



STRENGTHENING CAPACITY IN HOME GARDENING, HEALTHY FOOD AWARENESS AND EFFECTIVE BIOSECURITY FOR TOKELAU

September 2020

SDGs:













Countries: Tokelau

TCP/TOK/3601 **Project Codes:**

FAO Contribution USD 205 000

Duration: 1 January 2017 - 31 December 2019

Contact Info: FAO Subregional Office for the Pacific

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Implementing Partners

Department of Economic Development, Natural Resources and Environment (EDNRE).

Beneficiaries

EDNRE personnel; 150 households across the Atafu, Fakaofo and Nukunonu atolls.

Country Programming Framework (CPF) Outputs

Enhanced capacity to review, strengthen and implement quarantine regulations (Output 1.3); Capacity for community and family food gardens and small livestock production enhanced (Output 2.2); Strengthened capacity to implement food security and nutritional awareness programs and to promote local food choices (Output 2.3).



BACKGROUND

As a net food importer and remote atoll island nation with limited land and soils of low fertility, Tokelau has faced increasingly complex challenges in ensuring a reliable, sufficient and diversified local production of essential food crops for its population of under 1 500 people.

Tokelau's need for enhanced technical capacities for food crop production, climate change adaptation and integrated pest management comes on the heels of its government's call for collaborative efforts between national authorities, local communities and technical and resource partners to help revitalize domestic food production. These efforts are part of a broader commitment to safeguarding fragile ecosystems and building preventive capacities to new pests and diseases that affect small island developing states (SIDS).

Consumer demand for imported, processed goods has also increased in recent years, with latest estimates suggesting that up to 90 percent of all food consumed in Tokelau is imported. In addition to this missed opportunity for communities to rely on local production for their dietary needs, the Tokelau Department of Health has warned against a rising dependency on imported, processed foods and its contribution to increases in non-communicable diseases (NCDs).

To this end, FAO aimed at supporting ongoing national food and nutrition security efforts from a multidimensional perspective and with the support of inter-disciplinary expertise with which to tackle the following priorities.

- ➤ Enhance EDNRE technical expertise in agricultural production and livestock development;
- ➤ Improve soil health and nutritional composition to support domestic food production;
- Facilitate improved access to innovative agricultural technologies and best practices; and
- > Strengthen capacities on biosecurity support services.

The project also supported follow-up actions from Tokelau's National Strategy Plan for 2010-2015, which prioritized food and nutrition security as a core driver for development, including through (i) developing sustainable crop, livestock and forestry systems, (ii) improving biosecurity for trade, (iii) promoting village and community-centered capacity development and (iv) facilitating research-based solutions for pest management. In light of these areas of work, the project worked with the EDNRE and other authorities and communities to ensure the following.

- National capacity development activities for coordination mechanisms for food crop production and public health carried out;
- Programmatic and capacity assessments with governmental departments, national counterparts, development partners and other stakeholders performed;
- ➤ Demonstrative trainings on home gardening, small-scale livestock rearing completed; and
- ➤ Outreach and guidance materials on biosecurity and nutrition education produced.

IMPACT

Having strengthened the planning and technical capacities of EDNRE personnel and developed the practical skills of households on home-gardening production, livestock productivity, food safety, biosecurity and nutrition education, the project helped Tokelau reap the benefits of greater self-reliance and food sovereignty, improved local food crop production capacities and improved public health outcomes moving forward.



ACHIEVEMENT OF RESULTS

This project built on the results and findings of a previous Technical Cooperation Programme (TCP) project that supported Tokelau's land use planning (TCP/TOK/3501) and worked closely with a second TCP project on coastal replanting (TCP/TOK/3502), with which a number of capacity development linkages were identified. These mutually constructive efforts contributed to the following milestones.

- Capacity building, demonstrative trainings and nutrition education and community outreach efforts delivered to 78 EDNRE officials and island council members and 150 households on improved nutrition and healthy diets, food safety and the revitalization of home-grown food crop production for local consumption;
- Enhanced capacities of EDNRE personnel on food safety, biosecurity, quarantine support and the surveillance, control and prevention of pest outbreaks;
- A participatory rural appraisal (PRA) and a baseline household survey completed in order to support the EDNRE in its targeted technical support to farmers, including through technical manuals and guidance materials;
- ➤ A series of trainings for 34 households across the three atolls completed on the improvement of small-scale pig production; and
- ➤ In parallel with TCP/TOK/3502, two dual forestry and agriculture nursery facilities designed and implemented in the Atafu and Fakaofo atolls, followed by capacity building efforts on nursery management, the transfer of essential tools (shredders and planting materials) and the production of a training manual on integrated farm management guidelines.

