

Nutrition and behaviour change communication strategies for Solomon Islands and Vanuatu

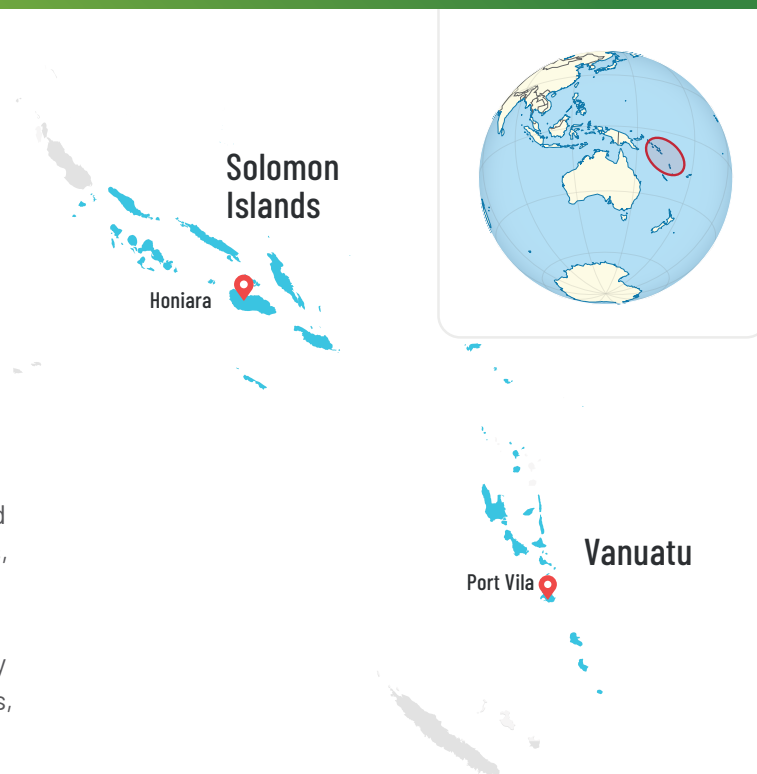


Context

The agricultural sector is key in both Vanuatu and the Solomon Islands, with approximately 80% of people engaged in agricultural and forestry activities, and dependent on subsistence agriculture for their livelihoods (FAO, 2016; VBoS, 2021). Food production and availability, depending on the region, is, however, constrained by the terrain, extreme climate events, and inadequate access to technologies, transport, and infrastructure. As such, food and market access are inadequate and vary with region. At the same time, food imports are on the rise, with increased imports of and household expenditure on processed foods, such as canned meat and fish, high fatty meat, noodles, and cereals (Allen, 2015; SINSO, 2015). The food systems are under stress due to the increasing population, a dietary shift to purchased rice and imported processed foodstuffs, a greater need to engage with the cash economy, a declining rural economy, exposure to extreme events and depletion of natural resources. These factors are affecting the availability of and access to safe, diverse, and nutritious foods in complex ways.

Availability, access, and consumption of diverse nutritious and healthy foods are of great importance because both countries are experiencing the triple burden of malnutrition, that is, undernutrition, micronutrient deficiencies and overnutrition. Reports indicate that in the Solomon Islands, 32% of children under 5 years are stunted,

and 39% are anaemic, while diets of children aged 6-23 months are lacking, with only 22% consuming the minimum recommended acceptable diets (SINSO, 2017). In addition, 41% of pregnant women aged 15-49 are anaemic, and 48% are overweight or obese. Meanwhile, in Vanuatu, 29% of children under five years are stunted, 27% are anaemic, and only 29% of children aged 6-23 months consume the minimum recommended acceptable diets. Among adults, 22% of women aged 15-49 years were anaemic and 50% were overweight or obese (VNSO and SPC, 2014).



A situation analysis in Tafea province, Vanuatu and Malaita province, Solomon Islands, showed a large diversity of locally available foods that were accessed by households through their own production, markets or the wild. However, adequate food access and availability were dependent on the level and diversity of household food production, seasonality of food, household income, nutrition-related knowledge and skills, and food culture and preferences. In fact, the diets of women and children were inadequate with low dietary diversity, reflecting the importance of strengthening the nutrition capacity of communities to access, utilise, and consume diverse and healthy diets.

Strategy development

A Nutrition and Behaviour Change Communication strategy (NBCCS) was developed to guide nutrition interventions and communication to enhance community awareness and capacity to increase access to and consumption of healthy diets. The strategy was designed for use within an agriculture for nutrition and income research for development programme, the Melanesia Rural Market and Innovation Driven (MERMAID) Programme in the Solomon Islands and Vanuatu.

