regulatory procedures is due to many reasons but mainly due to lack of resources. This highlights the importance of regional cooperation to combine the resources and adherence to international guidelines to ensure the safe and effective use of vector control products across these nations.

4. Summary of Key Findings

Key features	Challenges
Some countries have key basic pesticide import controls	Limited capacity and technical resources
Minimal regulatory framework	Gaps in enforcement
Some regional co-operation	Operational constraints on surveillance

Table 3: Summary of regulatory processes in PICs

Country	Registration System	Participates in PRPRS	Participates in WHO CRP-VCP	Relies on WHO PQ	Import Permit Required
FSM	No	Yes	No	Potential	No
Fiji	Yes	Yes	No	Potential	Yes
Kiribati	No	Yes	No	Potential	No
Nauru	No	No	No	Potential	No
Niue	No	Yes	No	Potential	Yes
Palau	Yes	Yes	No	Potential	Yes
PNG	Yes	Yes	No	Potential	Yes
RMI	No	Yes	No	Potential	No
Samoa	Yes	Yes	No	Potential	Yes
Solomon Islands	Yes	Yes	No	Potential	Yes

Country	Registration System	Participates in PRPRS	Participates in WHO CRP-VCP	Relies on WHO PQ	Import Permit Required
Tonga	Yes	Yes	No	Potential	Yes
Tuvalu	Yes	No	No	Potential	Yes
Vanuatu	Yes	Yes	No	Potential	Yes

5. Harmonized Regulatory System in Pacific Island Countries

5.1. Pacific Regional Pesticide Registration Scheme (PRPRS)

Twelve Pacific Island Countries, with support from the Pacific Community (SPC), are establishing a Pesticide Regulatory scheme to serve as the principal platform for harmonising pesticide registration and use across the region. The scheme is not yet fully operational. This forum will function as a technical advisory mechanism, providing guidance to inform national decision-making processes related to pesticide registration. The scheme is initially to be tested on a pilot scale in six countries – Cook Islands, Kiribati, RMI, Samoa, Solomon Islands and Tonga.

The **Pacific Community (SPC)** coordinates the **PRPRS (Pacific Regional Pesticide Registration Scheme)**, a voluntary regional initiative aimed at:

- Harmonizing pesticide registration standards across PICs.
- Providing technical review and risk assessment support for countries with limited capacity.
- Reducing duplication of effort by enabling mutual recognition of product assessments.

Key Features:

- Centralized evaluation of pesticide dossiers.
- Development of regional guidelines and templates for product registration.
- Support for capacity building and training of regulatory staff in member states.
- Facilitating group procurement based on jointly approved lists.

Impact on Vector Control:

- PRPRS could support the expedited introduction of WHO-prequalified vector control products.
- It encourages consistent risk-based regulatory approaches across the region.

6. Role of WHO Collaborative Registration Procedure (CRP-VCP)

The **WHO Collaborative Registration Procedure for Vector Control Products (CRP-VCP)**⁴ is designed to accelerate national registration of WHO PQ listed Vector Control Products (VCPs) by leveraging WHO's rigorous prequalification assessments.

6.1 Key Components:

- Fast-tracked registration of WHO-prequalified vector control products by engaging with the National Regulatory Authority of the participating country.
- Access to confidential WHO assessment and evaluation reports by national regulators (with manufacturer consent).
- Support for countries with limited capacity to independently review complex product dossiers.

6.2 Benefits for PICs:

- Enhances regulatory efficiency by reducing duplication.
- Improves access to quality-assured VCPs in a timely manner.
- Increases trust in products used for national disease control programs.

6.3 Participation:

The WHO CRP-VCP is available to interested National Regulatory Authorities who would like to participate in this collaborative registration procedure. WHO CRP – VCP has been introduced on a pilot scale in six Sub Saharan African countries and there have been some positive developments in approving new vector control products in record time to be deployed in the countries for the benefit of the people. Several PICs can either directly participate or cooperatively participate in or benefit from CRP-VCP when procuring products through donor-funded mechanisms or government funded.

7. Recommendations

7.1 For Regulators and Governments:

- **Align with WHO PQ and CRP-VCP:** Focus submissions on products with WHO prequalification and adopt Collaborative Registration Procedure to facilitate fast track approval of products.
- **Extend and Adopt PRPRS processes for VCPs:** Once PRPRS becomes operational, include vector control products (VCPs) in PRPRS process. Leverage SPC's assessments to strengthen local decision-making.
- **Formalize Use of CRP-VCP:** Establish legal and procedural pathways to formally accept CRP-VCP outputs.

⁴ [Regulation and Prequalification](#)

- **Build Regulatory Capacity:** Continue training programs with SPC, WHO, and other partners.

7.2 For Vector Control Programs:

- **Engage proactively with regulatory authorities:** Vector control programs or MoH can play a key role in advocating for the development and enforcement of robust regulatory frameworks for vector control products by National Regulatory Authorities (NRAs).
- **Select appropriate vector control tools:** Prioritizing the use of WHO-prequalified products can enhance the effectiveness of interventions against vector-borne diseases.
- **Strengthen resistance monitoring capacity:** Developing local capacity for resistance monitoring supports evidence-based decision-making and ensures efficient allocation of resources.

7.3 For Product Developers and Donors:

- **Prioritization of countries:** Depending on the market requirements for Vector control products prioritization should be done and regulatory pathway mapped.
- **Surveillance of vectors and insecticide resistance:** This will enable data driven decisions on optimal vector control strategies and positioning of products.
- **Support establishing regulatory processes:** The need for quality products is to be emphasized and this can be only through robust regulatory processes.
- **Engage Early with SPC and Country Focal Points:** Navigate regionally aligned registration and procurement efficiently.
- **Support Harmonization:** Invest in systems that encourage mutual recognition and regulatory alignment.

8. Conclusion

Some of the major gaps in vector control efforts across Pacific Island Countries are unavailability of trained resources in product safety and efficacy assessments, gaps in legislations, slack import requirements and limited knowledge of resistance profiles for local vectors. Therefore, understanding the status of the vector and ensuring the deployment of high-quality, effective vector control tools are essential steps toward achieving meaningful and impactful vector control outcomes. Furthermore, without systematic and up-to-date data on mosquito species distribution, density, and breeding habitats, it is challenging to make evidence-based decisions regarding the selection and deployment of appropriate vector control tools.

The regulatory environment for vector control products in Pacific Island Countries is evolving. Through mechanisms like the **SPC's PRPRS** there is increasing alignment and efficiency in product registration processes. Additionally, with the availability of and the **WHO CRP-VCP** procedures,

the process of enabling a robust, efficient, timebound and collaborative process of product approval would be made available to country authorities. Alternatively, SPC PRPRS and WHO CRP-VCP can work together in strengthening the regulatory systems in Pacific Island countries. Continued investment in these regional and global frameworks will be essential to ensure timely access to high-quality vector control tools, critical for disease prevention and public health resilience across the Pacific.