As such, the project's inter-disciplinary approach to food and nutrition security contributed to SDG 1, 2, 3 and 12, with significant contributions to SDG 13, 15 and 17 as well. What's more, the community-wide interest fostered by the project was made possible through effective community leadership working alongside FAO and ENDRE personnel, as well as by actively involving students and youth groups in demonstrative trainings through school gardens.



IMPLEMENTATION OF WORK PLAN

The project faced recruitment and procurement-related delays and logistical challenges due to Tokelau's geographical remoteness and poor transport linkages from other countries. Therefore, the three project outputs were achieved to varying degrees. In addition, several workplan adjustments took place in response to the November 2019 measles outbreak. The following are noteworthy changes to the workplan, as agreed with government stakeholders at the time.

- The project's biosecurity component was delivered with the Government of New Zealand, the Pacific Community (SPC) and Victoria University in Wellington to avoid duplicating efforts and reap the benefits of pooled resources and expertise;
- ➤ The small poultry system demonstration component was replaced with small-scale pig production, which entailed a lengthy procurement procedure of six boars, which had to reach three months of age before being delivered in Tokelau; and
- ➤ The measles outbreak in the Pacific region affected the project's nutrition education component, especially since the recruitment of a nutrition consultant in January 2019 was initially delayed until November 2019, at which point the outbreak was starting.

In light of the above, Activities 2.4 and 2.5 on demonstration plots, home gardening and poultry systems, and Activities 3.2 – 3.6 on nutrition education and imported food inspection modalities, were partially completed by the project's revised end date of 31 December 2019 (extended from 31 December 2018). The remaining activities were completed on time and within the allocated budget, thanks in part to the active participation and buy-in of local authorities during all project stages, as well as from a project risk management strategy that recognized the importance of engaging all community members to ensure a sustained interest in the project.

FOLLOW-UP FOR GOVERNMENT ATTENTION

The New Zealand government committed to providing Tokelau with financial and technical assistance on border, customs and food import quality control priorities in continuation to this project. Therefore, FAO personnel in the Sub-Regional Office for the Pacific and officials from the EDNRE are invited to explore cooperation and/or knowledge exchange opportunities with the SPC and the New Zealand government moving forward.

In addition, in light of the six boar piglets that were delivered towards the end of the project, it is expected for cross breeding and multiplication of the boards to take place. To this end, EDNRE and FAO should follow up with the communities in order to ensure that this objective is achieved, as originally planned.

SUSTAINABILITY

1. Capacity development

In empowering and encouraging the local population, the majority of whom are lifetime fisherfolk, into new food crop production activities, the project tailored all trainings to different types of audiences, ranging from agriculture and public health officials to local farmers, community leaders, teachers and students. As such, the project's approach to experiential learning proved successful, especially with respect to students and the use of school gardens to facilitate nutrition education from a young age. Moreover, the project's capacity development efforts responded to the constraints previously identified by TCP/TOK/3501 with respect to improved soil management techniques, updated border control and quarantine procedures and new domestic food production techniques.

2. Gender equality

All project activities ensured active participation of the three main community groups in Tokelau: the *Fatupaepae* (women), the *Aumaga* (men) and the *Taupulega* (Council of Elders). Their involvement ensured that trainings and workshops responded to gender-specific considerations around work burdens for men and women according to their time commitments for on and off-farm work. In this respect, all trainings and guidance materials contributed to time-saving modalities in crop production, soil management and biosecurity controls for men and women. Moreover, the project encouraged the establishment of a Village Cooperative Store Food Purchasing Committee, which was comprised of women-led groups, local health officials and the Council of Elders

3. Environmental sustainability

The project supported market-based solutions to Tokelau's food and nutrition security needs, in accordance to the needs and opportunities for ecosystem protection moving forward. All project activities were anchored on the premise of sustainable domestic food production practices that are in sync with national priorities for marine and land-based ecosystem protection and preventive pest management efforts. As such, the project successfully mainstreamed environmental sustainability in all its activities.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The project contributed to the progressive realization of the Right to Food with emphasis on the right to healthy and culturally appropriate food produced through ecologically conscious and sustainable methods, in turn contributing to the nutritional, cognitive and socioeconomic development of Tokelau's population.