Social behaviour change communication strategies are integrated approaches that foster community dialogue and action, strengthen social contexts that underpin health, and sustain individual and group behaviours that support health, in this case, behaviours that support adequate nutrition (Mahumud et al., 2022; Schmied, 2019). Behaviour change communication approaches have been used to promote positive changes in food-related attitudes, behaviours and practices and are key in ensuring that agricultural interventions, such as the production and marketing of different foods, as well as improved incomes, increasingly translate into improved diets and nutrition outcomes (Gibson, 2014; Murty et al., 2016; Osei et al., 2017).

The development process of the NBCCS acknowledged that having knowledge is but one of the several factors that influence one's ability and willingness to practise a given behaviour. And that behaviour is dynamic and dependent on knowledge, awareness, motivation to act, and familiarity, which are in turn influenced by perceptions of social norms, attitudes, and beliefs (Schmied, 2017). Furthermore, long-term change in an individual's behaviour often cannot be achieved without addressing the social and environmental factors that influence the target behaviours (Figure 1).

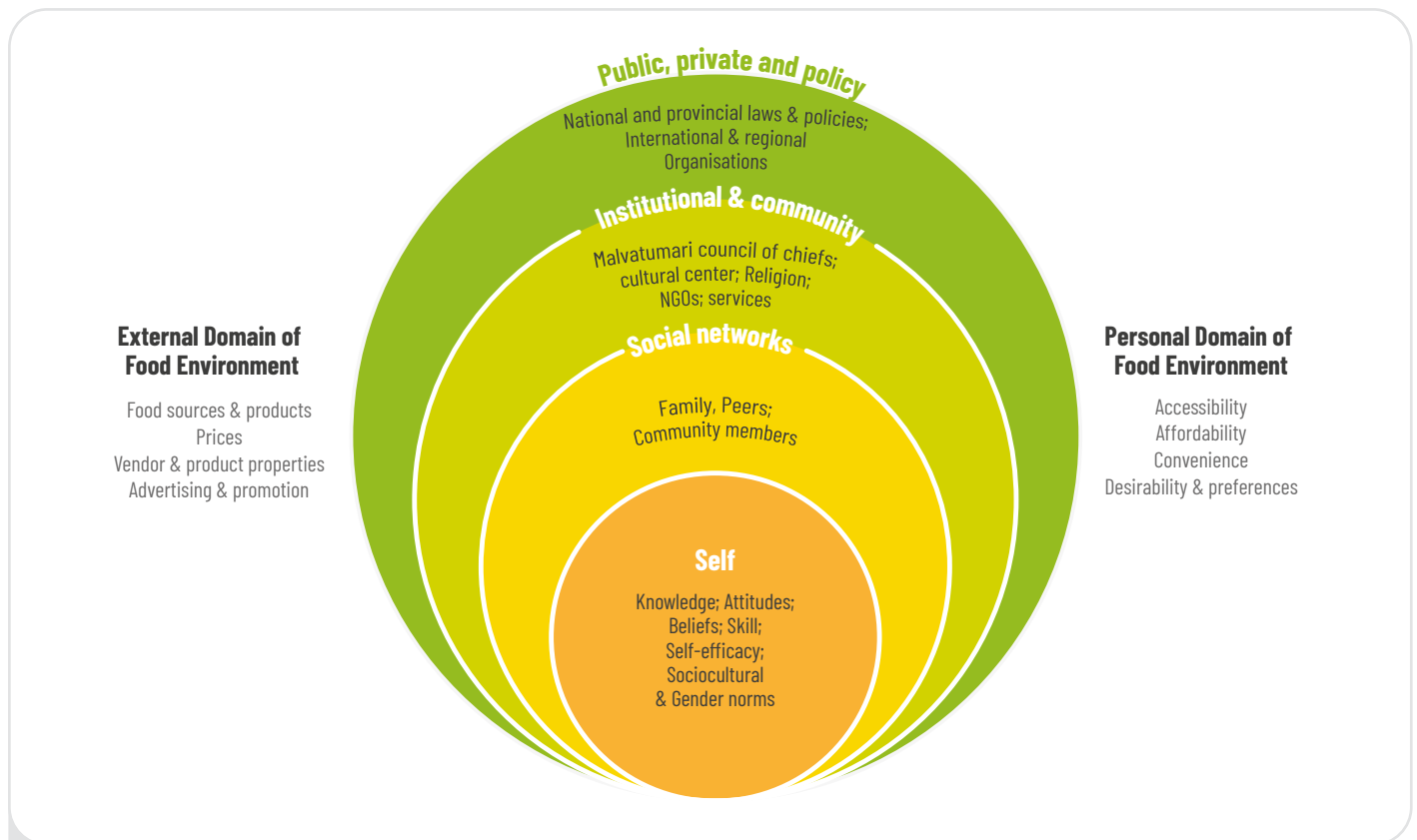


Figure 1 Influencing factors impacting on food and nutritional security (Adapted from Glanz et al., 2015; Turner et al., 2018)

