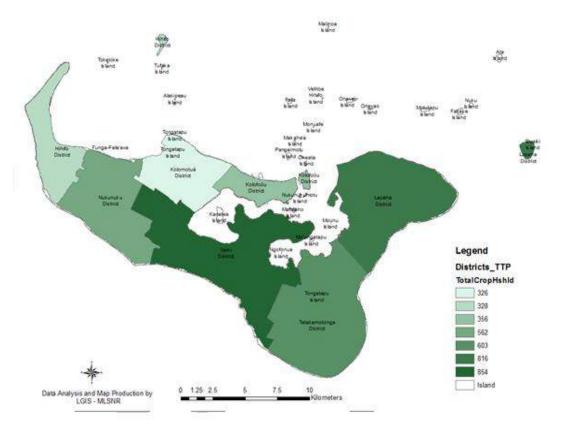


# 2015 TONGA NATIONAL AGRICULTURAL CENSUS MAIN REPORT



Ministry of Agriculture, Food, Forests and Fisheries (MAFFF)
Tonga Statistics Department (TSD)
Food and Agriculture Organization of the United Nations (FAO)







31 December 2015 Nuku'alofa TONGA \*\*\*\*\*

### **Cover Page**

The map that appears in the cover page presents the geographical distribution of agriculture active households in Tongatapu island region.

The darker the colour shade the higher is the number of agriculture active households in that district.

\*\*\*\*\*

### Ministry of Agriculture, Food, Forests and Fisheries (MAFFF) Tonga Statistics Department (TSD) Food and Agriculture Organization of the United Nations (FAO)



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### **PREFACE**

Fourteen years have passed since the 2001 Agriculture Census was conducted. In view of the significant changes that have happened in the agriculture sector, the 2001 Agriculture Census data is now considered to be out-of-date. For this reason the Ministry of Agriculture, Food, Forests and Fisheries (MAFFF) initiated the 2015 Tonga National Agriculture Census (TNAC). This census will ensure that MAFFF's development programs and policies are based on up-to-date and accurate agriculture statistics. The Government of Tonga and MAFFF, in particular, is proud to be one of the first governments in the Pacific to implement its third agriculture census.

The implementation of this census would not have been possible without the generous technical and financial support of the Food and Agriculture Organization (FAO) of the United Nations under its Technical Co-operation Programme (TCP/TON/3403). This project was jointly implemented by MAFFF and the Tonga Statistics Department (TSD) with the main objective of providing up-to-date and accurate data on the structure of agriculture in Tonga for the formulation, appraisal and implementation of agriculture development programmes and policy in Tonga.

The purpose of this Report is to analyze the census data and to provide detailed statistical tables that users can easily access. The Report is presented in eleven chapters. Chapter 1 contains an overview of the agriculture sector in the context of the Tongan economy, the objective and scope of 2015 TNAC and highlights of key findings from the census. Chapter 2 discusses the agriculture holdings, the land tenure system and land uses for both town and bush allotments. Agricultural activities, namely kitchen garden and small livestock in the town allotments, were analyzed for the first time in the 2015 agriculture census. This new section was in response to the growing amount of agricultural activities that are believed to be taking place in the town allotment, and the need to capture these. Chapters 3 looks at the level of agricultural activities taking place in the Kingdom, namely subsistence, semi-subsistence and commercial.

Chapter 4 analyzes the characteristics of the agriculture-active population, namely the age groups, gender, education and employment levels. Chapters 5, 6 and 7 analyze crops, livestock and fisheries. Chapter 8 looks at handicraft and forestry activities.

Chapter 9 looks at farm inputs, farm practices and impediments to agricultural activities in

each of the main sub-sectors, namely: cropping, livestock, fisheries, forestry and handicraft. Chapter 10 provides a summary, challenges and tentative recommendations. Chapter 11 contained 96 statistical tables which presented data from the 2015 TNAC.

I am confident that the information in this report will be invaluable not only in confirming agriculture sector benchmarks for national account purposes but will also provide much needed up-to-date data for strategic planning and policy formulation for agricultural development in Tonga. This will be of assistance to the Government of Tonga and to associated organizations and individuals, both in Tonga and abroad.

Mrs. Losaline Ma'asi

Chief Executive Officer of MAFFF and

Chairperson of the 2015 Tonga National Agriculture Census Steering Committee

### **ACKNOWLEDGEMENTS**

The successful completion of the 2015 TNAC, and of this Report, would not have been possible without the significant contributions of many individuals, national and international organizations and numerous key stakeholders. We would like to give acknowledgements to some of these contributors though we may not be able to acknowledge all.

The former Minister of MAFFF, Honorable Sangster Saulala and the current Minister of MAFFF, Honorable Semisi Fakahau and Minister of Finance and Planning, Honorable Dr. 'Aisake Eke, have accorded high priority to the implementation of the 2015TNAC. Their willingness to avail part of their budget and staff time to assist with the implementation of the census is deeply appreciated.

A note of appreciation is also extended for the guidance and advice given by the chairwoman, Mrs. Losaline Ma'asi, and members of the 2015 TNAC Steering Committee. Acknowledgement is also extended to the National Project Coordinator, Mr. Manaia Halafihi, and his team for the great effort put into implementing this project within the given timeframe. The work of the field staff, namely enumerators and supervisors is also acknowledged here.

The technical and financial assistance of the FAO of the United Nations, under the FAO/TON/3403, have enabled the planning and implementation of this census. Without FAO technical assistance the project successful implementation would not have been possible. We appreciate the services rendered by FAO Senior Statistician, Dr. Mukesh Srivastava; International Consultants, Mr. Choiril Maksum and Dr. 'Ofa Ketuu; and national consultants, Mrs. Sinai Tuitahi, Mr. Taniela Hoponoa and Dr. Vailala Matoto.

The technical, administrative and budget support from Mr. Gavin Wall, sub-regional coordinator for the FAO Pacific Office, and his team is also acknowledged here. The day-to-day support provided by the FAO Samoa Office to the project team on the field was invaluable. Special acknowledgement is given to the Assistant FAO Residence Representative for Tonga, Mr. Paumolevuka Likiliki for his steadfast and continuous support to the project team throughout the project duration.

Special thanks and appreciation are due to the Government Statistician, Mr. 'Ata'ata Finau, and staff of the TSD; namely Mr. Winston Fainga'anuku and Miss. Vaimoana Soakimi, who have made significant contributions to the implementation of the 2015 TNAC from beginning to end.

Special acknowledgement is made of the technical contribution made by the Secretariat for the Pacific Community (SPC) toward the data processing, validation and editing. In particular, the effort of Mr. Toga Raikoti in processing, validating and editing the 2015 census data within the short timeframe given is acknowledged here.

Finally, an utmost appreciation is also made of all the households that took time to respond to the questionnaires. We believe that the data generated in this census will help households who are active in the agriculture sector make well-informed decisions regarding their activities whether in cropping, livestock, forestry, fisheries or handicraft.

### **EXECUTIVE SUMMARY**

This report provides an analysis and evaluation of the data derived from the 2015 TNAC. The Census commenced on 7<sup>th</sup> April 2015 and ended on 30<sup>th</sup> June, 2015 and covered the whole of the Kingdom of Tonga. The main objective of the 2015 TNAC is to assess the structure of the agriculture sector in Tonga and to provide a framework for more regular agriculture surveys to draw from in future.

A total of 13,944 agriculturally active households and organizations were reported in the 2015 TNAC. Over 95% of the agriculturally active households engaged in subsistence and semi-subsistence agricultural activities with only 5% engaged in commercial agricultural activities.

The 2015 TNAC results showed that the majority of the agriculturally active households are in the subsistence and semi-subsistence sectors. About 95% of the agriculturally active households engaged in agricultural activities mainly for subsistence and semi-subsistence, while only about 5% of households were engaged for commercial purpose. This indicated that households active in Tongan agriculture continue to place great priority on food security as well as meeting cultural and religious obligations.

Agricultural land use has been dominated by annual and perennial crop cultivation followed by livestock activities. At the same time, about half of the agricultural land in Tonga is fallow. Some of the factors contributing to the large amount of fallow land are: land owners have migrated overseas; land left fallow for agriculture production improvement; or lack of finance to develop the agricultural land.

Of the 13,944 agriculturally active households and organizations, only 8,708 households owned bush allotments, while the rest either leased land from land-owners or used bush allotments belonging to other members of the extended family for free.

Crop cultivation and raising livestock continued to be the main agricultural activities for the Kingdom of Tonga. Fisheries, forestry and handicraft activities were also assessed during the 2015 TNAC. It is important to note that handicraft activity has become a major type of agriculture activity, especially in the rural areas and the outer islands.

Over half of agricultural land is fallow. The Government needs to determine how this land could be used more efficiently for agricultural activities.

The 2015 TNAC had its own limitations. One was the comparability of the data due to the timing of the census. The 2001 census was conducted between October and December, whereas the 2015 census took place between April and June. Seasonal variations in agriculture production had an impact on the data. Secondly, the concepts, definitions and questionnaire design varied between the 2001 and 2015 censuses thus limiting comparison between the two.

This Report strongly recommends the need to maintain the agriculture census for the Kingdom of Tonga every ten years and a more regular agriculture survey in between the census period. The 2015 TNAC has provided an up-to-date population frame that could be used to draw sample from for an annual survey. The Government of Tonga needs current and accurate agriculture statistics to ensure well-informed policy decisions are made on agriculture development as well as other sectors of the Tongan economy. This is given the importance of the sector to the Tongan economy and the maintenance of a comfortable food security benchmark for people of Tonga. Food security is becoming a very critical item on the political agenda.

Finally, I would like to acknowledge the commitment of the FAO of the United Nations to ensuring that agriculture censuses are conducted in Tonga and other Pacific Island nations. These ensure that Government policy makers have access to accurate and upto-date agriculture statistics to make better informed decisions on the development of the agriculture sector of these nations.

### **EXPLANATORY NOTES**

All monetary values refer to in this Report is denoted in Tongan pa'anga.

In the 2015 TNAC Questionnaire, bush allotment land area was measured in acre whereas town allotment land area was measured in square meters. Total agricultural land area for Tonga is a combination of bush allotment agricultural land area and town allotment agricultural land area.

TSD has been primarily responsible for the tabulation of the 95 Statistical Tables presented in Chapter 11 of this Report. The Statistical Tables provided in Chapter 11 are presented at district and village levels for some of the data. This is to allow users easy access to some of the data at village levels.

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Any table or other material published in this Report may be re-produced provided it is properly acknowledged.

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### **Acronyms**

BoP Balance of Payments
CPI Consumer Price Index
DEO Data Entry Operators

FAO Food and Agriculture Organization of the United Nations

GDP Gross Domestic Product

MAFFF Ministry of Agriculture, Food, Forests and Fisheries

SPC Secretary for the Pacific Community

TASP Tonga Agriculture Sector Plan
TCP Technical Cooperation Program
TDB Tonga Development Bank

TNAC Tonga National Agriculture Census

TSD Tonga Statistics Department

### 1. AN OVERVIEW OF THE AGRICULTURE SECTOR IN THE TONGAN ECONOMY

### 1.1 Overview

The purpose of this chapter is to assess the significance of the agriculture sector in the Tongan economy; the state of agriculture statistics in Tonga; the scope and coverage of the 2015 TNAC; and its highlights. In line with the FAO definition, the agriculture sector includes five main sub-sectors: cropping, livestock, fisheries, forestry, and handicrafts.

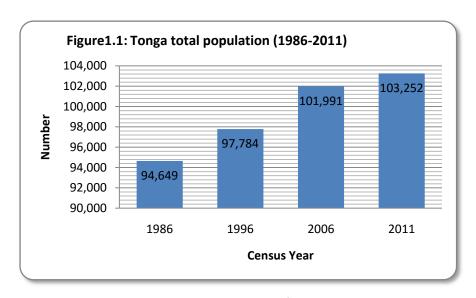
### 1.2 Geography

The Kingdom of Tonga is an archipelago of 172 coral and volcanic islands, of which 36 are inhabited, spread over 360,000 square kilometres in the South Pacific Ocean. Most of the islands are very small in size, ranging from those of only a few hectares, to Tongatapu, the largest island, with an area of 265 square kilometres. The total land area is 747 square kilometres, made up of the four main island groups of Tongatapu and 'Eua (370 square kilometres), Ha'apai (119 square kilometres), Vava'u (143 square kilometres) and the two Niuas (71 square kilometres).

### 1.3 Population

The 2011 census<sup>i</sup> determined that the total population for Tonga was 103,252. This compares with 101,991 people in 2006, and represents an increase of 1.3% or 1,261 people. The 2011 census counted 51,979 males and 51,273 females, representing a gender ratio of 101 males per 100 females. (See Figure 1.1)

Tongatapu's population was 75,416, which constitutes 73% of Tonga's total population, while the remaining 27% were spread throughout the outer-island groups. The 2011 census data showed a net flow of people from the outer islands of Vava'u, Ha'apai, 'Eua, and the two Niuas, towards Tongatapu during the inter-censual period 2006–2011. However, the main destination of outer island migrants was overseas.

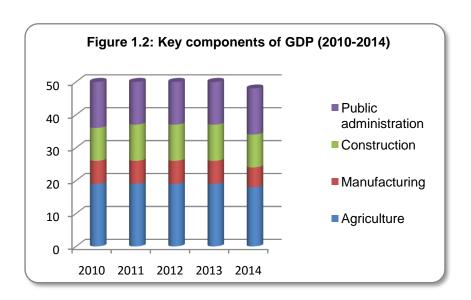


Tonga has a young population with a median age of 21 years. More than one-third (37%) of the population was younger than 15 years of age, and only 8% were 60 years and older.

### 1.4 The Agriculture sector<sup>ii</sup> in the Tongan economy

### 1.4.1 Contribution to Tonga's total Gross Domestic Product (GDP)

Agriculture continues to be the predominant economic activity in Tonga, although its relative importance has dwindled in recent years. The sector's contribution to GDP declined from 26% in 2004/5 to about 19% in 2009/10; it then declined further to 18% in 2013/14<sup>iii</sup>. Public administration, construction and manufacturing are other key sectors contributing to Tonga's total GDP. (See Figure 1.2)



### 1.4.2 Agriculture sector annual growth

The agriculture sector experienced strong growth of 4.7% in 2013/14; with 1.5% directed toward exports while 3.2% were for the domestic market. Despite this annual pick up, the contribution of the agriculture sector to GDP showed a long-term decline. A weak performance in the fisheries sector partly dampened growth in primary industry during the year. Growth is expected to slow down in 2014/15 due to the effect of severe drought in the second half of 2014. Agriculture production in the Ha'apai region was also severely damaged by Cyclone Ian in early 2014. It was estimated that 90% of all crops, fruit trees and forestry was destroyed by the cyclone.

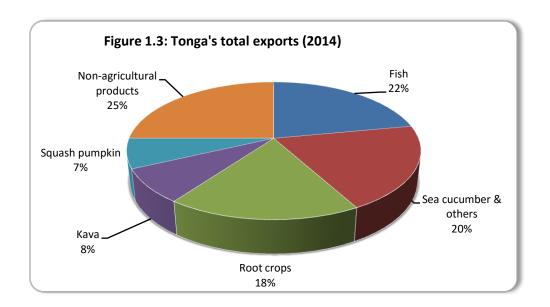
### 1.4.3 Agriculture sector exports

Since 2009/2010, agricultural exports have steadily increased. In that year, about 90% of the country's exports consisted of agricultural and fishery products, with a value estimated at \$14 million pa'anga. This growth in total agricultural exports was due to an increase in exports of non-squash commodities - particularly root crops, coconuts, watermelons and kava. Squash exports declined by 12% in 2013/14, reflecting the withdrawal of a major exporter from the market.

Fish dominated Tonga's exports in 2013/2014, contributing 22% of domestic exports, followed by crustaceans and other aquatic invertebrates at 20%, while root crops contributed 18%, kava 9%, and squash pumpkins 7%. Together these products made up 76% of domestic exports. (See Figure 1.3)

Fish exports declined in 2013/14 due to reductions in major fisheries exports. Tuna exports fell by 49% as the number of foreign fishing vessels operating in Tonga declined from 24 to 8. It is expected that in 2014/15, fish exports will pick up due mainly to anticipated increases in tuna exports. Exports of tuna, which constitutes 40% of fisheries exports, more than doubled in the first half of 2014/15. Seaweed export increased by 39% in the first half of 2014/15. In addition some high value fisheries products such as live hard coral and live fish are anticipated to experience positive growth - up by 25% and 29% respectively in 2015.

A notable omission from these statistics is the export of handicrafts that accounted for as much as \$4 million pa'anga.



### 1.4.4 Agriculture domestic production

Agricultural production for the domestic market declined by 10% in 2013/14, mainly due to a decrease in sales of root crops. However, survey data from MAFFF<sup>v</sup> indicated that roadside sales increased by 44%. The increase in volumes of roadside sales was strong enough to offset the decline in the volume of Talamahu market sales. A significant share of agricultural production is for subsistence.

### 1.5 Tonga agriculture sector plan

The Tonga Agriculture Sector Plan (TASP) was identified as part of Tonga's national planning process. This plan is expected to identify the kingdom's vision and priorities for maximizing contributions from the agriculture sector to the kingdom's economic growth and sustained food security in the face of a changing world economy, looming climate change, and on-going natural disasters in the Pacific. The plan is also expected to: (i) articulate specific programmes and activities which are required to achieve sector priorities; (ii) clarify the roles and responsibilities of the different sector stakeholders; (iii) estimate investment needs; and (iv) to provide a framework for measuring progress over the short- and medium-terms.

The TASP is expected to promote a balance between export-oriented objectives, import substitution, and subsistence agriculture; and to incorporate a strong focus on the

sustainability and resilience of the nation against climate change and natural disasters. The importance of (i) integrating all stakeholders' views; (ii) considering the different circumstances in the outer islands; and (iii) identifying links with other related sectors also needed to be recognized.

### 1.6 State of agriculture statistics in Tonga

One of the four priorities articulated in the TASP<sup>vi</sup> is to have a framework for measuring progress over the short and medium terms. This indicates clearly the need for up-to-date and accurate agriculture statistics to be available in a timely manner. According to World Bank and IMF<sup>vii</sup>, while economic statistics are broadly adequate for surveillance, data deficiencies continue to complicate the monitoring of economic conditions and policy formulation in the Pacific.

The agriculture sector is the mainstay of the Tongan economy; however, one of the key constraints in measuring performance in the agriculture sector is lack of up-to-date, accurate, agriculture statistics.

The TSD is responsible for the production and dissemination of core statistics for Tonga; which includes GDP; Balance of Payments (BoP); Consumer Price Index (CPI); Population Census and other socio-economic statistics. Unfortunately, agriculture statistic is not one of the core statistics regularly produced by TSD.

Within MAFFF, different divisions collected data independently to serve a specific purpose, with very limited coordination among these different collections. For example, the Extension and Women Division operates an Annual Crop Survey; Corporate Services Division operates the Domestic Market Survey; Livestock Division operates a Livestock Survey; Fisheries Division collected data on fish exports; and the Quarantine and Quality Management Division collects statistics on export and import of agricultural produce.

There are limitations with these types of data collection due to questionnaire and survey design, coverage, response rate, data quality and lack of coordination among different data collections. It is important that the authorities consider consolidating and building capability within the Ministry to be able to collect, produce and disseminate up-to-date and accurate agriculture statistics in a timely and coherent manner.

Statistics on agricultural households and their characteristics, land use, type and level of agricultural activities, cropping patterns, livestock, forestry, fisheries and farm practices are pre-requisites for agricultural policy and planning. However, most of these statistics are collected in an agriculture census, the first of which was conducted in 1985. The second census was conducted in 2001, focusing on land tenure, land area and utilization, production of principal crops, livestock, equipment and use of fertilizers. It also included the various agricultural activities which most of the households were engaged in. Fourteen years passed before the 2015 TNAC took place.

Important developments and changes have taken place in the agriculture sector over the last 14 years. All these new developments need to be captured in an agriculture census.

### 1.7 2015 TNAC objectives, scope, coverage, methodology and limitations viii

### 1.7.1 Objectives

The 2015 TNAC expected to:

- Provide a benchmark on the structure of agricultural holdings and their main characteristics
- Use the data collected as the basis for a regular system of statistical reporting
- Build up some important village level statistics
- Establish a technical and organizational foundation on which to build a comprehensive and integrated system of food and agricultural statistics
- Provide a framework from which samples can be drawn to study certain aspects of agricultural activities in greater depth
- Provide information derived from community (village) statistics

### 1.7.2 Scope

In keeping with the census objectives mentioned above, the priority needs of MAFFF, the FAO system of agriculture census and survey classification, the following items were included in the 2015 TNAC:

Household membership demographic and economic information:

- Name, gender, age
- Education
- Employment status

### Town allotment ('api kolo)

- Area
- Land tenure
- Land use
- Land location

### Bush allotment ('api 'uta)

- Area
- Method of operation
- Numbers of separate parcels
- Land location
- Land use
- Land tenure

### Crops and trees grown

- Crops/trees currently growing
- Name of crops/trees
- Area planted
- Number and names of plants/crops/trees planted and harvested during the last twelve months
- Number of plants in scattered planting
- Scattered/boundary crops/trees growing on this parcel
- Name and number of scattered crops/trees
- Name and number of boundary crops/trees
- Number of crops/trees

### Livestock (including dogs and cats)

- Number kept as of the day of visit to the household
- Names of livestock
- Number disposed of in the last twelve months
- Purpose of animal disposal

### **Fisheries**

- Number of households engaged in fishing activities
- Type of fishing activities
- Main purpose of fishing activity
- Type of fishing method

- Number of trips during the past week
- Use of boats, whether owned/hired/borrowed
- Proportion of fish/other sea products sold
- Means of disposal/selling fish/other sea products

### Agricultural labour input, income and loan

- Number, age and gender of hired laborers
- Type of labour
- Hours worked in the holding in the last week
- Wages per month if paid worker
- Other benefits received if paid worker
- Industry for other occupation
- Average number of days worked of hired labourers (by gender)
- Average hours worked/day of hired labourers (by gender)
- Proportion of household income derived from agricultural activities
- Access to agricultural loan
- Main source of loan(s)

### Use of fertilizers, chemicals and equipment

- Use of inorganic/organic fertilizers
- Use of agricultural chemicals
- Chemicals used
- Types of equipment used
- Number owned
- Whether hired or borrowed

### Agro-forestry on the holding

- Name and number of trees/shrubs
- Uses of trees/shrubs

### Handicraft Making

- No of household engaged
- Proportion of raw materials bought
- Proportion of raw materials sold
- Proportion of handicraft sold

Drawbacks that impede agricultural activities

 Type of impediments for each subsector: crop, livestock, fisheries, forestry and handicrafts

### 1.7.3 Coverage

The TNAC 2015 was conducted at the household level and made a complete enumeration of all households residing in Tonga during the period of the census enumeration. About 1,921 households did not respond during the 2015 TNAC, compared to 2,410 during the 2001 Census<sup>ix</sup>. This represented a final response rate of 89% for the 2015 TNAC. Households that went abroad and came back after the period of the census-taking, and those permanently living in other countries, were not included in the survey. (See Summary table 1.1)

Summary table 1.1: Total numbers of households surveyed -2015

Island divisions	Households enumerated in 2001 TNAC	Households enumerated in 2015 TNAC	Households not enumerated in 2015 TNAC	Total Households in 2015
TONGA	15,797	16,122	1,921	18,043
Tongatapu	10,610	11,914	910	12,824
Vava'u	2,667	2,360	454	2,813
Ha'apai	1,296	934	326	1,260
'Eua	854	644	219	863
Niuas	370	270	12	282

### 1.7.4 Census methodology

In order to prepare for the 2015TNAC, the Tonga Government committed budgetary resources from their own funds and sought supplementary technical assistance from the FAO under FAO Technical Cooperation Program (TCP/TON/3403).

The census activities implemented under the TCP can roughly be divided into three stages:

### (a) June to December 2014:

Main activities during this period included the recruitment of the National Project Coordinator, the formation of the of the 2015 TNAC Steering Committee, acquisition of equipment and materials, preparation of census frames and development of census work plan and design of census questionnaire.

During this period, the Lead Technical Officer, Dr. Mukesh Srivastava, undertook his first mission to Tonga to assist the TSD and MAFFF in the above aspects of work. An international consultant, Mr. Choiril Maksum, was also recruited and travelled to Tonga to assist with the design of the questionnaire.

### (b) January to June 2015:

At the beginning of 2015, the project continued with the conduct of data users and producers' workshop, pretest of census questionnaires, start of census publicity, finalization of questionnaires and manuals and designing of data processing system.

The enumeration began on 7<sup>th</sup> April until 30<sup>th</sup> June 2015. For the purpose of the 2015 TNAC, the Kingdom was divided into 5 divisions, 23 districts and 169 villages as provided in the population census. The breakdown by division is shown below:

Division	Number of Districts and Villages
Tonga	23 districts and 169 villages
Tongatapu	7 districts and 70 villages
Vava'u	6 districts and 43 villages
Ha'apai	6 districts and 29 villages
'Eua	2 districts and 15 villages
Niuas	2 districts and 12 villages

The village was composed of enumeration blocks. Each enumerator was assigned to handle at least one block and was provided with the updated household list from TSD, enumeration guiding map, coding sheet, census questionnaires, instruction manual, summary form and other control form. The enumerator was asked to complete the work in his/her assigned block(s) and was encouraged to give their best effort in undertaking the interview of the respondents.

Each census supervisor was assigned to handle several enumerators. He/she was tasked to guide the enumerators during the first week of the census taking. Then a follow-up supervision was also required from him/her. Then he/she was also expected to do some field checking/editing to facilitate the data processing in the headquarters.

### (c) July to December 2015:

During this period the forms were collected from the field, data was being processed and final report and the thematic paper was also written. The questionnaires for the 2015 TNAC were designed in such a way that data items were efficiently encoded and processed using the software package CSPro. The application was designed using the CAPI concept where all necessary checks were incorporated to allow the Data Entry Operators (DEO) to verify data while doing data entry.

These methods ensured the TNAC captured good quality data both efficiently and effectively. The final steps for final editing included:

- Verifying all questionnaires that had been collected. This is done by running frequency statistics on each variable and checking this against the register of data entry and listing of blocks/questionnaires from the census;
- Checking for missing variables from the frequency statistics. Some missing variables were imputed and some were left as it is, for example, values for items like livestock, fish, handicraft, etc.
- Edit check programs were run twice before it was decided to finalise the data.

### 1.7.5 Data limitations

Like any other census, the 2015 TNAC has its own limitations. These are summarized as follows:

- The 2015 TNAC only covered 89% of the total households in Tonga; 11% of the households were not enumerated.
- The quality of the data collected can be affected by many factors. For example,
  the concepts and interpretation of questionnaires may not be fully understood by
  enumerators and respondents. Farmers may not have accurate information due to
  a lack of proper records of agricultural activities.
- The 2015 TNAC took place at the aftermath of Cyclone Ian which had destroyed a large part of the agriculture sector and the infrastructure for the Ha'apai Region.x
- The 2015 TNAC Questionnaire design meant that some of the data was not comparable to 2001. For example, the levels of agricultural activities (subsistence, semi-subsistence and commercial) and the way they were described.

- The 2015 TNAC took place between April and June 2015 whereas the 2001 TNAC took place between October and December 2001, therefore there is variation in the data due to seasonality of some of the agricultural activities, such as cropping and fishing.
- In the 2001 TNAC the size of agricultural holding required to be considered as an agricultural holder was more than 1/8 of an acre. The 2015 TNAC included town allotments below 1/8 of an acre. This was done so that agricultural activities in the town allotment could be accounted for.
- Questions on the use of fertilizers were answerable only by "Yes" or "No" and
  questions on agricultural chemicals asked only for the name of the chemical and
  the crops they were used on. Quantities of these agricultural inputs were not
  gathered.
- In the 2015 TNAC, the question on the level of agricultural activities was only
  asked for the fisheries sub-sector and not for the other sub-sectors. Therefore,
  these were determined by the size of the land cultivated, the numbers of livestock
  kept, the number of forest trees grown, and the amount of handicrafts made and
  sold.
- The time allowed for data processing, editing and verification was rather limited and did not allow sufficient time for thorough and in-depth checking of the data.

### 1.8 2015 Agriculture census main findings

### 1.8.1 Total bush allotment agricultural land area

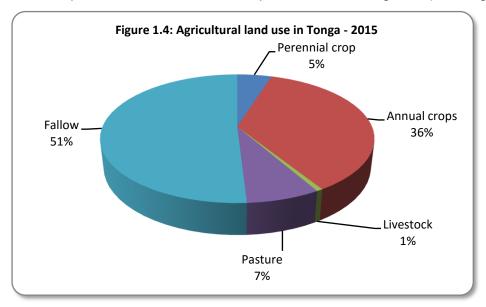
The total bush allotment agricultural land area for Tonga was 66,202 acres. In addition, areas used for agricultural activities such as kitchen garden and small livestock in the town allotment were estimated at 204 acres. Agricultural activities in the town allotments will be discussed separately.

Tongatapu has the largest agricultural land area (42,497 acres or 64%); Vava'u (11,549 acres or 17%); Ha'apai (4,501 acres or 7%); 'Eua (4,981 acres or 8%); and Niuas (2,674 acres or 4%).

Fallow land still dominated the agricultural land in Tonga. This was due to many land owners having migrated overseas and not utilizing their land for many years or customary land not being used for agricultural activities. There were also landowners who did not

have the resources to cultivate their own land due to factors such lack of finance or transportation.

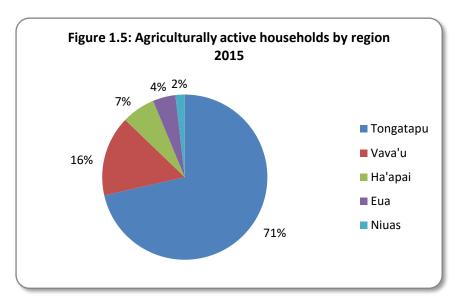
The area lying fallow was 51%. The land being used for annual and perennial crops covered 41%, while pasture and livestock occupied the remaining 8%. (See Figure 1.4)



### 1.8.2 Agriculturally active households

A total of 16,122 households and organizations were enumerated during the 2015 TNAC. About 13,944 or 86% of the total households and organizations enumerated were agriculturally active households, while 14% or 2,176 households and organizations were not engaged in any agricultural activity. A household was identified to be active in agriculture if it was involved in any one of the following activities: cropping, livestock, fishery, forestry, or handicraft activities.

About 9,958 or 71% of the agriculturally active households resided in the Tongatapu region. The Vava'u region with2, 190 households or 16%, was identified as the having second most agriculturally active households, followed by the Ha'apai region where 915 households or 7% live. About 4% or 615 households lived in the 'Eua region, and 2% or 254 households lived in the Niua region. (See Figure 1.5)

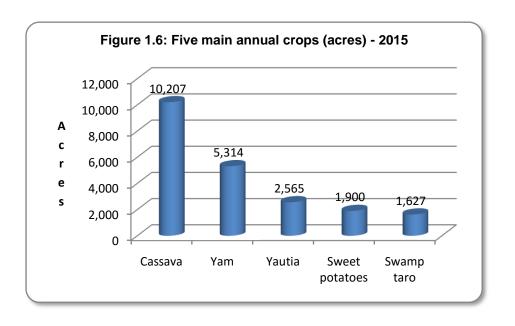


A total of 10,296 households engaged in crop cultivation during 2015, while 12,859 households engaged in livestock, 2,360 households in fishing, 6,151 households in handicraft making and 2,469 households engaged in forestry. Many of these households have engaged in more than one sub-sector, such as growers who may also be raising livestock, thus causing some double-counting in the total number.

### **1.8.3 Crops**

A total of 10,296 households were engaged in crop cultivation in 2015. The total cultivated land area was recorded at 57,713 acres. Annual and perennial crop cultivation occupied 27,206 acres of agricultural land. This represented 47% of the total cultivated land area. Cassava (manioke) was the largest annual crop cultivated; occupying 10,207 acres (18% of the total cultivated land area). Other crops included yam (ufi) (5,315 acres); yautia (talo futuna) (2,565 acres); sweet potato (kumala) (1,901 acres); and swamp taro (talo Tonga) (1,627 acres). (See Figure 1.6)

Kava plantation (1,257 acres); mulberry (757 acres) and vanilla (632 acres) were the largest perennial crops cultivated during 2015. Vava'u region had the largest area planted with kava; representing 64% (805 acres) of the total area cultivated with kava plantation in Tonga.

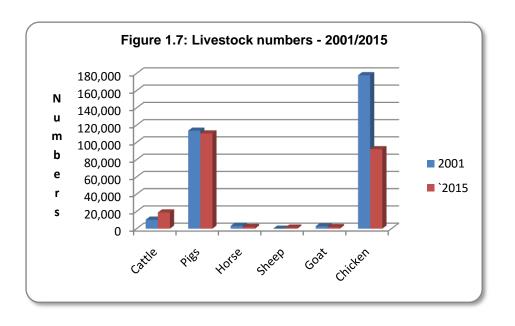


### 1.8.4 Livestock

A total of 12,859 households engaged in livestock farming during 2015. Pigs continued to be the largest number of animals raised during 2015. The total of 110,310 was similar to the level recorded in 2001. The number of cattle increased by 81% to a total of 18,762 in 2015 compared to 10,354 in 2001. Domestic demand for beef meat has increased not only for daily consumption but also for cultural events such funerals, birthdays and church or community functions.

A total of 1,240 sheep were being raised according to the 2015 Census. This is a major increase when compared to the 2001 Census, where no sheep were recorded. Horse numbers recorded in 2015 were 1,942 compared to 3,255 in 2001. Horse has been a major source of transport to the bush allotments in rural and outer islands. With the availability of other forms of transport in these areas the use of horses for transport has become less important.

Chicken numbers showed a large decline of 48% from 177,829 in 2001 to only 92,071 in 2015. The decline in domestic production of chicken has coincided with a large increase in chicken imports which has more than doubled over the same period. (See Figure 1.7)



### 1.8.5 Fisheries

A total of 2,360 households in Tonga engaged in fishing activities in 2015. Reef finfish and tuna fishing were the two main types of fishing activities with 1,386 households engaged in reef finfish fishing, while 936 engaged in tuna fishing. Other very common fishing activities included shellfish, lobster and sea cucumber fishing. The Tongatapu and Vava'u regions had the largest number of fisheries households.

### 1.8.6 Forestry<sup>xi</sup>

A total of 2,469 households engaged in forestry activity. Most of the forest trees grown were for building purposes or because of the high value in the market for sandalwood. A total of 344 households or 14% engaged in forestry mainly for commercial purposes. About 64% of the commercial forestry households lived in the Vava'u region. Many of them were sandalwood growers. 'Eua and Tongatapu also had some commercial forestry households.

### 1.8.7 Handicraft

A total of 6,151 households engaged in handicraft activity. Over 50% of those households engaged in handicraft activity are for subsistence purposes only or only sell their handicrafts occasionally. Over 80% of the households in the Niuas engaged in handicraft-making activities.

### 1.9 Conclusion

The 2015 TNAC showed that the majority of households in Tonga continued to engage in agricultural activities, with over 80% or 13,944 households and organizations engaged in one or more of the agricultural activities, namely cropping, livestock, fisheries, handicrafts and forestry.

The main purpose of household engagement in agriculture continued to be subsistence and semi-subsistence. Overall, about 5% of the agriculturally active households engaged in commercial agricultural activities while 95% still engaged in subsistence and semi-subsistence agricultural activities.

Agricultural land area continued to be dominated by fallow land with over 50% remained fallow during the 2015 TNAC. The main reasons for land not being cultivated were land owners who have migrated overseas or land left fallow due to customary or cultural reasons.

The next chapter will analyze the structure of agriculture holdings.

### 2. STRUCTURE OF AGRICULTURE HOLDINGS

### 2.1 Overview

The purpose of this chapter is to report on the structure of the agriculture holdings in Tonga. An agriculture holding is defined as an economic unit of agricultural production, under single management comprising all livestock kept and all land used wholly or, partly for agricultural production purposes, without regard to title, legal form or size.

For the 2015 TNAC, agriculture holding refers to bush allotment holdings only. Questions were asked on agricultural activities in the town allotment holdings but this will be analyzed separately. This chapter also discusses the agricultural land tenure system; agricultural land use patterns and the average agricultural land<sup>xii</sup> area available per agriculturally active household in Tonga. Landholdings may consist of one or more parcels, located in one or more separate areas.

### 2.2 Bush allotment holdings<sup>xiii</sup>

The total land area with bush allotment holdings in Tonga was recorded at 70,050 acres. Tongatapu has the largest bush allotment land area (43,910 acres) followed by Vava'u region (13,368 acres), Ha'apai region (4,698 acres), 'Eua region (5,355 acres) and Niua regions (2,720 acres).

A total of 8,708 households owned or had access to bush allotments through short or long-term lease arrangements. Over 95% of these household operated their holding individually; while only 5% were operated either by family or in partnership with another person.

