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When Water Is Not Guaranteed: The Rural Water Crisis in the Solomon Islands

When water systems are dependable, they tend to disappear into the background of daily life. A tap turns, a container fills, and the process requires no further thought. In rural parts of the Solomon Islands, that same action carries weight. It shapes how mornings begin, how far people travel, how long children stay in school, and how labor is divided across a household. Water access becomes part of the structure of daily life rather than a background utility, especially outside urban centers like Honiara, the capital of the Solomon Islands. The United Nations Children's Fund describes water, sanitation, and hygiene as a continuing challenge across the Pacific, especially in rural and outer island communities, where gaps still place children and vulnerable families at risk (United Nations Children's Fund).

The Solomon Islands sit in the South Pacific as a chain of hundreds of islands spread across a wide ocean region. The country has long been overwhelmingly rural, and that geography shapes nearly everything that follows. The 2019 census recorded a total population of 720,956, with 521,818 rural residents and 199,138 urban residents, meaning most people live outside the capital and the more centralized service systems (Solomon Islands Government). A World Bank assessment of the water sector also noted that water and sewage services are concentrated in Honiara and only a few provincial centers (Government of Solomon Islands Global Facility for Disaster Reduction and Recovery). This means infrastructure has to stretch across water instead of roads, across distances that cannot be easily shortened, while also withstanding weather patterns that shift quickly and severely. Governance may be national, but service delivery still heavily depends on how far a community lies from more established systems.

Daily life in many villages is still built around subsistence farming, fishing, and small-scale trade. The World Bank's agriculture and rural transformation project explains that the main food crops in the Solomon Islands include sweet potato, cassava, yam, taro, banana, pumpkin, and vegetables, while coconut and cocoa remain the main cash crops for many rural households (World Bank Group). The United Nations' Food and Agriculture Organization (FAO) also describes traditional Pacific diets as including root crops, coconut, fish, seafood, and a wide range of fruits and vegetables, which helps explain why food security in the Solomon Islands cannot be separated from access to water and healthy local environments (Gillett). Income is often irregular, and when storms or transportation problems disrupt travel, families feel the effects quickly. A household may still have land, skills, and food traditions, but without stable water and reliable movement between islands and villages, those strengths are harder to turn into security.

Climate makes the situation more complicated. The Solomon Islands Meteorological Services reports that annual rainfall is usually between 3,000 and 5,000 millimeters, and that most months receive more than 200 millimeters of rain (Solomon Islands Meteorological Services). At first glance, that sounds like plenty of water. In reality, the challenge is not only how much rain falls, but when it falls and what

happens afterward. Heavy rainfall can overwhelm drainage systems, contaminate water sources, and damage storage tanks or latrines. Water is abundant but not always usable. In that sense, the country's water problem is less about shortage and more about reliability, safety, and infrastructure that can survive extreme weather. The same climate source notes that cyclones are still a yearly threat, meaning that a less severe storm can still disrupt local water supplies (Solomon Islands Meteorological Services).

That is why rural water access remains so fragile. UNICEF says access to safe drinking water, sanitation, and hygiene is still a major issue across the Pacific, especially in rural and outer island communities, and the region is not on track to meet the 2030 goals for universal water and sanitation access (United Nations Children's Fund). UNICEF's data for the Solomon Islands show that while basic drinking water coverage is still limited, sanitation access is even lower, and unsafe disposal practices remain a serious issue in some places (United Nations Children's Fund). Older World Bank reporting also noted that approximately 80 percent of Solomon Islanders lived in rural villages, where only about 65 percent had access to safe water and just 18 percent had access to improved sanitation at the time of assessment (Government of Solomon Islands Global Facility for Disaster Reduction and Recovery). Even if specific numbers change over time, the pattern remains the same: rural areas face deeper gaps than urban centers.

On the ground, these problems do not feel abstract. A family may start the morning by checking whether the tank is full, whether the water looks clean, and if there is enough left for cooking, washing, and drinking. If the supply is low, someone has to travel farther to collect more, which takes time away from school, farming, or rest. That tradeoff may seem small from a distance, but when repeated daily, it changes what a household can actually do. It also changes how people think about planning. When water can disappear after a storm or become unsafe after flooding, families stop relying on it and begin building routines around uncertainty instead. That is one reason the rural water crisis matters so much: on top of access, it affects the mental and physical rhythm of daily life. This directly impacts food security in every sense of the word. Food security is not just about whether food exists somewhere in the country, but whether people can obtain it, prepare it safely, and depend on it over time. Water sits inside that system from the beginning. If families have to spend hours collecting water, less time remains for farming, fishing, cooking, cleaning, and schoolwork. If water becomes contaminated after flooding, illness spreads more easily, making it harder for the body to properly absorb nutrients from food. If sanitation fails, the whole cycle becomes harder to break. Water, health, and food are connected factors in the Solomon Islands, and the country's own development reporting treats water as part of the larger food security and public health picture (Solomon Islands Government Ministry of Health and Medical Services).