The NBCCS were developed through a participatory process, utilising information from the situation analysis; assessment of seasonal food availability; the research and development experiences of both World Vision and the Alliance of Bioversity International and CIAT teams; relevant literature on nutrition behaviour change; and importantly, community knowledge and experiences. Community actors were engaged at various points, from validation of the situation analysis findings; prioritisation of key opportunities, challenges, and actors; to contextualisation of the key components of the strategy. The target groups, barriers and motivators, desired behaviours, and approaches to reach the target groups and stimulate behaviour change were discussed and prioritised together with multi sectoral actors at national, provincial and community levels.



- 1 **Situation analysis:** Quantitative and qualitative data collection; Desk review
- 2 Validation of the situation analysis
- 3 Prioritisation of opportunities, challenges, and target groups
- 4 **Consolidation of results and literature to populate elements of the strategy:** priority and desired behaviours, barriers and motivators, key issues to be addressed, approaches and activities to be implemented
- 5 **Identification and contextualisation of the key components of the strategy:** target groups, key issues to be addressed, approaches and activities to be implemented
- 6 Completion of the strategy
- 7 Validation of the developed strategy
- 8 Finalisation of the strategy

Strategy highlights

Two NBCCS were developed for Tanna, Vanuatu, and Malaita, Solomon Islands. Generally, the strategies focused on access to, utilisation and consumption of healthy sustainable diets from diverse locally available foods, while also incorporating and/or addressing the knowledge, attitudes, beliefs, skills, self-efficacy, and norms that support access to and consumption of healthy sustainable diets. The specific objectives are to:

1. Increase the knowledge about nutrition behaviours that support healthy sustainable diets in the target groups
2. Increase the perceived ability to perform the nutrition behaviours (self-efficacy) and perceived positive consequences resulting from the behaviours
3. Increase the practice of nutrition behaviours that support healthy sustainable diets.



© Deborah Nabuuma/Bioversity International

The strategies lay out the approach to supporting communities, households, and individuals to understand, adopt and sustain improved nutrition-related practices. The priority target group are smallholder farming households. In addition, key actors that influence or ensure that the smallholder farming households adopt the behaviours were identified (Table 1). Understanding the varying characteristics, needs and opportunities of the different actors was important, such that the barriers to access and use of information and resources could be addressed. For example, in the case of Tanna, only small differences in nutrition capacity and knowledge were noted between the priority group and influencing groups. As a result, the suggested approaches sought to ensure that the influencing groups are adequately and more intensively equipped before engaging the priority group.

Table 1. Actors targeted by the NBCCS

PRIORITY GROUP	INFLUENCING GROUP
Smallholder farming households: men, women, youth	<ol style="list-style-type: none"> 1. Nutrition champions 2. Extension service providers 3. Community leaders (local, cultural, and religious) 4. Food suppliers (market, shops/stalls, restaurants, etc.) 5. Development partners and implementors



Deborah Nabuuma/Bioversity International

The main desired behaviour of the NBCCS is for households to consume at least three food groups per day and at least five food groups within seven days. This goal was set based on the food consumption data from the situation analysis of an average consumption of 2-3 food groups (*publication in progress*).¹ The goal serves as a steppingstone towards the recommended dietary diversity of four food groups for children (6-24 months) and five food groups for women.

To achieve this nutrition goal, several specific desired behaviours corresponding to the different target groups are presented (Table 2 and 3). As well as the key underlying issues that, when addressed through the selected approaches, communities, households, and individuals are better able to understand, adopt, and sustain the desired behaviours. Based on the proximity and similarity in the food systems in both the Solomon Islands and Vanuatu, a big proportion of the desired behaviours and issues related to food availability, accessibility, and utilisation were similar. The common elements are summarized in Table 2. The respective country strategies provide additional details that are country specific.

¹ The situation analysis in 2021 showed that 91% of children did not meet the minimum recommended dietary diversity of four food groups. The most consumed food groups were starchy staples (95-96%), fruits & vegetables (40-69%), and meat, poultry & fish (28-37%).