The average area of a bush allotment per household for Tonga was 8 acres. The Niua region had the largest area of bush allotment per household which was 12 acres. Ha'apai region had the smallest average area of bush allotment per household which was only 6 acres. Tongatapu region had an average of 7.9 acres per household; 'Eua region had 10 acres per household and the Vava'u region had 8.9 acres per household. (See Summary table 2.1)

Summary table 2.1: Households with own/access to bush allotment holdings - 2015

Island divisions	Nos. of households with bush allotments	Total area of bush allotments (acres)	Average area of bush allotment per household (acres)	Proportion of household with bush allotment (%)
TONGA	8,708	70,050	8.0	54%
Tongatapu	5,538	43,910	7.9	46%
Vava'u	1,624	13,368	8.9	69%
Ha'apai	789	4,698	6.0	84%
'Eua	533	5,355	10.0	83%
Niuas	224	2,720	12.0	83%

The proportion of households owning bush allotments in the kingdom of Tonga was 54%. Tongatapu region had the lowest proportion of households with owned bush allotments (46%) while the Ha'apai region had the largest proportion with bush allotment. The other regions were Vava'u (69%); 'Eua (83%) and the Niuas (83%). The low rate of bush allotment ownership in Tongatapu reflected the growing problem of overpopulation in the main island. About 75% of Tonga's population resides in Tongatapu. Many who have migrated from the outer islands do not own bush allotments in the main island. Increase number of households leasing bush allotments is an indication of a growing number of households who do not own any bush allotment in the main island.

### 2.2.1 Number and size of parcels

There was a total of 12,195 bush allotment parcels for the whole of Tonga. A total of 7,554 parcels (62%) were in the main island of Tongatapu. Vava'u region had 2,468 parcels (20%); Ha'apai region had 1,028 parcels (8%); 'Eua region had 798 parcels (6%); and the Niua region had 347 parcels (4%).

The parcel size ranged between 1-9.99 acres and 50-100 acres. A total of 9,820 parcels (81%) had parcel size that ranged between 1-9.99 acres. This reflected the legal right for all males over 16 years to own a bush allotment with maximum size of8 acres. A total of 1,922 parcels (15%) were less than 1 acre. A total of 338 parcels (3%) ranged between 10-19.99 acres; 95 parcels (0.7%) ranged between 20-49.99 acres; 14 parcels (0.2%) ranged between 50-99.99 acres; and 6 parcels (1%) were 100 acres or more.

There were a total of 8,708 households who owned or had access to bush allotments giving an average of 1.4 parcels per household with bush allotments.

# 2.3 Agricultural land

Total agricultural land includes land area with crop cultivation (annual and perennial); livestock; pasture; temporary and fallow land. The difference between agricultural land area and bush allotment land area is that bush allotment land also includes land used for residential housing; farm houses and land reserved for customary or cultural purposes.

# 2.3.1 Agricultural land area (bush allotment only)<sup>xvi</sup>

The total agricultural land area for Tonga was recorded at 66,202 acres. Tongatapu had the largest agricultural land area (42,497 acres); Vava'u (11,549 acres); Ha'apai (4,501 acres); 'Eua (4,981 acres); and the Niuas (2,674 acres). (See Table 2.2)

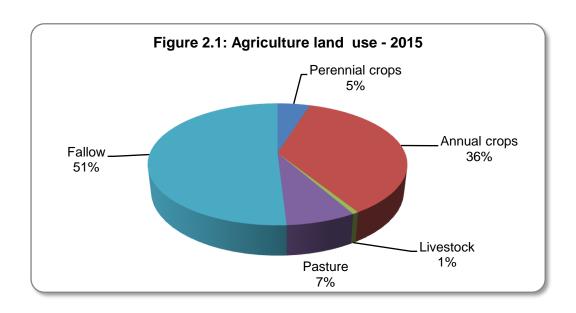
The average agricultural land area per agriculturally active household was 4.7 acres for Tonga. Tongatapu region had the lowest average agricultural land area per agriculturally active household of 4.3 acres; Vava'u region had 5.3 acres; Ha'apai region had 4.9 acres and the 'Eua region had an average of 8.0 acres. The Niuas had the highest average agricultural land area per agriculturally active household which was recorded at 10.5 acres. (See Summary table 2.2)

Summary table 2.2: Agricultural land area by region (acres) - 2015

Island division	Total number of agriculturally active households	Total agricultural land area (acres)	Average area per household
TONGA	13,944	66,202	4.7
Tongatapu	9,963	42,497	4.3
Vava'u	2,191	11,549	5.3
Ha'apai	916	4,501	4.9
'Eua	620	4,981	8.0
Niuas	254	2,674	10.5

## 2.4 Agricultural land use

Total agricultural land area for Tonga was recorded at 66,202 acres. Fallow land took up 33,717 acres or 51% of the total agricultural land area in Tonga. Annual crops occupied 23,999 acres (36%); pasture land occupied 4,858 acres (7%); perennial crops occupied 3,207 acres (5%); and livestock occupied 421 acres (1%). (See Figure 2.1)



The Niua region had the largest share of fallow land which took up 72% of its total agricultural land. This reflected the fact that many people from the Niuas have left the islands to destinations such as Tongatapu and overseas.

## 2.5 Agricultural land tenure

Land tenure in Tonga was classified into four main categories: own land; short term lease; long-term lease and others. The "others" category included households who used their extended family's land free of charge. Some households also operated other people's land for group production (toutu'u) in return to some of the yield from the production.

Agricultural land area for Tonga spread over 12,195 parcels. About 5,454 parcels or 45% of the total parcels were owned by the households themselves. These households with their owned bush allotment were land inherited by the eldest son. It is part of the Tonga Land Act that every male over the age of 16 years old is entitled to 8 acres of bush allotment. Shortage of land and the fast growth of the Tongan population mean the government may not be able to continue to meet this legal requirement, especially in the main island of Tongatapu.

About 5,528 parcels or 46% were bush allotments accessed through "other" arrangements such as land belonging to another member of the extended family who is overseas; or land belonging to the chief of the village who rented it out in return for some

of the yield from the production in that land. This is a very common practice in Tonga where many households do not own a bush allotment but arrange with friends, extended family member and even village chiefs to cultivate their land in return for some of the yield.

About 1,213 parcels or 9% of the total bush allotment parcels were accessed through short and long-term lease arrangements. Some of these parcels were used for toutu'u.

# 2.6 Town allotment holdings

A total of 16,032 households in Tonga have access to town allotments either through ownership, short and long term lease or through other informal arrangements. There is a total of 17,307 town allotment parcels giving each household, who own town allotments, an average of 1.1 town allotments. About 11,832 households with their own town allotment resided in Tongatapu. The other regions were: Vava'u about 2,360 households, Ha'apai 931 households, 'Eua 643 households and the Niua 266 households with town allotment holdings.

#### 2.6.1 Town allotment land tenure

About 12,015 or 69% of the total town allotments holdings were owned by the households, 877 or 5% were held through short or long-term lease and the other 26% were held through other sort of arrangements, such as informal arrangements between members of the same extended families. (See Summary table 2.3)

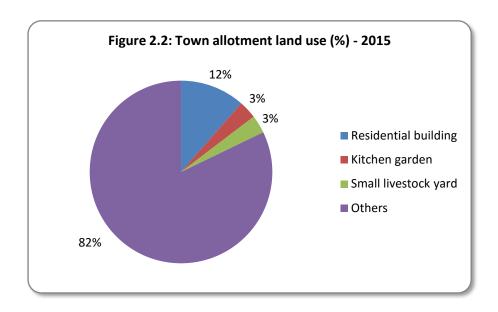
Summary table 2.3: Town allotments – nos. of parcel by type of land tenure - 2015

laland	Households	Numbers of parcels	Type of	land tenure (no	s. of parcels)
Island divisions	with town allotments		Owned	Short and long-term lease	Other arrangements
TONGA	16,032	17,307	12,015	877	4,415
Tongatapu	11,832	12,502	8,253	541	3,708
Vava'u	2,360	2,598	1,980	240	378
Ha'apai	931	1,055	865	70	120
'Eua	643	827	710	26	91
Niuas	266	325	207	-	118

#### 2.6.2 Town allotment land use

Total town allotment holdings covered a land area of over five thousand acres. About 82% of town allotments land areas are classified as "others" which are mainly areas without any building or garden at all. Another 12% is occupied with residential buildings and 6% is occupied with either livestock or kitchen gardens.

(See Figure 2.2)



A total of 202 acres is estimated to have been taken up by kitchen gardens and small livestock yards in the town allotments. These types of agricultural activities in the town allotments are becoming a common practice in Tonga with the growing number of households not having access to bush allotments. It is also a cost saving, in terms of time and transport, to have your own kitchen garden and small livestock yard in the town allotment rather than traveling to the bush allotment.

### 2.7 Conclusion

Tonga's agricultural land is still dominated by fallow land which indicated that there are still a lot of opportunities for the development of the agriculture sector in Tonga through the more efficient utilization of these lands. A smaller proportion of households owned bush allotments in Tongatapu and Vava'u regions, compared to regions such as Ha'apai, 'Eua and the Niuas. This reflected the high rate of urban migration where many of the people in the outer-islands have migrated to the main island, especially the urban area of Tongatapu.

AGRICULTURAL ACTIVITIES Agricultural activities Agricultural activities in the town allotment holdings is becoming a very common practice in Tonga which is expected to increase with less people owning or accessing bush allotments. This practice is also a cost saving in terms of transport and time saved on travel to and from the bush allotment.

The next chapter will be an analysis of the level of agricultural activities in Tonga.

## 3. LEVELS OF AGRICULTURAL ACTIVITIES

### 3.1 Overview

The purpose of this chapter is to analyze the agriculturally active households and their level of agricultural activities. A household is active in agriculture if it is involved in some of the following activities: cropping; livestock; fishery; forestry or handicraft. The level of agriculture activity is classified into: subsistence; semi-subsistence; and commercial<sup>xviii</sup>.

The five main types of household agricultural activities were: cropping; livestock; fishery; forestry and handicraft making. The analysis in this chapter is based on the number of agriculturally active households and their level and type of agricultural activities.

## 3.2 Agriculturally active households

A total of 16,122 households and organizations were enumerated during the 2015 TNAC. Of these, 13,944 households and organizations (86%) were agriculturally active; 13,936 households and 8 organizations. A household is active in agriculture if it can be classified into any one of the following activities: cropping, livestock, fishery, forestry or handicraft.

The Tongatapu region has the largest number of agriculturally active households accounting for 71% (9,963 households) of the total agriculturally active households in Tonga. This is followed by Vava'u which accounted for 16% (2,191 households); Ha'apai accounted for 6% (916 households); 'Eua accounted for 5% (620 households) and the Niuas accounted for the remaining 2% (254 households). Of the 10 organizations that were enumerated, 8 organizations were reported as agriculturally active, with the majority located in the Tongatapu region. (See Summary table 3.1)

In the Tongatapu region, about 42% of the total agriculture households reside in the two urban districts of Kolofo'ou and Kolomotu'a. The remaining 58% live in rural districts of Vaini (19%), Tatakamotonga (11%), Lapaha (12%), Nukunuku (11%) and Kolovai (5%).

Summary table 3.1: Number of agriculturally active households/organizations - 2015

Island divisions	Total households in Tonga	Total agriculturally active households / organizations	Total agriculturall y active households	Total agriculturally activeorganiza tions
TONGA	16,122	13,944	13,936	8
Tongatapu	11,914	9,963	9,958	5
Vava'u	2,360	2,191	2,190	1
Ha'apai	934	916	915	1
'Eua	644	620	619	1
Niuas	270	254	254	0

In the Vava'u region, 36% of the total agriculture households reside in Neiafu; Pangaimotu (8%); Hahake (15%); Leimatu'a (18%); Hihifo (16%) and the outer islands (7%). In the Ha'apai region, 36% of the agriculture households reside in Pangai; Foa (21%); Lulunga (14%); Mu'omu'a (10%), Ha'ano (9%) and 'Uiha (11%). In the 'Eua region, 56% reside in 'Eua Motu'a and 44% reside in 'Eua Fo'ou. In the Niuas, 61% reside in Niuatoputapu and 49% in Niuafo'ou.

## 3.3 Level of agricultural activities

A large proportion of the agriculturally active households engaged in either subsistence or semi-subsistence activities with only a small proportion engaged in commercial agricultural activities. In the 2015 TNAC, assessment of the level of agricultural activities (subsistence, semi-subsistence or commercial) was based on household levels of agriculture activity in any of the sub-sectors (cropping; livestock; fisheries; forestry; and handicrafts).xix It was not possible to make any cross tabulation due the method used to define subsistence; semi-subsistence and commercial agricultural activities. In addition, one household may have been involved in one or more level of agricultural activities.

### 3.3.1 Subsistence and semi-subsistence households

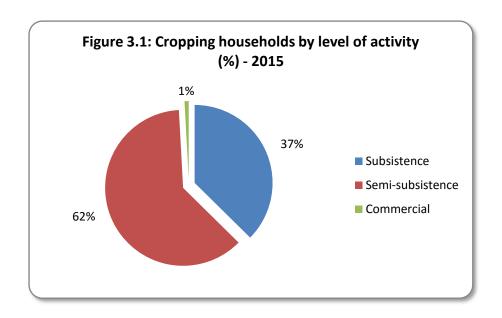
The majority of the agriculturally active households were engaged in either subsistence or semi-subsistence activities with only a few households engaged in commercial activities. This situation applied to households' activities in all the subsectors: cropping, livestock, fisheries, forestry; and handicrafts.

Summary table 3.2: Agriculturally active households in subsistence sector<sup>xx</sup> - 2015

Island divisions	Cropping	Livestock	Fisheries	Forestry	Handicrafts
TONGA	3,849	3,443	1,267	577	2,655
Tongatapu	2,331	2,730	376	296	1,345
Vava'u	1,052	400	590	154	835
Ha'apai	280	171	149	1	265
'Eua	91	107	28	112	137
Niuas	95	35	124	14	73

# **3.3.1.1 Cropping**

A total of 10,296 households and organizations engaged in crop cultivation during 2015. A large proportion of these households engaged either in subsistence or semisubsistence crop cultivation with only a few engaged in commercial crop cultivation. About 37% (3,849 households) engaged in subsistence crop cultivation and 62% (6,358 households) engaged in semi-subsistence crop cultivation. (See Figure 3.1)



In the Tongatapu region, a total of 6,667 households engaged in crop cultivation in 2015, with the largest proportion (99%) engaged in either subsistence or semi-subsistence. About 2,331 households (35%) engaged in subsistence crop cultivation and 4,272 households (64%) in semi-subsistence crop cultivation.

The largest number of subsistence growers in the Tongatapu region live in the Vaini district (708 households), followed by Kolomotu'a district (405 households) and Tatakamotonga district (344 households). The largest number of semi-subsistence growers live in Vaini district (913 households) followed by Nukunuku district (790 households) and Lapaha district (693 households). The largest numbers of commercial growers live in the Tatakamotonga district (20 households); followed by Vaini district (15 households) and Lapaha district (12 households).

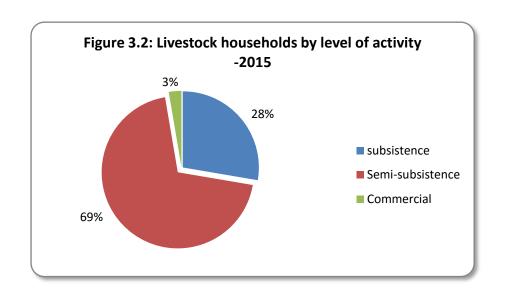
In the Vava'u region, a total of 2,331 households engaged in crop cultivation with most of them engaged in either subsistence or semi-subsistence crop cultivation. About 1,052 households (52%) engaged in subsistence crop cultivation and 946 households (47%) in semi-subsistence crop cultivation. Only 1% engaged in commercial crop cultivation.

In the Ha'apai region, there were 824 households engaged in crop cultivation; of which 543 households (65%) were involved in semi-subsistence crop cultivation and 280 households (34%) in subsistence crop cultivation. Again only 1% engaged in commercial crop cultivation.

In the 'Eua region, a total of 514 households engaged in crop cultivation; with 421 households (82%) in the semi-subsistence sector and 91 households (17%) in the subsistence sector. In the Niuas, a total of 254 households engaged in crop cultivation with 156 households (61%) engaged in semi-subsistence; 98 households (38%) in subsistence crop cultivation; and only 1% in commercial crop cultivation.

### 3.3.1.2 Livestock

A total of 12,859 households engaged in livestock farming with the majority residing in the Tongatapu region followed by the Vava'u region, the Ha'apai region then the 'Eua region and the Niuas. A total of 3,443 households engaged in subsistence livestock activities; 9,257 households engaged in semi-subsistence and only 159 households engaged in commercial livestock farming. (See Figure 3.2)

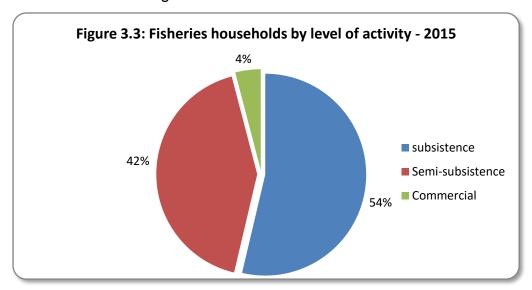


# 3.3.1.3 Fisheries

A total of 2,360 households engaged in fisheries with 2,264 households (96%) engaged in the subsistence and semi-subsistence sectors. (See Figure 3.3)

A total of 1,267 households engaged in subsistence fisheries with 590 households or 47% residing in the in the Vava'u region. It is interesting to note that most of these subsistence households resided in the Neiafu, Hahake and Hihifo districts and only a few in the outer island districts.

Tongatapu region had the second largest subsistence fisheries households (376) followed by Ha'apai region (149); Niuas (124) and 'Eua region (28). Subsistence fishing households in Tongatapu spread throughout the districts and were not concentrated in a few districts like the Vava'u region.



A total of 997 households (42%) engaged in semi-subsistence fisheries. A total of 520 households (52%) resided in the Tongatapu region; 236 households (24%) in the Vava'u region; 165 households (17%) in the Ha'apai region; 41 households (4%) in the Eua region; and 35 households (3%) in the Niuas region.

## **3.3.1.4 Forestry**

A total of 2,469 households engaged in forestry with 577 households (23%) in the subsistence sector and 1,548 households (63%) in the semi-subsistence sector.

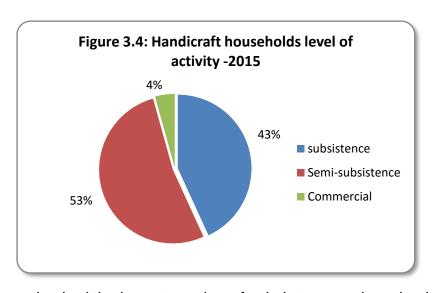
Of the 577 households engaged in subsistence fisheries, 296 households were in the Tongatapu region; 154 households in the Vava'u region and 112 households in the 'Eua region, with only 14 households in the Niuas and one household in the Ha'apai region.

About 52% of the households engaged in subsistence forestry in Tongatapu live in the Nukunuku, Tatakamotonga and Lapaha districts. In the Vava'u region 45% of the households in this sector reside in the capital of Vava'u, Neiafu. In the 'Eua region, about 90% of the households lives in the district of 'Eua Motu'a.

Semi-subsistence forestry households spread out to the Tongatapu region (43%), Vava'u region (37%) and 'Eua region (18%). A lot of these households are engaged in growing sandalwood trees for sale.

### 3.3.1.5 Handicraft

A total of 6,151 households engaged in handicraft making of which 2,655 households (43%) were engaged in subsistence handicraft making; 3,230 households (53%) in semi-subsistence; and 266 households in commercial handicraft making (6%). A large number of households engaged in semi-subsistence handicrafts were producing tapa and woven mats mainly for cultural events but also for sale. (See Figure 3.4)



The Tongatapu region had the largest number of subsistence and semi-subsistence handicraft making households, a total of 3,290 households. The Vava'u region had 1,337 households engaged in subsistence and semi-subsistence handicraft making.

The Ha'apai region had a total of 670 households engaged in subsistence and semisubsistence handicraft making. The 'Eua region had 381 households and the Niuas had 207 households were active in subsistence and semi-subsistence handicraft making.

Summary table 3.3: Agriculturally active households in the semi-subsistence sector - 2015

Island divisions	Crop	Livestock	Fisheries	Forestry	Handicraft
TONGA	6,358	9,257	997	1,548	3,230
Tongatapu	4,272	6,286	520	663	1,945
Vava'u	946	1,638	236	577	502
Ha'apai	543	668	165	9	405
'Eua	421	476	41	280	244
Niuas	176	189	35	19	134

Handicraft making is a main source of income for many households especially in the rural areas and outer islands. Handicraft making households in the Niuas tend to specialize in growing and weaving mats from kie Tonga (white pandanus).

### 3.3.2 Commercial agriculturally active households

Only a small proportion of the agriculturally active households were engaged in commercial activities. Only 89 households in the crop sub-sector were operating commercially; 329 households in the livestock sub-sector; 96 households in the fisheries

sub-sector; 344 households in the forestry sub-sector; and 266 households in the handicraft sub-sector. Majority of these commercial operators lived in the Tongatapu region except for forestry operators who were mainly in the Vava'u region.

Summary table 3.4: Agriculture households in the commercial sector - 2015

Island division	Crops	Livestock	Fishery	Forestry	Handicrafts
TONGA	89	329	96	344	266
Tongatapu	74	246	84	111	191
Vava'u	8	41	9	222	39
Ha'apai	1	21	3	0	17
'Eua	2	20	0	3	15
Niuas	4	1	0	8	4

#### 3.4 Conclusion

According to the 2015 TNAC, subsistence and semi-subsistence agricultural activities continued to dominate agricultural activities in Tonga for all the main subsectors, namely, cropping, livestock, fisheries, forestry, and handicrafts. On average, over 95% of the agriculturally active households in Tonga engaged mainly in subsistence and semi-subsistence agricultural activities.

Many agriculturally active households reported that one of the main purposes for their agriculture activity is to meet their social obligations such as funerals, weddings, birthdays, church conferences and other community or extended family events.

In the 2015 TNAC, crop cultivation and raising livestock were the main subsistence and semi-subsistence agriculture sub-sector activities. Food security was one of the main reasons for farmers' continued engagement in crop cultivation and livestock farming. Livestock and forestry are the main commercial activities.

The next chapter is an analysis of the demography of members of the agriculturally active households.

### 4. DEMOGRAPHY

### 4.1 Overview

This chapter analyzes the demography of the agriculturally active population, which included all those people who lived in the 13,944agriculturally active households in Tonga. The analysis will include age; gender; employment status and main source of income. Head of household will also be looked at.

# 4.2 Total agriculture population, gender and age

A total of 82,353 people lived in the 13,936 agriculturally active households in Tonga or an average of 6 people per household during the 2015 census. The average number of people per household varied slightly between the five main regions with Tongatapu and 'Eua regions having 6 people per household while Vava'u, Ha'apai and Niua regions had 5 people per household. Tongatapu region had the highest reflecting the high concentration of the total population in that region. (See Summary table 4.1)

Summary table 4.1: Members of agriculturally active households - 2015

Island divisions	Total	Male	Female
TONGA	82,353	41,016	41,337
Tongatapu	60,537	30,090	30,447
Vava'u	11,990	5,991	5,999
Ha'apai	4,918	2,464	2,454
'Eua	3,561	1,774	1,787
Niuas	1,347	697	650

### 4.3 Geographical distribution

The majority of the agriculturally active population resided in the main island of Tongatapu (60,537 people or 74%); followed by Vava'u region (11,990 people or 14%); Ha'apai region (4,918 people or 6%); 'Eua region (3,561 people of 4%) and the Niuas (1,347 people or 2%). This is in line with the total Tongan population geographical distribution, where about 75% of the total population is in the main island. The gender for the agriculturally active population was equally distributed between female and male, both at national and regional levels.

Over 41% or 33,618 people lived in urban areas such as the districts of Kolofo'ou and Kolomotu'a in Tongatapu, Neiafu district in Vava'u and Pangai district in the Ha'apai

region. This demonstrated that the agriculturally active population was not concentrated only in rural areas. Many lived in urban districts and commuted to their bush allotments.

In terms of age, 35% or 29,111 household members were below 15 years old. About 55% or 45,632 people were between the age of 15 and 59 years old. The remaining 10% or 7,510 people were over the age of 60 years old. This age distribution was seen in all the five main regions, where 35% of the regional population was aged below 15 years old. Tonga has a young population which indicated the need to plan for more jobs when this young population enters the job market.

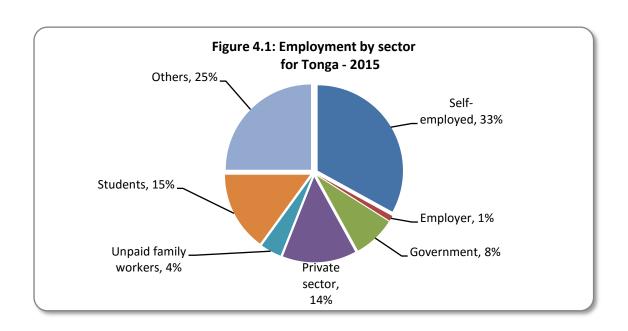
## 4.4 Employment status

There were 53,279 agriculturally active household members that were aged15 years old and over. About 21,751 people or 41% were either inactive or not in the labour force during the 2015 census while 31,528 people or 59% were active in the labour force. Those inactive in the labour force included people who were retired, students or housewives. About 25, 898 people or 49% of the agriculturally activelabour force were male and 27,381 or 51% were female. (See Summary table 4.2)

Summary table 4.2: Agriculturally active workforce by gender – 2015

Island	Total agriculturally active workforce by gender - 2015					
divisions	Total	Ma	le	Female		
		nos.	nos. %		%	
TONGA	53,279	25,898	49%	27,381	51%	
Tongatapu	39,320	19,117	49%	20,203	51%	
Vava'u	7,656	3,685	48%	3,971	52%	
Ha'apai	3,155	1,542	49%	1,613	51%	
'Eua	2,247	1,102	49%	1,145	51%	
Niuas	901	452	50%	449	50%	

Of the 31,528 people active in the labour force, about 17,666 or 56% were self-employed. About 7,213 people or 23% were employed in the private sector while 4,199 people or 13% were employed by others. About 1,919 people or 6% were unpaid family workers and 531 people or 2% managed their own businesses. This can be compared to the figures for all of Tonga (See Figure 4.1)



In terms of self-employed workers, Niua region had the highest proportion of its total workforce being self-employed (61% or 551 people). This indicated that, with fewer jobs available, many people created their own small business to help them earn a living in the outer islands. In the Ha'apai region over 50% of the agriculturally activelabour force worked on their own. In the Vava'u region 42% of its labour force was self-employed, and in the 'Eua region 36% of its labour force was self-employed. The Tongatapu region had more job opportunities available in the private, semi-government and government sectors and had the lowest proportion of self- employed workers, 29%.

In terms of working in government and private sectors, the Tongatapu region had the largest proportion of its agriculturally activelabour force working in these two sectors; with 18% working in government and 9% working in the private sector. This is due to many of the government services being located in the main island of Tongatapu. In contrast, the Ha'apai region had the lowest proportion working in these two sectors, less than 1% working in the private sector and just over 4% in the government sector. The Niua region had the second largest proportion of workers in government, 8% or a total of 75 workers.

#### 4.5 Educational level

Members of the agriculturally active households were literate with 89% having some education. Only 11% did not have any form of education. A total of 48,343 people or 59% were currently in secondary education; 14,132 people or 17% were in primary education; 5,674 people or 7% were in post secondary education; 3,114 people or 4% were in

tertiary education; 1,495 children were in pre-schools and another 717 people (1%) were in some other educational institutions.

The 'Eua region had the lowest proportion of members with no education at all, 9% compared to the Vava'u and Ha'apai regions,10% and the Tongatapu and Niua regions with 11% of its agriculturally active members with no education.

The Tongatapu region had the highest proportion of members with tertiary education, 4%. The Vava'u region had 3%, the Ha'apai and 'Eua regions each had 2%. The Niua region had only 1% of its agriculturally active members with tertiary education.

# 4.6 Sectors of employment

There were six main sectors of employment for the agriculturally active workforce: agriculture, forestry and fishing; manufacturing; services activities; education; construction; and public administration. 11,114 people or 34% of the agriculturally active workforce were employed in the agriculture, forestry and fishing. 6,089 people or 19% were employed in the manufacturing sector, 3,760 or 12% in other service activities, another 1,544 or 5% in the education sector and 1,146 people or 4% in professional science and technical activities. 1,096 people or 3% were in public administration and the remaining 23% were spread throughout other sectors of the economy, such as financial, health and social sector, arts, entertainment and recreation.

Of the 11,114 people employed in the agriculture sector, 88% were male and only 12% were female. This reflected the predominance of males in the agriculture sector.

## 4.7 Head of agriculturally active households

Of the total 13,936 agriculturally active households, 81% or 11,290 households were headed by males, while 19% or 2,646 households were headed by females. (See Summary table 4.3)

'Eua region had the highest proportion of agriculturally active households with female heads at 21%. In the 'Eua Fo'ou district 25% of the agriculturally active households were headed by females. The Tongatapu region had 20%. The Vava'u region had 15%, Ha'apai region had 16% and the Niua region had 13%.

Summary table 4.3: Gender of head of agriculturally active households - 2015

Island divisions	Agriculturally active households	Male	Female	% female headed households
TONGA	13,936	11,290	2,646	19%
Tongatapu	9,958	7,951	2,007	20%
Vava'u	2,190	1,857	333	15%
Ha'apai	915	769	146	16%
'Eua	619	491	128	21%
Niuas	254	222	32	13%

About 42% of the agriculturally active household members were children of the head of the households while 14% were grandchildren. Over 12% were spouses of the head of households, 10% were relatives of the households and 1% was parents of the head of household. This reflected the strong presence of extended family living in the agriculturally active households where a range of members of the extended family still live under one roof.

### 4.8 Conclusion

There was an average of five or six people per agriculturally active household in Tonga. 35% of these are less than 15 years old. This corresponds to Tonga's population age structure. Agriculturally active households contain many young people. 59% of the household members were currently in secondary school, another 17% in primary school. Only 11% of household members did not have any education. 4% had tertiary level education.

The agriculturally active population was distributed evenly between urban (41%) and rural areas of Tonga, with a high proportion (75%) living in Tongatapu. This also reflects Tonga's total population distribution.

The lifestyle in the agriculturally active households reflected a very strong presence of extended family ties where parents still live with children over the age of 18 years old, grandchildren and grandparents. 81% of the households were headed by males.

A large proportion of the agriculturally active workforce was self-employed.34% are employed in agriculture, fishery and forestry. Of these, 88% are males. Manufacturing, government and private sectors were the other major source of jobs especially in the Tongatapu region.

The next chapter is an analysis of the crop cultivation activities.

## 5 CROPS

### 5.1 Overview

The purpose of this chapter is to analyze the total cultivated land area<sup>xxi</sup>; the type of crops cultivated; and the method and type of planting. Crop cultivation included crops that were cultivated in the last 12 months and still growing on census day. Crops harvested are those that were harvested during the last twelve months prior to the census day. A total of 10,296 households engaged in crop cultivation in 2015.

## 5.2 Total cultivated land area

The total cultivated land area was recorded as 57,611 acres comprising of 57,509 acres (99.8%) from bush allotment holdings and 102 acres (0.2%) from town allotment holdings. A large proportion of the cultivated land area was land lying fallow for less than five years (25,445 acres); followed by annual crop cultivated land (23,999 acres); perennial crop cultivated land (3,207 acres); and pasture land (4,858 acres). Kitchen gardens within the town allotment occupied 102 acres. (See Summary table 5.1)

Summary table 5.1: Cultivated land use (acres) – 2015

Island	Total cultivated		Town allotment cultivated land use			
divisions	land area acres	Annual crop	Perennial crop	Pasture	Fallow land (<5yrs)	Kitchen garden
TONGA	57,611	23,999	3,207	4,858	25,445	102
Tongatapu	39,253	18,148	1,163	3,885	16,006	51
Vava'u	8,989	2,424	1,343	571	4,636	15
Ha'apai	4,129	1,643	158	43	2,277	8
'Eua	4,084	1,160	443	351	2,114	15
Niuas	1,156	624	100	8	412	12

The Tongatapu region has the largest cultivated land area which was 39,253 acres or 68% of the total cultivated land area. This was followed by Vava'u region which had 8,989 acres (16%); Ha'apai region had 4,129 acres (7%); 'Eua region had 4,084 acres (7%) and the Niuas had 1,156 acres (2%).

Operating kitchen gardens in the town allotment has become a common practice with many Tongan households who grow vegetables, plantain or green leaves at their backyard. In addition, there are a lot of fruit trees such as breadfruit, pawpaw, banana and plantain trees grown in the town allotments. This is very efficient method of farming as it saves time from travelling as well as cost of transportation.

## 5.3 Annual crop cultivation

Annual crops are crops with less than a one-year growing cycle. A total of 23,999 acres were cultivated with annual crops during 2015. The Tongatapu region had the largest annual crop land area occupying 18,148 acres (76%) of the total cultivated land area. This was followed by Vava'u region which had 8,989 acres (10%); followed by the Ha'apai region which had 1,643 acres (6%); the 'Eua region with 1,160 acres (5%) and the Niuas had 624 acres (3%).

The five most common annual crops cultivated during 2015 were cassava (manioke), yam (ufi), yautia (talo futuna), sweet potato (kumala) and swamp taro (talo Tonga). Areas planted with cassava and sweet potatoes increased in 2015 when compared to 2001, while areas planted with yautia, yam and swamp taro declined. Cassava plantations occupied the largest area of annual crop plantation (10,208 acres) followed by yam (5,315 acres); yautia (2,565 acres); sweet potato (1,901 acres); and swamp taro (1,627 acres). (See Summary table 5.2)

### 5.3.1 Cassava (manioke)



Cassava plantations took up 10,208 acres or 18% of the total cultivated land area. The region with the largest area of cassava plantation was Tongatapu with a total of 8,160 acres. Vaini district had the largest area of cassava plantation in the Tongatapu region, recorded at 1,809 acres. This was followed by Nukunuku and Kolovai districts which had 1,727 acres and 1,028 acres respectively. The Vava'u region had 800 acres planted with cassava; Ha'apai region had 815 acres; 'Eua had 291 acres and the Niuas had 142 acres cultivated with cassava.

# 5.3.2 Yam ('ufi tokamu'a and 'ufi tokamui)



Yam plantations took up a total of 5,315 acres. The Tongatapu region was the largest yam growing region, with a total of 4,248 acres under yam plantation. This was followed by the Vava'u region with an area of 585 acres; the Ha'apai region had 197 acres; the 'Eua had 163 acres and the Niuas had 121 acres of yam plantation.

# 5.3.3 Yautia (talo futuna)



Yautia was the third largest annual crop planted in 2015 with a total land area of 2,565 acres. The Tongatapu region had the largest area of yautia plantation, a total of 1,956 acres. This was followed by the Vava'u region a total of 248 acres; the Ha'apai region had 136 acres; 'Eua had 161 acres and the Niuas had 65 acres.

## 5.3.4 Sweet potato (kumala)



Sweet potato was the fourth most common crop planted in 2015 with a total of 1,901 acres. The Tongatapu region had the largest area with sweet potato plantation, which was recorded at 1,408 acres. The Vaini district was the largest sweet potato growing district in the Tongatapu region. The Vava'u region had a total of 154 acres of sweet potato plantation; the Ha'apai region had 127 acres; the 'Eua region had 166 acres; and the Niuas had 46 acres.

# 5.3.5 Swamp taro (talo Tonga)



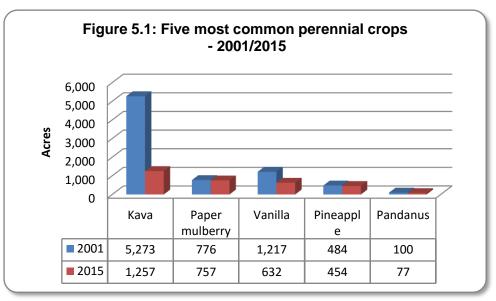
The area planted with swamp taro in 2015 was 1,627 acres. The Tongatapu region had a total of 1,216 acres cultivated with swamp taro followed by the Vava'u region which had 130 acres planted with swamp taro. The Ha'apai region had 70 acres; the 'Eua had 155 acres and the Niuas had 56 acres of swamp taro plantation.

Summary table 5.2: Five most common annual crops cultivated (acres) - 2015

Island divisions	Cassava	Yam	Yautia	Sweet potato	Swamp taro
TONGA	10,208	5,315	2,565	1,901	1,627
Tongatapu	8,160	4,248	1,956	1,408	1,216
Vava'u	800	585	248	154	130
Ha'apai	815	197	136	127	70
'Eua	291	163	161	166	155
Niuas	143	121	65	46	56

# 5.4 Perennial crops

Perennial crops are crops with more than one year growing cycle. Perennial crop cultivation occupied a total of 3,207 acres with kava, paper mulberry, vanilla, pineapple and pandanus being the five most common. (See Figure 5.1) Overall, there was a decline in the total area planted with perennial crops from 6,482 acres in 2001 to only 3,207 acres in 2015. The largest decline was in areas planted with kava and vanilla. Areas planted with pineapple, paper mulberry and pandanus also declined.