The four pillars of food security help make that connection clearer: availability, access, utilization, and stability. *Availability* depends on whether enough food can actually be produced. *Access* depends on whether households can get food with the money, transport, and time they have. *Utilization* depends on whether food is prepared safely and used by the body in a healthy way. *Stability* depends on whether the other three pillars hold up from season to season. In rural Solomon Islands, each of those pillars is affected by water. *Availability* weakens when crops suffer from flooding or when labor is lost to water collection and illness. *Access* weakens when limited income and unreliable transportation make it harder for households to obtain food. *Utilization* weakens when waterborne disease affects nutrition and digestion. *Stability* weakens when storms, flooding, and maintenance problems repeatedly disrupt the system. The effect reaches schools and children too. UNICEF describes children and vulnerable

communities as especially at risk when water, sanitation, and hygiene systems are weak (United Nations Children's Fund). In practical terms, that means a child who is sick from unsafe water may miss class, fall behind, or return to a classroom that is still missing clean water and toilets. A school without safe water cannot support basic hygiene well, which affects health and learning. When schools are not safe and sanitary, the burden often shifts back onto households, especially mothers and older girls, who may already be carrying much of the water-collection work (United Nations Children's Fund). In this way, unequal access to water can also contribute to unequal access in education.

Food systems are affected in less visible ways as well. The Solomon Islands rely heavily on local crops and marine resources, but both depend on environmental stability. FAO notes that fish are a major source of protein in the Solomon Islands and across Pacific Island food systems, and fisheries remain a central part of daily diets and local economies (Gillett). Water access is not just about having clean drinking water. It affects sanitation near coasts and rivers, the health of aquatic ecosystems, and how much time people can spend fishing or farming. In rural communities, the same family may depend on garden crops, coconut products, fish, and some market foods at different points in the year. When water systems fail, every one of those pieces becomes less stable. There are also clear differences between rural and urban areas. Urban regions have more centralized systems and more access to formal maintenance than remote villages do, meaning major cities can recover faster when problems arise. Rural communities, by contrast, often depend on rainwater tanks, wells, streams, or small-scale systems that need regular care. A World Bank report on the Solomon Islands' water and sanitation sector found that urban systems were tied to Solomon Water and a few provincial centers, while rural services depended on far more limited providers and reform programs that were already under pressure (Government of Solomon Islands Global Facility for Disaster Reduction and Recovery). That gap has important implications, as one national policy does not produce the same result everywhere. A solution that works in Honiara may not work on a remote island unless it is designed for local maintenance, weather, and travel conditions.

Some efforts have already been made, and those efforts matter. Rainwater harvesting systems have helped some villages capture the rainfall that is already available. Solar-powered systems have been tested in specific communities. UNICEF and development partners continue to support WASH work in the region, and those projects show that progress is possible (United Nations Children's Fund).
In Eastern India along the Bay of Bengal, UNICEF implemented rooftop rainwater harvesting in Odisha state schools to address groundwater depletion, climate variability, and recurring disasters, challenges that are also relevant to the Solomon Islands (UNICEF India). Another example comes from Manco Capac in Peru, where UNICEF and the Municipality of Indiana built a dry ecological toilet designed to prevent waste from contaminating local water supplies (Esquén). Before the indoor toilet was built, locals reported that their previous toilets would overflow regularly, with waste reaching the surface and contaminating local water supplies that residents continued to use (Esquén). The problem is not that solutions do not exist, but that solutions are often too small, scattered, or hard to maintain over time. A project can succeed in one place and still fail to create lasting change if it cannot be repaired locally or expanded to neighboring communities. That is why the next step should be to make existing systems stronger, simpler, and easier for communities to maintain themselves. Three solutions stand out. The first is *cyclone-resistant rainwater harvesting*, because rainfall is already available and collection is realistic if storage is safe and durable. The second is *flood-resistant sanitation*, including improved drainage and latrines designed for wet conditions, because contamination risks rise quickly when storms hit. The third

is *local training*, because systems fail when no locals know how to maintain them. These solutions work best together: *rainwater harvesting* gives households a safer supply, *sanitation* protects that supply, and *local maintenance* keeps both working after the first installation is over.

