

REALISING THE HEALTHY ISLANDS VISION THROUGH CROSS-SECTOR PLANNING, DATA, AND ACTION

INTRODUCTION

Fiji and other Pacific Island countries face a high risk of communicable disease outbreaks caused by endemic, emerging and re-emerging diseases, which are influenced by social, economic and ecological changes. Resilience to communicable disease outbreaks is reducing due to significant environmental and climate-induced shifts (e.g., poorer air and water quality), along with increasing non-communicable disease morbidity, such as malnutrition.¹ Despite numerous health-related projects and programs in the country and region, morbidity and mortality from a wide range of diseases (including typhoid, dengue and leptospirosis among others) seem to be rising.² Current health interventions focus largely on health services, which while crucial, do not address many of the root causes of disease risk. Existing strategies for improving primary health care often emphasise improved access to clinical services with less emphasis on the other two pillars of primary care: addressing the broader determinants of health and empowering communities and individuals. In order to realise the Healthy Islands Vision, a new approach is needed.

WHAT IS THE PROBLEM?

Outbreaks of water-related and climate-sensitive diseases are common in Fiji, amplified by environmental factors related to climate change, land use and changing social conditions. Existing communicable disease and outbreak responses in Fiji are reactive and control measures depend on a limited pool of resources, data quality, infrastructure and system challenges. It is known that health system interventions that focus exclusively on human disease and ignore the greater socio-ecological context will not be successful. Although some clear relationships have been identified between ecological, environmental and social drivers of disease occurrence, interventions for disease control exist largely in siloes related to health service interventions.³ Breaking out of siloes requires One Health approaches, where disease is managed by holistically addressing the interactions between humans, animals and the environment. While One Health principles are embodied in many regional and national policies (e.g., 1995 Healthy Islands Vision, 2050 Strategy for the Blue Pacific Continent, Fiji One Health National Action Plan on Antimicrobial Resistance 2022-2025), to date there have been few examples of One Health implementation in practice globally and in the region.

A core challenge is that existing data for informing and monitoring disease interventions are limited. Surveillance of water-borne and climate sensitive diseases is guided by the Fiji Communicable Disease Guidelines (2016), which describe key objectives to determine the geographic location and natural history of diseases in Fiji that cannot be presently achieved because most case data are not located to place of residence. Attempts to provide robust evaluations of public health interventions for communicable diseases in the country have also been limited due to this data gap.

WHAT DO WE KNOW?

The Watershed Interventions for Systems Health in Fiji (WISH Fiji) project introduced a strategy for reducing disease risk in rural communities that embraces the Healthy Islands Vision and aims to improve systems health by working collaboratively with communities and across sectors to prevent disease and promote health. WISH Fiji was designed and implemented as a collaborative research-to-action approach applied within watershed units to reduce the risk of water-related disease and improve downstream ecosystem health. Between 2018 and 2022, WISH Fiji was implemented in 29 Fijian communities across 5 watersheds in Fiji in the Central, Eastern and Northern divisions. We found that:

1. Frameworks for systems health in Fiji are lacking;
2. Co-ordination between key sectors that influence health (Environment, Climate Change, Waterways, Forestry, Agriculture, Indigenous Affairs) is lacking. Overlapping policies and regulations for water and land management are poorly coordinated and sometimes dilute the responsibility of enforcement;
3. Rural development plans require integrated consultation, planning and interventions to address watershed risks for disease and deep community engagement is critical for the success of these;
4. There is no existing body to monitor drinking water quality in rural areas, however new opportunities for coordinated and integrated monitoring exist through the National Drinking Water Quality Committee;
5. Disease surveillance data lacks routine reporting of case location information, which prohibits robust assessment of disease drivers and intervention effectiveness;
6. Integrated approaches require new types of data, data integration, data sharing and data storage.
7. Holistic, integrated watershed management can reduce disease risk, but requires significant investment to effectively manage risks at scale.

POLICY OPTIONS, STRATEGIES AND APPROACHES

The WISH-Fiji project provides guidance and a blueprint for cross-sector action. Based on the experience of the project to date, the following policy options emerge:

1. Promote the Healthy Islands Vision across sectors. Rally cross-sectoral approaches towards common goals as described under the Vision, where children are nurtured in body and mind, the environment invites learning and leisure, people work and age with dignity, ecological balance is a source of pride, and the ocean which sustains us is protected.
2. Emphasise disease prevention through integrated approaches that bring together communities, critical sectors and key private sector stakeholders to align policies and interventions.
3. Revisit and advance the Land and Water Resource Management Bill as an important cross-sectoral coordination policy that would give legal mandate to land and water sub-committees to enforce land and water use plans.
4. Activate the National Drinking Water Quality Committee to oversee coordinated monitoring of rural and urban water supplies to identify high risk areas for targeted management.
5. Investigate options for sustainable financing of systems management for disease prevention, such as through water or other environmental funds, coupled with appropriate governance systems to distribute funding to coordinate interventions in high risk areas.
6. Improve data and data processes to address multi-system needs by creating processes for data sharing across sectors and with communities:
 - a. Create common population boundaries for calculating disease rates that can be correlated with critical social, economic, environmental and ecological determinants of health (especially water quality monitoring).
 - b. Enable routine reporting of case location information;
 - c. Disseminate results of data analysis more widely and invite input from other sectors. •

¹ McIver L et al. "Climate change, overcrowding and non-communicable diseases: The 'triple whammy' of tuberculosis transmission risk in Pacific atoll countries." *Annals of the ACTM: An International Journal of Tropical and Travel Medicine* 16.3 (2015): 57-61.

² Li Y, Li H, Jiang Y. "Analysis of the burden and trends of communicable diseases in Pacific Island countries from 1990 to 2019." *BMC Public Health* 23.1 (2023): 2064.

³ McIver L et al. "Health impacts of climate change in Pacific Island countries: a regional assessment of vulnerabilities and adaptation priorities." *Environmental health perspectives* 124.11 (2016): 1707-1714.