### 5.4.1 Kava



A total of 1,257 acres was planted with kava in 2015 compared to 5,273 acres in 2001. The Vava'u region had the largest area of kava plantation which was recorded at 805 acres or 64%. Districts with the largest kava plantation in the Vava'u region were Leimatu'a (179 acres), Longomapu (104 acres) and Taoa (99 acres). The 'Eua region had the second largest area planted with kava (249 acres). The Tongatapu region had 141 acres planted with kava; the Ha'apai region had 7 acres and the Niuas had 55 acres.

# 5.4.2 Paper mulberry (hiapo)

Paper mulberry or hiapo plantation occupied a total of 757 acres. The Tongatapu region had the largest area planted with paper mulberry (587 acres) followed by the Ha'apai region (92 acres). The 'Eua region had a total of 73 acres planted with paper mulberry; the Vava'u region had 5 acres of paper mulberry and the Niuas 2 acres.

### 5.4.3 Vanilla (vanila)

Vanilla plantation occupied a total of 632 acres. This is a decline of 56% from the 1,123 acres recorded in 2001. The Vava'u region continued to have the largest area (341 acres) followed by the Tongatapu region (159 acres). The 'Eua region had 104 acres of vanilla plantation; the Niuas had 22 acres and the Ha'apai region had only 6 acres.

# 5.4.4 Pineapple (faina)

Pineapple cropping was the fourth most common perennial crop grown in Tonga in 2015. 454 acres were planted with pineapple crops in 2015. Vava'u had the largest area (226 acres) followed by Tongatapu (208 acres), 'Eua (9 acres), Ha'apai (7 acres) and the Niuas (3 acres).

# 5.4.5 Pandanus (lou'akau)

Pandanus was the fifth largest number of perennial trees grown in Tonga in 2015 occupying a total of 77 acres. It was interesting to note that the Niuas regions had the largest area of pandanus plantations (37 acres). Ha'apai had 23 acres. Tongatapu had 9 acres; the Vava'u region had 8 acres and the 'Eua region had only 1 acre.

## 5.5 Vegetables and other crops

416 acres were planted with watermelon. Tomatoes occupied 111 acres, mainly in the Tongatapu region; tobacco 37 acres; papaya 28 acres; capsicum 24 acres and head cabbage 22 acres.



# 5.6 Types of planting

There were three main types of crop planting used in Tonga: single crop, mixed crop and scattered. Table 5.3 shows that the most common type of planting is single crop, which takes up about 22,411 acres or 81% of the area cultivated with annual and perennial crops. This was followed by mix crop which took up a total of 5,074 acres or 18% of the total cultivated area. The scattered pattern was less than 1%.

Summary table 5.3: Type of planting (acres) - 2015

	Type of planting (acres)						
Island divisions	Total	Total Single crop		Scattered pattern			
TONGA	27,615	22,411	5,074	130			
Tongatapu	19,627	17,199	2,398	29			
Vava'u	3,798	2,175	1,603	-			
Ha'apai	1,816	1,437	356	23			
'Eua	1,607	1,156	405	45			
Niuas	767	443	311	12			

# 5.7 Method of planting

There are three main methods of planting: compact, line and scatter<sup>xxii</sup>. Of the 27,168 acres planted with annual and perennial crops about 24,838 acres or 91% of the total area was planted using the compact method. Cassava, yam, sweet potatoes, yautia, swamp taro, paper mulberry and vanilla had majority of their planting method as compact. About 2,034 acres of perennial and annual crops were planted using the line method and only 296 acres were planted using the scatter method. (See Summary tables 5.3 and 5.4)

Summary table 5.4: Method of planting for major crops (acres) - 2015

	Method of planting (Acres)					
	Total	Compact	Line	Scatter		
Crops	27,168	24,838	2,034	296		
Pineapple (Faina)	454	405	46	3		
Plantain (Hopa)	502	324	151	27		
Giant Taro (Kape)	626	486	121	19		
Sweet potato (Kumala)	1,901	1,733	150	15		
Cassava (Manioke)	10,207	9,661	511	29		
Watermelon (Meleni)	416	394	21	0		
Cooking banana (Pata)	124	80	32	12		
Banana (Siaine)	282	173	87	22		
Yautia (Talo Futuna)	2,565	2,387	152	24		
Swamp taro (Talo Tonga)	1,627	1,464	142	20		
Corn (Koane)	37	32	5	0		
Pele	38	36	2	0		
Tomato	111	98	13	1		
Paper mulberry (Hiapo)	757	695	41	21		
Kava	1,257	994	206	58		
Pandanus (Lou'akau)	77	58	6	9		
Vanilla	632	522	89	21		
Peanut (Pinati)	259	250	8	1		
Yam (Ufi)	5,315	5,045	252	13		

### 5.8 Conclusion

The most striking feature of Tonga's crop cultivation is that 44% of its recently cultivated land lies fallow. This percentage varies from region to region. Tongatapu has 41% lying fallow; Vava'u 52%; Ha'apai 55%; 'Eua 52% and the Niuas 36%.

Crop cultivation has been dominated by annual crops, namely, cassava, sweet potato, taro and yam. Perennial crops such as kava and vanilla have declined since 2001,

caused by changes in the market regulation, weather and market demand for these crops. Crop cultivation in the Ha'apai region will take time to recover after Cyclone Ian which damaged many annual and perennial crops. Vegetable plantation continued with the main purpose of supplying the domestic market. The Tongatapu region continued to be the main annual crop cultivating region, while the Vava'u and 'Eua regions dominated perennial crop cultivation.

The next chapter will analyze livestock numbers in Tonga; including livestock kept, disposed of and average herd numbers per household.

### 6. LIVESTOCK

### 6.1 Overview

The livestock included in this report are those kept and those disposed of during the last twelve months before census. Livestock includes cattle, pigs, horses, sheep, goats, chickens and ducks. Although the number of dogs and cats kept was also asked in the questionnaire, they were not considered livestock for the purpose of this census.

Summary table 6.1: Total number of livestock -2001-2015

	2001	2015	% change
Cattle	10,354	18,762	81%
Pigs	113,580	110,310	-3%
Horses	3,255	1,942	-40%
Sheep	0	1,240	100%
Goats	2,741	1,744	-36%
Chickens	177,829	92,071	-48%
Ducks	1,119	2,705	142%

Summary table 6.1 above shows that while total numbers of cattle and sheep increased the number of pigs, horses, goats, chickens and ducks declined compared to 2001. Chicken numbers showed the largest decline of 42% while duck and sheep numbers increased by 142% and 100% respectively.

### 6.2 Households with livestock

A total of 12,859 households raised livestock during the 12 months before the 2015 census and these households kept one or more kind of livestock at the same time. About 3,443 households were raising livestock for subsistence purpose, 9,257 households were raising livestock for semi-subsistence purpose, and 159 households raised livestock for commercial purpose.

About 20% (3,310 households) of the total households in Tonga kept cattle at the time of the 2015 census. On average, each household kept seven cattle. About 62% (10,038 households) of the total households in the Kingdom kept pigs with an average of 11 pigs per household. About 161 households kept sheep with an average of 8 sheep per household. About 4,797 households kept chickens with an average of 19 chickens per household. (See Summary table 6.2)

Summary table 6.2: Average number of livestock kept per household - 2015

Type of livestock	Number of households	Number of livestock kept	Average number of livestock kept
Cattle	3,310	18,762	7
Pigs	10,038	110,310	11
Horses	865	1,942	2
Sheep	161	1,240	8
Goats	405	1,744	4
Chickens	4,797	92,071	19
Ducks	322	2,705	8

# 6.3 Livestock kept and disposed of

## 6.3.1 Cattle

More than 60% of the 3,310 households kept 5 or less cattle, while only 14 households or less than 1% kept more than 50 cattle. About 782 households kept around 5-9 cattle, 376 households kept 10-19 cattle and 109 household kept 20-49 cattle.

During the year ended April 2015, a total of 18, 803 cattle were kept in the Kingdom of Tonga; this is a significant increase from the 10,354 cattle kept in 2001. This number was made up of 16,768 beef cattle (89%) and 2,035 dairy cattle (11%). This indicated that Tonga's cattle industry is dominated by beef cattle. (See Summary table 6.3)

79% of the beef cattle were cows (7,589), bulls (3,172) and heifers (2,450). The remaining 21% (3,557) were calves and steers. The Tongatapu region kept the largest number of beef cattle (8,854) followed by Vava'u (5,130), Ha'apai (1,318), 'Eua (1,417) and the Niuas (49).

Summary table 6.3: Types of beef cattle kept - 2015

Island divisions	Total beef cattle	Calves	Steers	Heifers	Bulls	Cows
TONGA	16,768	1,820	1,737	2,450	3,172	7,589
Tongatapu	8,854	1,109	888	1,259	1,742	3,856
Vava'u	5,130	470	587	815	836	2,422
Ha'apai	1,318	66	137	176	272	667
'Eua	1,417	169	122	192	316	618
Niuas	49	6	3	8	6	26

A total of 2,035 dairy cattle were kept in the Kingdom during the year ended April 2015. Most of these dairy cattle were kept in the main island group, Tongatapu. 81% of these dairy cattle were cows (938), bulls (403) and heifers (299). The remaining 19% were calves (191) and steers (204). (See Summary table 6.4)

Summary table 6.4: Total number of dairy cattle kept - 2015

Island	Total number of dairy cattle							
divisions	Dairy cattle	Calves	Steer	Heifer	Bull	Cow		
TONGA	2,035	191	204	299	403	938		
Tongatapu	1,061	114	91	189	159	508		
Vava'u	582	12	57	57	184	272		
Ha'apai	229	21	33	37	42	96		
'Eua	151	44	23	16	18	50		
Niuas	12	0	0	0	0	12		

During the year ended April 2015, a total of 4,564 cattle were disposed of: 4,429 beef cattle and 135 dairy cattle. This represented 24% of the total cattle in the Kingdom. Ha'apai disposed of the largest proportion of cattle kept in any region (32%). The Tongatapu and Vava'u regions disposed of 24% of the cattle kept for both regions.

The main purpose for disposing of cattle was for social obligations, such as weddings, funerals, birthdays or church conferences. About 2,481 cattle (54% of total disposals) were for social obligation purposes. About 974 cattle (21%) were disposed of for sale; 554 cattle (12%) for home consumption and 555 cattle (12%) were lost or stolen. (See Summary table 6.5)

Summary table 6.5: Total number of cattle kept and disposed of - 2015

Island		Total cattle			cattle	Dairy cattle	
divisions	Kept	Disposed of	% Disposed	Kept	Disposed of	Kept	Disposed of
TONGA	18,803	4,564	24%	16,768	4,429	2,035	135
Tongatapu	9,915	2,380	24%	8,854	2,283	1,061	97
Vava'u	5,712	1,370	24%	5,130	1,345	582	25
Ha'apai	1,547	490	32%	1,318	479	229	11
'Eua	1,568	320	20%	1,417	318	151	2
Niuas	61	4	7%	49	4	12	0

# 6.3.2 Pigs

A total of 10,038 households kept pigs during the 2015 census. About 33% of these households kept less than 5 pigs, 25% kept 5-9 pigs; 26% kept 10-19 pigs; 14% kept 20-49 pigs and about 2% kept more than 50.

The total number of pigs kept in Tonga at the time of the 2015 census was 110,616 pigs, the highest number of livestock kept in the Kingdom. About 10,038 households kept pigs which was also the biggest group of livestock keepers. These households kept an average of 11 pigs each. The large amount of pigs kept in Tonga reflected the high level of demand for piglets and sows for consumption purposes. (See Summary table 6.6)

Almost 50% of the total pigs were piglets (53,643); 23% were sows (25,146); 17% were weaners (18,778); 9,248 were barrows (8%); and 2% were boars (3,801). The ratio of piglets per sow is 3. This is low when compared to the ratio in other countries but it is possible that this is due to high number of piglets being consumed throughout the year.

The Tongatapu region has 60,061 (54%) of the total pigs kept in Tonga. This was followed by Vava'u, 25,067 (22%); Ha'apai 11,944 (11%), 'Eua 8,439 (8%) and the Niuas 5,105 pigs (5%).

Summary table 6.6: Total number of pigs kept – 2015

lalan d	Total pigs							
Island divisions	Total pigs	Boars	Sows	Piglets	Weaners	Barrows		
TONGA	110,616	3,801	25,146	53,643	18,778	9,248		
Tongatapu	60,061	2,116	13,696	25,691	13,514	5,044		
Vava'u	25,067	661	5,669	14,149	2,434	2,154		
Ha'apai	11,944	682	2,715	6,339	1,245	963		
'Eua	8,439	195	1,902	4,564	1,058	720		
Niuas	5,105	147	1,164	2,900	527	367		

About 50% of the pigs disposed of were piglets and weaners, mainly for social obligations. Only 23% of the total piglets disposed of were for personal consumption; 13% were sold in the market and 14% were lost.

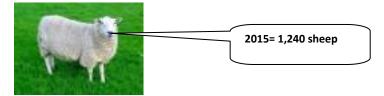
### 6.3.3 Sheep

Sheep numbers in Tonga have increased in previous years to a total of 1,240 at the time of the 2015 census. Ewes represented 58% of the total sheep numbers; lambs

represented 27% and rams represented 15%. About 161 households kept sheep in Tonga. 63% of these households kept less than 5 sheep. Four households and organizations kept more than 50 sheep, two in Tongatapu, one in the 'Eua region and the other one in the Vava'u region.

About 653 sheep or 53% of the total sheep number were kept in the Tongatapu region; followed by the Vava'u region (23%); the 'Eua region (21%). The Niuas have more sheep (29) than the Ha'apai region (9).

Sheep are a new livestock to Tonga but rapidly increasing in numbers.



### 6.3.4 Poultry (chickens and ducks)

A total of 92,071 chickens were kept at the time of the 2015 census, which represented a decline of 48% from the 177,829 chickens recorded in 2001. About 91% of the chickens kept in the Kingdom were domestic breeds raised mainly for home consumption. The other 9% were egg broilers and broilers raised for commercial purposes. Local production of chickens has been gradually replaced by imported chickens.

A total of 23,069 chickens were disposed of at the time of 2015 census, mainly for social obligations and home consumption. A total of 2,705 ducks were recorded in 2015 census; this is a significant increase from the 1,119 in 2001.

### 6.4 Conclusion

Livestock production in Tonga continued to focus on subsistence and semi-subsistence purposes with only a few households engaged in livestock for commercial purposes. Pigs and cattle dominated the livestock industry in Tonga while sheep numbers are picking up very rapidly.

Chicken numbers declined by over 50% reflecting the country's growing dependence on imported chicken meat. The number of horses and goats also declined (40% and 36% respectively). Between 12% and 14% of cattle and pigs were lost or stolen.

The next chapter will analyze the fisheries sector focusing on type of species harvested and the main purpose of fishing activities.

### 7. FISHERIES

### 7.1 Overview

This chapter will analyze the fisheries sub-sector including the total number of households engaged in fishing activities; the main purposes for fishing; species harvested and the type of fishing methods.

The 2015 TNAC showed that households engaged in fisheries declined by over 50% compared to the 2001 TNAC. This Report strongly recommends that any comparison on fisheries activities between the two censuses should be taken with great caution.

# 7.2 Households engaged in fishing activities

Fishing is one of the most important economic activities in the Kingdom since it is surrounded by about 200 square kilometers of bodies of water.

During the twelve months before the agriculture census taking in April 2015, a total of 2,360 households or 15% of the total households in Tonga engaged in fishing activities. The Niua region had the highest proportion of households engaged in fishing, 59% (159 households). This was followed by the Vava'u region which had 35% (835 households) engaged in fishing, then the Ha'apai region at 34% (317 households). The 'Eua region had only 11% of its total households engaged in fishing. Although the Tongatapu region had the highest number of households engaged in fishing activities, this only represented 8% of its total households. (See Summary table 7.1)

Summary table 7.1: Households engaged in fishing activities - 2015

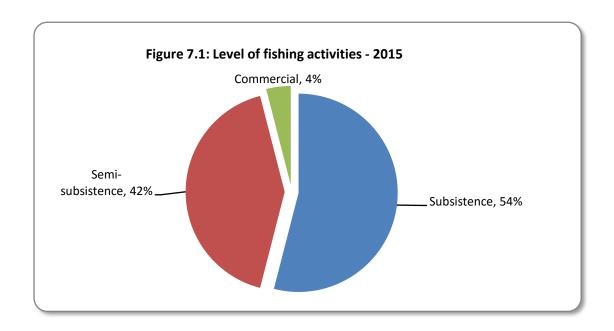
Island divisions	Total number of households	Total household s engaged in fishing	Percentage of households engaged in fishing	Proportion of households by island division
TONGA	16,122	2,360	15%	15%
Tongatapu	11,914	980	42%	8%
Vava'u	2,360	835	35%	35%
Ha'apai	934	317	13%	34%
'Eua	644	69	3%	11%
Niuas	270	159	7%	59%

Overall, 42% (980 households) of the fishing households lived in Tongatapu; 35% (835 households) in the Vava'u region; 13% (317 households) in the Ha'apai region, 3% (69 households) in the 'Eua region and 7% (159 households) in the Niuas.

# 7.3 Main purpose of fishing

Of the total 2,630 households engaged in fishing, 54% (1,267 households) only engaged in subsistence fishing for consumption. About 42% (997 households) engaged in semi-subsistence which was mainly for consumption and some for sale. Only 4% (96 households) engaged in commercial fishing. (See Summary table 7.2)

Of the total 96 households engaged in commercial fishing, 88% (84 households) lived in the main island of Tongatapu. Another 9% (9 households) resided in Vava'u and 3 commercial fishing households lived in the Ha'apai region. Tongatapu had the highest proportion of households engaged in commercial fishing.



The Vava'u region had 71% (590 households) engaged in subsistence fishing, 28% (236 households) in semi-commercial fishing and only 1% (9 households) in commercial fishing. The 'Eua and Niua regions did not have any commercial fishing households, with all their fishing households engaged either in subsistence or semi-subsistence fishing. The Ha'apai region had only three commercial fishing households.

The 2015 TNAC showed that fishing activities in Tonga were still mainly for subsistence and semi-subsistence with very minimal commercial fishing activities.

Summary table 7.2: Level of fishing activities - 2015

	Total	Sub	sistence	Semi-sı	ubsistence	Commercial	
Island divisions	Households engaged in fishing activities	Number	% of total households	Number	% of total households	Number	% of total households
TONGA	2,360	1,267	54%	997	42%	96	4%
Tongatapu	980	376	38%	520	53%	84	9%
Vava'u	835	590	71%	236	28%	9	1%
Ha'apai	317	149	47%	165	52%	3	1%
'Eua	69	28	41%	41	59%	0	0%
Niuas	159	124	78%	35	22%	0	0%

# 7.4 Fishing methods

The fishing households in Tonga were engaged in one or more type of fishing, namely, hand line (1,194 or 50%), spear fishing (1,039 or 44%) and reef gleaning (639 or 27%). About 30% also reported to have engaged in other types of fishing methods such as net fishing, octopus harvesting and trolling.

Tongatapu had the highest number of households engaged in hand line fishing. The Niuas had the highest proportion of households (42%) engaged in this fishing method. This compared to only 27% in the Vava'u region, 29% in the Tongatapu region, 36% in the Ha'apai region and 30% in the 'Eua region.

The most common fishing method in the Vava'u region was reef gleaning with 46% (387 households). This was followed by hand line fishing used by 45% (385 households). The most common fishing method in the Ha'apai region was spear fishing 59% (186 households) followed by deep sea hand line fishing 42% (133 households).

The 'Eua and Niua regions both had hand line fishing as their main method of fishing, followed by spear and glean fishing for both island regions.

# 7.5 Species harvested

The fish species harvested by fishing households in Tonga were one or more of the following: reef finfish (1,386 or 59%), tuna (936 or 40%), shell fish (710 or 30%) and other species (749 or 32%).

About 1,386 or 59% of the fishing households in Tonga had reef finfish as their main harvested species. The Niuas had the highest proportion of fishing households (130 or 82%) who harvested reef finfish. This was followed by Ha'apai (190 or 60%), Tongatapu (570 or 58%) and Vava'u (460 or 56%). The Tongatapu region, however, had the highest number of households who harvested reef finfish species (570 households).

About 936 or 40% of the fishing households in Tonga harvested tuna. The Ha'apai region had the highest proportion of fishing households (207 or 65%). This was followed by the 'Eua region (36 or 50%), then Vava'u (352 or 42%) and Tongatapu (326 or 33%). The Vava'u region had the largest number of fishing households who harvested tuna. In the Niuas only 16 fishing households engaged in tuna fishing.

Shell fish is also another common species harvested by fishing households in Tonga. About 710 households or 30% harvested shell fish. The Vava'u region had the highest number of households harvesting shell fish, 352 households or 42%.

Lobster and sea cucumber were other fish species harvested by fishing households in Tonga. The Vava'u region had the highest number of households harvesting lobster (229 or 27%). The Ha'apai region had the highest proportion of households (112 or 35%) who harvested lobsters.

The Vava'u region had the highest number and highest proportion of fishing households harvesting sea cucumber (325 or 39%). This is compared to the Tongatapu region which only had 13% of its fishing households harvesting sea cucumber. The Vava'u region has the best climate for growing sea cucumber. It is becoming one of the main types of commercial fishing in that region.

During the week the 2015 TNAC was conducted, the total value of fish sold by fishing households was estimated at \$642,603 pa'anga.

# 7.6 Time of fishing trips

About 959 fishing households or 41% go fishing during day and night times. Another 904 fishing households or 38% only go fishing during the day and the remaining 494 fishing households or 21% only go fishing during night time.

The Tongatapu region had the highest number of households who went fishing during day and night times and during night times only. The Vava'u region had the highest number of fishing households who went fishing during day time only.

The Ha'apai region had the highest proportion of fishing households who went fishing during day and night times. On the other hand, the 'Eua and Niua regions had the lowest proportion of fishing households who went fishing during both day and night times.

About 1,782 (75%) of the total fishing households went fishing all year round. About 541 fishing households (23%) went fishing during summer season only and 37 households (2%) went fishing during the winter season only.

### 7.7 Conclusion

The 2015 TNAC recorded a significant decline in fishing activity compared to the 2001 Census. A large proportion of the fishing households were in the Tongatapu (42%) and Vava'u (35%) regions as compared to other regions.

Overall, 15% of Tongan households engaged in fishing according to the 2015 TNAC. Much higher proportions were fishing in the Niuas (59%), Ha'apai (34%) and Vava'u (35%) than Tongatapu (8%) and 'Eua (11%).

Fishing activities in Tonga were mainly for subsistence and semi-subsistence purposes with only 4% of households engaging in commercial fishing. In Vava'u, 39% of fishing households harvested sea cucumber. This is a growth market. The majority of fishing households went fishing all year round.

The next chapter will analyze other agricultural activities, namely forestry and handicraft activities.

#### 8. OTHER AGRICULTURAL ACTIVITIES

### 8.1 Overview

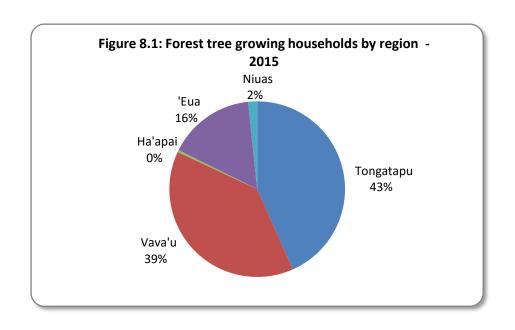
The purpose of this chapter is to analyze the two smaller agriculture sub-sectors, namely, forestry and handicraft. In the 2015 TNAC, forestry included trees that were grown for their high value and trees grown for timber. Other forest trees were not categorized as forest trees, though they have been grown in the bush allotments for many years.

In the handicraft sub-sector, the TNAC asked about raw materials used for making handicrafts and the proportion bought or sold. It also asked questions on the proportion of handicrafts being sold and the value of the sales. Finally, questions were asked about households involved in group production (katoanga) in the last 12 months and the purpose of the katoanga.

# 8.2 Forestry

A total of 2,469 households engaged in growing forest trees with 23% engaged for subsistence purposes only, 63% for semi-subsistence purposes and 14% for commercial purposes. Most of the households engaged for commercial purpose grew trees used for timber and those with high value, namely sandalwood. Overall this represented 15% of Tonga's agriculturally active households.

Majority of the forest tree growing households resided in Tongatapu (43%). However, the 'Eua region had the highest proportion of forest tree growing households as a proportion of the total agriculturally active households in that region. This compared to 11% and 10% for the Tongatapu and Vava'u regions respectively. (See Figure 8.1)



## 8.2.1 Number and names of forest trees

Summary table 8.1 below shows that a total of 43,988 forest trees were being grown in Tonga at the time of the 2015 TNAC. Forest trees grown for timber purposes included: pine (10,290 trees); cedar (6,057), kauri (4,129) and mahogany (556). Other trees included cordial, oak and bamboo trees. The main high value forest tree is sandalwood.

The Tongatapu region had the largest number of forest trees, 24,899 or 56% of the total forest trees in Tonga. The 'Eua region was the second largest forest tree growing region with a total of 12,167 trees or 28% of the total. The 'Eua region grows a lot of the timber trees. The Vava'u region had 6,626 forest trees, largely sandalwood trees. (See Summary table 8.1)

Summary table 8.1: Forest tree numbers and purpose - 2015

		Purpose	of forestry	
Island divisions	Total numbers of forest trees	Timber	High value	Share of total forest trees by region
TONGA	43,988	37,633	6,355	100%
Tongatapu	24,899	21,266	3,633	56%
Vava'u	6,626	5,473	1,153	15%
Ha'apai	251	251	0	1%
'Eua	12,167	10,603	1,564	28%
Niuas	45	40	5	1%

# 8.2.2 Purpose of forest trees

About 37,633 trees or 86% of the total forest trees in Tonga were grown for timber and 6,355 trees or 14% were grown for their high market value, namely, sandalwood.

# 8.3 Handicraft production

A total of 6,151 households or 44% of the 13,936 agriculturally active households engaged in handicraft activities. The Tongatapu region had the highest number of handicraft making households (3,481) though it had the lowest proportion of households (35%). On the other hand, the Niua region had the lowest number of households engaged in handicraft activities (254) and yet it had the highest proportion (83%). The Ha'apai region had the second highest proportion of agriculturally active households engaged in handicrafts. Handicraft making continued to be one of the main sources of income for the people of the Niuas and Ha'apai regions especially from making and selling fine mats. (See Summary table 8.2)

Summary table 8.2: Handicraft making households – 2015

			Share by	aft making	Proportion of	
Island divisions	Total agriculturally active households	Total handicraft making households	Subsistence	Semi- subsistence	Commercial	total agriculturally active households
TONGA	13,936	6,151	43%	53%	4%	44%
Tongatapu	9,958	3,481	39%	56%	5%	35%
Vava'u	2,190	1,376	61%	36%	3%	63%
Ha'apai	915	687	39%	59%	2%	75%
'Eua	619	396	35%	62%	4%	64%
Niuas	254	211	35%	64%	2%	83%

2,655 households or 43% of agriculture households engaged in handicraft activities mainly for subsistence purposes. This included making handicraft for cultural events such as weddings, funerals and birthdays.

A total of 3,230 households or 53% engaged in handicraft activities mainly for subsistence but also sold some. Only 4% or 266 households made handicrafts for sale.

# 8.3.1 Households engaged in group production

Of the total handicraft making households, about 23% or 1,386 households engaged in group production, with the Vava'u region having the highest proportion of households engaged in group production (katoanga). (See Summary table 8.3)

Summary table 8.3: Households engaged in katoanga – 2015

	Household engage in group production of handicraft (katoanga)								
Island divisions	Total involved in handicraft making	Total involved in group % production (katoanga)		Not involved in group production (katoanga)	%				
TONGA	6,151	1,386	23%	4,771	77%				
Tongatapu	3,481	413	12%	3,074	88%				
Vava'u	1,376	615	45%	761	55%				
Ha'apai	687	229	33%	458	67%				
'Eua	396	77	19%	319	81%				
Niuas	211	52	25%	159	75%				

The main purpose for many of these group productions was to sell to Tongans from overseas when they travel to Tonga for an exchange ceremony (katoanga) where money will be exchanged for the mats and tapa. Handicraft is one of Tonga's main agricultural exports.

### 8.3.2 Finished products sold

From Summary table 8.4 below, we can see that many of the handicraft making households (43% or 2,661) did not sell any of their finished products. The main purpose for households making handicrafts was for cultural ceremonies and their own use.

Summary table 8.4: Nos. of households by proportion of finished products sold - 2015

Island	Nos. of households by proportion of finished handicraft products sold								
divisions	Total	None	None 1 - 25% 50% 51 - 75% 76 -						
TONGA	6,157	2,661	1,435	1,193	602	266			
Tongatapu	3,487	1,351	794	767	384	191			
Vava'u	1,376	835	297	148	57	39			
Ha'apai	687	265	171	123	111	17			
'Eua	396	137	112	103	29	15			
Niuas	211	73	61	52	21	4			

1,435 households or 23% of the total handicraft making households sold up to 25% of their finished products. 1,795 households or 29% sold between 26% and 75% of their finished products. Only 5% sold more than 75% of their finished products. (See Summary table 8.4)

#### 8.3.3 Raw materials sold

Many of the handicraft making households produce raw materials for their own use and sell some of the surplus. About 4,806 or 78% of the total handicraft making households never sold any of their raw materials while 22% sold some of their raw materials. Most of the raw materials sold were mulberry and pandanus. The total value of raw materials sold was \$962,524. Households in Tongatapu earn the largest share of this amount (\$508,966 or 58%), followed by the Ha'apai region (\$240,000 or 25%), and the Vava'u region (\$82,491or 9%).

#### 8.4 Conclusion

About 15% of Tonga's agriculturally active households engage in forest tree growing. 86% of forestry is for subsistence or semi-subsistence purposes. Forest trees were grown mainly for timber and for their high market value. Forest trees harvested for their timber were targeted at the local market while sandalwood was targeted at the overseas market.

The Tongatapu, 'Eua and Vava'u regions were the three main forest tree growing regions, with the 'Eua and Tongatapu regions focusing on timber while the Vava'u region focuses on sandalwood.

Handicraft making for subsistence and semi-subsistence purposes continued to dominate this sub-sector in 2015. Many households made Tongan handicrafts, mainly tapa and fine mats, for cultural purposes. While they sold some of these they also kept a large number for their events such as funerals, birthdays, weddings and other ceremonies.

The next chapter will analyze farm inputs, farm practices and drawbacks faced by farmers.

# 9. FARM INPUTS, FARM PRACTICES AND DRAWBACKS

#### 9.1 Overview

This chapter analyzes farm inputs, such as loans, farm practices and some of the challenges faced by farmers. These are some of the factors that affected the performance of the farmers and it is important to identify and address them.

# 9.2 Agriculture loans

A total of 1,405 agriculturally active households borrowed money from banks and other sources to help operate their agricultural activities. About 46% (650 households) borrowed money from the Tonga Development Bank (TDB), the country's main source of finance for the agriculture sector. Another 10% (142 households) borrowed from other banks. 43% (604 households) borrowed from other sources such as members of the extended family or non-bank sources. 9 households have borrowed from exporters. (See Summary table 9.1).

Summary table 9.1: Sources of loans for agriculturally active households - 2015

Island divisions	Agriculturally active households taking loans	Loans from TDB	Loans from other banks	Loans from exporters (in kind)	Loans from other sources
TONGA	1,405	650	142	9	604
Tongatapu	646	205	84	7	350
Vava'u	408	220	29	1	158
Ha'apai	85	42	9	1	33
'Eua	201	121	17	0	63
Niuas	65	62	3	0	0

About 46% (646 households) who borrowed money lived in the Tongatapu region, 29% (408 households) lived in the Vava'u region, 14% (201 households) in the 'Eua region, 6% in the Ha'apai region and 5% (65 households) in the Niua region. (See Summary table 9.1)

Summary table 9.2: Purpose of borrowing – 2015

Island divisions	Total loans	Agriculture inputs	Agriculture development	Marketing	Other
TONGA	1,405	606	258	26	515
Tongatapu	646	366	107	12	161
Vava'u	408	157	65	3	183
Ha'apai	85	30	27	1	27
'Eua	201	45	53	10	93
Niuas	65	8	6	0	51

About 43% (606 agriculturally active households) borrowed money for agriculture inputs such as fertilizer. 18% (258 households) borrowed money for agriculture development such as purchasing more land or leasing and another 37 % (515 households) borrowed money for various reasons such as hiring equipments. Only 26 households borrowed money for agriculture marketing purposes. (See Summary table 9.2)

### 9.3 Fertilisers

A total of 4,117 agriculturally active households use fertiliser and irrigation for their farming. Some of these households applied more than one type of fertiliser depending on the crops cultivated. About 71% (2,912 households) used pesticide for their crops, 12% (475 households) used inorganic fertiliser and 7% (277 households) used inorganic fertiliser. 453 households used some sort of irrigation system to water their plantations. (See Summary table 9.2). 92% (3,798) of the households using fertilisers and irrigation systems resided in the Tongatapu region. (See Summary table 9.2)

Summary table 9.3: Households using fertilisers, pesticides and irrigation – 2015

Island divisions	Total	Inorganic fertiliser	Organic fertiliser	Pesticide	Irrigation
TONGA	4,117	475	277	2,912	453
Tongatapu	3,798	427	234	2,764	373
Vava'u	150	20	22	77	31
Ha'apai	80	18	12	39	11
'Eua	75	8	6	26	35
Niuas	14	2	3	6	3

In Tonga, the most common fertilisers used were NPK and Urea. The most common pesticides used were herbicides, insecticides and fungicides.

#### 9. 4 Drawbacks

One of the questions asked during the census was what farmers considered the main drawbacks they faced in their agricultural activities. For all the five main agriculture subsectors there were five main drawbacks identified in the following order: lack of uses of farm production inputs, lack of sources of finance, lack of management skills, poor access to market and lack of transport infrastructure.

About 99% of the agriculturally active households answered this question identifying one of the above as some of the drawbacks or challenges they faced in operating their own agricultural activities.

#### 9.5 Conclusion

Less than 10% of Tonga's agriculturally active households had taken out an agriculture loan. Most of these loans were from the TDB, the country's main bank for agriculture loans. It is important to note that one of the main drawbacks identified by farmers was lack of sources of finance to operate their agricultural activities.

The use of pesticides and fertilisers tends to focus in the main island of Tongatapu. Very few households use them in the outer islands. Fertilisers commonly used in Tonga were NPK and Urea while the most common pesticides used were herbicides, insecticides and fungicides. A few agriculturally active households used some sort of irrigation system in their bush allotments mainly for crops and livestock.

Almost every agriculturally active household in Tonga identified one or two main drawbacks faced with in their own agricultural activities. Among the main drawbacks identified were: lack of production input, lack of sources of finance, lack of management skills, lack of market and lack of infrastructure.

The next chapter is the conclusion.

#### 10. Conclusion

#### 10.1 Overview

The purpose of this final chapter is to highlight some of the key findings from the 2015 TNAC, identify some of the key challenges and make some final recommendations.

# 10.2 Key findings

The agriculture sector is very important: Almost 90% of all the households in Tonga engaged in an agricultural activity in one or more of the main sub-sectors: cropping, livestock, fisheries, forestry or handicraft. 95% of production is for consumption. The agriculture sector is still a very important sector in the Tongan economy especially in the subsistence and semi-subsistence sectors.

There are high proportions of young people participating in agriculture: some 80% of the populations are members of agriculturally active households, with 50% of those male and 50% female. 5 or 6 people live in each household. 59% of members of these households are actively engaged in agriculture as defined by this census. About 35% of the members of agriculturally active households were under the age of 15 years old.

Most of the agriculturally active population lives in Tongatapu: 74% of the agriculturally active population lives in the Tongatapu region, which was in line with the geographical distribution of the Tongan population.

Most agricultural activity is for the local market: Crop cultivation and livestock-raising were the two predominant agricultural activities. Subsistence and semi-subsistence agricultural activities continued to dominate the agriculture sector in Tonga, with more than 90% of the agriculturally active households remaining in these two sub-sectors. Only about 5% engaged in commercial agricultural activities, mainly livestock raising, forestry and handicrafts.

A high percentage of agricultural land lies fallow: more than 50% of the total agricultural land areas available were found to be lying fallow.

**Most crops are for own household consumption:** Annual and perennial crops were the main type of crop cultivation in Tonga. Cassava, sweet potatoes, taro and yams were the main cropping choices. Production of both kava and vanilla has declined in line with market demand.