My recommendation is a phased, community-centered water and sanitation program that begins in Temotu Province, targeting the most vulnerable rural areas and then expanding outward. Temotu Province has historically struggled with water sanitation because it is the country's most remote province and has some of the lowest levels of WASH infrastructure in the country (Waikori). The first phase should prioritize schools and nearby households; children are among the first to feel the effects of unsafe water, and schools provide stable locations from which to begin implementation. In this phase, the goal would be to install cyclone-resistant rainwater tanks, protect catchment systems from contamination, and improve drainage around toilets and handwashing areas. That would not solve every problem immediately, but it would create a reliable base. The first phase is intended to be a short-term intervention and could be implemented in one to two years per target village cluster. A similar project supported by Water for Women reached an additional 3,500 people, providing a precedent for scaling this type of intervention (Water for Women Fund). In a place where weather is unpredictable and travel is expensive, a dependable local system matters more than a perfect national one.

The second phase should focus on training and ownership. Village leaders, teachers, and local technicians should be trained to monitor tanks, identify contamination, clean catchments, and make basic repairs. This step is critical because outside support is not always fast enough to prevent a small problem from becoming a major failure. Community ownership also makes the system feel less like a donated project and more like a shared asset. Because each community has its own needs and cultural practices, involving village leaders and residents in planning can help build trust and ensure that the project fits within local context. This phase would work best alongside phase one, with village leaders helping coordinate implementation while local technicians are taught to maintain the infrastructure. It would also help reduce the amount of additional training if local technicians learn how to repair the systems while they are being built. When people understand how a system works, they are more likely to protect it, repair it, and keep using it correctly.

The third phase should connect local systems to broader policy and funding to support long-term success. Government agencies, NGOs, and international development partners all have a role to play, but the long-term goal should be a structure that does not depend on emergency response alone. For example, the Solomon Islands have begun to adopt national policies such as the Framework for Resilient Development in the Pacific (otherwise known as FRDP), with participation from the government itself, the National Disaster Management Office, NGOs such as World Vision, and international partners such as the Humanitarian Advisory Group and the Australian Humanitarian Partnership (Humanitarian Advisory Group et al.). However, challenges such as short donor timelines and limited funding persist. For this reason, national policies should provide initial funding and establish a reliable source of continued financial support. For long-term maintenance, grants such as the United Nations' Small Grants Initiative could provide funding directly to community leaders, allowing repairs to be completed more quickly (Lilomo). Lastly, long-term expansion should become the responsibility of the government and organizations such as the United Nations. The Solomon Islands government should continue to integrate projects like this into long-term WASH policy, while the United Nations can continue to provide support

and encourage further progress. Monitoring should track whether systems are functioning, whether water quality is safe, and where repairs are needed next. Measurable outcomes are also necessary to determine the long-term success of the project. Measurable outcomes could include the percentage of installed systems still functioning six months to a year later, reductions in reported waterborne illnesses, increased school attendance, and reductions in the time spent collecting water. Together, these measures would indicate whether the project is having its intended impact. Overall, funding could come from a mix of national support, donor partnerships, and community-level coordination, but the key is that each new installation should be planned with maintenance in mind. A system that cannot be maintained is not really a solution.

There are limits to this approach, and pretending otherwise would make these solutions much weaker. Geography cannot be erased, and weather cannot be controlled. Some islands will be harder to reach than others. Some communities will need more support than others. A phased plan can improve stability, but it cannot overcome the same geographic challenges created by living across hundreds of islands. Even so, limitations are not the same as impossibility. In a country shaped by islands, distance, and climate, the most realistic solution is one that works with those conditions instead of pretending they are not there.

What stands out most is that water is never only about water. In the rural Solomon Islands, it influences food production, health, school attendance, labor, and the ability of families to plan beyond the day in front of them. The country already has strengths to build on: rainfall, community knowledge, local food traditions, and existing systems that can be strengthened rather than replaced. If the response is designed around those strengths, consistency becomes more possible. In a place where daily life depends on whether water is safe, available, and nearby, consistency is what changes everything.

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