Moreover, the planting materials, working tools and biosecurity control guidance offered by the project helped farmers work more efficiently on physically demanding tasks, thus improving on-farm work conditions. With more time available to them, farmers were able to develop and manage nurseries and pilot new types of food crop production.

5. Technological sustainability

The technical guidance materials, information dissemination products and demonstrative capacity building workshops introduced new concepts and techniques to revitalize local food crop production and carry out small-scale livestock activities. As such, household government officials and members strengthened their conceptual understanding of, and developed practical skills on, diversified vegetable production, healthy dietary choices and food safety and biosecurity standards.

The demonstrative trainings were adaptable to the needs of EDNRE officials and households alike. Moreover, the learning-by-doing approach adopted throughout the project was well received as was the training of trainers for ENDRE and public health officials, whose new skills and toolsets will allow them to better support communities.

6. Economic sustainability

The project's in-kind support, training materials and demonstrative capacity building efforts enabled EDNRE officials and households to pursue economically and environmentally sustainable and reliable food crop and small-scale livestock production. In addition, the project's collaboration with the Village Cooperative Store Food Purchasing Committee on nutrition education and food import modalities shall improve the selection and promotion of imported food varieties against national dietary and nutritional priorities.

In terms of identifying additional resources for the continuation of key activities, the Government of New Zealand expressed its commitment to continue providing financial and technical assistance on border, customs and food import quality control.

DOCUMENTS AND OUTREACH PRODUCTS

- ☐ Back-to-Office Report (22-25 June). T. Keresoma. Tokelau. 2017. 15 pp.
- ☐ First Mission Report. (22-25 June) S. Diarra. Tokelau. 2017. 3 pp.
- ☐ First Mission Report (22-25 June). M. Konelio. Tokelau. 2017. 3 pp.
- ☐ Second Mission Report (3-11 December). M. Konelio. Tokelau. 2017. 6 pp.
- ☐ Third Mission Report. (13 January 6 February) M. Konelio. Tokelau. 2018. 19 pp.
- ☐ End of Mission Report (24 June 31 July). BM. Bejo. Tokelau. 2019. 37 pp.
- ☐ End of Mission Report (15 October 31 December).
 DL. Pupi. Tokelau. 2019. 88 pp.
- ☐ Laupele (Abelmoschus manihot). Information Pamphlet 1. 2019. 1 pp.
- ☐ Laupele (Abelmoschus manihot). Information Pamphlet 2. 2019. 1 pp.
- ☐ Eat a Rainbow. Poster. 2019. 1 pp.
- ☐ Food Security. Poster. 2019. 1 pp.
- ☐ *High Fat Foods*. Poster. 2019. 1 pp.
- ☐ *High Sugar Foods*. Poster. 2019. 1 pp.
- ☐ Let's Go Local. Poster. 2019. 1 pp.
- ☐ *Tokelau Healthy Plate*. Poster. 2019. 1 pp.
- ☐ Tokelau learns from Samoa. Press Release. FAO Regional Office for Asia and the Pacific. Apia. 2019. 1 pp. https://bit.ly/3mOJXVe.







ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Improved food and nutrition security for the people of Tokelau			
Outcome	Local food production and consumption increased and border protection strengthened in Tokelau			
	Indicator	 Number of trained EDNRE staff on biosecurity (Output 1). Number of households with home gardens and small poultry units (Output 2). Number of fruit trees, root crops and vegetable crops planted by households over the course of the project (Output 2). Number of households with skills and knowledge on nutrition and promotion of local food choices (Output 3). Number of public health and community workers trained as trainers on food security, nutrition and promotion of healthy food choices, including local food to sustain ongoing awareness and nutrition training (Output 3). Imported food inspection operation guidelines developed (Output 3). Number of food inspection staff from the EDNRE, Health, Transport and Support Services, Police and the Co-op Village store and committee trained on imported food control inspection services (Output 3). 		
	Baseline	 0 Not established. Not established. 0 0 0 		
	End Target	 8 50 5000 150 Imported food inspection operation guidelines in place. 32 		
	Comments and follow-up action to be taken	All three project outputs were achieved, although to varying degrees. Due to the measles outbreak in the region that led to border closures, the project's planned activities on poultry systems was replaced by technical assistance on small-scale pig rearing, as requested by the Government of Tokelau. Other activities were not completed on time due to recruitment and procurement delays. Nonetheless, the project swiftly adapted to a revised workplan and achieved, and exceeded in some cases, many of its intended targets, as follows. Eleven ENDRE officials were trained in biosecurity and quarantine procedures, exceeding the target of eight participants; Fifteen participants, including six EDNRE officials, received specialized training on small-scale pig production, in line with the delivery of six boars and the production of training and guidance materials and manuals; Three training sessions on home gardening practices, improved crop production and animal husbandry modalities benefited 78 EDNRE and island council members across the three atolls; One hundred households were trained on nutrition and the promotion of healthy dietary choices; Eighteen public health officials and community health personnel were trained on food security, nutrition and the promotion of healthy food choices, exceeding the target of 15 trained officials; and Forty government officials were trained on food control and inspection modalities, but only in the Nukunonu atoll.		

	Border control and EDNRE biosecurity support services strengthened				
Output 1	Indicators		Target	Achieved	
		ained EDNRE staff on biosecurity.	8	Yes	
Baseline	0				
Comments	FAO discussed with Tokelau government representatives and EDNRE personnel the key priorities on biosecurity that the project could support moving forward. These consultations revealed that the Government of New Zealand, in partnership with Victoria University in Wellington and the SPC, were already planning on providing border control and biosecurity support to Tokelau. To avoid duplication of efforts, FAO agreed to collaborate with these partners in the delivery of this technical assistance. Output 1 was successfully completed, with a total of 11 ENDRE officials trained on biosecurity and quarantine controls; this exceeded the intended target of eight trained EDNRE officials.				
		nsultations and workshops on biosecurity			
	Achieved	Yes			
Activity 1.1	Comments	These consultations revealed that the Government of N University in Wellington and the SPC, were planning on biosecurity support to Tokelau. FAO agreed to collabor services with these partners, thus reaping the benefits	providing border control and attein the delivery of these su	d ipport	
	Review biose	curity operation and draft regulations			
	Achieved	Yes			
Activity 1.2	Comments	The aforementioned partnership arrangement allowed and assessing current biosecurity operations in Tokelau village by-laws.		-	
	Implement bi	osecurity strategy			
	Achieved	Yes			
Activity 1.3	Comments	As part of the partnership arrangement mentioned about implementing a biosecurity strategy.	ve, the EDNRE received supp	ort in	
	Conduct train	ing for EDNRE officers on biosecurity operations			
	Achieved	Yes			
Activity 1.4	Comments	The project worked alongside the Government of New Wellington and the SPC in delivering a one-week training 11 EDNRE officials. As part of this training, technical pe Samoan quarantine modalities and interpreted them u Quarantine Law, thus ensuring that the two national quis especially important since all imported goods arriving efforts featured the presentation of briefings and lesso risk profiling, analysis and assessment, import permits, hygiene systems and biosecurity awareness and emerg The project led outreach and public awareness consults modalities for the 11 ENDRE officials as well. Due to liminto Tokelau, the training took place in Apia instead.	ng in Apia, Samoa during May rsonnel from the SPC assessed ander the framework of the Tourantine tools are complements in Tokelau come from Samons learned on pre-border biouphytosanitary certificates, coency plans.	2018 for d the okelau entary. This ia. These security, intainer	
	Develop and	print biosecurity awareness and extension material			
Activity 1.5	Achieved	Yes	<u> </u>		
	Comments	The Government of New Zealand, in partnership with V SPC, completed this activity under the alternative partr the development of biosecurity awareness outreach an brochures, posters and leaflets.	ership arrangement. These e	fforts led to	