**Most livestock is for own household consumption:** Pasturing and livestock took less agricultural land compared to crop cultivation. The livestock sub-sector continued to be dominated by subsistence and semi-subsistence livestock farming. Pigs, cattle and

sheep numbers increased while the number of chickens declined by almost half compared to 2001. The numbers of horses and goats also declined.

**Most fishing is for own household consumption:** Fisheries continued to be dominated by subsistence and semi-subsistence fishing. Only a few (4%) large fishing organizations or households engaged in commercial fishing. Hand line fishing continued to be the main method of fishing with tuna and reef finfish as the main species harvested. Sea cucumber harvesting increased in Vava'u.

Most forestry is for own household use: Forestry was 86% subsistence or semi-subsistence. Sandalwood was still being produced for commercial purposes in Vava'u.

Most handicrafts are for household and customary use: Handicraft making expanded with more households engaged, mainly for subsistence and semi-subsistence purposes. Handicraft making was more wide spread in the Niua and Ha'apai regions as compared to Tongatapu, Vava'u and the 'Eua regions.

## 10.3 Challenges

Tonga remains largely self-sufficient in terms of food production and housing materials. Despite natural disasters such as hurricanes, Tonga is able to sustain its food security at a level well above many other nations. The challenge therefore, is to decide whether to be more than a subsistence economy. While there is land available for cropping and livestock and abundant food in the surrounding sea, there remains a strong incentive to maintain a traditional island lifestyle. It provides for the basic needs of the population and a safe haven for Tongans returning or visiting from overseas. The challenge to commercialize has to be weighed against the appeal of the simplicity and independence that subsistence provides.

**Key question:** What sort of 'future Tonga' is envisaged?

The drift to urban areas (41%), to Tongatapu (75%) and to overseas destinations suggests that many Tongans desire a different way of life however. Urbanization does not eliminate agricultural production as can be seen in the use of town allotments, leased or borrowed land use and the retention of bush allotments for agricultural production. But it does reduce the workforce in rural areas. It also reflects the drive towards consumerism and an increased appetite for involvement in the world economy.

**Key questions:** Is the drift towards urban areas and overseas destinations inevitable or could Tonga contemplate retaining its young population? What impact is urban drift having on rural Tonga? What is required to secure Tonga's food supply in the future?

This phenomenon affects the young people especially, and there are a large proportion of them in most households.

**Key question:** How well are they being prepared for the world they will face if they leave the rural sector and/or Tonga itself? Thought must be given to equipping young Tongans for the pathways they need to negotiate the life challenges they will face.

Tonga's economy is very focused on subsistence agriculture. There are some examples of commercial activities such as sea cucumber harvesting and sandal wood production in Vava'u. There are small numbers of commercial fisheries and livestock producers.

Key question: If Tonga wants a stronger economic base to engage more robustly with the rest of the world, what could the Kingdom offer world or neighbouring markets? The drawbacks identified by the census respondents reflected a need for thinking outside the current agriculture-based square. Some of the main drawbacks identified by farmers included lack of farm input resources, lack of finance, lack of management skill and lack of market opportunities. All of these can be viewed in terms of immediate production requirements. Predictably they also identified infrastructure such as road, land and sea transport and water supply in rural areas and outer-islands as major challenges facing the development of the agriculture sector.

Key questions: What are Tonga's future agriculture needs? Would investment in infrastructure, education, agricultural inputs and marketing be the best investment for Tonga? Or should alternative investment be considered a higher priority? In order to make sound decisions about these questions and others there is a serious need to for accurate and up-to-date statistics. The lack of up-to-date and accurate agriculture statistics has also been identified by policy makers as one of the biggest challenges in trying to make informed policy decisions for this sector. The 2015 TNAC provided information that many stakeholders are looking forward to using for various policy discussions.

Implementation of the 2015 TNAC has not been free from a number of challenges. Some of the lessons learnt will help improve the quality of future agriculture censuses run in Tonga and other islands in the Pacific.

The purpose of this Report is to report and analyze the data from the 2015 TNAC, highlighting some of the key findings. Some of the data may have not been analyzed or

released in this Report due to time limitation but some of the data can be released upon request from MAFFF or Statistics Department who house the 2015 TNAC metadata.

### 10.4 Recommendations

### a. Do not throw the fish out with the pond water

While it is tempting to recommend an immediate priority on commercialization and economic development, there are many desirable aspects to subsistence living. Careful consideration should be given to the aspirations of the local people and to the impacts of commercialization before launching into full scale economic development.

## b. Work smarter, not harder

No doubt there are efficiencies and management approaches that could benefit Tongan agricultural activity. These should supplement local practices rather than assume superiority over them. Tongan graduates should be encouraged to conduct research and to invest knowledge back into Tongan agricultural practice. For example, environmentally friendly land fertilization and pest control; ways to improve animal husbandry and crop productivity; fish quota management.

### c. Invest in young people

If we accept that many young people will leave their rural homes and migrate to urban and overseas destinations then there needs to be a strategic investment in preparing them for their futures. Many will reinvest knowledge and financial support so this is a sound investment. For example, scholarships could be offered to students to study agriculture and economic development applicable to Pacific environments. There should be a focus on practical resilience skills and attributes – English language and cultural practices of likely destination countries.

# d. Make the most of what Tonga already offers

There are ways to make better use of Tonga's resources – land, crop choices, stock security, marine harvesting. Although some land lies fallow for cultural and recovery reasons, there is still much underutilized arable land. Crop choices could include produce that neighbouring markets desire. 12% cattle and 14% pork loss due to theft is unacceptably high and needs to be addressed.

### 10.5 Conclusion

The 2015 TNAC has provided up-to-date agriculture statistics that government, businesses, private sector, individual households and people of Tonga the opportunity to understand the changes and developments that have taken place in the agriculture sector over the last 14 years.

The 2015 TNAC data also offers policy makers the opportunity to make well-informed decision makings. Limitations associated with the data must be acknowledged and properly noted when using the 2015 TNAC agriculture statistics.

Going forward it is strongly recommended that a more regular census and survey of the agriculture sector should be in place for the Kingdom of Tonga.

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# 11.2 Statistical tables

Table 1: Total number of agricultural active households by type of holding - 2015

	Agr	iculturally active h			Hous	eholds				Or	ganizations		
		Agriculturally	Non										l
D:	<b>-</b>	active	agriculture				Joint	<b>-</b>	D :: :				Semi-
District	Total	households	households	Total	Individual	Family	Operation	Total	Religious	Cooperative	Company	Government	government
TONGA	13944	13944	0	13936	13340	503	93	8	4	0	0	4	0
Tongatapu	9963	9963	0	9958	9557	341	60	5	3	0	0	2	0
Kolofo'ou	2271	2271	0	2271	2137	115	19	0	0	0	0	0	0
Kolomotu'a	1863	1863	0	1863	1774	56	33	0	0	0	0	0	0
Vaini	1849	1849	0	1845	1781	63	1	4	2	0	0	2	0
Tatakamotonga	1138	1138	0	1137	1130	7	0	1	1	0	0	0	0
Lapaha	1149	1149	0	1149	1110	38	1	0	0	0	0	0	0
Nukunuku	1133	1133	0	1133	1078	51	4	0	0	0	0	0	0
Kolovai	560	560	0	560	547	11	2	0	0	0	0	0	0
Vava'u	2191	2191	0	2190	2104	64	22	1	0	0	0	1	0
Neiafu	798	798	0	797	753	39	5	1	0	0	0	1	0
Pangaimotu	183	183	0	183	182	0	1	0	0	0	0	0	0
Hahake	323	323	0	323	314	9	0	0	0	0	0	0	0
Leimatu'a	396	396	0	396	380	8	8	0	0	0	0	0	0
Hihifo	340	340	0	340	327	5	8	0	0	0	0	0	0
Motu	151	151	0	151	148	3	0	0	0	0	0	0	0
Ha'apai	916	916	0	915	865	47	3	1	0	0	0	1	0
Pangai Hp	330	330	0	329	299	28	2	1	0	0	0	1	0
Foa	192	192	0	192	186	6	0	0	0	0	0	0	0
Lulunga	124	124	0	124	117	7	0	0	0	0	0	0	0
Mu'omu'a	91	91	0	91	87	3	1	0	0	0	0	0	0
Ha'ano	82	82	0	82	81	1	0	0	0	0	0	0	0
Uiha	97	97	0	97	95	2	0	0	0	0	0	0	0
'Eua	620	620	0	619	583	33	3	1	1	0	0	0	0
'Eua Motu'a	347	347	0	346	344	2	0	1	1	0	0	0	0
'Eua Fo'ou	273	273	0	273	239	31	3	0	0	0	0	0	0
Niuas	254	254	0	254	231	18	5	0	0	0	0	0	0
Niuatoputapu	152	152	0	152	143	9	0	0	0	0	0	0	0
Niuafo'ou	102	102	0	102	88	9	5	0	0	0	0	0	0

Table 2: Total number of agricultural active households in cropping - 2015

	Cropping							
District	TOTAL	Subsistence	Semi subsistence	Commercial				
TONGA	10,296	3,849	6,358	89				
Tongatapu	6,677	2,331	4,272	74				
Kolofo'ou	635	269	361	5				
Kolomotu'a	894	405	485	4				
Vaini	1,636	708	913	15				
Tatakamotonga	964	344	600	20				
Lapaha	931	226	693	12				
Nukunuku	1,065	265	790	10				
Kolovai	552	114	430	8				
Vava'u	2,006	1,052	946	8				
Neiafu	321	116	203	2				
Pangaimotu	143	92	51	0				
Hahake	374	269	105	0				
Leimatu'a	516	291	223	2				
Hihifo	496	213	279	4				
Motu	156	71	85	0				
Ha'apai	824	280	543	1				
Pangai Hp	229	57	172	0				
Foa	186	71	115	0				
Lulunga	131	35	95	1				
Mu'omu'a	89	29	60	0				
Ha'ano	77	42	35	0				
Uiha	112	46	66	0				
'Eua	514	91	421	2				
'Eua Motu'a	289	75	212	2				
'Eua Fo'ou	225	16	209	0				
Niuas	275	95	176	4				
Niuatoputapu	179	54	121	4				
Niuafo'ou	96	41	55	0				

Table 3: Total number of agricultural active households in livestock - 2015

		Live	stock	
District	TOTAL	Subsistence	Semi subsistence	Commercial
TONGA	12,859	3,443	9,257	159
Tongatapu	9,077	2,730	6,286	61
Kolofo'ou	2,108	662	1,442	4
Kolomotu'a	1,624	481	1,135	8
Vaini	1,673	519	1,142	12
Tatakamotonga	1,060	321	727	12
Lapaha	1,072	268	795	9
Nukunuku	1,025	338	679	8
Kolovai	515	141	366	8
Vava'u	2,080	400	1,638	42
Neiafu	774	136	630	8
Pangaimotu	172	36	135	1
Hahake	311	62	240	9
Leimatu'a	371	79	283	9
Hihifo	322	75	241	6
Motu	130	12	109	9
Ha'apai	869	171	668	30
Pangai Hp	319	62	251	6
Foa	182	41	136	5
Lulunga	118	21	89	8
Mu'omu'a	80	22	54	4
Ha'ano	78	11	63	4
Uiha	92	14	75	3
'Eua	598	107	476	15
'Eua Motu'a	333	55	269	9
'Eua Fo'ou	265	52	207	6
Niuas	235	35	189	11
Niuatoputapu	137	16	115	6
Niuafo'ou	98	19	74	5

Table 4: Total number of agricultural active households in fisheries - 2015

		Fisheries							
District	TOTAL	Subsistence	Semi subsistence	Commercial					
TONGA	2,360	1,267	997	96					
Tongatapu	980	376	520	84					
Kolofo'ou	286	96	145	45					
Kolomotu'a	96	33	58	5					
Vaini	137	63	59	15					
Tatakamotonga	74	54	17	3					
Lapaha	202	64	127	11					
Nukunuku	79	23	52	4					
Kolovai	106	43	62	1					
Vava'u	835	590	236	9					
Neiafu	214	160	53	1					
Pangaimotu	101	63	35	3					
Hahake	166	119	46	1					
Leimatu'a	123	99	23	1					
Hihifo	143	101	42	0					
Motu	88	48	37	3					
Ha'apai	317	149	165	3					
Pangai Hp	83	50	32	1					
Foa	69	34	35	0					
Lulunga	54	28	26	0					
Mu'omu'a	38	9	27	2					
Ha'ano	45	19	26	0					
Uiha	28	9	19	0					
'Eua	69	28	41	0					
'Eua Motu'a	36	11	25	0					
'Eua Fo'ou	33	17	16	0					
Niuas	159	124	35	0					
Niuatoputapu	94	63	31	0					
Niuafo'ou	65	61	4	0					

Table 5: Total number of agricultural active households in handicrafts - 2015

		Hai	ndicraft	
District	TOTAL	Subsistence	Semi subsistence	Commercial
TONGA	6,151	2,655	3,230	266
Tongatapu	3,481	1,345	1,945	191
Kolofo'ou	605	220	312	73
Kolomotu'a	642	287	345	10
Vaini	700	222	430	48
Tatakamotonga	300	109	172	19
Lapaha	618	332	256	30
Nukunuku	449	117	327	5
Kolovai	167	58	103	6
Vava'u	1,376	835	502	39
Neiafu	309	221	86	2
Pangaimotu	140	95	40	5
Hahake	254	142	109	3
Leimatu'a	286	172	109	5
Hihifo	279	136	119	24
Motu	108	69	39	C
Ha'apai	687	265	405	17
Pangai Hp	228	92	126	10
Foa	144	48	95	1
Lulunga	93	37	55	1
Mu'omu'a	74	31	41	2
Ha'ano	69	23	46	0
Uiha	79	34	42	3
'Eua	396	137	244	15
'Eua Motu'a	273	87	175	11
'Eua Fo'ou	123	50	69	4
Niuas	211	73	134	4
Niuatoputapu	127	49	76	2
Niuafo'ou	84	24	58	2

Table 6: Total number of agricultural active households in forestry - 2015

		For	estry	
District	Total	Subsistence	Semi Subsistence	Commercial
TONGA	2,469	577	1,548	344
Tongatapu	1,070	296	663	111
Kolofo'ou	88	25	57	6
Kolomotu'a	79	39	32	8
Vaini	325	58	223	44
Tatakamotonga	187	44	128	15
Lapaha	179	42	106	31
Nukunuku	157	68	82	7
Kolovai	55	20	35	0
Vava'u	953	154	577	222
Neiafu	110	70	38	2
Pangaimotu	74	0	36	38
Hahake	206	16	136	54
Leimatu'a	241	27	148	66
Hihifo	283	36	191	56
Motu	39	5	28	6
Ha'apai	10	1	9	0
Pangai Hp	0	0	0	0
Foa	10	1	9	0
Lulunga	0	0	0	0
Mu'omu'a	0	0	0	0
Ha'ano	0	0	0	0
Uiha	0	0	0	0
'Eua	395	112	280	3
'Eua Motu'a	193	101	90	2
'Eua Fo'ou	202	11	190	1
Niuas	41	14	19	8
Niuatoputapu	18	2	9	7
Niuafo'ou	23	12	10	1

Table 7: Total agricultural land area – bush and town allotments (acres) - 2015

					Agricultur	al land Area	3		
			Bush	allotment a	agricultural	land area (	acres)		Town allotment
	Total Agricult ural land	Total	Perennial crop	Annual crop	Animal yard	Pasture	Fallow less than 5 years	Fallow 5 years and above	agricultu ral land area (acres)
District	(acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)
TONGA	66,406	66,202	3,207	23,999	421	4,858	25,445	8,272	204
Tongatapu	42,663	42,545	1,163	18,148	176	3,885	16,006	3,166	118
Kolofo'ou	3,999	3,975	81	1,617	19	533	1,411	314	24
Kolomotu'a	4,066	4,055	62	2,023	37	329	1,325	280	11
Vaini	9,679	9,657	251	3,792	17	674	4,071	853	22
Tatakamotonga	7,772	7,751	235	2,465	8	1,490	2,273	1,281	21
Lapaha	7,596	7,580	376	2,630	36	444	3,926	169	17
Nukunuku	6,030	6,014	114	3,675	49	206	1,804	167	16
Kolovai	3,520	3,513	44	1,947	12	210	1,195	105	7
Vava'u	11,540	11,513	1,343	2,424	76	571	4,636	2,463	28
Neiafu	1,680	1,662	155	574	5	136	586	207	17
Pangaimotu	1,103	1,102	36	164	0	87	426	389	1
Hahake	2,032	2,030	87	330	46	141	910	516	2
Leimatu'a	3,135	3,132	379	545	24	118	1,159	908	3
Hihifo	2,481	2,477	611	595	-	90	891	290	4
Motu	1,110	1,109	76	215	1	-	665	152	1
Ha'apai	4,521	4,507	158	1,643	9	43	2,277	378	14
Pangai Hp	1,831	1,824	15	607	7	16	926	253	7
Foa	853	850	99	294	2	24	430	1	4
Lulunga	466	465	14	273	-	-	165	13	1
Mu'omu'a	600	600	15	172	-	-	329	84	1
Ha'ano	182	181	13	94	-	-	73	1	1
Uiha	589	588	2	203	-	3	353	27	1
'Eua	4,993	4,964	443	1,160	159	351	2,114	737	29
'Eua Motu'a	2,977	2,968	195	572	100	315	1,251	535	9
'Eua Fo'ou	2,016	1,996	248	587	59	36	863	203	20
Niuas	2,688	2,674	100	624	2	8	412	1,527	14
Niuatoputapu	1,576	1,573	63	475	2	8	362	663	2
Niuafo'ou	1,112	1,101	37	149	-	-	50	865	12

Table 8: Total land area cultivated in acres by five most common annual crops (acres) - 2015

		Top 5 Annual Crops					
District	Cassava (Manioke)	Yam (Ufi)	Yautia (Talo Futuna)	Sweet potato (Kumala)	Swam taro (Talo Tonga)		
TONGA	10,207	5,315	2,565	1,901	1,627		
Tongatapu	8,160	4,248	1,956	1,408	1,216		
Kolofo'ou	890	353	181	84	183		
Kolomotu'a	844	426	222	99	215		
Vaini	1,809	726	356	301	301		
Tatakamotonga	945	699	233	222	78		
Lapaha	917	1,023	267	235	48		
Nukunuku	1,727	673	545	264	280		
Kolovai	1,028	348	153	203	111		
Vava'u	800	585	248	154	130		
Neiafu	162	165	47	32	37		
Pangaimotu	77	30	14	12	4		
Hahake	115	134	21	11	8		
Leimatu'a	149	110	60	55	32		
Hihifo	209	98	94	28	46		
Motu	88	49	12	16	4		
Ha'apai	815	197	136	127	70		
Pangai Hp	316	63	60	57	22		
Foa	141	27	28	24	10		
Lulunga	128	53	16	4	20		
Mu'omu'a	83	24	12	20	2		
Ha'ano	59	8	4	12	1		
Uiha	89	22	16	11	15		
'Eua	291	163	161	166	155		
'Eua Motu'a	159	86	67	95	64		
'Eua Fo'ou	132	77	94	71	92		
Niuas	142	121	65	46	56		
Niuatoputapu	121	82	48	28	44		
Niuafo'ou	21	40	16	18	12		

Table 9: Total land area cultivated in acres by five most common perennial crops (acres) - 2015

	Top 5 Perennial Crops					
District	Kava	Paper mulberry (Hiapo)	Vanilla	Pineapple (Faina)	Pandanus (Lou'akau)	
TONGA	1,257	757	632	454	77	
Tongatapu	141	587	159	208	9	
Kolofo'ou	20	20	12	19	0	
Kolomotu'a	17	12	14	16	1	
Vaini	30	76	15	80	6	
Tatakamotonga	6	174	26	38	1	
Lapaha	21	253	67	19	-	
Nukunuku	42	28	14	18	1	
Kolovai	6	24	12	19	1	
Vava'u	805	5	341	226	8	
Neiafu	93	1	36	28	-	
Pangaimotu	3	-	20	14	-	
Hahake	45	1	23	19	0	
Leimatu'a	278	-	76	54	0	
Hihifo	361	1	155	91	8	
Motu	25	1	31	21	-	
Ha'apai	7	92	6	7	23	
Pangai Hp	-	10	1	-	-	
Foa	-	80	3	2	8	
Lulunga	6	2	-	3	2	
Mu'omu'a	-	-	3	2	10	
Ha'ano	-	-	-	1	2	
Uiha	1	-	1	0	-	
'Eua	249	73	104	9	1	
'Eua Motu'a	106	55	25	2	1	
'Eua Fo'ou	143	18	79	8	-	
Niuas	55	2	22	3	37	
Niuatoputapu	14	2	-	2	32	
Niuafo'ou	41	-	22	1	5	

Table 10: Total number of livestock by species type - 2015

				Livestock	Species			
District	Beef cattle	Dairy cattle	Pig	Horse	Sheep	Goat	Chicken	Duck
TONGA	16,755	2,007	110,310	1,942	1,240	1,744	92,071	2,705
Tongatapu	8,847	1,052	60,047	396	653	419	55,756	2,565
Kolofo'ou	822	168	8,845	17	25	32	9,776	217
Kolomotu'a	934	113	10,177	48	45	95	11,554	374
Vaini	1,408	221	10,201	71	152	100	13,032	422
Tatakamotonga	2,574	342	8,768	107	289	39	7,450	405
Lapaha	1,534	121	10,376	76	26	28	5,133	247
Nukunuku	925	60	6,692	51	78	46	5,614	407
Kolovai	650	27	4,988	26	38	79	3,197	493
Vava'u	5,130	582	25,019	690	283	613	17,629	39
Neiafu	1,743	526	8,001	67	87	259	5,137	11
Pangaimotu	688	-	1,726	76	8	25	1,614	-
Hahake	821	1	4,419	125	38	64	3,727	12
Leimatu'a	1,177	10	4,661	163	124	22	3,034	11
Hihifo	574	43	3,676	212	10	68	2,633	1
Motu	127	2	2,536	47	16	175	1,484	4
Ha'apai	1,318	229	11,749	424	9	269	9,805	21
Pangai Hp	644	197	3,452	195	4	80	3,273	15
Foa	503	-	2,076	100	-	68	1,495	4
Lulunga	62	3	2,289	1	-	37	1,996	-
Mu'omu'a	29	23	1,198	66	-	-	1,044	2
Ha'ano	23	-	1,248	57	-	41	771	-
Uiha	57	6	1,486	5	5	43	1,226	-
'Eua	1,411	144	8,434	261	266	329	5,170	77
'Eua Motu'a	814	111	5,181	178	204	251	2,868	30
'Eua Fo'ou	597	33	3,253	83	62	78	2,302	47
Niuas	49	-	5,061	171	29	114	3,711	3
Niuatoputapu	7	-	2,341	72	26	85	2,091	-
Niuafo'ou	42	-	2,720	99	3	29	1,620	3

Table 11: Total nos. of households engaged in fishing of five main species - 2015

	Species					
District	Reef finfish	Tuna & pelagic fish	Shellfish	Sea cucumber	Lobster	Other species
TONGA	1,386	936	710	527	504	1904
Tongatapu	570	326	241	131	142	679
Kolofo'ou	179	85	97	25	18	233
Kolomotu'a	59	21	9	5	10	83
Vaini	109	26	10	3	11	66
Tatakamotonga	59	14	24	1	32	38
Lapaha	98	106	39	52	14	82
Nukunuku	31	35	29	26	26	89
Kolovai	35	39	33	19	31	88
Vava'u	465	352	352	325	229	947
Neiafu	95	132	132	101	113	223
Pangaimotu	60	43	28	38	11	143
Hahake	105	29	65	62	30	178
Leimatu'a	61	34	58	43	18	156
Hihifo	88	69	55	39	27	178
Motu	56	45	14	42	30	69
Ha'apai	190	207	93	57	112	205
Pangai Hp	40	41	29	20	30	62
Foa	43	53	10	12	15	33
Lulunga	43	40	21	12	21	50
Mu'omu'a	23	27	17	5	22	29
Ha'ano	25	25	8	8	10	13
Uiha	16	21	8	-	14	18
'Eua	31	35	7	6	16	46
'Eua Motu'a	13	22	4	5	9	24
'Eua Fo'ou	18	13	3	1	7	22
Niuas	130	16	17	8	5	27
Niuatoputapu	69	13	16	8	3	20
Niuafo'ou	61	3	1	-	2	7

Table12: Total number of households engaged in handicraft making by proportion sold - 2015

		Proporti	on of handic	rafts sold	
District					
	None	1 - 25%	26 - 50%	51 - 75%	76 - 100%
TONGA	2,655	1,435	1,193	602	266
Tongatapu	1,345	794	767	384	191
Kolofo'ou	220	98	120	94	73
Kolomotu'a	287	191	114	40	10
Vaini	222	136	182	112	48
Tatakamotonga	109	68	83	21	19
Lapaha	332	89	113	54	30
Nukunuku	117	154	121	52	5
Kolovai	58	58	34	11	6
Vava'u	835	297	148	57	39
Neiafu	221	54	24	8	2
Pangaimotu	95	29	8	3	5
Hahake	142	57	45	7	3
Leimatu'a	172	79	22	8	5
Hihifo	136	51	37	31	24
Motu	69	27	12	-	-
Ha'apai	265	171	123	111	17
Pangai Hp	92	80	35	11	10
Foa	48	16	25	54	1
Lulunga	37	25	18	12	1
Mu'omu'a	31	16	15	10	2
Ha'ano	23	5	20	21	-
Uiha	34	29	10	3	3
'Eua	137	112	103	29	15
'Eua Motu'a	87	84	69	22	11
'Eua Fo'ou	50	28	34	7	4
Niuas	73	61	52	21	4
Niuatoputapu	49	48	26	2	2
Niuafo'ou	24	13	26	19	2

Table13: Number of households and number of parcels (town/bush allotment) - 2015

	Number of He Allotr		Number of Par	Number of Parcels in Allotment		
District	Town	Bush	Town	Bush		
TONGA	16,032	8,708	17,307	12,195		
Tongatapu	11,832	5,538	12,502	7,563		
Kolofo'ou	2,804	629	2,973	758		
Kolomotu'a	2,497	804	2,547	1,030		
Vaini	2,165	1,191	2,317	1,839		
Tatakamotonga	1,246	829	1,304	1,141		
Lapaha	1,229	821	1,316	1,056		
Nukunuku	1,251	820	1,321	1,133		
Kolovai	640	444	724	606		
Vava'u	2,360	1,624	2,598	2,462		
Neiafu	955	348	993	396		
Pangaimotu	183	152	209	210		
Hahake	327	300	371	485		
Leimatu'a	399	361	450	621		
Hihifo	343	319	390	559		
Motu	153	144	185	191		
Ha'apai	931	789	1,055	1,029		
Pangai Hp	341	265	392	337		
Foa	193	164	212	219		
Lulunga	126	114	139	144		
Mu'omu'a	92	85	108	109		
Ha'ano	82	71	88	77		
Uiha	97	90	116	143		
'Eua	643	533	827	794		
'Eua Motu'a	357	300	458	470		
'Eua Fo'ou	286	233	369	324		
Niuas	266	224	325	347		
Niuatoputapu	160	134	201	206		
Niuafo'ou	106	90	124	141		

Table14: Number of town allotment parcels by land tenure at village level - 2015

	t parcels by land tenure at village level - 2015  Land tenure (No.) - Parcels							
Village	Total	Owned	Short-term lease	Long-term lease	Others			
TONGA	17,307	12,015	383	494	4,415			
Tongatapu	12,497	8,253	243	298	3,703			
Kolofo'ou District	2,940	1,990	82	107	761			
Kolofo'ou	1,340	862	47	68	363			
Ma'ufanga	1,143	786	23	28	306			
Nukunukumotu	10	7	-	-	3			
'Oneata	-	-	-	-				
Popua	338	251	12	9	66			
Tukutonga	107	84	-	1	22			
Pangaimotu	1	-	-	-	1			
Fafaa	1	-	-	1				
'Onevai	-	-	-	-				
Ata	-	-	-	-				
Velitoa Hahake	-	-	-	-				
Velitoa Hihifo	-	-	-	-				
Kolomotu'a District	2,556	1,760	104	78	614			
Kolomotu'a	1,299	855	67	42	335			
Haveluloto	461	328	11	13	109			
Tofoa	520	346	17	20	137			
Hofoa	124	105	4	-	15			
Puke	118	103	2	2	11			
Sia'atoutai	34	23	3	1	7			
Vaini District	2,308	1,346	23	35	904			
Vaini	631	307	2	10	312			
Malapo	122	52	-	2	68			
Longoteme	113	44	-	1	68			
Folaha	168	67	-	2	99			
Nukuhetulu	66	27	-	-	39			
Veitongo	211	105	1	6	99			
Ha'ateiho	466	329	4	8	125			
Pea	343	240	16	5	82			
Tokomololo	188	175	-	1	12			
Tatakamotonga District	1,334	920	4	7	403			
Tatakamotonga	321	214	-	1	106			
Holonga	106	69	-	-	37			
Pelehake	141	100	-	-	41			
Fua'amotu	342	203	1	-	138			
Nakolo	85	72	-	-	13			
Ha'asini/Hamula	154	123	-	1	30			

		Land tenure (No.) - Parcels							
Village	Total	Owned	Short-term lease	Long-term lease	Others				
Lavengatonga	82	61	2	2	17				
Haveluliku	32	24	1	1	6				
Fatumu	71	54	- -	2	15				
Lapaha District	1,320	717	10	7	586				
Lapaha	365	219	4	2	140				
Talasiu	53	37	2	-	14				
Hoi	79	50	1	1	27				
Nukuleka	56	25	_	-	31				
Makaunga	69	31	2	-	36				
Talafo'ou	71	53	-	-	18				
Manuka	50	25	-	1	24				
Navutoka	125	64	-	1	60				
Kolonga	235	109	_	-	126				
Afa	74	31	-	2	41				
Niutoua	127	66	_	_	61				
'Eueiki	16	7	1	-	8				
Fukave	-	-	· -	-	-				
Nukunuku District	1,314	972	12	46	284				
Nukunuku	346	250	7	28	61				
Matahau	96	75	· -	5	16				
Matafonua	38	23	_	2	13				
Fatai	54	31	3	1	19				
Lakepa	44	35	1		8				
Vaotu'u	82	58	· -	5	19				
'Utulau	122	78	_	-	44				
Ha'alalo	83	59	_	1	23				
Ha'akame	104	78	1	2	23				
Houma	345	285		2	58				
Kolovai District	725	548	8	18	151				
Kolovai	132	84	5	9	34				
Te'ekiu	104	82	-	2	20				
Masilamea	37	29	_	_	8				
Fahefa	88	61	2	1	24				
Ha'utu	39	28	1	1	9				
Kala'au	25	18			7				
Fo'ui	82	70	-	2	10				
Ha'avakatolo	43	35	-	_	8				
'Ahau	55	46	-	-	9				
Kanokupolu	52	42	-	2	8				
Ha'atafu	43	34	-	1	8				

		Land to	enure (No.) - Parc	els	
	Total	Owned	Short-term	Long-term	
Village			lease	lease	Others
'Atataa	25	19	-	-	6
Vava'u	2,600	1,980	104	136	380
Neiafu District	1,001	717	36	88	160
Neiafu	691	471	30	75	115
Fungamisi	105	91	-	4	10
Falaleu	74	54	3	8	9
Makave	51	39	2	-	10
Toula	19	12	-	-	7
'Utui	47	38	1	1	7
Ofu	13	11	-	-	2
Okoa	-	-	-	-	-
Olo'ua	1	1	-	-	-
Kenutu	-	-	-	-	-
Pangaimotu District	206	158	16	5	27
Pangaimotu	103	78	12	1	12
'Utulei	26	22	2	2	-
Nga'unoho	26	18	1	-	7
'Utungake	51	40	1	2	8
Tapana	-	-	-	-	-
Hahake District	372	306	10	13	43
Ha'alaufuli	79	65	2	-	12
Ha'akio	26	19	1	3	3
Houma	29	19	2	2	6
Mangia	16	12	_	3	1
Ta'anea	97	89	1	1	6
Tu'anekivale	76	60	3	2	11
Koloa	30	24	1	2	3
Holeva	19	18	-	-	1
Leimatu'a District	447	353	18	9	67
Leimatu'a	197	159	11	2	25
Holonga	72	50	3	1	18
Feletoa	60	44	2	3	11
Mataika	118	100	2	3	13
Hihifo	393	323	12	7	51
Longomapu	112	86	3	2	21
Taoa	95	85	3	1	6
Tefisi	105	90	1	4	10
Vaimalo	19	15	2	-	2
Tu'anuku	62	47	3	_	12
Motu District	181	123	12	14	32

	Land tenure (No.) - Parcels				
	Total	Owned	Short-term	Long-term	
Village			lease	lease	Others
Кара	9	6	1	2	-
Falevai	24	19	-	4	1
'Otea	18	14	1	1	2
Lape	8	3	1	1	3
Matamaka	17	13	2	-	2
Nuapapu	30	26	-	2	2
Ovaka	19	10	1	1	7
Taunga	16	8	-	1	7
Hunga	40	24	6	2	8
Foeata	-	-	-	-	-
Vaka'eitu	-	-	-	-	-
Mounu	-	-	-	-	-
'Eu'eiki	-	-	-	-	-
Mala	-	-	-	-	-
Fofoa	-	-	-	-	-
Ha'apai	1,054	865	32	38	119
Pangai Hp District	388	321	-	12	55
Pangai	187	152	-	9	26
Hihifo	140	120	-	3	17
Holopeka	23	19	-	-	4
Koulo	38	30	-	-	8
Foa District	211	169	19	3	20
Fangale'ounga	24	20	3	-	1
Fotua	38	26	3	1	8
Lotofoa	67	51	7	1	8
Faleloa	58	49	6	1	2
Ha'afakahenga	13	13	-	-	-
Ha'ateiho Si'i	11	10	-	-	1
Lulunga District	141	109	3	7	22
Ha'afeva	35	25	1	2	7
Tungua	28	19	1	1	7
Fotuha'a	18	15	_	2	1
'O'ua	19	17	_	1	1
Matuku	14	11	1	1	1
Kotu	27	22	-	_	5
Mu'omu'a District	108	92	-	7	9
Nomuka	80	72	-	4	4
Mango	8	7	-	1	-
Fonoifua	20	13	_	2	5
Nomukeiki	-	-	_	-	-

	Land tenure (No.) - Parcels					
	Total	Owned	Short-term	Long-term		
Village			lease	lease	Others	
Ha'ano District	88	69	10	4	5	
Fakakai	17	13	3	-	1	
Pukotala	23	18	3	1	1	
Ha'ano	21	17	1	2	1	
Muitoa	8	6	2	-	-	
Mo'unga'one	19	15	1	1	2	
'Uiha District	118	105	-	5	8	
'Uiha	62	57	-	-	5	
Felemea	28	25	-	2	1	
Lofanga Island	28	23	-	3	2	
Tofua Island	-	-	-	-	-	
'Eua	832	710	4	22	96	
'Eua Motu'a District	463	393	2	15	53	
'Ohonua	247	192	2	14	39	
Tufuvai	49	46	-	1	2	
Pangai	49	47	-	-	2	
Houma	46	44	-	-	2	
Ha'atu'a	72	64	-	-	8	
Ta'anga	-	-	-	-	-	
'Eua Fo'ou District	369	317	2	7	43	
Angaha	59	57	-	-	2	
Futu	44	43	-	1	-	
'Esia	40	35	-	1	4	
Sapa'ata	31	27	-	2	2	
Fata'ulua	42	41	-	-	1	
Mu'a	33	25	1	-	7	
Tongamama'o	23	23	-	-	-	
Petani	48	23	-	3	22	
Mata'aho	49	43	1	-	5	
Niuas	324	207	-	-	117	
Niuatoputapu District	200	120	-	-	80	
 Hihifo	85	44	-	-	41	
Vaipoa	51	28	-	_	23	
Falehau	55	42	-	_	13	
Tafahi Island	9	6	-	_	3	
Niuafo'ou District	124	87	-	_	37	
'Esia	32	27	-	_	5	
Kolofo'ou	19	12	-	_	7	
Sapa'ata	24	14	-	_	10	
Fata'ulua	14	10	-	_	4	

		Land tenure (No.) - Parcels						
Village	Total	Owned	Short-term lease	Long-term lease	Others			
Mata'aho	7	5	-	-	2			
Mu'a	6	5	-	-	1			
Tongamama'o	8	3	-	-	5			
Petani	14	11	-	-	3			

Table15: Total area of town allotment by land tenure by villages (square meters) - 2015