Table 2. Desired behaviours and issues related to food availability, accessibility, and utilisation to address for target groups in the Solomon Islands and Vanuatu

PRIORITY BEHAVIOUR CHANGE	DESIRED BEHAVIOUR	KEY ISSUES TO BE ADDRESSED
Increase local household food production	<ul style="list-style-type: none"> • Increase production diversity – households farm at least 1 additional nut &/or legume, fruit, & vegetable • Improve post-harvest handling and storage – households handle and store food safely 	<ul style="list-style-type: none"> • Increase planning skills to ensure seasonal production & food availability • Knowledge and skills on integrated soil and crop management • Increase knowledge and skills on post-harvest handling and storage • Increase knowledge on nutrition and value of diverse production and consumption, especially locally produced foods
Use of household income to increase consumption of local food & nutritious meals	<ul style="list-style-type: none"> • Improve financial management – households increase the amount of income saved • Increasing informed food choice – households able buy foods that contribute to the diversity of diets 	<ul style="list-style-type: none"> • Increase budgeting and saving skills • Increase knowledge on nutrition and value of diverse diets • Increase perception of the cost & implications of inadequate diets • Increase perception of (nutrition) value for money during food purchase
Increase household skills and knowledge in preparing local & nutritious meals	<ul style="list-style-type: none"> • Increase dietary diversity – women & children consume at least 3 food groups per day & 5 food groups per week • Increase food consumption – children consume at least 3 meals per day 	<ul style="list-style-type: none"> • Increase food preparation skills that maintain & enhance nutrient quality, are labour and time sensitive (of affordable, tasty, diverse meals using local foods) • Increase awareness on infant & young child feeding importance & practices • Increase consumption of nuts & seeds, legumes, eggs & healthier animal source products • Awareness on the nutritional value of locally produced foods
Increase local food & nutritious meals in the community	<ul style="list-style-type: none"> • Improve the diversity and nutrient quality of foods/meals sold in the community • Improve access to diverse foods - community members utilise different food sources to access diverse nutritious foods throughout the year 	<ul style="list-style-type: none"> • Increase use of locally available nutritious foods (including wild foods) • Increase post-harvest handling and storage, & food preparation skills • Increase awareness on where and when in the community diverse nutritious foods can be accessed • Reduce consumption of foods high in salt, sugar, and fat • Increase knowledge, skills and participation of children and youth

Below is a summary of the proposed approaches and activities that can be used to address the key underlying issues related to food availability, accessibility, and utilisation identified:

- 1. Capacity building** of the influencing groups which includes training of trainers and dissemination of developed materials and tools (job aids).
- 2. Skilling of the target group** through sharing of knowledge and practices. For example, practical demonstrations; demonstration gardens; and exchange visits, seed/food/farmer fairs, cooking competitions, etc. This also includes activities conducted at/through institutional or community environments, such as schools, churches, etc.

3. **Awareness creation** of the larger community beyond the target group in the project sites through mass media, social media, and communication through the various community leaders' platforms (local, cultural, and religious leaders) and platforms of other influencing groups.

The main key messages are for the NBCCS are:

- i. Diversity – consume diverse diets that include five main food groups (starchy staples, animal protein, plant protein, fruits, and vegetables)
- ii. Locally available – different sources in the community can be used to access foods that make a diverse diet
- iii. Value for money and nutrition – use income at the market to buy foods that contribute to the diversity of diets.

The implementation plan is accompanied by a corresponding monitoring and evaluation plan that sets out the indicators and activities that are required to determine whether implementation of the NBCCS achieves the desired outcomes and whether the observed changes can be attributed to the strategy.



© Deborah Nabuuma/Bioversity International



Key lessons



Context and framing: The strategy should build upon traditional and local knowledge and practices and enhance a learning and empowering environment. This requires a deliberate framing of what the challenges, opportunities and needs are, in ways that acknowledge and include the target communities as active actors with the capacity to build their communities towards their envisioned future.



Implementation: The importance of the activities varies based on the needs and opportunities of the communities, and available resources at the time of implementation. Therefore, the scope, order, sequencing of activities needs to be responsive. The proposed approach and activities were selected for implementation alongside other actions to improve the capacity of communities towards enhanced food production, nutrition, income, and livelihoods. As such, the strategies provide a framework that can be used to plan and track activities that have the potential to support behaviour change.



Nutrition materials: Implementation of the selected approaches and activities requires a variety of nutrition materials to provide information that is relevant, related to already known knowledge or preconceived ideas, and that corresponds to characteristics and culture of the target groups. In addition, the different activities and nutrition materials should complement one another in content and implementation (sequencing) to reinforce the main nutrition messages and facilitate behaviour change.