Achieved				
Partially				
Not established.Not established.				
A three-day centralized training on the improvement of small-scale pig production in Tokelau was delivered in the Atafu atoll for 15 participants (including six EDNRE officials) during the period of June – July 2019. In turn, training materials were prepared following the shipment of six boars to Tokelau. Additionally, three training sessions on home gardening practices, improved crop production and animal husbandry modalities benefited 78 EDNRE and island council members across the three atolls. Output 2 was only partially achieved given that the project was forced to substitute its activities around poultry systems with new activities on small-scale pig production, as outlined below under Activities 2.4 and 2.5. As such, the envisioned target of 50 households with home gardens and small poultry systems was only fully achieved in terms of home gardens. Similarly, the end target of 5 000 fruit trees, root crops and vegetable crops planted only reflects the number of vegetable crops planted.				
baseline us of				
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ings on production were e trained,				
outbreak in ens for the en y the yegetable 501), and den				
was not g coll in oll y 2018),				

	Nutrition and food security awareness and local food choices promoted at household level			
	Indicators	Target	Achieved	
Output 3	 Number of households with skills and knowledge on nutrition and promotion of local food choices. Number of public health and community workers trained as trainers on food security, nutrition and promotion of healthy food choices, including. local food to sustain ongoing awareness and nutrition training. Imported food inspection operation guidelines developed. Number of food inspection staff from the EDNRE, Health, Transport and Support Services, Police and the Co-op Village store and committee trained on imported food control inspection services. 	 Imported food inspection operation guidelines in place 	Partially	
Baseline	- 0 - 0 - 0 - 0			
Comments	As part of the project's nutrition education efforts, six billboards and several pamphlets promoting and explaining the added value of healthy dietary choices were presented to government stakeholders. Overall, the expected targets under Output 3 were completed to varying degrees, as outlined below. Only 100 households were trained on the promotion of healthy eating instead of 150, as the measles outbreak limited the trainings to only one atoll; A total of 18 public health and community health workers were trained, exceeding the expected target by an additional three workers trained; The imported food inspection operation guidelines were not completed due to workplan interruptions from the measles outbreak; and A training on food control and inspection modalities was completed for the Nukunonu atoll only, where 40 participants were trained on food control and inspection modalities; this training alone exceeded the intended target of 32 trained officials.			
	Training of trainers for public health staff and community health worker	S		
Activity 3.1	Achieved Yes On November 2019, a training-of-trainers workshop for community health personnel was carried out, focusing promotion of healthy food choices, including local food awareness raising and nutrition education efforts across	· 18 public health officials and on food security, nutrition an s. These trainings supported o	d the	
	Train communities on food security, nutrition and promotion of healthy			
	Achieved Partially			
Activity 3.2	An international consultant led trainings for 100 households on food security, nutrition and the promotion of healthy food choices in close collaboration with public health officials and community health workers. The number of participants trained was lower than the expected target of 150 households because the consultant could only deliver the training on one atoll (Nunkunonu) due to the measles outbreak and border closures at the time.			
	Assist Co-op Store Committee select foods which address the health and		nunities	
Activity 3.3	Achieved Partially A November 2019 workshop took place in the Nukunor officials and inspection personnel from the Village Cool Committee, the EDNRE and health, transport and supply whom 60 percent were women. The project also provided technical guidance to the Vill Committee on nutritional values of food and beverages collaboration with the Ministry of Health and the local on the provision of local and imported food varieties work Due to the border closures resulting from the measles of Nukunonu atoll.	nu atoll, convening 40 employ perative Store Food Purchasin ort service and police authorit age Cooperative Store Food P and on healthy food recipes, health committees. Recomme ere also developed.	ees, g ties, of urchasing in endations	

Activity 3.4	Conduct training on imported food inspection operation		
	Achieved	Partially	
	Comments	Only one training was completed on November 2019 in the Nukunonu atoll due to border closures resulting from the measles outbreak. This one-day workshop convened 40 participants who received training on food control and inspection modalities. This exceeded the intended target of 32 participants across the three atolls.	
Activity 3.5	Develop and print imported food control inspection operational guidelines and extension material and manual		
	Achieved	Partially	
	Comments	The measles outbreak prevented this activity from being completed, although six nutrition education posters and billboards were developed and delivered.	
Activity 3.6	Establish garden demonstration plots at schools for training purposes		
	Achieved	Partially	
	Comments	One hundred households, including schoolteachers and students, attended a November 2019 workshop on food and nutrition security and the promotion of healthy food choices, including through the use of school gardens. The border closures in response to the measles outbreak limited this activity to the Nukunonu atoll only.	