	Land tenure (sq. meters)						
Village	Total	Owned	Short-term lease	Long-term lease	Other		
TONGA	17,408,362	12,164,093	365,524	554,337	4,324,40		
Tongatapu	12,292,316	8,194,402	217,478	331,888	3,548,54		
Kolofo'ou district	2,718,507	1,789,446	90,397	87,418	751,24		
Kolofo'ou	1,267,059	821,054	66,321	50,032	329,65		
Ma'ufanga	966,889	697,075	15,665	18,456	235,69		
Nukunukumotu	7,090	4,050	, -	-	3,0		
'Oneata	, -	, -	-	-	,		
Popua	312,812	218,639	8,411	10,904	74,8		
Tukutonga	59,553	48,628	, -	26	10,8		
Pangaimotu	97,104	, -	-	-	97,1		
Fafaa	8,000	-	-	8,000	,		
'Onevai	-	_	_	-			
Ata	-	_	_	-			
Velitoa Hahake	-	_	_	-			
Velitoa Hihifo	-	_	_	-			
Kolomotu'a district	2,208,634	1,570,348	78,530	65,636	494,1		
Kolomotu'a	1,105,357	785,669	47,911	35,415	236,3		
Haveluloto	349,434	257,312	8,012	8,662	75,4		
Tofoa	517,179	333,534	13,488	19,279	150,8		
Hofoa	99,951	84,207	3,800	-	11,9		
Puke	107,179	90,724	2,280	1,520	12,6		
Sia'atoutai	29,534	18,902	3,039	760	6,8		
Vaini district	2,580,134	1,528,004	18,436	106,836	926,8		
Vaini	744,089	369,677	4,552	82,066	287,7		
Malapo	144,073	56,879	-	2,783	84,4		
Longoteme	113,122	42,810	-	861	69,4		
Folaha	176,529	79,810	-	1,772	94,9		
Nukuhetulu	61,785	26,080	-	· -	35,7		
Veitongo	231,075	91,602	1,520	7,295	130,6		
Ha'ateiho	551,774	419,222	3,074	7,354	122,1		
Pea	338,665	248,735	9,290	3,945	76,6		
Tokomololo	219,022	193,189	-	760	25,0		
Tatakamotonga district	1,355,158	1,027,970	2,392	3,956	320,8		
Tatakamotonga	356,678	253,860	· -	36	102,7		
Holonga	120,278	85,052	-	-	35,2		
Pelehake	142,796	116,331	-	-	26,4		
Fua'amotu	305,985	220,031	112	-	85,8		
Nakolo	85,956	76,696	-	-	9,2		
Ha'asini/Hamula	150,833	124,777	-	60	25,9		

	Land tenure (sq. meters)						
Milese	Tatal	O a d	Short-term	Long-term	Othern		
Village Lavengatonga	73,991	Owned   57,470	lease   1,520	lease	Others		
Haveluliku	34,775	26,841	760	1,520 760	13,481		
	·		760		6,414		
Fatumu	83,866	66,912	0.202	1,580	15,374		
Lapaha District	1,446,352	779,619	9,282	5,541	651,910		
Lapaha	435,404	239,779	3,004	1,520	191,101		
Talasiu	57,370	40,002	2,379	-	14,989		
Hoi	89,824	60,604	760	506	27,954		
Nukuleka	54,343	24,716	-	-	29,627		
Makaunga	68,940	33,238	2,379	-	33,323		
Talafo'ou	80,820	64,269	-	-	16,551		
Manuka	46,698	21,631	-	1,619	23,448		
Navutoka	122,171	65,983	-	60	56,128		
Kolonga	259,153	120,726	-	-	138,427		
Afa	78,084	33,503	-	1,836	42,745		
Niutoua	140,625	69,848	-	-	70,777		
'Eueiki	12,920	5,320	760	-	6,840		
Fukave	-	-	-	-	-		
Nukunuku District	1,233,572	913,324	11,601	53,421	255,226		
Nukunuku	333,226	230,903	5,674	38,700	57,949		
Matahau	83,177	64,598	-	4,304	14,275		
Matafonua	50,150	32,702	-	2,404	15,044		
Fatai	55,423	35,608	3,546	1,520	14,749		
Lakepa	57,584	47,583	1,621	-	8,380		
Vaotu'u	71,791	52,290	-	3,800	15,701		
'Utulau	114,035	73,536	-	-	40,499		
Ha'alalo	73,934	50,460	-	1,520	21,954		
Ha'akame	88,538	67,166	760	393	20,219		
Houma	305,714	258,478	-	780	46,456		
Kolovai District	749,959	585,691	6,840	9,080	148,348		
Kolovai	163,825	118,170	3,800	6,193	35,662		
Te'ekiu	99,275	79,783	-	758	18,734		
Masilamea	32,746	25,569	-	-	7,177		
Fahefa	83,654	57,168	2,280	760	23,446		
Ha'utu	39,820	31,061	760	505	7,494		
Kala'au	28,247	21,233	-	-	7,014		
Fo'ui	81,851	70,031	-	70	11,750		
Ha'avakatolo	55,995	45,919	_	-	10,076		
'Ahau	51,913	43,912	_	-	8,001		
Kanokupolu	50,837	43,969	_	34	6,834		
Ha'atafu	35,406	28,566		760	6,080		

		Land	tenure (sq. meters)		
Village	Total	Owned	Short-term lease	Long-term lease	Others
'Atataa	26,390	20,310	-	-	6,080
Vava'u	2,802,058	2,135,082	109,981	168,874	388,121
Neiafu District	1,175,852	836,900	54,660	107,934	176,358
Neiafu	848,852	582,581	43,528	88,196	134,547
Fungamisi	128,289	111,077	-	6,326	10,886
Falaleu	80,505	58,733	2,280	12,652	6,840
Makave	52,689	, 34,217	8,092	-	10,380
Toula	18,372	12,292	-	-	6,080
'Utui	35,745	28,880	760	760	5,345
Ofu	10,640	8,360	-	-	2,280
Okoa	-	, -	-	-	-
Olo'ua	760	760	-	-	_
Kenutu	_	-	-	-	_
Pangaimotu District	192,890	143,254	13,680	11,892	24,064
Pangaimotu	92,201	70,669	10,640	1,520	9,372
'Utulei	30,231	19,859	1,520	8,852	-
Nga'unoho	23,047	15,195	760	-	7,092
'Utungake	47,411	37,531	760	1,520	7,600
Tapana	-	-	-	-	-
Hahake District	356,637	292,130	7,848	17,770	38,889
Ha'alaufuli	71,720	59,820	1,520	-	10,380
Ha'akio	27,185	20,097	760	2,280	4,048
Houma	26,075	17,469	1,266	1,772	5,568
Mangia	20,730	11,139	-	8,831	760
Ta'anea	92,956	87,297	760	279	4,620
Tu'anekivale	69,075	53,743	2,531	2,328	10,473
Koloa	29,879	24,308	1,011	2,280	2,280
Holeva	19,017	18,257	-	-	760
Leimatu'a District	416,066	330,085	14,541	8,612	62,828
Leimatu'a	171,469	134,994	8,360	3,292	24,823
Holonga	61,818	43,836	2,280	760	14,942
Feletoa	55,679	39,976	1,520	2,280	11,903
Mataika	127,100	111,279	2,381	2,280	11,160
Hihifo	476,876	401,514	9,372	11,266	54,724
Longomapu	108,323	82,232	2,280	3,040	20,771
Taoa	147,745	133,321	2,532	4,046	7,846
Tefisi	148,066	131,228	760	4,180	11,898
Vaimalo	14,994	11,954	1,520	-	1,520
Tu'anuku	57,748	42,779	2,280	-	12,689
Motu District	183,737	131,199	9,880	11,400	31,258

		Land t	enure (sq. meters)		
			Short-term	Long-term	
Village	Total	Owned	lease	lease	Others
Кара	7,600	5,320	760	1,520	-
Falevai	24,566	20,766	-	3,040	760
'Otea	18,486	15,446	760	760	1,520
Lape	7,600	3,800	760	760	2,280
Matamaka	15,960	11,400	1,520	-	3,040
Nuapapu	27,360	24,320	-	1,520	1,520
Ovaka	17,890	8,770	760	1,520	6,840
Taunga	15,200	6,840	-	760	7,600
Hunga	49,075	34,537	5,320	1,520	7,698
Foeata	-	-	-	-	-
Vaka'eitu	-	-	-	-	-
Mounu	-	-	-	-	-
'Eu'eiki	-	-	-	-	-
Mala	-	-	-	-	-
Fofoa	-	-	-	-	-
Ha'apai	1,121,018	922,646	34,523	34,997	128,852
Pangai Hp District	442,611	358,175	-	10,047	74,389
Pangai	240,989	184,578	-	7,767	48,644
Hihifo	140,813	124,222	-	2,280	14,311
Holopeka	20,011	16,099	-	-	3,912
Koulo	40,798	33,276	-	-	7,522
Foa District	234,427	194,311	20,855	5,957	13,304
Fangale'ounga	21,271	17,979	2,532	-	760
Fotua	68,817	58,693	2,531	1,011	6,582
Lotofoa	61,860	47,917	9,361	900	3,682
Faleloa	63,483	51,486	6,431	4,046	1,520
Ha'afakahenga	10,384	10,384	-	-	-
Ha'ateiho Si'i	8,612	7,852	-	-	760
Lulunga District	123,149	92,640	2,782	6,073	21,654
Ha'afeva	29,347	21,373	760	2,022	5,192
Tungua	27,862	15,960	1,011	1,011	9,880
Fotuha'a	13,680	11,400	-	1,520	760
'O'ua	18,827	17,307	-	760	760
Matuku	10,891	8,360	1,011	760	760
Kotu	22,542	18,240	- -	-	4,302
Mu'omu'a District	99,188	86,015	-	6,080	7,093
Nomuka	77,097	70,004	-	3,800	3,293
Mango	6,840	6,080	-	760	-,
Fonoifua	15,251	9,931	-	1,520	3,800
Nomukeiki		-	-	-,	-,

	Land tenure (sq. meters)						
Village	Total	Owned	Short-term lease	Long-term lease	Others		
Ha'ano District	70,166	52,440	10,886	3,040	3,800		
Fakakai	12,920	9,880	2,280	-	760		
Pukotala	17,480	13,680	2,280	760	760		
Ha'ano	19,246	12,920	4,046	1,520	760		
Muitoa	6,080	4,560	1,520	, -	_		
Mo'unga'one	14,440	11,400	760	760	1,520		
'Uiha District	151,477	139,065	-	3,800	8,612		
'Uiha	72,281	65,949	-	, -	6,332		
Felemea	24,035	21,755	_	1,520	760		
Lofanga Island	55,161	51,361	_	2,280	1,520		
Tofua Island		-	_	-	-		
'Eua	730,624	624,449	3,542	18,578	84,055		
'Eua Motu'a District	377,506	320,916	1,520	11,498	43,572		
'Ohonua	194,130	150,510	1,520	10,688	31,412		
Tufuvai	53,375	49,525	-	810	3,040		
Pangai	38,760	37,240	_	-	1,520		
Houma	35,310	33,790	-	-	1,520		
Ha'atu'a	55,931	49,851	_	_	6,080		
Ta'anga	, -	-	-	-	, -		
'Eua Fo'ou District	353,118	303,533	2,022	7,080	40,483		
Angaha	52,880	50,858	, -	, -	2,022		
Futu	38,058	37,047	-	1,011	-		
'Esia	35,811	31,508	-	1,011	3,292		
Sapa'ata	52,670	49,128	-	2,022	1,520		
Fata'ulua	32,923	32,163	-	· -	760		
Mu'a	32,610	24,773	1,011	-	6,826		
Tongamama'o	17,530	17,530	-	-	-		
Petani	48,324	23,276	-	3,036	22,012		
Mata'aho	42,312	37,250	1,011	-	4,051		
Niuas	462,346	287,514	· -	-	174,832		
Niuatoputapu District	262,741	142,399	-	-	120,342		
Hihifo	118,027	50,450	-	-	67,577		
Vaipoa	69,885	36,608	-	-	33,277		
Falehau	66,726	50,781	-	-	15,945		
Tafahi Island	8,103	4,560	-	-	3,543		
Niuafo'ou District	199,605	145,115	-	-	54,490		
'Esia	50,246	48,556	-	-	1,690		
Kolofo'ou	43,680	18,789	-	-	24,891		
Sapa'ata	34,216	24,995	-	-	9,221		
Fata'ulua	24,456	19,795	-	-	4,661		

		Land tenure (sq. meters)						
Village	Total	Owned	Short-term lease	Long-term lease	Others			
Mata'aho	9,423	7,042	-	-	2,381			
Mu'a	8,663	7,903	-	-	760			
Tongamama'o	13,368	4,762	-	-	8,606			
Petani	15,553	13,273	-	-	2,280			

Table16: Number of town allotment parcels by land use and by village - 2015

	No Parcels						
Village	Total	Total residential building	Total kitchen garden	Animal yard	Other		
TONGA	17,307	17,295	2,888	8,088	16,673		
Tongatapu	12,497	12,487	1,429	5,629	11,905		
Kolofo'ou District	2,940	2,934	309	1,026	2,724		
Kolofo'ou	1,340	1,337	66	295	1,177		
Ma'ufanga	1,143	1,140	154	480	1,094		
Nukunukumotu	10	10	-	2	10		
'Oneata	-	-	-	-	-		
Popua	338	338	79	192	337		
Tukutonga	107	107	10	57	104		
Pangaimotu	1	1	-	-	1		
Fafaa	1	1	-	-	1		
'Onevai	-	-	-	-	-		
Ata	-	-	-	-	-		
Velitoa Hahake	-	-	-	-	-		
Velitoa Hihifo	-	-	-	-	-		
Kolomotu'a District	2,556	2,553	391	801	2,418		
Kolomotu'a	1,299	1,296	324	415	1,211		
Haveluloto	461	461	12	85	434		
Tofoa	520	520	38	159	499		
Hofoa	124	124	6	51	124		
Puke	118	118	9	75	116		
Sia'atoutai	34	34	2	16	34		
Vaini District	2,308	2,308	241	1,001	2,232		
Vaini	631	631	29	225	602		
Malapo	122	122	17	74	116		
Longoteme	113	113	9	64	112		
Folaha	168	168	6	86	163		
Nukuhetulu	66	66	1	40	63		
Veitongo	211	211	6	96	202		
Ha'ateiho	466	466	76	200	455		
Pea	343	343	92	141	333		
Tokomololo	188	188	5	75	186		
Tatakamotonga District	1,334	1,333	107	769	1,207		
Tatakamotonga	321	320	17	150	302		
Holonga	106	106	21	59	101		
Pelehake	141	141	5	82	124		
Fua'amotu	342	342	30	207	279		
Nakolo	85	85	-	48	76		
Ha'asini/Hamula	154	154	10	89	149		

	No Parcels						
		Total residential	Total kitchen				
Village	Total	building	garden	Animal yard	Other		
Lavengatonga	82	82	15	52	80		
Haveluliku	32	32	5	23	31		
Fatumu	71	71	4	59	65		
Lapaha District	1,320	1,320	81	839	1,307		
Lapaha	365	365	43	223	361		
Talasiu	53	53	8	24	53		
Hoi	79	79	3	49	79		
Nukuleka	56	56	3	40	56		
Makaunga	69	69	-	49	67		
Talafo'ou	71	71	11	48	71		
Manuka	50	50	2	32	50		
Navutoka	125	125	2	79	124		
Kolonga	235	235	6	158	230		
Afa	74	74	1	40	73		
Niutoua	127	127	2	84	127		
'Eueiki	16	16	-	13	16		
Fukave	-	-	-	-			
Nukunuku District	1,314	1,314	167	729	1,301		
Nukunuku	346	346	32	211	341		
Matahau	96	96	1	56	96		
Matafonua	38	38	4	28	38		
Fatai	54	54	2	29	54		
Lakepa	44	44	1	25	43		
Vaotu'u	82	82	1	52	82		
'Utulau	122	122	2	68	123		
Ha'alalo	83	83	12	27	82		
Ha'akame	104	104	36	53	102		
Houma	345	345	76	180	342		
Kolovai District	725	725	133	464	710		
Kolovai	132	132	19	83	129		
Te'ekiu	104	104	25	72	103		
Masilamea	37	37	7	23	36		
Fahefa	88	88	22	54	88		
Ha'utu	39	39	5	16	39		
Kala'au	25	25	4	17	2!		
Fo'ui	82	82	15	48	80		
Ha'avakatolo	43	43	11	36	4:		
'Ahau	55	55	7	36	55		
Kanokupolu	52	52	10	31	50		
Ha'atafu	43	43	4	27	43		

	No Parcels						
		Total residential	Total kitchen				
Village	Total	building	garden	Animal yard	Other		
'Atataa	25	25	4	21	25		
Vava'u	2,600	2,600	847	1,056	2,580		
Neiafu District	1,001	1,001	470	346	984		
Neiafu	691	691	320	215	674		
Fungamisi	105	105	61	47	105		
Falaleu	74	74	43	29	74		
Makave	51	51	23	24	51		
Toula	19	19	3	5	19		
'Utui	47	47	20	21	47		
Ofu	13	13	-	5	13		
Okoa	-	-	-	-	-		
Olo'ua	1	1	-	-	1		
Kenutu	-	-	-	-	-		
Pangaimotu District	206	206	73	77	206		
Pangaimotu	103	103	34	57	103		
'Utulei	26	26	10	6	26		
Nga'unoho	26	26	10	3	26		
'Utungake	51	51	19	11	51		
Tapana	-	-	-	-	-		
Hahake District	372	372	129	223	371		
Ha'alaufuli	79	79	21	38	79		
Ha'akio	26	26	21	19	26		
Houma	29	29	20	25	29		
Mangia	16	16	8	10	16		
Ta'anea	97	97	19	63	96		
Tu'anekivale	76	76	20	46	76		
Koloa	30	30	16	15	30		
Holeva	19	19	4	7	19		
Leimatu'a District	447	447	105	209	445		
Leimatu'a	197	197	39	77	197		
Holonga	72	72	19	48	71		
Feletoa	60	60	24	28	60		
Mataika	118	118	23	56	117		
Hihifo	393	393	58	152	393		
Longomapu	112	112	18	32	112		
Taoa	95	95	12	37	95		
Tefisi	105	105	17	46	105		
Vaimalo	19	19	2	4	19		
Tu'anuku	62	62	9	33	62		
Motu District	181	181	12	49	181		

			No Parcels		
		Total residential	Total kitchen		
Village	Total	building	garden	Animal yard	Other
Кара	9	9	4	-	9
Falevai	24	24	1	2	24
'Otea	18	18	-	6	18
Lape	8	8	-	2	8
Matamaka	17	17	-	7	17
Nuapapu	30	30	-	9	30
Ovaka	19	19	-	6	19
Taunga	16	16	5	2	16
Hunga	40	40	2	15	40
Foeata	-	-	-	-	-
Vaka'eitu	-	-	-	-	-
Mounu	-	-	-	-	-
'Eu'eiki	-	-	-	-	-
Mala	-	-	-	-	-
Fofoa	-	-	-	-	-
Ha'apai	1,054	1,052	148	646	1,043
Pangai Hp District	388	387	107	243	381
Pangai	187	187	52	119	182
Hihifo	140	140	46	78	139
Holopeka	23	22	3	15	22
Koulo	38	38	6	31	38
Foa District	211	210	26	120	207
Fangale'ounga	24	23	3	13	24
Fotua	38	38	4	23	38
Lotofoa	67	67	17	43	63
Faleloa	58	58	1	27	58
Ha'afakahenga	13	13	1	8	13
Ha'ateiho Si'i	11	11	-	6	11
Lulunga District	141	141	2	94	141
Ha'afeva	35	35	1	25	35
Tungua	28	28	-	12	28
Fotuha'a	18	18	-	15	18
'O'ua	19	19	-	11	19
Matuku	14	14	-	12	14
Kotu	27	27	1	19	27
Mu'omu'a District	108	108	3	54	108
Nomuka	80	80	-	45	80
Mango	8	8	1	5	8
Fonoifua	20	20	2	4	20
Nomukeiki			-	-	-

	No Parcels								
Village	Total	Total residential building	Total kitchen garden	Animal yard	Other				
Ha'ano District	88	88	3	52	88				
Fakakai	17	17	-	10	17				
Pukotala	23	23	-	14	23				
Ha'ano	21	21	1	13	21				
Muitoa	8	8	2	6	8				
Mo'unga'one	19	19	-	9	19				
'Uiha District	118	118	7	83	118				
'Uiha	62	62	3	43	62				
Felemea	28	28	2	19	28				
Lofanga Island	28	28	2	21	28				
Tofua Island	-	-	-	-	-				
'Eua	832	832	290	620	829				
'Eua Motu'a District	463	463	156	298	463				
'Ohonua	247	247	59	161	247				
Tufuvai	49	49	18	19	49				
Pangai	49	49	11	39	49				
Houma	46	46	42	44	46				
Ha'atu'a	72	72	26	35	72				
Ta'anga	-	-	-	-	-				
'Eua Fo'ou District	369	369	134	322	366				
Angaha	59	59	9	49	57				
Futu	44	44	21	40	43				
'Esia	40	40	11	27	40				
Sapa'ata	31	31	14	25	31				
Fata'ulua	42	42	32	39	42				
Mu'a	33	33	11	33	33				
Tongamama'o	23	23	22	23	23				
Petani	48	48	7	40	48				
Mata'aho	49	49	7	46	49				
Niuas	324	324	174	137	316				
Niuatoputapu District	200	200	96	90	195				
Hihifo	85	85	24	25	81				
Vaipoa	51	51	26	27	50				
Falehau	55	55	44	36	55				
Tafahi Island	9	9	2	2	9				
Niuafo'ou District	124	124	78	47	121				
'Esia	32	32	20	6	29				
Kolofo'ou	19	19	12	4	19				
Sapa'ata	24	24	13	8	24				
Fata'ulua	14	14	13	11	14				

		No Parcels								
Village	Total	Total residential building	Total kitchen garden	Animal yard	Other					
Mata'aho	7	7	5	6	7					
Mu'a	6	6	5	3	6					
Tongamama'o	8	8	5	3	8					
Petani	14	14	5	6	14					

Table17: Area of town allotment by land use and by villages (sq. meters) - 2015

7: Area of town allotm	Jan ay lana as	Total	, so todi illotolo		
	Total Town	residential	Total town	Total town	
	Allotment	building	home	animal yard	Total town
Village	area (m²)	(m²)	garden (m²)	(m <sup>2</sup> )	other (m²)
TONGA	17,408,362	2,115,424	409,698	414,990	14,468,250
Tongatapu	12,298,297	1,385,890	204,523	274,152	10,433,732
Kolofo'ou	1,274,224	180,704	9,638	7,749	1,076,133
Ma'ufanga	972,827	131,403	37,353	13,226	790,845
Nukunukumotu	7,090	685	0	50	6,355
Oneata Island	0	0	0	0	0
Popua	323,490	38,024	21,487	5,616	258,363
Tukutonga	64,164	6,110	416	1,092	56,546
Pangaimotu	97,104	951	0	0	96,153
Fafaa Island	8,000	448	0	0	7,552
Onevai Island	0	0	0	0	0
Ataa Island	0	0	0	0	0
Velitoa Hahake	0	0	0	0	0
Velitoa Hihifo	0	0	0	0	0
Kolomotu'a	1,111,382	158,440	8,912	9,999	934,031
Haveluloto	350,702	61,542	265	1,448	287,447
Tofoa	515,979	58,299	9,441	3,669	444,570
Hofoa	95,390	8,882	380	1,874	84,254
Puke	101,865	8,633	5,379	3,803	84,050
Sia'atoutai	27,762	2,234	103	538	24,887
Vaini	751,188	68,674	8,724	7,709	666,081
Malapo	155,851	17,878	5,761	5,157	127,055
Longoteme	116,922	10,622	1,823	1,913	102,564
Folaha	168,577	15,120	3,282	3,149	147,026
Nukuhetulu	63,305	5,015	100	1,070	57,120
Veitongo	231,210	20,582	721	3,355	206,552
Ha'ateiho	551,323	51,036	6,300	23,646	470,341
Pea	352,152	35,078	5,591	4,360	307,123
Tokomololo	198,032	17,531	3,056	3,125	174,320
Tatakamotonga	352,723	38,164	7,182	8,330	299,047
Holonga	107,237	11,033	7,048	2,701	86,455
Pelehake	141,276	15,537	1,115	6,096	118,528
Fua'amotu	301,933	42,494	4,343	19,248	235,848
Nakolo	85,956	8,494	0	3,444	74,018
Ha'asini/Hamula	148,453	20,665	2,264	6,071	119,453
Lavengatonga	72,979	12,022	3,822	3,509	53,626
Haveluliku	34,775	7,944	717	1,581	24,533
Fatumu	82,248	14,135	3,100	5,357	59,656

		<b>-</b>			
	Total Town	Total residential	Total town	Total town	
	Allotment	building	home	animal yard	Total town
Village	area (m²)	(m <sup>2</sup> )	garden (m²)	(m <sup>2</sup> )	other (m <sup>2</sup> )
Lapaha	437,629	38,516	14,077	9,239	375,797
Talasiu	56,610	3,600	1,952	1,162	49,896
Hoi	89,824	6,023	85	1,318	82,398
Nukuleka	54,343	4,343	760	3,386	45,854
Makaunga	68,180	8,816	0	3,045	56,319
Talafo'ou	80,060	4,639	1,668	3,276	70,477
Manuka	48,218	4,116	111	1,214	42,777
Navutoka	122,171	10,805	50	3,279	108,037
Kolonga	254,494	17,706	763	13,998	222,027
Afa	78,084	5,500	24	1,710	70,850
Niutoua	139,865	10,656	513	3,635	125,061
Eueiki	12,920	853	0	1,551	10,516
Fukave	0	0	0	0	0
Nukunuku	332,308	27,446	2,574	21,047	281,241
Matahau	83,177	7,971	300	3,881	71,025
Matafonua	50,150	3,849	1,106	3,617	41,578
Fatai	54,663	6,789	56	3,488	44,330
Lakepa	57,584	8,679	200	4,667	44,038
Vaotu'u	71,791	7,472	21	3,339	60,959
Utulau	114,486	8,694	59	1,518	104,215
Ha'alalo	73,075	7,273	1,018	1,508	63,276
Ha'akame	90,818	30,362	4,887	5,346	50,223
Houma	312,653	32,046	3,158	3,791	273,658
Kolovai	166,105	12,773	4,953	5,618	142,761
Te'ekiu	97,755	8,102	1,825	2,170	85,658
Masilamea	35,026	3,700	153	301	30,872
Fahefa	81,374	6,134	2,049	1,569	71,622
Ha'utu	41,216	2,319	674	1,079	37,144
Kala'au	28,247	1,890	906	245	25,206
Fo'ui	86,508	7,436	198	762	78,112
Ha'avakatolo	55,995	3,858	996	2,487	48,654
Ahau	52,673	5,565	55	590	46,463
Kanokupolu	44,759	3,808	199	462	40,290
Ha'atafu	33,027	2,742	27	466	29,792
Atataa	26,390	3,030	783	503	22,074
VAVAU	2,802,304	490,061	58,781	53,217	2,200,245
Neiafu	897,432	259,697	33,751	17,095	586,889
Makave	89,064	26,628	4,297	1,953	56,186
Toula	76,705	24,554	4,040	1,456	46,655

		Tatal				
	Total Town	Total residential	Total town	Total town		
	Allotment	building	home	animal yard	Total town	
Village	area (m²)	(m <sup>2</sup> )	garden (m²)	(m <sup>2</sup> )	other (m²)	
Utui	52,180	10,906	1,859	1,519	37,896	
Ofu Island	17,612	4,612	29	492	12,479	
Okoa	35,745	13,583	1,408	1,253	19,501	
Olo'ua Island	9,880	1,309	0	297	8,274	
Kenutu Island	0	0	0	0	0	
Pangaimotu	94,984	8,339	446	1,455	84,744	
Utulei	30,231	2,222	165	83	27,761	
Nga'unoho	23,047	2,272	180	68	20,527	
Utungake	48,171	4,361	341	145	43,324	
Tapa Island	0	0	0	0	0	
Ha'alaufuli	73,240	6,731	118	1,168	65,223	
Ha'akio	26,425	1,736	380	1,332	22,977	
Houma	25,315	2,387	196	478	22,254	
Mangia	20,730	1,200	135	211	19,184	
Ta'anea	90,425	10,877	303	3,073	76,172	
Tu'anekivale	70,595	5,655	103	1,573	63,264	
Koloa	29,119	2,404	257	308	26,150	
Holeva	19,017	1,581	63	267	17,106	
Leimatu'a	171,469	16,098	1,354	1,559	152,458	
Holonga	62,578	5,865	352	2,000	54,361	
Feletoa	57,450	4,866	806	1,205	50,573	
Mataika	126,340	7,406	1,381	2,074	115,479	
Longomapu	108,323	8,215	1,789	1,059	97,260	
Taoa	146,225	8,612	319	6,643	130,651	
Tefisi	148,826	6,857	2,833	1,653	137,483	
Vaimalo	14,994	1,052	20	70	13,852	
Tu'anuku	56,228	4,676	1,113	670	49,769	
Кара	11,400	3,004	702	54	7,640	
Falevai	19,760	8,664	0	11	11,085	
Otea	16,720	3,053	0	487	13,180	
Lape Island	6,080	1,448	0	11	4,621	
Matamaka	19,760	2,439	0	243	17,078	
Nuapapu	25,080	4,570	0	222	20,288	
Ovaka Island	18,650	3,237	0	244	15,169	
Taunga Island	15,200	1,668	40	282	13,210	
Hunga	47,304	7,277	1	504	39,522	
Foeata Island	0	0	0	0	0	
Vaka'eitu Island	0	0	0	0	0	
Mounu Island	0	0	0	0	0	

		Total			
	Total Town	residential	Total town	Total town	
	Allotment	building	home	animal yard	Total town
Village	area (m²)	(m²)	garden (m²)	(m²)	other (m²)
'Eueiki Island	0	0	0	0	0
Mala Island	0	0	0	0	0
Fofoa Island	0	0	0	0	0
HA'APAI	1,119,351	69,214	31,046	26,566	992,525
Pangai	283,025	13,382	16,733	3,140	249,770
Hihifo	143,382	8,601	2,059	3,461	129,261
Holopeka	20,771	970	52	422	19,327
Koulo	41,558	1,956	1,041	1,581	36,980
Fangale'ounga	22,031	1,942	828	668	18,593
Fotua	36,449	1,855	4,590	1,015	28,989
Lotofoa	61,860	5,364	2,607	2,549	51,340
Faleloa	62,723	4,033	48	1,407	57,235
Ha'afakahenga	10,384	837	332	465	8,750
Ha'ateiho Si'i	10,132	829	0	262	9,041
Ha'afeva Island	29,347	1,969	50	1,229	26,099
Tungua Island	27,862	1,516	0	526	25,820
Fotuha'a Island	13,680	948	0	622	12,110
O'ua Island	14,781	1,158	0	588	13,035
Matuku Island	9,371	701	0	537	8,133
Kotu Island	23,302	1,587	0	763	20,952
Nomuka Island	77,097	6,439	0	1,127	69,531
Mango Island	6,840	409	7	106	6,318
Fonoifua Island	15,251	657	760	114	13,720
Nomukeiki Island	0	0	0	0	0
Fakakai	12,920	726	0	391	11,803
Pukotala	17,480	1,012	0	699	15,769
Ha'ano	19,246	1,082	280	994	16,890
Muitoa	6,080	273	320	277	5,210
Mo'unga'one Isla	14,440	940	0	765	12,735
Uiha	60,143	6,361	1,271	1,543	50,968
Felemea	24,035	1,921	34	658	21,422
Lofanga Island	55,161	1,746	34	657	52,724
Tofua Island	0	0	0	0	0
EUA	724,544	126,830	62,896	55,540	479,278
Ohonua	195,700	21,393	5,715	8,310	160,282
Tufuvai	51,805	3,549	4,923	814	42,519
Pangai	37,240	2,306	3,800	1,863	29,271
Houma	33,790	2,774	6,142	1,466	23,408
Ha'atu'a	53,400	4,398	3,361	974	44,667

		Total			
	Total Town	residential	Total town	Total town	
	Allotment	building	home	animal yard	Total town
Village	area (m²)	(m²)	garden (m²)	(m²)	other (m²)
Ta'anga	0	0	0	0	0
Angaha	51,360	18,526	1,324	6,670	24,840
Futu	39,069	10,509	7,570	5,182	15,808
Esia	38,643	7,281	7,041	2,967	21,354
Sapa'ata	51,659	6,717	5,564	2,685	36,693
Fata'ulua	31,102	7,100	6,148	4,106	13,748
Mu'a	31,090	10,180	4,040	5,209	11,661
Tongamama'o	18,340	3,555	2,902	1,870	10,013
Petani	48,324	12,613	2,682	5,865	27,164
Mata'aho	43,022	15,929	1,684	7,559	17,850
NIUAS	463,866	43,429	52,452	5,515	362,470
Hihifo	117,519	8,440	4,090	938	104,051
Vaipoa	69,534	9,441	1,659	743	57,691
Falehau	69,865	13,233	1,527	728	54,377
Tafahi Island	7,343	861	40	50	6,392
Esia	50,246	3,128	13,839	340	32,939
Kolofo'ou	43,680	2,312	10,279	200	30,889
Sapa'ata	34,216	2,481	6,946	660	24,129
Fata'ulua	24,456	1,128	5,271	830	17,227
Mata'aho	9,423	402	3,136	306	5,579
Mu'a	8,663	579	818	200	7,066
Tongamama'o	13,368	566	2,433	190	10,179
Petani	15,553	858	2,414	330	11,951

Table18: Total number of households with bush allotment and number of parcels by location of households - 2015

nousenoid	15 - 2015	<del></del>				
	Total	Owned bush allotment (Number of parcels)	Witho	ut owned a	llotment (No.)	
	households			Short-		
	with bush			term	Long-term	
District	allotment	Owned	Total	lease	lease	Others
TONGA	8,708	5,454	6,741	676	537	5,528
Tongatapu	5,538	2,820	4,743	293	277	4,173
Kolofo'ou	629	270	488	21	32	435
Kolomotu'a	804	371	659	64	29	566
Vaini	1,191	444	1,395	60	95	1,240
Tatakamotonga	829	493	648	7	6	635
Lapaha	821	415	641	3	28	610
Nukunuku	820	482	651	99	56	496
Kolovai	444	345	261	39	31	191
Vava'u	1,624	1,148	1,314	327	145	842
Neiafu	348	197	199	21	49	129
Pangaimotu	152	116	94	19	9	66
Hahake	300	230	255	116	28	111
Leimatu'a	361	265	356	52	20	284
Hihifo	319	247	312	83	16	213
Motu	144	93	98	36	23	39
Ha'apai	789	703	326	45	53	228
Pangai Hp	265	223	114	1	12	101
Foa	164	133	86	27	1	58
Lulunga	114	103	41	4	8	29
Mu'omu'a	85	87	22	0	7	15
Ha'ano	71	55	22	13	4	5
Uiha	90	102	41	0	21	20
'Eua	533	629	165	10	62	93
'Eua Motu'a	300	363	107	3	57	47
'Eua Fo'ou	233	266	58	7	5	46
Niuas	224	154	193	1	0	192
Niuatoputapu	134	86	120	1	0	119
Niuafo'ou	90	68	73	0	0	73

Table19: Total number of households with bush allotment and area in acres by location of households – 2015

		Owned bush				
		allotment				
		(Acres)	Withou	Without owned allotment (Acres)		
	Total households			Short-		
	with bush			term	Long-term	
District	allotment	Owned	Total	lease	lease	Others
TONGA	8,708	37,178	32,872	2,356	3,983	26,533
Tongatapu	5,538	19,968	23,985	1,319	2,432	20,233
Kolofo'ou	629	1,739	2,571	102	363	2,107
Kolomotu'a	804	2,082	2,345	116	253	1,976
Vaini	1,191	3,141	6,657	308	847	5,502
Tatakamotonga	829	4,120	3,826	47	72	3,707
Lapaha	821	3,367	4,350	20	197	4,134
Nukunuku	820	3,303	2,825	516	420	1,888
Kolovai	444	2,216	1,412	211	281	920
Vava'u	1,624	8,301	5,030	837	901	3,292
Neiafu	348	1,185	917	65	205	647
Pangaimotu	152	878	383	146	67	170
Hahake	300	1,563	692	138	182	372
Leimatu'a	361	2,145	1,466	210	123	1,133
Hihifo	319	1,884	1,070	138	200	732
Motu	144	644	501	140	124	237
Ha'apai	789	3,298	1,408	138	197	1,072
Pangai Hp	265	1,272	612	2	47	564
Foa	164	576	307	89	3	216
Lulunga	114	362	162	18	27	117
Mu'omu'a	85	501	103	0	19	84
Ha'ano	71	161	47	30	6	11
Uiha	90	426	178	0	96	82
'Eua	533	4,304	1,037	57	452	528
'Eua Motu'a	300	2,592	693	20	415	258
'Eua Fo'ou	233	1,712	344	37	37	270
Niuas	224	1,308	1,412	4	0	1,408
Niuatoputapu	134	726	886	4	0	882
Niuafo'ou	90	582	527	0	0	527

Table 20: Area of bush allotment in acres by the location of the bush allotment -2015