References

- Allen MG. 2015. Framing food security in the Pacific Islands: empirical evidence from an island in the Western Pacific. *Reg Environ Change* 15, 1341–1353. <https://doi.org/10.1007/s10113-014-0734-5>
- FAO. 2016. Aquastat Country Profile: Solomon Islands. Food and Agriculture Organization.
- Gibson RS. 2014. Enhancing the performance of food-based strategies to improve micronutrient status and associated health outcomes in young children from poor-resource households in low-income countries: challenges and solutions, in: Thompson B, Amoroso L, C.A.B. International (Eds.), *Improving diets and nutrition: food-based approaches*. CABI; Food and Agriculture Organization of the United Nations, Wallingford, Oxfordshire: Rome, Italy, pp. 19–31.
- Glanz K; Rimer BK; Viswanath K. (Eds.), 2015. *Health behavior: theory, research, and practice*, Fifth edition. ed, Jossey-bass public health. Jossey-Bass, San Francisco, CA.
- Mahumud RA; Uprety S; Wali N; Renzaho AMN; Chitekwe S. 2022. The effectiveness of interventions on nutrition social behaviour change communication in improving child nutritional status within the first 1000 days: Evidence from a systematic review and meta-analysis. *Maternal & Child Nutrition* 18. <https://doi.org/10.1111/mcn.13286>
- Murty PVVS; Rao MV; Bamji MS. 2016. Impact of enriching the diet of women and children through health and nutrition education, introduction of homestead gardens and backyard poultry in rural India. *Agric Res* 5, 210–217. <https://doi.org/10.1007/s40003-016-0206-x>
- Osei A; Pandey P; Nielsen J; Pries A; Spiro D; Davis D; Quinn V; Haselow N. 2017. Combining home garden, poultry, and nutrition education program targeted to families with young children improved anemia among children and anemia and underweight among nonpregnant women in Nepal. *Food Nutr Bull* 38, 49–64. <https://doi.org/10.1177/0379572116676427>
- Schmied P. 2017. Behaviour Change Toolkit for international development practitioners. Enabling people to practice positive behaviours.
- Schmied P. 2019. *Social and Behaviour Change. Insights and Practice; Practitioner's Guide*.
- SINSO. 2015. Household Income and Expenditure Survey - National Analytical Report. Solomon Islands National Statistics Office (SINSO).
- SINSO. 2017. Solomon Islands Demographic and Health Survey 2015. Solomon Islands National Statistics Office (SINSO); Solomon Islands Ministry of Health and Medical Services and the Pacific Community.
- Turner C; Aggarwal A; Walls H; Herforth A; Drewnowski A; Coates J; Kalamatianou S; Kadiyala S. 2018. Concepts and critical perspectives for food environment research: A global framework with implications for action in low- and middle-income countries. *Global Food Security* 18, 93–101. <https://doi.org/10.1016/j.gfs.2018.08.003>
- VBoS. 2021. Vanuatu Population and Housing Census 2020. Preliminary Results. Vanuatu Bureau of Statistics (VBoS).
- VNSO, SPC. 2014. Vanuatu Demographic and Health Survey, 2013. Vanuatu National Statistics Office (VNSO); Secretariat of the Pacific Community (SPC).

Acknowledgement

The authors acknowledge the support and contribution of World Vision Vanuatu, World Vision Solomon Islands, Regenerative Vanua, and the People of Tanna and Malaita.

The Melanesia Rural Market and Innovation Driven (MERMAID) Programme is a research for development programme in the Solomon Islands and Vanuatu implemented by World Vision and the Alliance of Bioversity International and CIAT with support from the International Fund for Agricultural Development (IFAD). The goal is “To establish scalable pathways for increased consumption of local, nutritious foods, and improved incomes.”

Correct citation

Nabuuma D; Ekesa B. 2024. Nutrition and behaviour change Communication strategies for Solomon Islands and Vanuatu. Brief. Bioversity International. Kampala, Uganda. 8 p.

Authors

Beatrice Ekesa, Senior Scientist, Uganda, Bioversity International. b.ekesa@cgiar.org

Deborah Nabuuma, Scientist, Malaysia, Bioversity International. d.nabuuma@cgiar.org



Contact

Beatrice Ekesa

✉ b.ekesa@cgiar.org



The Alliance is part of CGIAR, a global research partnership for a food-secure future dedicated to transforming food, land, and water systems in a climate crisis.