	Total acres - bush	Perennial crop	Annual crop	Animal Yard	Pasture	Farm building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
TONGA	70,050	3,207	23,999	421	4,858	194	33,717	3654
Kolofo'ou	50	0	23	0	0	0	27	0
Ma'ufanga	121	9	42	6	0	0	39	25
Nukunukumotu	32	4	7	0	0	0	8	14
Oneata Island	0	0	0	0	0	0	0	0
Popua	65	3	11	0	16	0	17	18
Tukutonga	0	0	0	0	0	0	0	0
Pangaimotu	1	1	0	0	0	0	0	0
Fafaa Island	0	0	0	0	0	0	0	0
Onevai Island	0	0	0	0	0	0	0	0
Ataa Island	0	0	0	0	0	0	0	0
Velitoa Hahake	0	0	0	0	0	0	0	0
Velitoa Hihifo	0	0	0	0	0	0	0	0
Kolomotu'a	265	5	107	0	11	4	128	11
Haveluloto	113	1	72	0	14	0	25	1
Tofoa	235	2	119	0	17	0	82	15
Hofoa	568	6	351	0	10	1	189	12
Puke	656	13	300	0	20	2	290	32
Sia'atoutai	627	3	286	11	60	38	171	57
Vaini	4,683	80	1,690	3	319	19	2,439	133
Malapo	639	12	186	25	116	5	288	8
Longoteme	1,196	48	252	0	25	0	856	14
Folaha	922	36	202	9	68	0	593	13
Nukuhetulu	221	2	53	0	0	0	166	0
Veitongo	927	21	373	0	40	8	478	7
Ha'ateiho	1,591	16	952	8	128	2	424	60
Pea	1,541	60	856	5	112	0	458	51
Tokomololo	989	7	620	0	34	0	312	16
Tatakamotonga	1,576	15	561	0	221	3	754	23
Holonga	362	18	64	1	66	0	213	1

	Total acres - bush	Perennial crop	Annual crop	Animal Yard	Pasture	Farm building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Pelehake	1,320	32	416	1	227	0	629	14
Fua'amotu	2,847	47	880	1	935	9	829	147
Nakolo	500	17	161	1	42	0	277	2
Ha'asini/Hamula	932	58	291	1	96	16	454	16
Lavengatonga	695	44 7	175	5	20	0	436	15
Haveluliku	211		64	0	40	0	98	2
Fatumu	629	16	193	0	60	0	298	63
Lapaha	2,395	146	728	0	134	10	1,282	96
Talasiu	152	7	78	0	0	0	65	2
Hoi	741	28	288 63	6	20	0	393	6
Nukuleka	183	16		0	12	0	93	0
Makaunga Talafo'ou	361	2	113	0	40	0	205	0
	334 59		148 17	0	58	0	118	0
Manuka		4			2		36	0
Navutoka	814	39	292	0	77	0	395	13
Kolonga	1,751	54	686	20	152	0	828	12
Afa	407	29	97	0	0	0	280	1
Niutoua	948	58	234	10	36	0	611	0
Eueiki	79	7	19	0	0	0	54	0
Fukave	0	0	0	0	0	0	0	0
Nukunuku	1,126	45	621	1	71	0	360	29
Matahau	714	8	438	0	20	0	228	20
Matafonua	128	5	16	43	19	0	45	0
Fatai	330	1	95	0	47	0	172	15
Lakepa	323	18	128	5	20	0	150	3
Vaotu'u	815	9	452	0	26	12	311	5
Utulau	921	6	552	0	51	1	251	59
Ha'alalo	377	8	275	0	4	0	90	1
Ha'akame	423	6	257	0	24	1	117	20
Houma	2,044	16	1,204	1	77	1	667	78
Kolovai	493	8	233	9	38	0	201	4

	Total acres - bush	Perennial crop	Annual crop	Animal Yard	Pasture	Farm building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Te'ekiu	568	26	295	4	53	0	161	30
Masilamea	301	2	124	1	16	0	141	17
Fahefa	679	9	330	1	82	0	251	7
Ha'utu	219	3	111	0	3	0	102	0
Kala'au	222	0	120	0	8	0	58	36
Fo'ui	683	4	420	0	52	8	176	24
Ha'avakatolo	170	0	56	0	16	0	95	4
Ahau	221	4	157	0	24	0	30	6
Kanokupolu	160	1	79	0	15	0	57	8
Ha'atafu	171	2	94	0	0	0	72	3
Atataa	86	1	34	0	0	0	47	3
Neiafu	314	16	81	1	5	0	151	60
Fungamisi	149	11	50	0	16	0	24	50
Falaleu	74	6	33	1	2	0	18	15
Makave	188	5	77	0	15	0	55	36
Toula	119	1	36	0	0	0	82	0
Utui	102	5	29	0	10	0	24	34
Ofu Island	69	1	14	2	0	0	52	0
Okoa Island	16	1	2	0	0	0	4	10
Olo'ua Island	2	0	1	0	0	0	0	1
Kenutu Island	0	0	0	0	0	0	0	0
Pangaimotu	777	20	120	0	55	4	466	112
Utulei	231	2	30	0	4	0	143	52
Nga'unoho	137	4	9	0	0	0	117	7
Utungake	232	11	32	0	36	0	134	19
Tapana Island	0	0	0	0	0	0	0	0
Ha'alaufuli	542	19	76	0	8	8	365	65
Ha'akio	106	8	19	0	24	0	50	4
Houma	148	10	15	9	0	0	110	3
Mangia	180	15	26	1	40	1	75	22
Ta'anea	628	14	88	24	74	0	361	68

	Total							
	acres -	Perennial	Annual	Animal		Farm		
	bush	crop	crop	Yard	Pasture	building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Tu'anekivale	513	3	57	6	31	0	366	50
Koloa	122	5	21	6	2	8	75	4
Holeva	85	13	31	0	0	0	36	6
Leimatu'a	2,077	310	419	16	32	0	1,086	214
Holonga	756	21	75	1	56	0	520	83
Feletoa	376	35	52	4	35	0	222	28
Mataika	747	48	97	4	20	0	342	237
Longomapu	814	186	202	0	12	0	333	81
Taoa	692	121	103	0	0	0	330	138
Tefisi	1,060	214	255	0	19	0	391	181
Vaimalo	158	42	37	0	0	0	61	18
Tu'anuku	692	124	118	0	68	0	254	128
Кара	87	5	7	0	0	0	66	8
Falevai	175	20	45	0	0	0	98	12
Otea	139	12	26	0	0	0	93	8
Lape Island	48	0	9	0	0	0	39	0
Matamaka	93	5	19	0	0	0	62	6
Nuapapu	197	18	44	1	0	0	121	14
Ovaka Island	132	1	22	0	3	0	96	10
Taunga Island	65	0	6	0	0	0	50	8
Hunga	316	17	43	0	0	0	248	8
Foeata Island	0	0	0	0	0	0	0	0
Vaka'eitu Island	0	0	0	0	0	0	0	0
Mounu Island	0	0	0	0	0	0	0	0
'Eu'eiki Island	6	0	0	0	0	0	6	0
Mala Island	0	0	0	0	0	0	0	0
Fofoa Island	4	0	2	0	0	0	2	0
Pangai	778	4	223	5	11	14	501	21
Hihifo	705	1	281	2	7	1	399	14
Holopeka	121	0	33	1	0	1	87	0
Koulo	176	4	52	0	0	0	119	1

	Total acres - bush	Perennial crop	Annual crop	Animal Yard	Pasture	Farm building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Fangale'ounga	95	6	26	0	0	0	60	3
Fotua	144	17	50	0	7	0	71	0
Lotofoa	274	38	48	0	1	2	168	18
Faleloa	298	26	134	1	16	0	110	10
Ha'afakahenga	43	10	10	0	0	0	23	0
Ha'ateiho Si'i	77	10	29	0	0	0	32	7
Ha'afeva Island	158	1	82	0	0	0	53	21
Tungua Island	121	1	57	0	0	0	51	12
Fotuha'a Island	77	2	50	0	0	0	18	8
O'ua Island	93	3	37	0	0	0	39	14
Matuku Island	29	0	16	0	0	0	13	0
Kotu Island	46	4	28	0	0	0	9	4
Nomuka Island	474	9	152	0	0	0	309	4
Mango Island	29	2	11	0	0	0	17	0
Fonoifua Island	93	3	17	0	0	0	72	0
Nomukeiki Island	0	0	0	0	0	0	0	0
Fakakai	66	11	25	0	0	0	16	14
Pukotala	29	0	19	0	0	0	10	0
Ha'ano	26	0	15	0	0	0	11	0
Muitoa	12	2	7	0	0	0	3	0
Mo'unga'one Isla	75	2	23	0	0	0	38	14
Uiha	348	2	103	0	3	0	225	16
Felemea	109	0	47	0	0	0	62	0
Lofanga Island	196	0	57	0	0	0	140	0
Tofua Island	8	5	3	0	0	0	0	0
Ohonua	1,126	119	208	26	101	2	595	76
Tufuvai	270	15	40	9	5	0	172	30
Pangai	239	1	39	2	3	0	180	14
Houma	719	53	142	54	102	0	313	56
Ha'atu'a	1,414	110	284	23	65	10	803	119
Ta'anga	205	13	33	0	47	0	93	20

	Total acres -	Perennial	Annual	Animal		Farm		
	bush	crop	crop	Yard	Pasture	building	Fallow	Other
Village	Allotment	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Angaha	163	9	31	0	15	0	84	24
Futu	232	13	58	17	1	0	127	17
Esia	109	21	38	2	10	0	39	0
Sapa'ata	24	3	6	0	0	0	15	0
Fata'ulua	216	40	49	0	0	0	124	3
Mu'a	168	12	54	23	0	0	79	0
Tongamama'o	100	6	22	3	0	0	70	0
Petani	234	24	70	0	0	0	140	0
Mata'aho	136	12	74	0	0	0	47	3
Hihifo	568	27	145	0	8	0	362	26
Vaipoa	379	13	106	2	0	0	245	13
Falehau	613	14	210	0	0	0	390	0
Tafahi Island	52	10	15	0	0	0	28	0
Esia	302	14	45	0	0	0	243	0
Kolofo'ou	72	2	8	0	0	0	63	0
Sapa'ata	120	5	24	0	0	0	91	0
Fata'ulua	80	4	11	0	0	0	66	0
Mata'aho	64	4	20	0	0	0	33	8
Mu'a	114	2	10	0	0	0	103	0
Tongamama'o	76	2	15	0	0	0	60	0
Petani	280	6	17	0	0	0	257	0

Table 21: Gender of head of agriculturally active households - 2015

21. dender of head of agric	j				of Agricultura	l Active
		d of house			Households	
District	Total	Male	Female	Total	Male	Female
TONGA	16,112	12,849	3,263	13,936	11,290	2,646
Tongatapu	11,908	9,347	2,561	9,958	7,951	2,007
Kolofo'ou	2,805	2,155	650	2,271	1,769	502
Kolomotu'a	2,578	1,988	590	1,863	1,469	394
Vaini	2,161	1,723	438	1,845	1,482	363
Tatakamotonga	1,244	990	254	1,137	920	217
Lapaha	1,229	986	243	1,149	933	216
Nukunuku	1,251	990	261	1,133	914	219
Kolovai	640	515	125	560	464	96
Vava'u	2,359	1,979	380	2,190	1,857	333
Neiafu	954	788	166	797	672	125
Pangaimotu	183	143	40	183	143	40
Hahake	327	266	61	323	264	59
Leimatu'a	399	342	57	396	340	56
Hihifo	343	296	47	340	295	45
Motu	153	144	9	151	143	8
Ha'apai	932	780	152	915	769	146
Pangai Hp	340	275	65	329	267	62
Foa	194	155	39	192	155	37
Lulunga	126	115	11	124	113	11
Mu'omu'a	92	80	12	91	79	12
Ha'ano	83	72	11	82	72	10
Uiha	97	83	14	97	83	14
'Eua	643	506	137	619	491	128
'Eua Motu'a	357	293	64	346	286	60
'Eua Fo'ou	286	213	73	273	205	68
Niuas	270	237	33	254	222	32
Niuatoputapu	164	145	19	152	133	19
Niuafo'ou	106	92	14	102	89	13

Table 22: Relation of members to head of agricultural active households - 2015

				cuiturai active			d of Househ	olds				
				Biological	Adopted	Broth		Paren	Parent	Child of		
		Head of		born son and	son or	er/	Grandchi	t of	of	spouse (step	Other	No
District	Total	household	Spouse	daughter	daughter	Sister	ld	head	spouse	child)	relatives	relation
TONGA	82353	13936	9819	34214	1303	1427	11258	542	368	347	8426	713
Tongatapu	60537	9958	6901	25089	826	1106	8365	378	259	223	6798	634
Kolofo'ou	14073	2271	1504	5497	210	323	2013	83	49	52	1904	167
Kolomotu'a	11469	1863	1294	4561	135	252	1596	88	54	33	1451	142
Vaini	11564	1845	1277	4815	150	231	1504	83	75	59	1417	108
Tatakamotonga	6793	1137	814	2856	122	94	1035	23	15	28	598	71
Lapaha	6727	1149	811	3077	59	67	875	40	18	16	579	36
Nukunuku	6519	1133	797	2853	111	84	806	38	38	30	545	84
Kolovai	3392	560	404	1430	39	55	536	23	10	5	304	26
Vava'u	11990	2190	1621	5161	235	169	1591	84	53	60	781	45
Neiafu	4202	797	591	1829	73	64	519	25	18	15	241	30
Pangaimotu	1117	183	131	453	28	21	210	8	7	1	71	4
Hahake	1828	323	241	765	44	17	296	15	7	10	108	2
Leimatu'a	2202	396	281	954	47	22	290	16	17	8	168	3
Hihifo	1924	340	252	844	14	43	222	19	3	17	165	5
Motu	717	151	125	316	29	2	54	1	1	9	28	1
Ha'apai	4918	915	666	1994	119	84	570	50	29	41	427	23
Pangai Hp	1883	329	234	766	67	36	211	18	9	21	186	6
Foa	1137	192	142	478	15	12	155	11	9	13	97	13
Lulunga	566	124	95	224	10	5	64	1	1	2	39	1
Mu'omu'a	493	91	66	204	14	9	58	4	3	1	43	0
Ha'ano	384	82	64	160	1	11	24	7	4	4	24	3
Uiha	455	97	65	162	12	11	58	9	3	0	38	0
'Eua	3561	619	441	1392	102	56	560	19	20	23	323	6
'Eua Motu'a	1991	346	261	809	61	33	284	14	9	8	161	5
'Eua Fo'ou	1570	273	180	583	41	23	276	5	11	15	162	1
Niuas	1347	254	190	578	21	12	172	11	7	0	97	5
Niuatoputapu	808	152	116	351	10	6	111	5	6	0	49	2
Niuafo'ou	539	102	74	227	11	6	61	6	1	0	48	3

Table 23: Number of agricultural active household members by 5 years age group - 2015

Table 23:		. or ag	ouitu	. ar aot		4301101	<u> </u>		,, o ,c			group - 1											
																						100	
		less than 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95 - 99	+ yea	Not State
District	Total	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	years	rs	d
TONGA	82353	9328	9921	9962	8986	7063	5501	4965	4441	4230	4361	3411	2674	2239	1873	1263	1115	596	322	82	20	0	0
Tongatapu	60537	6909	7168	7193	6684	5490	4262	3784	3331	3035	3190	2409	1897	1566	1297	857	766	414	214	58	13	0	0
Kolofo'ou	14073	1568	1568	1569	1541	1348	1134	907	778	677	769	602	433	352	311	201	163	92	44	15	1	0	0
Kolomotu'a	11469	1239	1246	1307	1282	1118	846	727	641	582	565	488	413	336	243	173	147	69	32	7	8	0	0
Vaini Tatakamotonga	11564 6793	1346 803	1419 869	1407 821	1384 708	1006 609	821 450	704 426	654 371	568 297	593 355	404 267	340 207	288 181	223 164	131 84	146 91	84 51	36 34	8	2	0	0
Lapaha	6727	810	872	844	736	600	368	432	356	348	358	256	200	151	135	92	85	49	25	9	1	0	0
Nukunuku	6519	755	769	818	702	529	436	382	340	383	359	267	207	157	137	106	84	47	31	9	1	0	0
Kolovai	3392	388	425	427	331	280	207	206	191	180	191	125	97	101	84	70	50	22	12	5	0	0	0
Vava'u	11990	1253	1502	1592	1350	865	637	625	586	674	646	553	418	366	346	199	190	108	63	15	2	0	0
Neiafu Pangaimotu	4202 1117	392 135	498 144	525 158	511 116	315 81	247 55	206 49	210 53	228 56	241 62	232 53	159 50	130 29	108 26	76 17	61 14	37 11	20 7	6 1	0	0 0	0
Hahake	1828	201	230	243	209	123	84	87	81	113	114	80	49	55	60	22	36	26	10	3	2	0	0
Leimatu'a	2202	277	303	287	203	131	117	147	118	130	94	72	75	54	69	35	32	16	16	2	0	0	0
																				3		0	0
Hihifo	1924	181	242	279	218	155	98	99	80	117	89	78	53	70	64	41	37	12	8	-	0	-	_
Motu	717	67	85	100	69	60	36	37	44	30	46	38	32	28	19	8	10	6	2	0	0	0	0
Ha'apai	4918	609	637	559	438	366	330	275	290	262	241	203	179	142	118	118	87	38	20	4	2	0	0
Pangai Hp	1883	179	215	255	233	163	97	88	103	113	103	78	76	49	35	38	28	16	13	0	1	0	0
Foa	1137	160	138	136	100	87	94	67	75	40	46	47	40	31	27	20	23	2	2	2	0	0	0
Lulunga	566	81	88	35	26	42	42	44	39	33	27	23	20	23	15	16	8	2	1	1	0	0	0
Mu'omu'a	493	78	82	52	22	26	35	37	29	20	26	16	12	20	15	15	4	2	1	1	0	0	0
Ha'ano	384	49	50	42	25	26	29	17	21	24	23	17	15	6	12	11	11	4	2	0	0	0	0
Uiha	455	62	64	39	32	22	33	22	23	32	16	22	16	13	14	18	13	12	1	0	1	0	0
'Eua	3561	409	468	460	357	231	191	211	173	194	219	170	126	112	88	58	45	22	20	5	2	0	0
'Eua Motu'a	1991	239	282	234	184	120	106	116	116	126	127	78	70	59	44	37	30	12	10	1	0	0	0
'Eua Fo'ou	1570	170	186	226	173	111	85	95	57	68	92	92	56	53	44	21	15	10	10	4	2	0	0
Niuas	1347	148	146	158	157	111	81	70	61	65	65	76	54	53	24	31	27	14	5	0	1	0	0
Niuatoputapu	808	102	89	82	84	66	50	54	33	35	33	47	31	38	19	24	10	8	2	0	1	0	0
Niuafo'ou	539	46	57	76	73	45	31	16	28	30	32	29	23	15	5	7	17	6	3	0	0	0	0

Table 24: Number of agricultural active household members by 5 years age group by gender- 2015

14515 2-1114									<u> </u>		r age gro		.0.0								
		Total		les	ss than 5	years		5 - 9 yea	ars		10 - 14 ye	ars	:	15 - 19 ye	ars	2	20 - 24 ye	ears		25 - 29 ye	ars
District	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
TONGA	82353	41016	41337	9196	4943	4385	9921	5119	4802	9962	5134	4828	8986	4635	4351	7063	3449	3614	5501	2610	2891
Tongatapu	60537	30090	30447	6861	3636	3273	7168	3689	3479	7193	3676	3517	6684	3436	3248	5490	2710	2780	4262	2035	2227
Kolofo'ou	14073	6965	7108	1557	800	768	1568	809	759	1569	783	786	1541	783	758	1348	698	650	1134	542	592
Kolomotu'a	11469	5689	5780	1221	675	564	1246	621	625	1307	657	650	1282	676	606	1118	550	568	846	432	414
Vaini	11564	5723	5841	1339	697	649	1419	730	689	1407	738	669	1384	683	701	1006	498	508	821	395	426
Tatakamotonga	6793	3416	3377	801	433	370	869	455	414	821	400	421	708	384	324	609	298	311	450	206	244
Lapaha	6727	3366	3361	804	431	379	872	435	437	844	442	402	736	399	337	600	290	310	368	156	212
Nukunuku	6519	3227	3292	754	397	358	769	399	370	818	440	378	702	343	359	529	243	286	436	207	229
Kolovai	3392	1704	1688	385	203	185	425	240	185	427	216	211	331	168	163	280	133	147	207	97	110
Vava'u	11990	5991	5999	1240	676	577	1502	794	708	1592	844	748	1350	689	661	865	379	486	637	289	348
Neiafu	4202	2052	2150	391	198	194	498	259	239	525	281	244	511	261	250	315	133	182	247	104	143
Pangaimotu	1117	538	579	135	67	68	144	71	73	158	77	81	116	58	58	81	37	44	55	25	30
Hahake	1828	901	927	194	110	91	230	128	102	243	132	111	209	98	111	123	51	72	84	33	51
Leimatu'a	2202	1117	1085	275	161	116	303	158	145	287	160	127	227	109	118	131	53	78	117	52	65
Hihifo	1924	1009	915	181	104	77	242	130	112	279	147	132	218	123	95	155	78	77	98	56	42
Motu	717	374	343	64	36	31	85	48	37	100	47	53	69	40	29	60	27	33	36	19	17
Ha'apai	4918	2464	2454	567	329	280	637	320	317	559	297	262	438	244	194	366	175	191	330	156	174
Pangai Hp	1883	930	953	164	100	79	215	113	102	255	131	124	233	119	114	163	85	78	97	45	52
Foa	1137	555	582	144	82	78	138	67	71	136	72	64	100	57	43	87	34	53	94	44	50
Lulunga	566	301	265	81	43	38	88	41	47	35	19	16	26	20	6	42	22	20	42	21	21
Mu'omu'a	493	242	251	77	38	40	82	38	44	52	25	27	22	14	8	26	10	16	35	18	17
Ha'ano	384	195	189	45	32	17	50	24	26	42	25	17	25	13	12	26	11	15	29	13	16
Uiha	455	241	214	56	34	28	64	37	27	39	25	14	32	21	11	22	13	9	33	15	18
'Eua	3561	1774	1787	386	215	194	468	246	222	460	225	235	357	182	175	231	122	109	191	98	93
'Eua Motu'a	1991	1000	991	222	120	119	282	144	138	234	122	112	184	90	94	120	70	50	106	56	50
'Eua Fo'ou	1570	774	796	164	95	75	186	102	84	226	103	123	173	92	81	111	52	59	85	42	43
Niuas	1347	697	650	142	87	61	146	70	76	158	92	66	157	84	73	111	63	48	81	32	49
Niuatoputapu	808	419	389	97	63	39	89	41	48	82	47	35	84	47	37	66	40	26	50	21	29
Niuafo'ou	539	278	261	45	24	22	57	29	28	76	45	31	73	37	36	45	23	22	31	11	20

										5 y	ear age g	roup									
		30 - 34 ye			35 - 39 ye			10 - 44 ye		4	15 - 49 ye			50 - 54 ye	ars		55 - 59 ye		-	60 - 64 ye	
District	Total	Male	Female	Total	Male	Female															
TONGA	4965	2247	2718	4441	2092	2349	4230	2036	2194	4361	2148	2213	3411	1743	1668	2674	1297	1377	2239	1101	1138
Tongatapu	3784	1726	2058	3331	1576	1755	3035	1439	1596	3190	1572	1618	2409	1238	1171	1897	935	962	1566	772	794
Kolofo'ou	907	442	465	778	352	426	677	313	364	769	360	409	602	314	288	433	208	225	352	185	167
Kolomotu'a	727	335	392	641	293	348	582	286	296	565	272	293	488	240	248	413	193	220	336	162	174
Vaini Tatakamotonga	704 426	296 189	408 237	654 371	315 188	339 183	568 297	265 141	303 156	593 355	309 188	284 167	404 267	199 143	205 124	340 207	185 102	155 105	288 181	146 84	142 97
Lapaha	432	201	231	356	175	181	348	163	185	358	170	188	256	140	116	200	102	98	151	76	75
Nukunuku	382	169	213	340	158	182	383	180	203	359	176	183	267	137	130	207	99	108	157	78	79
Kolovai	206	94	112	191	95	96	180	91	89	191	97	94	125	65	60	97	46	51	101	41	60
Vava'u	625	275	350	586	273	313	674	340	334	646	314	332	553	284	269	418	197	221	366	169	197
Neiafu	206	89	117	210	87	123	228	116	112	241	115	126	232	123	109	159	74	85	130	59	71
Pangaimotu	49	26	23	53	28	25	56	28	28	62	29	33	53	21	32	50	25	25	29	11	18
Hahake	87	36	51	81	40	41	113	56	57	114	54	60	80	42	38	49	25	24	55	23	32
Leimatu'a	147	65	82	118	55	63	130	71	59	94	47	47	72	38	34	75	37	38	54	22	32
Hihifo	99	41	58	80	41	39	117	55	62	89	46	43	78	39	39	53	24	29	70	36	34
Motu	37	18	19	44	22	22	30	14	16	46	23	23	38	21	17	32	12	20	28	18	10
Ha'apai	275	128	147	290	135	155	262	134	128	241	120	121	203	99	104	179	80	99	142	71	71
Pangai Hp	88	42	46	103	44	59	113	50	63	103	50	53	78	39	39	76	36	40	49	21	28
Foa	67	30	37	75	38	37	40	22	18	46	21	25	47	20	27	40	17	23	31	15	16
Lulunga	44	22	22	39	19	20	33	19	14	27	14	13	23	15	8	20	10	10	23	12	11
Mu'omu'a	37	19	18	29	12	17	20	14	6	26	13	13	16	7	9	12	1	11	20	13	7
Ha'ano	17	7	10	21	11	10	24	16	8	23	10	13	17	7	10	15	8	7	6	3	3
Uiha	22	8	14	23	11	12	32	13	19	16	12	4	22	11	11	16	8	8	13	7	6
'Eua	211	85	126	173	82	91	194	92	102	219	110	109	170	84	86	126	54	72	112	63	49
'Eua Motu'a	116	41	75	116	54	62	126	64	62	127	65	62	78	42	36	70	29	41	59	35	24
'Eua Fo'ou	95	44	51	57	28	29	68	28	40	92	45	47	92	42	50	56	25	31	53	28	25
Niuas	70	33	37	61	26	35	65	31	34	65	32	33	76	38	38	54	31	23	53	26	27
Niuatoputapu	54	26	28	33	14	19	35	13	22	33	13	20	47	21	26	31	21	10	38	18	20
Niuafo'ou	16	7	9	28	12	16	30	18	12	32	19	13	29	17	12	23	10	13	15	8	7

												5 year ag	e group											
	6	5 - 69 ye	ears	7	0 - 74 ye	ars	7.	5 - 79 ye	ars	8	0 - 84 ye	ars	8	5 - 89 y	ears	9	0 - 94 ye	ears	9	5 - 99 ye	ars		100 + ye	ars
District	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female									
TONGA	1873	911	962	1263	597	666	1115	525	590	596	258	338	322	135	187	82	31	51	20	5	15	0	0	0
Tongatapu	1297	614	683	857	397	460	766	354	412	414	171	243	214	89	125	58	22	36	13	3	10	0	0	0
Kolofo'ou	311	151	160	201	92	109	163	74	89	92	38	54	44	13	31	15	7	8	1	1	0	0	0	0
Kolomotu'a	243	110	133	173	80	93	147	63	84	69	20	49	32	19	13	7	4	3	8	1	7	0	0	0
Vaini	223	95	128	131	59	72	146	65	81	84	36	48	36	11	25	8	0	8	2	1	1	0	0	0
Tatakamotonga	164	77	87	84	43	41	91	49	42	51	22	29	34	12	22	5	2	3	0	0	0	0	0	0
Lapaha	135	67	68	92	42	50	85	35	50	49	26	23	25	11	14	9	5	4	1	0	1	0	0	0
Nukunuku	137	68	69	106	51	55	84	44	40	47	19	28	31	17	14	9	2	7	1	0	1	0	0	0
Kolovai	84	46	38	70	30	40	50	24	26	22	10	12	12	6	6	5	2	3	0	0	0	0	0	0
Vava'u	346	185	161	199	103	96	190	89	101	108	56	52	63	29	34	15	6	9	2	0	2	0	0	0
Neiafu	108	65	43	76	36	40	61	29	32	37	16	21	20	6	14	6	1	5	0	0	0	0	0	0
Pangaimotu	26	14	12	17	9	8	14	2	12	11	4	7	7	5	2	1	1	0	0	0	0	0	0	0
Hahake	60	25	35	22	8	14	36	18	18	26	16	10	10	4	6	3	2	1	2	0	2	0	0	0
Leimatu'a	69	34	35	35	21	14	32	17	15	16	9	7	16	8	8	2	0	2	0	0	0	0	0	0
Hihifo	64	36	28	41	22	19	37	17	20	12	7	5	8	5	3	3	2	1	0	0	0	0	0	0
Motu	19	11	8	8	7	1	10	6	4	6	4	2	2	1	1	0	0	0	0	0	0	0	0	0
Ha'apai	118	56	62	118	52	66	87	47	40	38	16	22	20	5	15	4	0	4	2	0	2	0	0	0
Pangai Hp	35	18	17	38	13	25	28	13	15	16	7	9	13	4	9	0	0	0	1	0	1	0	0	0
Foa	27	12	15	20	10	10	23	13	10	2	1	1	2	0	2	2	0	2	0	0	0	0	0	0
Lulunga	15	9	6	16	7	9	8	6	2	2	2	0	1	0	1	1	0	1	0	0	0	0	0	0
Mu'omu'a	15	7	8	15	11	4	4	1	3	2	1	1	1	0	1	1	0	1	0	0	0	0	0	0
Ha'ano	12	6	6	11	2	9	11	7	4	4	0	4	2	0	2	0	0	0	0	0	0	0	0	0
Uiha	14	4	10	18	9	9	13	7	6	12	5	7	1	1	0	0	0	0	1	0	1	0	0	0
'Eua	88	41	47	58	31	27	45	22	23	22	9	13	20	8	12	5	3	2	2	2	0	0	0	0
'Eua Motu'a	44	21	23	37	20	17	30	15	15	12	6	6	10	5	5	1	1	0	0	0	0	0	0	0
'Eua Fo'ou	44	20	24	21	11	10	15	7	8	10	3	7	10	3	7	4	2	2	2	2	0	0	0	0
Niuas	24	15	9	31	14	17	27	13	14	14	6	8	5	4	1	0	0	0	1	0	1	0	0	0
Niuatoputapu	19	12	7	24	12	12	10	5	5	8	3	5	2	2	0	0	0	0	1	0	1	0	0	0
Niuafo'ou	5	3	2	7	2	5	17	8	9	6	3	3	3	2	1	0	0	0	0	0	0	0	0	0

Table 25: Number of agricultural active household members by education levels - 2015

Table 25: Number	or agriculti	urar active ii	iousenoiu in	enibers by e	uucation ieve	Education	Level				
								Tertiary -	Tertiary -		
			Pre-				Post	first stage of	second stage		
		No	primary	Primary	Secondary	Secondary	secondary	secondary	of secondary		Not
District	Total	schooling	education	education	education	education 2	education	school	school	Other	Stated
TONGA	82353	8878	1495	14132	22719	25624	5674	2526	588	153	564
Tongatapu	60537	6744	964	10101	15209	19716	4878	2130	475	111	209
Kolofo'ou	14073	1575	171	2070	3183	4660	1533	661	167	35	18
Kolomotu'a	11469	1173	197	1674	2226	4105	1376	514	105	22	77
Vaini	11564	1317	169	2049	3637	3435	710	167	51	1	28
Tatakamotonga	6793	763	144	1241	1934	1924	439	251	55	35	7
Lapaha	6727	852	64	1205	2035	2162	280	103	3	1	22
Nukunuku	6519	699	171	1176	1490	2201	382	305	61	17	17
Kolovai	3392	365	48	686	704	1229	158	129	33	0	40
Vava'u	11990	1151	263	1999	4004	3655	494	247	87	11	79
Neiafu	4202	365	69	651	1321	1245	309	147	59 -	8	28
Pangaimotu	1117	130	19	190	384	343	24	8	7	0	12
Hahake	1828	147	74	343	523	611	72	32	6	2	18
Leimatu'a	2202	260	43	389	771	643	50	22	11	1	12
Hihifo	1924	171	49	343	789	509	24	31	4	0	4
Motu	717	78	9	83	216	304	15	7	0	0	5
Ha'apai	4918	515	126	973	1644	1320	145	82	10	26	77
Pangai Hp	1883	139	57	305	643	554	106	33	3	19	24
Foa	1137	138	22	213	329	365	20	23	6	4	17
Lulunga	566	76	13	141	214	106	5	2	1	0	8
Mu'omu'a	493	64	22	112	146	116	5	19	0	2	7
Ha'ano	384	53	1	78	166	72	1	3	0	1	9
Uiha	455	45	11	124	146	107	8	2	0	0	12
'Eua	3561	318	120	803	1363	608	83	54	12	5	195
'Eua Motu'a	1991	148	104	408	809	404	48	32	12	0	26
'Eua Fo'ou	1570	170	16	395	554	204	35	22	0	5	169
Niuas	1347	150	22	256	499	325	74	13	4	0	4
Niuatoputapu	808	101	17	136	342	169	29	8	3	0	3
Niuafo'ou	539	49	5	120	157	156	45	5	1	0	1

Table 26: Number of agricultural active household members by employment status - 2015

				Employmer	nt Status			
District	Total	Own-account	Employer	Employee - government	Employee -	Unpaid family worker	Student	Other
TONGA	53279	17666	531	4199	7213	1919	8201	13550
Tongatapu	39320	11475	183	3469	6531	1328	6284	10050
Kolofo'ou	9379	1854	57	1037	2125	25	1496	2785
Kolomotu'a	7695	1373	56	867	1548	426	1376	2049
Vaini	7404	2193	26	542	1234	200	1160	2049
Tatakamotonga	4302	1345	2	341	554	4	678	1378
Lapaha	4207	2123	25	227	349	556	616	311
Nukunuku	4178	1620	12	308	548	115	621	954
Kolovai	2155	967	5	147	173	2	337	524
Vava'u	7656	3236	92	374	487	413	1152	1902
Neiafu	2788	528	28	220	174	362	476	1000
Pangaimotu	680	322	2	10	16	0	106	224
Hahake	1161	707	0	47	35	10	162	200
Leimatu'a	1337	754	1	43	45	7	166	321
Hihifo	1222	676	5	38	172	33	181	117
Motu	468	249	56	16	45	1	61	40
Ha'apai	3155	1587	239	130	29	11	335	824
Pangai Hp	1249	435	153	111	24	9	220	297
Foa	719	347	8	2	2	1	66	293
Lulunga	362	288	7	7	3	0	8	49
Mu'omu'a	282	170	27	6	0	0	10	69
Ha'ano	247	170	0	1	0	0	13	63
Uiha	296	177	44	3	0	1	18	53
'Eua	2247	817	12	151	144	167	304	652
'Eua Motu'a	1253	677	5	91	133	7	142	198
'Eua Fo'ou	994	140	7	60	11	160	162	454
Niuas	901	551	5	75	22	0	126	122
Niuatoputapu	540	340	5	31	4	0	72	88
Niuafo'ou	361	211	0	44	18	0	54	34

Table 27: Number of agricultural active household members by employment status - 2015

	_	•			District				
Sector of Employment	TONGA	Tongatapu	Kolofo'ou	Kolomotu'a	Vaini	Tatakamotonga	Lapaha	Nukunuku	Kolovai
Total	32071	23136	5127	4308	4214	2268	3300	2615	1304
Agriculture forestry and fishing	10424	6784	602	766	1409	1004	1393	1034	576
Mining and quarrying	95	78	10	21	33	4	3	5	2
Manufacturing	6089	3765	504	672	886	290	696	520	197
Electricity gas steam and air conditioning supply	366	322	114	76	58	25	10	28	11
Water supply sewerage waste management & remediation activity	122	95	20	22	24	17	4	8	0
Construction	1163	1056	284	251	248	91	61	107	14
Trade	956	807	301	96	137	128	58	66	21
Transportation and storage	578	527	165	96	92	83	44	24	23
Accommodation and food service activities	735	636	225	118	125	47	39	40	42
Information and communication	406	353	150	75	42	28	12	35	11
Financial and insurance activities	564	524	206	143	74	37	15	37	12
Real estate rental and leasing activities	48	44	17	10	0	3	2	10	2
Professional science and technical activities	1146	1034	315	375	148	41	39	64	52
Administrative and support services activities	605	529	230	97	98	16	52	32	4
Education	1544	1178	278	201	226	170	103	149	51
Human health and social work	458	393	108	93	89	44	13	32	14
Arts entertainment and recreation	96	86	41	7	17	6	6	8	1
Other service activities	3760	3089	1050	842	283	70	401	266	177
Public administration and defense compulsory social security	1096	990	311	233	162	88	90	82	24
Activities of household as employers	805	325	54	20	11	9	220	9	2
Extra-territorial organization and bodies	325	324	100	45	21	39	16	46	57
Missing	690	197	42	49	31	28	23	13	11

				District			
Sector of Employment	Vava'u	Neiafu	Pangaimotu	Hahake	Leimatu'a	Hihifo	Motu
Total	4738	1365	359	806	867	933	408
Agriculture forestry and fishing	1711	220	142	295	397	478	179
Mining and quarrying	9	4	0	1	0	1	3
Manufacturing	1067	101	122	305	278	247	14
Electricity gas steam and air conditioning supply	21	10	1	3	2	4	1
Water supply sewerage waste management & remediation activity	13	12	0	1	0	0	0
Construction	61	30	9	10	8	1	3
Trade	121	95	1	4	7	11	3
Transportation and storage	30	20	1	3	3	0	3
Accommodation and food service activities	69	52	2	6	0	1	8
Information and communication	27	21	1	0	2	2	1
Financial and insurance activities	17	9	1	2	2	2	1
Real estate rental and leasing activities	3	2	0	0	1	0	0
Professional science and technical activities	74	24	5	21	15	6	3
Administrative and support services activities	59	55	0	0	1	2	1
Education	209	97	12	35	26	31	8
Human health and social work	26	17	0	5	2	1	1
Arts entertainment and recreation	8	3	1	1	1	1	1
Other service activities	574	260	37	54	72	134	17
Public administration and defense compulsory social security	50	16	2	11	13	1	7
Activities of household as employers	424	258	0	41	20	0	105
Extra-territorial organization and bodies	1	1	0	0	0	0	0
Missing	164	58	22	8	17	10	49

				District			
		Pangai					
Sector of Employment	Ha'apai	Нр	Foa	Lulunga	Mu'omu'a	Ha'ano	Uiha
Total	2189	781	460	324	210	183	231
Agriculture forestry and fishing	917	227	213	174	100	89	114
Mining and quarrying	4	4	0	0	0	0	0
Manufacturing	739	222	132	123	83	79	100
Electricity gas steam and air conditioning supply	15	9	1	0	1	0	4
Water supply sewerage waste management & remediation activity	6	6	0	0	0	0	0
Construction	32	30	0	0	1	0	1
Trade	17	14	3	0	0	0	0
Transportation and storage	13	12	0	0	1	0	0
Accommodation and food service activities	16	10	6	0	0	0	0
Information and communication	8	7	0	0	1	0	0
Financial and insurance activities	9	9	0	0	0	0	0
Real estate rental and leasing activities	1	1	0	0	0	0	0
Professional science and technical activities	5	5	0	0	0	0	0
Administrative and support services activities	9	9	0	0	0	0	0
Education	54	35	2	5	7	2	3
Human health and social work	19	19	0	0	0	0	0
Arts entertainment and recreation	1	1	0	0	0	0	0
Other service activities	24	24	0	0	0	0	0
Public administration and defense compulsory social security	26	24	0	0	1	0	1
Activities of household as employers	51	41	0	1	7	0	2
Extra-territorial organization and bodies	0	0	0	0	0	0	0
Missing	223	72	103	21	8	13	6

			District			
		'Eua				
Sector of Employment	'Eua	Motu'a	'Eua Fo'ou	Niuas	Niuatoputapu	Niuafo'ou
Total	1334	926	408	674	400	274
Agriculture forestry and fishing	732	505	227	280	184	96
Mining and quarrying	3	1	2	1	0	1
Manufacturing	321	277	44	197	86	111
Electricity gas steam and air conditioning supply	5	5	0	3	0	3
Water supply sewerage waste management & remediation activity	8	5	3	0	0	0
Construction	7	5	2	7	3	4
Trade	10	4	6	1	1	0
Transportation and storage	5	2	3	3	0	3
Accommodation and food service activities	10	8	2	4	4	0
Information and communication	12	10	2	6	3	3
Financial and insurance activities	9	6	3	5	1	4
Real estate rental and leasing activities	0	0	0	0	0	0
Professional science and technical activities	21	3	18	12	2	10
Administrative and support services activities	6	5	1	2	1	1
Education	54	34	20	49	31	18
Human health and social work	11	5	6	9	8	1
Arts entertainment and recreation	0	0	0	1	1	0
Other service activities	54	27	27	19	4	15
Public administration and defense compulsory social security	19	10	9	11	8	3
Activities of household as employers	3	1	2	2	2	0
Extra-territorial organization and bodies	0	0	0	0	0	0
Missing	44	13	31	62	61	1

Table 28: Number of agricultural active household members by main agriculture activity - 2015

bie 20. Number of a				Main Activity		ity - 2015	
							None of
District	Total	Farming	Fishing	Livestock	Handicrafts	Forestry	the above
TONGA	53279	11356	853	6043	8438	39	26550
Tongatapu	39320	7381	650	5561	4648	25	21055
Kolofo'ou	9379	774	275	2225	804	16	5285
Kolomotu'a	7695	1060	71	1053	887	1	4623
Vaini	7404	1818	73	392	1000	5	4116
Tatakamotonga	4302	996	22	382	344	2	2556
Lapaha	4207	894	150	820	765	0	1578
Nukunuku	4178	1212	22	527	637	1	1779
Kolovai	2155	627	37	162	211	0	1118
Vava'u	7656	1949	124	343	1968	8	3264
Neiafu	2788	287	34	204	382	7	1874
Pangaimotu	680	199	15	31	214	0	221
Hahake	1161	363	15	33	388	0	362
Leimatu'a	1337	481	6	30	437	0	383
Hihifo	1222	470	2	38	402	0	310
Motu	468	149	52	7	145	1	114
Ha'apai	3155	928	51	50	885	2	1239
Pangai Hp	1249	269	21	25	286	2	646
Foa	719	190	4	13	171	0	341
Lulunga	362	165	7	4	125	0	61
Mu'omu'a	282	101	12	1	108	0	60
Ha'ano	247	83	3	3	82	0	76
Uiha	296	120	4	4	113	0	55
'Eua	2247	783	21	87	632	0	724
'Eua Motu'a	1253	502	7	43	442	0	259
'Eua Fo'ou	994	281	14	44	190	0	465
Niuas	901	315	7	2	305	4	268
Niuatoputapu	540	168	7	0	173	4	188
Niuafo'ou	361	147	0	2	132	0	80

Table 29: Number of agricultural active household members by activity in the holding - 2015

Sic 23. Number of a						ctivity of hold	ding				
District	Total	Planting	Harvesting	Livestock rearing	Fish catching	Fish processing	Forestry	Handicraft	Transporting	Selling	None of the above
TONGA	82353	10858	1335	7246	823	16	15	8761	78	391	52830
Tongatapu	60537	6848	703	6549	642	11	7	4662	34	227	40854
Kolofo'ou	14073	681	139	2570	264	5	4	800	10	67	9533
Kolomotu'a	11469	971	76	1144	73	2	0	866	9	26	8302
Vaini	11564	1771	104	434	69	0	2	1018	1	43	8122
Tatakamotonga	6793	988	14	426	23	0	0	334	5	14	4989
Lapaha	6727	846	53	935	148	1	0	772	2	8	3962
Nukunuku	6519	1040	204	795	28	1	1	664	2	49	3735
Kolovai	3392	551	113	245	37	2	0	208	5	20	2211
Vava'u	11990	2220	244	490	111	3	6	2331	37	98	6450
Neiafu	4202	256	55	209	30	1	1	358	29	64	3199
Pangaimotu	1117	250	4	42	11	1	0	288	0	0	521
Hahake	1828	468	19	68	19	0	0	517	2	14	721
Leimatu'a	2202	572	35	57	6	0	0	532	3	13	984
Hihifo	1924	525	108	99	5	1	0	495	0	2	689
Motu	717	149	23	15	40	0	5	141	3	5	336
Ha'apai	4918	903	5	50	40	1	2	839	2	10	3066
Pangai Hp	1883	266	1	18	17	0	0	260	2	5	1314
Foa	1137	172	2	16	4	0	1	151	0	3	788
Lulunga	566	163	0	4	7	0	0	128	0	0	264
Mu'omu'a	493	104	0	3	5	1	0	111	0	1	268
Ha'ano	384	83	2	3	3	0	0	77	0	1	215
Uiha	455	115	0	6	4	0	1	112	0	0	217
'Eua	3561	579	381	149	23	1	0	624	4	55	1745
'Eua Motu'a	1991	483	160	64	7	1	0	449	0	12	815
'Eua Fo'ou	1570	96	221	85	16	0	0	175	4	43	930
Niuas	1347	308	2	8	7	0	0	305	1	1	715
Niuatoputapu	808	159	0	0	7	0	0	166	1	1	474
Niuafo'ou	539	149	2	8	0	0	0	139	0	0	241

Table 30: Area in acres of top 10 perennial crops cultivated by location of households - 2015

		Top Perennial Crops									
		Paper									
Village	Kava	mulberry	Vanilla	Pineapple	Pandanus	Papaya	Coffee	Tomato?			
TONGA	1,257	757	632	454	77	28	18	3			
Tongatapu	141	587	159	208	9	23	17	0			
Kolofo'ou	6	1	2	6	0	2	1	0			
Ma'ufanga	10	17	8	12	0	1	0	0			
Nukunukumotu	2	1	0	0	0	0	0	0			
Oneata Island	0	0	0	0	0	0	0	0			
Popua	2	0	1	1	0	0	0	0			
Tukutonga	0	0	0	0	0	0	0	0			
Pangaimotu	0	0	1	0	0	0	0	0			
Fafaa Island	0	0	0	0	0	0	0	0			
Onevai Island	0	0	0	0	0	0	0	0			
Ataa Island	0	0	0	0	0	0	0	0			
Velitoa Hahake	0	0	0	0	0	0	0	0			
Velitoa Hihifo	0	0	0	0	0	0	0	0			
Kolomotu'a	3	5	3	9	1	7	0	0			
Haveluloto	9	0	0	2	0	0	0	0			
Tofoa	4	4	5	1	0	0	0	0			
Hofoa	1	2	2	1	0	0	0	0			
Puke	1	1	4	3	0	0	0	0			
Sia'atoutai	1	0	0	1	0	1	0	0			
Vaini	8	5	0	34	0	7	7	0			
Malapo	3	4	4	0	1	0	0	0			
Longoteme	3	42	0	0	0	0	0	0			
Folaha	0	7	6	5	0	0	0	0			
Nukuhetulu	0	5	0	1	0	0	0	0			
Veitongo	0	2	0	7	4	0	8	0			
Ha'ateiho	2	4	1	5	1	0	0	0			
Pea	14	8	4	25	0	0	2	0			
Tokomololo	0	0	0	2	0	0	0	0			
Tatakamotonga	0	11	2	4	0	0	0	0			
Holonga	2	17	0	1	0	0	0	0			
Pelehake	1	23	1	4	0	0	0	0			
Fua'amotu	3	22	3	11	0	0	0	0			
Nakolo	0	17	0	5	1	0	0	0			
Ha'asini/Hamula	0	34	6	13	0	0	0	0			
Lavengatonga	1	37	7	13	0	0	0	0			
Haveluliku	0	0	3	1	0	0	0	0			
Fatumu	0	13	4	0	0	0	0	0			
Lapaha	1	103	4	10	0	1	0	0			
Talasiu	0	11	0	0	0	0	0	0			
Hoi	0	24	4	5	0	0	0	0			
Nukuleka	4	1	11	0	0	0	0	0			

		Top Perennial Crops										
		Paper										
Village	Kava	mulberry	Vanilla	Pineapple	Pandanus	Papaya	Coffee	Tomato?				
Makaunga	1	4	2	0	0	0	0	0				
Talafo'ou	0	2	2	1	0	0	0	0				
Manuka	2	1	1	0	0	0	0	0				
Navutoka	7	23	10	2	0	0	0	0				
Kolonga	6	16	25	1	0	0	0	0				
Afa	0	20	3	0	0	0	0	0				
Niutoua	0	42	7	1	0	0	0	0				
Eueiki	0	7	0	0	0	0	0	0				
Fukave	0	0	0	0	0	0	0	0				
Nukunuku	13	3	6	10	0	1	0	0				
Matahau	1	2	0	0	0	0	0	0				
Matafonua	19	4	1	2	0	0	0	0				
Fatai	2	0	0	0	0	0	0	0				
Lakepa	3	2	0	0	0	0	0	0				
Vaotu'u	3	1	1	1	0	0	0	0				
Utulau	0	6	1	1	0	4	0	0				
Ha'alalo	0	8	0	0	0	0	0	0				
Ha'akame	1	0	2	3	0	0	0	0				
Houma	1	2	4	1	1	0	0	0				
Kolovai	0	15	0	0	0	0	0	0				
Te'ekiu	1	0	2	16	0	0	0	0				
Masilamea	0	0	0	1	0	0	0	0				
Fahefa	1	0	1	1	0	0	0	0				
Ha'utu	0	0	2	1	0	0	0	0				
Kala'au	0	0	0	1	0	0	0	0				
Fo'ui	2	0	6	1	0	0	0	0				
Ha'avakatolo	0	0	0	0	0	0	0	0				
Ahau	1	6	0	0	1	0	0	0				
Kanokupolu	0	1	2	0	0	0	0	0				
Ha'atafu	1	3	0	0	0	0	0	0				
Atataa	1	0	0	1	0	0	0	0				
VAVAU	805	5	341	226	8	0	1	0				
Neiafu	70	1	29	20	0	0	0	0				
Makave	11	1	2	2	0	0	0	0				
Toula	4	0	3	4	0	0	0	0				
Utui	1	0	0	1	0	0	0	0				
Ofu island	0	0	0	1	0	0	0	0				
Okoa	7	0	2	1	0	0	0	0				
Olo'ua Island	0	0	1	0	0	0	0	0				
Kenutu Island	0	0	0	0	0	0	0	0				
Pangaimotu	2	0	9	9	0	0	0	0				
Utulei	0	0	0	0	0	0	0	0				
Nga'unoho	0	0	3	1	0	0	0	0				

	Top Perennial Crops								
		Paper							
Village	Kava	mulberry	Vanilla	Pineapple	Pandanus	Papaya	Coffee	Tomato?	
Utungake	1	0	8	4	0	0	0	0	
Tapana Island	0	0	0	0	0	0	0	0	
Ha'alaufuli	4	0	9	7	0	0	0	0	
Ha'akio	4	0	1	4	0	0	0	0	
Houma	4	1	4	0	0	0	0	0	
Mangia	7	0	0	1	0	0	0	0	
Ta'anea	13	0	0	1	0	0	0	0	
Tu'anekivale	1	0	2	0	0	0	0	0	
Koloa	12	0	1	3	0	0	0	0	
Holeva	1	0	5	3	0	0	0	0	
Leimatu'a	179	0	57	31	0	0	0	0	
Holonga	12	0	3	6	0	0	0	0	
Feletoa	21	0	8	5	0	0	0	0	
Mataika	66	0	8	13	0	0	0	0	
Longomapu	104	1	48	18	5	0	0	0	
Taoa	99	0	18	15	0	0	0	0	
Tefisi	73	1	36	53	1	0	0	0	
Vaimalo	25	0	4	3	0	0	0	0	
Tu'anuku	61	0	49	3	2	0	0	0	
Кара	1	0	0	4	0	0	0	0	
Falevai	17	0	3	1	0	0	0	0	
Otea	3	1	2	8	0	0	0	0	
Lape Island	0	0	0	0	0	0	0	0	
Matamaka	1	0	2	2	0	0	0	0	
Nuapapu	2	0	12	4	0	0	0	0	
Ovaka Island	0	0	0	0	0	0	0	0	
Taunga Island	0	0	0	0	0	0	0	0	
Hunga	2	1	14	2	0	0	1	0	
Foeata Island	0	0	0	0	0	0	0	0	
Vaka'eitu Island	0	0	0	0	0	0	0	0	
Mounu Island	0	0	0	0	0	0	0	0	
'Eueiki Island	0	0	0	0	0	0	0	0	
Mala Island	0	0	0	0	0	0	0	0	
Fofoa Island	0	0	0	0	0	0	0	0	
HA'APAI	7	92	6	7	23	4	0	2	
Pangai	0	7	0	0	0	0	0	0	
Hihifo	0	0	1	0	0	0	0	1	
Holopeka	0	0	0	0	0	0	0	0	
Koulo	0	3	0	0	0	0	0	0	
Fangale'ounga	0	0	0	0	2	0	0	0	
Fotua	0	15	0	1	0	1	0	0	
Lotofoa	0	26	3	1	3	0	0	0	
Faleloa	0	16	0	1	4	1	0	0	

				Top Peren	nial Crops			
		Paper						
Village	Kava	mulberry	Vanilla	Pineapple	Pandanus	Papaya	Coffee	Tomato?
Ha'afakahenga	0	13	0	0	0	0	0	0
Ha'ateiho Si'i	0	10	0	0	0	2	0	0
Ha'afeva Island	1	0	0	1	0	0	0	0
Tungua Island	0	0	0	0	1	0	0	0
Fotuha'a Island	0	0	0	1	0	0	0	0
O'ua Island	0	2	0	1	0	0	0	0
Matuku Island	0	0	0	0	1	1	0	0
Kotu Island	5	0	0	0	0	0	0	0
Nomuka Island	0	0	1	2	8	0	0	0
Mango Island	0	0	2	0	1	0	0	0
Fonoifua Island	0	0	0	0	2	0	0	0
Nomukeiki Island	0	0	0	0	0	0	0	0
Fakakai	0	0	0	0	2	0	0	1
Pukotala	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0
Muitoa	0	0	0	0	0	0	0	0
Mo'unga'one Isla	0	0	0	1	0	0	0	0
Uiha	1	0	1	0	0	0	0	0
Felemea	0	0	0	0	0	0	0	0
Lofanga Island	0	0	0	0	0	0	0	0
Tofua Island	0	0	0	0	0	0	0	0
EUA	249	73	104	9	1	0	0	1
Ohonua	75	39	17	1	0	0	0	0
Tufuvai	10	4	0	0	0	0	0	0
Pangai	2	0	0	0	0	0	0	0
Houma	12	12	3	1	1	0	0	0
Ha'atu'a	7	1	5	0	0	0	0	0
Ta'anga	0	0	0	0	0	0	0	0
Angaha	8	3	1	0	0	0	0	0
Futu	7	3	3	2	0	0	0	0
Esia	41	6	15	0	0	0	0	0
Sapa'ata	24	0	19	5	0	0	0	0
Fata'ulua	20	1	19	1	0	0	0	0
Mu'a	11	0	2	0	0	0	0	0
Tongamama'o	8	0	4	0	0	0	0	0
Petani	11	0	4	1	0	0	0	0
Mata'aho	13	6	13	0	0	0	0	0
NIUAS	55	2	22	3	37	0	0	0
Hihifo	4	0	0	0	9	0	0	0
Vaipoa	1	1	0	2	15	0	0	0
Falehau	0	1	0	0	9	0	0	0
Tafahi Island	10	0	0	0	0	0	0	0
Esia	8	0	7	1	2	0	0	0

				Top Peren	nial Crops			
Village	Kava	Paper mulberry	Vanilla	Pineapple	Pandanus	Papaya	Coffee	Tomato?
Kolofo'ou	7	0	3	0	1	0	0	0
Sapa'ata	12	0	3	0	2	0	0	0
Fata'ulua	2	0	4	0	0	0	0	0
Mata'aho	5	0	3	0	0	0	0	0
Mu'a	2	0	1	0	0	0	0	0
Tongamama'o	2	0	0	0	0	0	0	0
Petani	5	0	2	0	0	0	0	0

Table 31: Area in acres of common crops cultivated by method of planting - 2015

		Division											
		Tota				Tongata	pu			Vava'u			
	M	lethod of plan	ting (Acre	es)	Me	ethod of plant	ing (Ac	res)	Method of planting (Acres)				
Common crop	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter	
Total	27,168	24,858	2,034	276	19,252	19,108	123	21	3,772	2,937	811	23	
Pineapple (Faina)	454	405	46	3	208	207	1	0	226	185	41	0	
Plantain (Hopa)	492	324	151	17	144	127	14	2	66	35	28	3	
Giant Taro (Kape)	616	486	121	9	159	152	6	1	272	210	59	3	
Sweet potato													
(Kumala)	1,901	1,736	150	15	1,408	1,406	2	0	154	114	39	1	
Cassava (Manioke)	10,207	9,667	511	29	8,160	8,126	31	3	800	556	240	4	
Watermelon (Meleni)	416	394	21	0	348	348	0	0	42	33	9	0	
Cooking banana (Pata)	124	80	32	12	19	14	5	0	10	8	2	0	
Banana (Siaine)	282	173	87	22	131	104	21	7	38	19	15	4	
Yautia (Talo Futuna) Swam taro (Talo	2,565	2,389	152	24	1,956	1,948	7	1	248	208	38	2	
Tonga)	1,627	1,465	142	20	1,216	1,201	13	2	130	103	27	0	
Corn (Koane)	37	32	5	0	12	12	0	0	6	5	1	0	
Pele	38	36	2	0	27	27	0	0	2	2	0	0	
Tomato	111	98	13	1	79	79	1	0	24	15	8	1	
Paper mulberry													
(Hiapo)	757	695	41	21	587	575	7	4	5	2	2	0	
Kava	1,257	994	206	58	141	140	1	1	805	684	120	1	
Pandanus (Lou'akau)	77	62	6	9	9	8	1	0	8	8	0	0	
Vanilla	632	522	89	21	159	159	0	0	341	281	57	2	
Peanut (Pinati)	259	250	8	1	239	239	0	0	10	7	3	0	
Yam (Ufi)	5,315	5,050	252	13	4,248	4,236	12	0	585	462	121	3	

					_	Divisi	ion						
		Ha'a <sub>l</sub>	oai			Eu	a			Niuas			
	N	∕lethod of pla	nting (Ac	res)	ľ	∕lethod of pla	nting (Ac	cres)	1	Method of pla	nting (A	cres)	
Common crop	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter	
Total	1,795	1,411	357	27	1,587	761	649	177	762	641	93	28	
Pineapple (Faina)	7	6	2	0	9	7	2	1	3	1	0	2	
Plantain (Hopa)	101	56	42	3	92	30	55	7	89	75	12	2	
Giant Taro (Kape)	44	33	9	1	52	23	27	2	89	68	20	2	
Sweet potato													
(Kumala)	127	92	34	1	166	80	74	12	46	43	1	1	
Cassava (Manioke)	815	708	104	3	291	152	122	17	142	125	14	2	
Watermelon (Meleni)	7	6	1	0	17	6	11	0	2	1	1	0	
Cooking banana (Pata)	61	30	21	10	2	0	2	1	30	27	1	2	
Banana (Siaine)	76	42	29	5	34	7	20	7	3	1	2	0	
Yautia (Talo Futuna)	136	101	35	1	161	80	63	18	65	53	9	3	
Swam taro (Talo													
Tonga)	70	47	20	2	155	68	74	14	56	46	8	2	
Corn (Koane)	11	8	3	0	7	6	1	0	0	0	0	0	
Pele	7	5	2	0	2	2	0	0	0	0	0	0	
Tomato	7	3	4	0	1	1	0	0	1	0	1	0	
Paper mulberry													
(Hiapo)	92	82	10	0	73	36	21	16	2	1	0	1	
Kava	7	2	5	0	249	114	79	56	55	54	2	0	
Pandanus (Lou'akau)	23	19	4	0	1	0	0	1	37	28	0	8	
Vanilla	6	3	3	0	104	62	24	19	22	17	5	0	
Peanut (Pinati)	2	2	1	0	8	2	5	1	1	1	0	0	
Yam (Ufi)	197	167	30	0	163	84	71	9	121	101	18	2	

Table 32: Number of plants and area in acres of cultivated crops by method of planting - 2015

		Method of planting											
		Number o	of plants			Area -a	acres						
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter					
Total	84,206,524	80,165,767	3,585,148	455,609	27,610	25,255	2,055	279					
CROPS	71,071,116	67,794,233	2,989,195	287,688	24,077	22,227	1,667	164					
Angoango	14,223	14,223	-	-	4	4	-	-					
Pineapple	1,364,660	1,269,632	89,674	5,354	454	405	46	3					
Pumpkin	46,935	46,935	-	-	31	31	-	-					
Plantain	401,965	293,738	98,498	9,729	492	324	151	17					
Giant Taro	1,342,686	1,177,391	156,530	8,765	616	486	121	9					
Sweet potato	4,038,347	3,749,146	262,640	26,561	1,901	1,733	150	15					
Cassava	35,331,938	34,130,642	1,137,366	63,930	10,207	9,661	511	29					
Yam	12,397,581	11,977,000	381,406	39,175	5,315	5,045	252	13					
Breadfruit	7,671	7,293	342	36	6	5	1	-					
Watermelon	719,981	697,301	22,625	55	416	394	21	-					
Lady's finger	150	150	-	-	-	-	-	-					
Coconut	285	-	185	100	-	-	-	-					
Granadilla	7,846	4,123	3,723	-	19	18	1	-					
Cooking banana	60,716	42,788	13,990	3,938	124	80	32	12					
Irish potato	32,554	32,354	200	-	3	3	-	-					
Banana	227,904	166,701	50,890	10,313	282	173	87	22					
Yautia	8,897,658	8,444,553	381,725	71,380	2,565	2,387	152	24					
Swam taro	6,138,871	5,701,468	389,051	48,352	1,627	1,464	142	20					
Golden passion fruit	39,145	38,795	350	-	15	14	-	-					
VEGETABLES	3,563,521	3,512,140	41,652	9,729	320	295	22	3					
Broccoli	2,510	2,510	-	-	-	-	-	-					
Cauliflower	3,510	3,510	-	-	-	-	-	-					
Carrot	538,070	537,570	500	-	17	17	-	-					
Head cabbages	349,094	348,714	380	-	22	22	-	-					
Chinese cabbage	347,693	347,693	-	-	18	18	-	-					
Cucumber	124,433	121,348	2,085	1,000	13	13	-	-					

	Method of planting										
		Number of	plants			Area -a	icres				
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter			
Corn	384,312	373,187	9,425	1,700	37	32	5	-			
Radish	27,250	26,500	-	750	2	1	-	1			
Lettuce	292,537	291,477	60	1,000	13	13	-	-			
Okra	21,000	21,000	-	-	-	-	-	-			
Onion	207,301	204,901	100	2,300	4	3	1	1			
Egg plant	3,179	3,179	-	-	1	1	-	-			
Pele	206,689	202,079	2,862	1,748	38	36	2	-			
Bean	164,302	164,302	-	-	13	13	-	-			
Capsicum	248,865	248,535	330	-	24	24	-	-			
Hot Chilli	30,160	25,174	4,986	-	3	2	2	-			
Tomato	612,616	590,461	20,924	1,231	111	98	13	1			
CASH CROP	9,384,882	8,711,977	515,543	157,362	3,105	2,638	352	110			
Squash	94,273	94,190	83	-	84	83	1	-			
Paper mulberry	2,451,684	2,274,029	111,585	66,070	757	695	41	21			
Kava	1,785,745	1,449,264	268,216	68,265	1,257	994	206	58			
Lou'akau	55,422	39,277	5,029	11,116	77	58	6	9			
Vanilla	553,630	452,035	89,984	11,611	632	522	89	21			
Peanut	4,359,091	4,321,670	37,121	300	259	250	8	1			
Tobacco plant	85,037	81,512	3,525	-	37	36	2	-			
FRUIT TREES	59,062	53,768	4,674	620	59	51	8	-			
Avocado	20	20	-	-	-	-	-	-			
Custard apple Sweetsop	90	60	-	30	-	-	-	-			
Rose apple	13,453	13,453	-	-	4	4	-	-			
Coffee	13,618	13,618	-	-	18	18	-	-			
Guava	4,137	2,482	1,655	-	7	2	5	-			
Papaya	24,180	21,789	1,801	590	28	26	2	-			
Lopa	100	-	100	-	-	-	-	-			
Mango	1,301	1,301	-	-	2	2	-	-			
Breadfruit tree	668	-	668	-	1	-	1	-			
Orange	1,045	1,045	-	-	1	1	-	-			
Pacific litchi	450	-	450	-	1	-	1	-			

	Method of planting											
		Number of	plants			Area -a	icres					
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter				
ORNAMENTAL PLANTS	53,944	29,510	24,414	20	12	10	1	1				
Sandalwood	7,702	7,682	-	20	8	7	-	1				
Vanda orchid-Amy	4,005	4,005	-	-	1	1	-	-				
Butterfly palm	3,723	3,723	-	-	1	1	-	-				
Ginger	38,514	14,100	24,414	-	2	1	1	-				
OTHER TREES	73,999	64,139	9,670	190	40	34	5	1				
Akataha hina	2,358	2,358	-	-	2	2	-	-				
Coffee	372	372	-	-	1	1	-	-				
Fau	400	400	-	-	-	-	-	-				
Fehi	1,636	1,636	-	-	1	1	-	-				
Fiho'a	100	100	-	-	-	-	-	-				
Hiehieapo	5,120	5,120	-	-	2	2	-	-				
Kaho folalahi	15,264	15,264	-	-	4	4	-	-				
Kanume	300	300	-	-	-	-	-	-				
Kie	150	150	-	-	1	1	-	-				
Kihikihi	3,040	3,040	-	-	8	8	-	-				
Koli kolitoto	1,760	1,760	-	-	1	1	-	-				
Kotia	3,721	-	3,721	-	1	-	1	-				
Limu	70	-	70	-	1	-	1	-				
Loupata	553	400	153	-	-	-	-	-				
Malamala 'a toa	350	350	-	-	-	-	-	-				
Moengalo	7,000	7,000	-	-	-	-	-	-				
Moli	5	-	-	5	-	-	-	-				
Pakaka	15	-	15	-	-	-	-	-				
Paongo	6,582	6,582	-	-	3	3	-	-				
Pele	15	-	15	-	-	-	-	-				
Pua tonga	15	-	15	-	-	-	-	-				
Tamatama	5,582	5,582	-	-	2	2	-	-				
Tava	300	300	-	-	-	-	-	-				
Tavahi	400	400	-	-	-	-	-	-				
То	1,855	580	1,090	185	3	1	1	1				

		Method of planting											
		Number of p	plants		icres								
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter					
Toa	70	-	70	-	1	-	1	1					
Tuamea	3,310	3,310	-	-	2	2	-	-					
Tuitui	2,628	2,628	-	-	1	1	-	-					
Tupu'a	2,220	2,220	-	-	2	2	-	-					
Tutu hina tutu tahi	8,808	4,287	4,521	-	4	3	1	-					

Table 33: Number of plants and area in acres of cultivated crops by type of planting - 2015

·	Types of Planting										
		Number of	plants			Area -acı	res				
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter			
Total	84,206,524	70,517,393	13,595,959	93,172	27,610	22,433	5,069	108			
CROPS	71,071,116	58,581,286	12,427,043	62,787	24,077	19,432	4,573	71			
Angoango	14,223	14,223	-	-	4	4	-	-			
Pineapple	1,364,660	1,122,736	240,832	1,092	454	356	98	-			
Pumpkin	46,935	44,935	2,000	-	31	30	2	-			
Plantain	401,965	175,642	219,643	6,680	492	327	150	14			
Giant Taro	1,342,686	426,382	912,422	3,882	616	302	311	3			
Sweet potato	4,038,347	3,558,674	475,865	3,808	1,901	1,690	209	2			
Cassava	35,331,938	33,301,679	2,010,727	19,532	10,207	9,538	657	12			
Yam	12,397,581	7,798,745	4,595,478	3,358	5,315	3,132	2,181	2			
Breadfruit	7,671	4,981	2,633	57	6	5	-	1			
Watermelon	719,981	708,906	11,075	-	416	409	6	-			
Lady's finger	150	-	150	-	-	-	-	-			
Coconut	285	-	85	200	-	-	-	-			
Granadilla	7,846	7,846	-	-	19	19	-	-			
Cooking banana	60,716	24,373	29,840	6,503	124	77	33	13			
Irish potato	32,554	23,689	8,865	-	3	3	1	-			
Banana	227,904	99,452	120,608	7,844	282	165	100	17			
Yautia	8,897,658	6,887,870	2,001,421	8,367	2,565	2,067	494	5			
Swam taro	6,138,871	4,344,522	1,792,885	1,464	1,627	1,296	329	2			
Golden passion fruit	39,145	36,631	2,514	-	15	12	2	-			
VEGETABLES	3,563,521	3,118,228	445,063	230	320	264	55	-			
Broccoli	2,510	2,510	-	-	-	-	-	-			
Cauliflower	3,510	3,510	-	-	-	-	-	-			
Carrot	538,070	502,729	35,341	-	17	15	2	-			
Head cabbages	349,094	333,794	15,300	-	22	20	3	-			
Chinese cabbage	347,693	322,457	25,236	-	18	15	3	-			
Cucumber	124,433	113,203	11,230	-	13	12	2	-			
Corn	384,312	241,503	142,809	-	37	27	10	-			
Radish	27,250	26,500	750	-	2	1	1				

	Types of Planting											
		Number of	f plants		Area -acres							
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter				
Lettuce	292,537	272,076	20,461	-	13	13	1	-				
Okra	21,000	21,000	-	-	-	-	-	-				
Onion	207,301	202,891	4,410	-	4	3	1	-				
Egg plant	3,179	3,159	20	-	1	1	-	-				
Pele	206,689	171,758	34,761	170	38	35	3	-				
Bean	164,302	153,977	10,325	-	13	13	1	-				
Capsicum	248,865	224,014	24,851	-	24	20	4	-				
Hot Chilli	30,160	24,970	5,190	-	3	2	2	-				
Tomato	612,616	498,177	114,379	60	111	88	23	-				
CASH CROP	9,384,882	8,685,802	669,075	30,005	3,105	2,644	424	37				
Squash	94,273	94,190	83	-	84	83	1	-				
Paper mulberry	2,451,684	2,309,585	136,623	5,476	757	708	47	2				
Kava	1,785,745	1,391,525	380,844	13,376	1,257	966	270	21				
Lou'akau	55,422	44,305	3,809	7,308	77	67	4	6				
Vanilla	553,630	460,410	89,395	3,825	632	528	98	7				
Peanut	4,359,091	4,304,620	54,451	20	259	256	3	1				
Tobacco plant	85,037	81,167	3,870	-	37	36	2	-				
FRUIT TREES	59,062	47,556	11,356	150	59	52	6	-				
Avocado	20	-	20	-	-	-	-	-				
Custard apple Sweetsop	90		90	_								
Rose apple	13,453	9,316	4,137		4	3	1	-				
Coffee	13,618	12,508	1,110		18	17	1	-				
Guava	4,137	3,310	827		7	6	1	-				
	24,180	19,626	4,404	150	28	24	4	_				
Papaya	100		100	150	-	_	4	-				
Lopa	1,301	1,301	100		2	2	<del>-</del>	-				
Mango Breadfruit tree	668	1,301	668		1	_	1	-				
		1 0/15	008	-			1	-				
Orange Pacific litchi	1,045 450	1,045 450	-	-	1 1	1	-	-				

	Types of Planting										
		Number of	plants			Area -ac	res				
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter			
ORNAMENTAL PLANTS	53,944	22,818	31,126	_	12	8	5				
Sandalwood	7,702	2,890	4,812	- -	8	5	4				
Vanda orchid-Amy	4,005	4,005	-,012	_	1	1	_				
Butterfly palm	3,723	3,723	-	_	1	1	_				
Ginger	38,514	12,200	26,314	_	2	1	1				
OTHER TREES	73,999	61,703	12,296	_	40	35	5				
Akataha hina	2,358	2,358		_	2	2	-				
Coffee	372	372	<del>-</del>	-	1	1	_				
Fau	400	-	400	-	-	-	_				
Fehi	1,636	1,636	-	_	1	1	_				
Fiho'a	100	-	100	_	_	_	_				
Hiehieapo	5,120	700	4,420	-	2	-	2				
Kaho folalahi	15,264	15,264	, -	_	4	4	_				
Kanume	300	, -	300	-	-	-	-				
Kie	150	150	-	-	1	1	_				
Kihikihi	3,040	3,040	-	-	8	8	_				
Koli kolitoto	1,760	1,760	-	-	1	1	-				
Kotia	3,721	3,721	-	-	1	1	-				
Limu	70	-	70	-	1	-	1				
Loupata	553	102	451	-	-	-	-				
Malamala 'a toa	350	-	350	-	-	-	-				
Moengalo	7,000	7,000	-	-	-	-	-				
Moli	5	5	-	-	-	-	-				
Pakaka	15	15	-	-	-	-	-				
Paongo	6,582	6,582	-	-	3	3	-				
Pele	15	-	15	-	-	-	-				
Pua tonga	15	15	-	-	-	-	-				
Tamatama	5,582	5,582	-	-	2	2	-				
Tava	300	-	300	-	-	-	-				
Tavahi	400	400	-	-	-	-	-				

	Types of Planting												
		Number	of plants			Area -a	cres						
Crop name	Total	Compact	Line	Scatter	Total	Compact	Line	Scatter					
То	1,855	855	1,000	-	3	2	-	-					
Toa	70	70	-	-	1	1	-	-					
Tuamea	3,310	3,310	-	-	2	2	-	-					
Tuitui	2,628	-	2,628	-	1	-	1	-					
Tupu'a	2,220	2,190	30	-	2	2	-	-					
Tutu hina tutu tahi	8,808	6,576	2,232	-	4	4	1	-					

Table 34: Area in acres of common crops cultivated by type of holdings - 2015

					Type of	holding			
Common crop	Total	Individual	Family	Joint Operation	Religious	Cooperative	Company	Government	Semi- government
Total	27168	25084	1498	298	191	0	0	97	0
Pineapple (Faina)	454	427	20	2	0	0	0	5	0
Plantain (Hopa)	492	458	28	5	0	0	0	0	0
Giant Taro (Kape)	616	578	31	6	0	0	0	0	0
Sweet potato (Kumala)	1901	1686	93	78	18	0	0	26	0
Cassava (Manioke)	10207	9384	558	112	120	0	0	34	0
Watermelon (Meleni)	416	396	9	0	4	0	0	7	0
Cooking banana (Pata)	124	111	12	0	0	0	0	0	0
Banana (Siaine)	282	256	22	3	0	0	0	2	0
Yautia (Talo Futuna)	2565	2379	149	20	15	0	0	3	0
Swam taro (Talo Tonga)	1627	1461	147	10	9	0	0	0	0
Corn (Koane)	37	30	2	1	3	0	0	0	0
Pele	38	38	-	0	0	0	0	0	0
Tomato	111	109	1	1	0	0	0	1	0
Paper mulberry (Hiapo)	757	722	33	3	0	0	0	0	0
Kava	1257	1136	96	16	8	0	0	3	0
Pandanus (Lou'akau)	77	76	1	0	0	0	0	0	0
Vanilla	632	571	50	2	9	0	0	0	0
Peanut (Pinati)	259	241	8	3	0	0	0	8	0
Yam (Ufi)	5315	5024	239	38	5	0	0	9	0

Table 35: Number of common trade units of harvested common crops - 2015

					СТИ	code (units	s)				
		Plastic					Bunch	Hands			
	Kilogram	bags	Basket	Bundle	Неар		(kau	(taa'i		Bags	
Common crop	(kg)	(milemila)	(kato)	(ha'inga)	(tu'unga)	Number	siaine)	siaine)	Plants	(tangai)	Others
Total	404	272	9,108	1,244	2,055	6,504	4,641	232	33,426	7,840	1,760
Pineapple (Faina)	0	0	6	0	60	102	0	0	117	30	0
Plantain (Hopa)	0	2	15	8	5	114	3,031	152	513	20	33
Giant Taro (Kape)	4	0	87	8	335	1,068	14	0	1,314	70	55
Sweet potato (Kumala)	16	66	1,053	0	0	126	0	0	2,376	590	44
Cassava (Manioke)	72	22	4,071	0	20	858	0	0	11,601	4,160	803
Watermelon (Meleni)	12	0	0	4	20	318	0	0	549	0	66
Cooking banana (Pata)	0	0	3	0	0	18	308	32	63	0	0
Banana (Siaine)	1	0	3	4	0	48	1,274	48	189	10	11
Yautia (Talo Futuna)	28	40	1,236	124	15	264	0	0	2,646	750	143
Swam taro (Talo Tonga)	45	12	609	788	85	348	7	0	3,141	1,010	99
Corn (Koane)	1	26	36	0	15	48	0	0	99	20	22
Pele	1	2	0	84	0	12	7	0	18	0	44
Tomato	1	22	0	0	75	6	0	0	297	0	11
Paper mulberry (Hiapo)	2	0	0	140	0	24	0	0	135	0	22
Kava	56	54	54	8	0	96	0	0	261	180	22
Pandanus (Lou'akau)	0	0	0	12	0	0	0	0	0	0	0
Vanilla	11	0	0	16	0	12	0	0	0	0	11
Peanut (Pinati)	1	18	3	44	5	30	0	0	297	140	0
Yam (Ufi)	153	8	1,932	4	1,420	3,012	0	0	9,810	860	374

Table 36: Number of households having livestock species and number of species by each livestock species - 2015

	Household		Number of Household having Livestock Species							Number of Livestock species							
District	with Livestock	Beef cattle	Dairy cattle	Pig	Horse	Sheep	Goat	Chicken	Duck	Beef cattle	Dairy cattle	Pig	Horse	Sheep	Goat	Chicken	Duck
TONGA	12,859	2,897	413	10,038	865	161	405	4,797	322	16,755	2,007	110,310	1,942	1,240	1,744	92,071	2,705
Tongatapu	9,077	1,490	203	6,592	163	73	134	2,705	287	8,847	1,052	60,047	396	653	419	55,756	2,565
Kolofo'ou	2,108	121	35	1,292	8	8	20	519	38	822	168	8,845	17	25	32	9,776	2,303
Kolomotu'a	1,624	167	27	1,161	14	9	24	461	47	934	113	10,177	48	45	95	11,554	374
Vaini	1,673	272	65	1,162	31	17	30	544	50	1,408	221	10,201	71	152	100	13,032	422
Tatakamotonga	1,060	361	30	847	41	14	16	415	49	2,574	342	8,768	107	289	39	7,450	405
Lapaha	1,072	246	17	895	30	3	9	326	47	1,534	121	10,376	76	26	28	5,133	247
Nukunuku	1,025	187	25	797	22	11	14	268	38	925	60	6,692	51	78	46	5,614	407
Kolovai	515	136	4	438	17	11	21	172	18	650	27	4,988	26	38	79	3,197	493
Vava'u	2,080	905	138	1,854	315	42	91	1,020	13	5,130	582	25,019	690	283	613	17,629	39
Neiafu	774	299	122	655	30	16	30	342	3	1,743	526	8,001	67	87	259	5,137	11
Pangaimotu	172	100	0	156	29	3	7	84	0	688	0	1,726	76	8	25	1,614	0
Hahake	311	157	1	287	52	7	14	182	4	821	1	4,419	125	38	64	3,727	12
Leimatu'a	371	185	4	339	76	9	11	172	3	1,177	10	4,661	163	124	22	3,034	11
Hihifo	322	132	10	292	96	3	9	166	1	574	43	3,676	212	10	68	2,633	1
Motu	130	32	1	125	32	4	20	74	2	127	2	2,536	47	16	175	1,484	4
Ha'apai	869	222	51	818	166	4	76	528	6	1,318	229	11,749	424	9	269	9,805	21
Pangai Hp	319	116	45	294	66	2	22	174	4	644	197	3,452	195	4	80	3,273	15
Foa	182	70	0	169	40	0	17	111	1	503	0	2,076	100	0	68	1,495	4
Lulunga	118	12	1	115	1	0	14	79	0	62	3	2,289	1	0	37	1,996	0
Mu'omu'a	80	7	2	78	26	0	0	49	1	29	23	1,198	66	0	0	1,044	2
Ha'ano	78	6	0	75	29	0	10	49	0	23	0	1,248	57	0	41	771	0
Uiha	92	11	3	87	4	2	13	66	0	57	6	1,486	5	5	43	1,226	0
'Eua	598	261	21	553	128	38	81	338	14	1,411	144	8,434	261	266	329	5,170	77
'Eua Motu'a	333	150	10	310	83	20	58	180	6	814	111	5,181	178	204	251	2,868	30
'Eua Fo'ou	265	111	11	243	45	18	23	158	8	597	33	3,253	83	62	78	2,302	47
Niuas	235	19	0	221	93	4	23	206	2	49	0	5,061	171	29	114	3,711	3
Niuatoputapu	137	6	0	128	41	3	14	118	0	7	0	2,341	72	26	85	2,091	0
Niuafo'ou	98	13	0	93	52	1	9	88	2	42	0	2,720	99	3	29	1,620	3

Table 37: Number of households owning each type of cattle - 2015

					Nun	nber of Housel	hold own a Cattle	!				
			BEEF CATT	LE					DAIRY CA	ATTLE		
District	BEEF CATTLE (pulu kakano) - TOTAL	1.1 Calves (< 6 months)	1.2 Steer (young male cattle: 6-24 months)	1.3 Heifer (young female cattle: 6-24 months)	1.4 Bull (adult male cattle)	1.5 Cow (adult female cattle)	DAIRY CATTLE (pulu hu'akau) - TOTAL	2.1 Calves (< 6 months)	2.2 Steer (young male cattle: 6-24 months)	2.3 Heifer (young female cattle: 6-24 months)	2.4 Bull (adult male cattle)	2.5 Cow (adult female cattle)
TONGA	2897	779	813	1083	1444	2527	413	79	107	123	187	339
Tongatapu	1490	447	397	554	765	1249	203	50	50	65	77	161
Kolofo'ou	121	28	41	46	70	91	35	9	11	16	18	23
Kolomotu'a	167	28	47	63	78	144	27	4	6	10	14	21
Vaini	272	83	64	82	137	211	65	16	13	18	22	52
Tatakamotonga	361	121	99	155	179	319	30	8	9	7	5	30
Lapaha	246	65	73	104	122	210	17	4	6	9	8	13
Nukunuku	187	64	47	59	99	165	25	7	4	4	7	17
Kolovai	136	58	26	45	80	109	4	2	1	1	3	5
Vava'u	905	221	292	362	420	824	138	8	36	36	80	119
Neiafu	299	84	104	82	157	279	122	7	35	31	77	105
Pangaimotu	100	37	26	52	45	98	0	0	0	0	0	0
Hahake	157	21	71	80	62	145	1	0	0	0	0	1
Leimatu'a	185	45	56	94	74	164	4	0	0	1	1	4
Hihifo	132	25	26	46	66	112	10	1	0	4	2	9
Motu	32	9	9	8	16	26	1	0	1	0	0	0
Ha'apai Pangai Hp	222 116	27 3	69 42	81 40	112 59	199 103	51 45	8 8	14 13	15 13	20 17	40 35
Foa	70	21	25	34	31	64	0	0	0	0	0	0
Lulunga	12	1	0	4	7	10	1	0	0	1	1	0
Mu'omu'a	7	0	1	1	3	6	2	0	1	1	1	2
Ha'ano	6	2	0	2	3	6	0	0	0	0	0	0
Uiha	11	0	1	0	9	10	3	0	0	0	1	3
'Eua	261	78	53	82	141	238	21	13	7	7	10	18
'Eua Motu'a	150	61	28	60	62	138	10	7	2	4	6	8
'Eua Fo'ou	111	17	25	22	79	100	11	6	5	3	4	10
Niuas	19	6	2	4	6	17	0	0	0	0	0	1
Niuatoputapu	6	2	0	0	1	4	0	0	0	0	0	1
Niuafo'ou	13	4	2	4	5	13	0	0	0	0	0	0

Table 38: Number of cattle of each type of cattle - 2015

						Number of Ca	ittles					
			BEEF	CATTLE					DAIRY CA	ATTLE		
District	TOTAL	Calves (< 6 months)	Steer (young male cattle: 6- 24 months)	Heifer (young female cattle: 6- 24 months)	Bull (adult male cattle)	Cow (adult female cattle)	TOTAL	Calves (< 6 months)	Steer (young male cattle: 6-24 months)	Heifer (young female cattle: 6-24 months)	Bull (adult male cattle)	Cow (adult female cattle)
TONGA	16755	1820	1737	2450	3172	7589	2007	191	204	299	403	938
Tongatapu	8847	1109	888	1259	1742	3856	1052	114	91	189	159	508
Kolofo'ou	822	77	100	155	219	271	168	15	22	37	33	61
Kolomotu'a Vaini	934 1408	79 169	118 141	155 159	162 307	420 635	113 221	10 28	12 17	14 29	31 36	46 115
Tatakamotonga	2574	354	245	364	419	1192	342	37	21	65	17	206
Lapaha Nukunuku	1534 925	157 158	157 85	222 110	312 173	690 399	121 60	7 11	9	38 5	26 9	41 29
Kolovai Vava'u	650 5130	115 470	42 587	94 815	150 836	249 2422	27 582	6 12	4 57	1 57	7 184	10 272
Neiafu	1743	157	208	209	359	810	526	7	55	48	179	237
Pangaimotu	688	93	51	150	84	310	0	0	0	0	0	0
Hahake	821	33	134	149	106	399	1	0	0	0	0	1
Leimatu'a	1177	130	133	209	156	549	10	0	0	1	2	7
Hihifo	574	43	46	83	110	292	43	5	0	8	3	27
Motu	127	14	15	15	21	62	2	0	2	0	0	0
Ha'apai	1318	66	137	176	272	667	229	21	33	37	42	96
Pangai Hp Foa	644 503	6 57	65 69	76 83	140 80	357 214	197 0	21 0	29 0	30 0	32 0	85 0
Lulunga	62	1	0	14	17	30	3	0	0	2	1	0
Mu'omu'a	29	0	2	1	11	15	23	0	4	5	8	6
Ha'ano	23	2	0	2	7	12	0	0	0	0	0	0
Uiha	57	0	1	0	17	39	6	0	0	0	1	5
'Eua	1411	169	122	192	316	618	144	44	23	16	18	50
'Eua Motu'a	814	135	71	143	128	343	111	35	17	13	13	35
'Eua Fo'ou	597	34	51	49	188	275	33	9	6	3	5	15
Niuas	49	6	3 0	8	6	26 4	0 0	0	0 0	0 0	0	12
Niuatoputapu	7	2	•	0	1	•	•	0	•	-	0	12
Niuafo'ou	42	4	3	8	5	22	0	0	0	0	0	0

Table 39: Number of households owning each type of sheep and goats and number of each type of sheep and goats - 2015

		N	umber of Ho	usehold K	ept sheep	and Goat		Number of Sheep and Goats						
			EEP			Goat			SH	EEP	•		GOAT	
District	Sheep	Lamb ('uhiki'i sipi)	Ewe (sipi sinaman u fefine)	Ram (sipi tau)	Goat	Male goat (kosi tangata)	Female goat (kosi fefine)	TOTAL	Lamb ('uhiki'i sipi)	Ewe (sipi sinamanu fefine)	Ram (sipi tau)	TOTAL	Male goat (kosi tangata)	Female goat (kosi fefine)
TONGA	161	63	143	92	405	252	369	1240	331	724	185	1744	640	1122
Tongatapu	73	24	64	42	134	80	115	653	183	398	72	419	137	282
Kolofo'ou	8	2	6	4	20	10	16	25	7	14	4	32	10	22
Kolomotu'a	9	1	8	6	24	16	22	45	10	23	12	95	30	65
Vaini	17	8	15	10	30	18	26	152	52	78	22	100	35	65
Tatakamotonga	14	5	13	7	16	7	16	289	93	184	12	39	10	29
Lapaha	3	1	3	3	9	4	8	26	5	17	4	28	7	21
Nukunuku	11	4	11	7	14	10	12	78	10	56	12	46	14	32
Kolovai	11	3	8	5	21	15	15	38	6	26	6	79	31	48
Vava'u	42	22	41	23	91	65	80	283	79	149	55	613	268	345
Neiafu	16	8	15	7	30	22	26	87	25	52	10	259	127	132
Pangaimotu	3	0	3	2	7	4	7	8	0	6	2	25	7	18
Hahake	7	3	7	5	14	9	14	38	13	16	9	64	22	42
Leimatu'a	9	7	9	4	11	5	8	124	36	63	25	22	11	11
Hihifo	3	1	3	3	9	8	6	10	2	4	4	68	36	32
Motu	4	3	4	2	20	17	19	16	3	8	5	175	65	110
Ha'apai	4	2	2	3	76	43	72	9	2	2	5	269	77	192
Pangai Hp	2	1	2	1	22	13	20	4	1	2	1	80	24	56
Foa	0	0	0	0	17	12	16	0	0	0	0	68	21	47
Lulunga	0	0	0	0	14	6	14	0	0	0	0	37	10	27
Mu'omu'a Ha'ano	0	0 0	0 0	0 0	0 10	0 5	0 10	0	0 0	0 0	0 0	0 41	0 11	0 30
Uiha	2	1	0	2	13	7	12	5	1	0	4	43	11	32
'Eua	38	14	34	20	81	51	80	266	64	161	41	329	130	217
'Eua Motu'a	20	10	19	10	58	35	58	204	56	125	23	251	100	169
'Eua Fo'ou				_						36				48
Niuas	18 4	4 1	15 2	10 4	23 23	16 13	22 22	62 29	8 3	36 14	18 12	78 114	30 28	48 86
Niuatoputapu	3	1	2	3	14	6	14	26	3	14	9	85	17	68
Niuafo'ou	1	0	0	1	9	7	8	3	0	0	3	29	11	18

Table 40: Number of households owning each type of chicken, ducks, dogs and cats - 2015

		_		Number o	of Household	Kept Lives	tock Spec	ies			
			CH	ICKEN		-	-		DOG		
		Broiler	Egg layer		Male						
		(moa	(moa	Domestic	rooster	Female			Male dog	Female	
		palangi	palangi	breeds 9moa	(moa	hen (moa	DUCK		(kuli	dog (kuli	CAT
District	CHICKEN	kakano)	fakato)	tonga)	ta'ane)	fefine)	(pato)	DOG	tangata)	fefine)	(pusi)
TONGA	4797	216	96	4802	4575	4701	322	10245	8919	6837	4859
Tongatapu	2705	179	55	2711	2581	2637	287	7193	6283	4610	3256
Kolofo'ou	519	18	9	517	492	499	38	1706	1472	1040	736
Kolomotu'a	461	23	17	451	424	438	47	1276	1200	682	541
Vaini	544		12	574	547	558	50	1294	1128	846	562
Tatakamotonga	415	49	6	395	381	386	49	868	709	639	486
Lapaha	326	11	5	338	309	331	47	858	733	605	385
Nukunuku	268	16	4	273	268	266	38	791	692	518	332
Kolovai	172	20	2	163	160	159	18	400	349	280	214
Vava'u	1020	14	25	1019	967	1006	13	1614	1422	1081	845
Neiafu	342	8	8	341	332	332	3	594	515	353	356
Pangaimotu	84	0	0	84	82	83	0	130	126	85	52
Hahake	182	5	5	181	168	179	4	246	232	171	158
Leimatu'a	172	1	0	172	161	172	3	285	256	200	143
Hihifo	166	0	11	167	150	166	1	245	202	184	79
Motu	74	0	1	74	74	74	2	114	91	88	57
Ha'apai	528	14	6	527	508	518	6	717	614	589	336
Pangai Hp	174	8	5	173	165	168	4	262	223	202	120
Foa	111	2	0	111	110	110	1	160	141	141	83
Lulunga	79	0	0	79	76	78	0	90	72	77	35
Mu'omu'a	49	0	0	49	46	48	1	58	50	50	34
Ha'ano	49	3	0	49	47	48	0	65	54	55	34
Uiha	66	1	1	66	64	66	0	82	74	64	30
'Eua	338	9	10	338	324	335	14	509	425	387	299
'Eua Motu'a	180	4	2	181	177	179	6	276	226	200	164
'Eua Fo'ou	158	5	8	157	147	156	8	233	199	187	135
Niuas	206	0	0	207	195	205	2	212	175	170	123
Niuatoputapu	118	0	0	119	116	118	0	126	103	104	72
Niuafo'ou	88	0	0	88	79	87	2	86	72	66	51

Table 41: Number of chicken, ducks, dogs and cats - 2015

					Number of I	_ivestock Spec	cies				
		Broiler	Egg layer		Domestic bree	ds			Dogs		
District	Total chicken	(moa palangi kakano)	(moa palangi fakato)	Total	Male rooster (moa ta'ane)	Female hen (moa fefine)	DUCK (pato)	Total	Male dog (kuli tangata)	Female dog (kuli fefine)	CAT (pusi)
TONGA	92071	4719	4115	85112	27584	57728	2705	29963	16984	13019	7831
Tongatapu	55756	4242	3649	49692	16119	33773	2565	20470	11743	8761	5206
Kolofo'ou	9776	277	131	9558	3587	6012	217	4675	2707	1980	1225
Kolomotu'a	11554	842	1039	9716	3275	6431	374	3619	2347	1277	916
Vaini	13032	1089	2191	10714	3232	7592	422	3704	2124	1580	866
Tatakamotonga	7450	1039	176	6235	1952	4287	405	2683	1334	1349	750
Lapaha	5133	300	60	4982	1518	3441	247	2443	1343	1110	588
Nukunuku	5614	238	25	5724	1525	4237	407	2219	1250	972	516
Kolovai	3197	457	27	2763	1030	1773	493	1127	638	493	345
Vava'u	17629	190	355	17094	5844	11250	39	4746	2738	2012	1367
Neiafu	5137	151	130	4856	2091	2765	11	1641	983	658	564
Pangaimotu	1614	0	0	1614	657	957	0	411	257	154	89
Hahake	3727	29	74	3624	921	2703	12	788	459	331	265
Leimatu'a	3034	10	0	3024	1009	2015	11	880	519	363	236
Hihifo Motu	2633 1484	0	141 10	2502 1474	834 332	1668 1142	1 4	678 348	360 160	318 188	124 89
Ha'apai	9805	139	50	9616	3072	6544	21	2538	1316	1224	548
Pangai Hp	3273	82	35	3156	985	2171	15	904	485	419	201
Foa	1495	7	0	1488	408	1080	4	621	296	325	134
Lulunga	1996	0	0	1996	708	1288	0	297	151	148	63
Mu'omu'a	1044	0	0	1044	379	665	2	210	111	99	53
Ha'ano	771	45	0	726	221	505	0	219	121	98	54
Uiha	1226	5	15	1206	371	835	0	287	152	135	43
'Eua	5170	148	61	4981	1587	3394	77	1458	807	651	488
'Eua Motu'a 'Eua Fo'ou	2868 2302	119 29	6 55	2763 2218	750 837	2013 1381	30 47	753 705	416 391	337 314	255 233
Niuas	3711	0	0	3729	962	2767	3	751	380	371	222
Niuatoputapu	2091	0	0	2109	697	1412	0	478	236	242	149
Niuafo'ou	1620	0	0	1620	265	1355	3	273	144	129	73

Table~42: Number~of~households~keeping~cattle~by~size~of~cattle~in~the~holding~by~location~of~household~-~2015

C 42. Number of nouse	Total Number	,		Cattle in the I		
	of Households	Less than 5		10 - 19	20 - 49	50 cattle
District	keeping Cattle	cattle	5 - 9 cattle	cattle	cattle	and over
TONGA	3310	2029	782	376	109	14
Tongatapu	1693	1057	362	204	61	9
Kolofo'ou	156	99	28	19	7	3
Kolomotu'a	194	132	30	22	10	0
Vaini	337	235	54	39	8	1
Tatakamotonga	391	226	87	54	20	4
Lapaha	263	132	82	41	7	1
Nukunuku	212	143	47	17	5	0
Kolovai	140	90	34	12	4	0
Vava'u	1043	619	282	110	29	3
Neiafu	421	251	124	31	13	2
Pangaimotu	100	41	37	17	4	1
Hahake	158	102	34	20	2	0
Leimatu'a	189	100	51	30	8	0
Hihifo	142	99	31	11	1	0
Motu	33	26	5	1	1	0
Ha'apai	273	156	78	30	9	0
Pangai Hp	161	93	47	20	1	0
Foa	70	34	22	9	5	0
Lulunga	13	9	3	0	1	0
Mu'omu'a	9	6	1	1	1	0
Ha'ano	6	3	3	0	0	0
'Uiha	14	11	2	0	1	0
'Eua	282	181	57	32	10	2
'Eua Motu'a	160	104	31	19	4	2
'Eua Fo'ou	122	77	26	13	6	0
Niuas	19	16	3	0	0	0
Niuatoputapu	6	6	0	0	0	0
Niuafo'ou	13	10	3	0	0	0

Table 43: Number of cattle by size of cattle by location of household - 2015

inder of eartie by size of				attle in the	Holding	
						50
	Total					cattle
	Number	Less than	5 - 9	10 - 19	20 - 49	and
District	of Cattle	5 cattle	cattle	cattle	cattle	over
Total	18,762	4,613	5,099	4,982	2,934	1,134
Tongatapu	9,899	2,351	2,363	2,723	1,658	804
Kolofo'ou	990	210	179	241	201	159
Kolomotu'a	1,047	286	192	293	276	0
Vaini	1,629	507	334	508	213	67
Tatakamotonga	2,916	509	575	738	596	498
Lapaha	1,655	301	559	561	154	80
Nukunuku	985	324	303	226	132	0
Kolovai	677	214	221	156	86	0
Vava'u	5,712	1,481	1,827	1,439	788	177
Neiafu	2,269	607	779	409	352	122
Pangaimotu	688	92	239	202	100	55
Hahake	822	270	224	281	47	0
Leimatu'a	1,187	233	337	388	229	0
Hihifo	617	226	212	142	37	0
Motu	129	53	36	17	23	0
Ha'apai	1,547	341	533	426	247	0
Pangai Hp	841	210	326	283	22	0
Foa	503	70	151	128	154	0
Lulunga	65	18	23	0	24	0
Mu'omu'a	52	10	5	15	22	0
Ha'ano	23	5	18	0	0	0
'Uiha	63	28	10	0	25	0
'Eua	1,555	410	357	394	241	153
'Eua Motu'a	925	237	197	247	91	153
'Eua Fo'ou	630	173	160	147	150	0
Niuas	49	30	19	0	0	0
Niuatoputapu	7	7	0	0	0	0
Niuafo'ou	42	23	19	0	0	0

 $Table 44: Number\ of\ households\ keeping\ pigs\ by\ size\ of\ pigs\ by\ location\ of\ household\ -\ 2015$ 

	Total	Size of Pigs in the Holding							
	Number of					50 pig			
	Households	Less than 5		10 - 19	20 - 49	and			
District	keeping Pigs	pig	5 - 9 pig	pig	pig	over			
Total	10,038	3,443	2,515	2,565	1,356	159			
Tongatapu	6,592	2,730	1,674	1,490	637	61			
Kolofo'ou	1,292	662	322	235	69	4			
Kolomotu'a	1,161	481	333	239	100	8			
Vaini	1,162	519	290	231	110	12			
Tatakamotonga	847	321	193	219	102	12			
Lapaha	895	268	204	273	141	9			
Nukunuku	797	338	220	180	51	8			
Kolovai	438	141	112	113	64	8			
Vava'u	1,854	400	489	559	364	42			
Neiafu	655	136	185	225	101	8			
Pangaimotu	156	36	52	44	23	1			
Hahake	287	62	61	89	66	9			
Leimatu'a	339	79	87	92	72	9			
Hihifo	292	75	81	72	58	6			
Motu	125	12	23	37	44	9			
Ha'apai	818	171	192	277	148	30			
Pangai Hp	294	62	87	105	34	6			
Foa	169	41	42	60	21	5			
Lulunga	115	21	17	40	29	8			
Mu'omu'a	78	22	11	24	17	4			
Ha'ano	75	11	18	20	22	4			
'Uiha	87	14	17	28	25	3			
'Eua	553	107	125	174	132	15			
'Eua Motu'a	310	55	61	104	81	9			
'Eua Fo'ou	243	52	64	70	51	6			
Niuas	221	35	35	65	75	11			
Niuatoputapu	128	16	26	42	38	6			
Niuafo'ou	93	19	9	23	37	5			

Table 45: Number of pigs, by size of pigs by location of household - 2015

			Size of	Pigs in the H	olding	
	Total					50 pig
	Number of	Less than		10 - 19	20 - 49	and
District	Pigs	5 pig	5 - 9 pig	pig	pig	over
Total	110,310	7,549	17,290	34,846	38,376	12,249
Tongatapu	60,047	5,787	11,421	19,932	17,927	4,980
Kolofo'ou	8,845	1,315	2,173	3,077	1,928	352
Kolomotu'a	10,177	1,032	2,263	3,137	2,880	865
Vaini	10,201	1,143	1,951	3,121	3,164	822
Tatakamotonga	8,768	632	1,354	2,963	2,913	906
Lapaha	10,376	615	1,412	3,756	3,836	757
Nukunuku	6,692	741	1,487	2,364	1,348	752
Kolovai	4,988	309	781	1,514	1,858	526
Vava'u	25,019	948	3,400	7,687	10,184	2,800
Neiafu	8,001	328	1,299	3,058	2,794	522
Pangaimotu	1,726	97	366	607	594	62
Hahake	4,419	149	421	1,240	1,969	640
Leimatu'a	4,661	175	594	1,265	2,002	625
Hihifo	3,676	173	570	1,004	1,533	396
Motu	2,536	26	150	513	1,292	555
Ha'apai	11,749	447	1,375	3,865	4,101	1,961
Pangai Hp	3,452	152	610	1,436	929	325
Foa	2,076	109	284	836	570	277
Lulunga	2,289	61	120	579	850	679
Mu'omu'a	1,198	60	87	350	479	222
Ha'ano	1,248	31	140	262	578	237
'Uiha	1,486	34	134	402	695	221
'Eua	8,434	273	846	2,460	3,787	1,068
'Eua Motu'a	5,181	143	422	1,492	2,417	707
'Eua Fo'ou	3,253	130	424	968	1,370	361
Niuas	5,061	94	248	902	2,377	1,440
Niuatoputapu	2,341	44	189	575	1,199	334
Niuafo'ou	2,720	50	59	327	1,178	1,106

Table 46: Number of households keeping horses by size of horses by location of household - 2015

	Total	-	Size of I	Horse in the	Holding	
	Number of				-	
	Households	Less				
	keeping	than 5	5 - 9	10 - 19	20 - 49	50 horse
District	Horse	horse	horse	horse	horse	and over
Total	865	791	67	6	1	0
Tongatapu	163	146	12	4	1	0
Kolofo'ou	8	7	1	0	0	0
Kolomotu'a	14	12	0	2	0	0
Vaini	31	29	2	0	0	0
Tatakamotonga	41	34	6	1	0	0
Lapaha	30	27	2	0	1	0
Nukunuku	22	20	1	1	0	0
Kolovai	17	17	0	0	0	0
Vava'u	315	292	21	2	0	0
Neiafu	30	28	1	1	0	0
Pangaimotu	29	25	4	0	0	0
Hahake	52	45	6	1	0	0
Leimatu'a	76	72	4	0	0	0
Hihifo	96	90	6	0	0	0
Motu	32	32	0	0	0	0
Ha'apai	166	142	24	0	0	0
Pangai Hp	66	54	12	0	0	0
Foa	40	35	5	0	0	0
Lulunga	1	1	0	0	0	0
Mu'omu'a	26	21	5	0	0	0
Ha'ano	29	27	2	0	0	0
'Uiha	4	4	0	0	0	0
'Eua	128	120	8	0	0	0
'Eua Motu'a	83	78	5	0	0	0
'Eua Fo'ou	45	42	3	0	0	0
Niuas	93	91	2	0	0	0
Niuatoputapu	41	40	1	0	0	0
Niuafo'ou	52	51	1	0	0	0

Table 47: Number of horses by size of horses by location of household - 2015

		Size of Horse in the Holding							
						50			
	Total					horse			
	Number of	Less than 5	5 - 9	10 - 19	20 - 49	and			
District	Horse	horse	horse	horse	horse	over			
Total	1,942	1,446	397	75	24	0			
Tongatapu	396	251	74	47	24	0			
Kolofo'ou	17	8	9	0	0	0			
Kolomotu'a	48	23	0	25	0	0			
Vaini	71	57	14	0	0	0			
Tatakamotonga	107	62	33	12	0	0			
Lapaha	76	42	10	0	24	0			
Nukunuku	51	33	8	10	0	0			
Kolovai	26	26	0	0	0	0			
Vava'u	690	535	127	28	0	0			
Neiafu	67	45	5	17	0	0			
Pangaimotu	76	53	23	0	0	0			
Hahake	125	79	35	11	0	0			
Leimatu'a	163	140	23	0	0	0			
Hihifo	212	171	41	0	0	0			
Motu	47	47	0	0	0	0			
Ha'apai	424	285	139	0	0	0			
Pangai Hp	195	124	71	0	0	0			
Foa	100	71	29	0	0	0			
Lulunga	1	1	0	0	0	0			
Mu'omu'a	66	37	29	0	0	0			
Ha'ano	57	47	10	0	0	0			
'Uiha	5	5	0	0	0	0			
'Eua	261	215	46	0	0	0			
'Eua Motu'a	178	147	31	0	0	0			
'Eua Fo'ou	83	68	15	0	0	0			
Niuas	171	160	11	0	0	0			
Niuatoputapu	72	66	6	0	0	0			
Niuafo'ou	99	94	5	0	0	0			

 $Table\ 48: Number\ of\ households\ keeping\ sheep\ by\ size\ by\ location\ of\ household\ -\ 2015$ 

doi: 10. Number of its	Total Number			Sheep in the		
	of Households	Less				50
	keeping	than 5	5 - 9	10 - 19	20 - 49	sheep
District	Sheep	sheep	sheep	sheep	sheep	and over
Total	161	102	30	17	8	4
Tongatapu	73	48	7	11	5	2
Kolofo'ou	8	6	2	0	0	0
Kolomotu'a	9	7	0	1	1	0
Vaini	17	10	2	3	1	1
Tatakamotonga	14	8	3	1	1	1
Lapaha	3	1	0	2	0	0
Nukunuku	11	6	0	4	1	0
Kolovai	11	10	0	0	1	0
Vava'u	42	26	10	4	1	1
Neiafu	16	7	7	2	0	0
Pangaimotu	3	3	0	0	0	0
Hahake	7	5	0	2	0	0
Leimatu'a	9	6	1	0	1	1
Hihifo	3	2	1	0	0	0
Motu	4	3	1	0	0	0
Ha'apai	4	4	0	0	0	0
Pangai Hp	2	2	0	0	0	0
Foa	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0
'Uiha	2	2	0	0	0	0
'Eua	38	22	12	1	2	1
'Eua Motu'a	20	11	5	1	2	1
'Eua Fo'ou	18	11	7	0	0	0
Niuas	4	2	1	1	0	0
Niuatoputapu	3	1	1	1	0	0
Niuafo'ou	1	1	0	0	0	0

Table 49: Number of households keeping goats by size by location of household - 2015

able 43. Number of the		,		Goat in the		
	Total Number	Less				
	of Households	than 5	5 - 9	10 - 19	20 - 49	50 goat
District	keeping Goat	goat	goat	goat	goat	and over
Total	405	301	66	23	13	2
Tongatapu	134	114	11	7	2	0
Kolofo'ou	20	20	0	0	0	0
Kolomotu'a	24	18	4	1	1	0
Vaini	30	24	2	4	0	0
Tatakamotonga	16	15	1	0	0	0
Lapaha	9	8	1	0	0	0
Nukunuku	14	12	1	1	0	0
Kolovai	21	17	2	1	1	0
Vava'u	91	55	21	7	6	2
Neiafu	30	15	11	1	1	2
Pangaimotu	7	3	4	0	0	0
Hahake	14	11	2	0	1	0
Leimatu'a	11	10	1	0	0	0
Hihifo	9	5	1	2	1	0
Motu	20	11	2	4	3	0
Ha'apai	76	56	16	3	1	0
Pangai Hp	22	17	4	0	1	0
Foa	17	10	6	1	0	0
Lulunga	14	11	3	0	0	0
Mu'omu'a	0	0	0	0	0	0
Ha'ano	10	7	1	2	0	0
'Uiha	13	11	2	0	0	0
'Eua	81	62	12	4	3	0
'Eua Motu'a	58	45	8	2	3	0
'Eua Fo'ou	23	17	4	2	0	0
Niuas	23	14	6	2	1	0
Niuatoputapu	14	8	3	2	1	0
Niuafo'ou	9	6	3	0	0	0

Table 50: Number of goats by size by location of household - 2015

o: Number of goats by	-			Goat in the	Holding	
	Total	Less				
	Number	than 5	5 - 9	10 - 19	20 - 49	50 goat
District	of Goat	goat	goat	goat	goat	and over
Total	1,744	593	408	284	329	130
Tongatapu	419	220	73	81	45	0
Kolofo'ou	32	32	0	0	0	0
Kolomotu'a	95	37	26	10	22	0
Vaini	100	43	12	45	0	0
Tatakamotonga	39	34	5	0	0	0
Lapaha	28	21	7	0	0	0
Nukunuku	46	22	9	15	0	0
Kolovai	79	31	14	11	23	0
Vava'u	613	107	127	79	170	130
Neiafu	259	25	67	11	26	130
Pangaimotu	25	3	22	0	0	0
Hahake	64	27	12	0	25	0
Leimatu'a	22	16	6	0	0	0
Hihifo	68	11	5	22	30	0
Motu	175	25	15	46	89	0
Ha'apai	269	108	102	38	21	0
Pangai Hp	80	31	28	0	21	0
Foa	68	19	33	16	0	0
Lulunga	37	17	20	0	0	0
Mu'omu'a	0	0	0	0	0	0
Ha'ano	41	12	7	22	0	0
'Uiha	43	29	14	0	0	0
'Eua	329	128	70	58	73	0
'Eua Motu'a	251	96	46	36	73	0
'Eua Fo'ou	78	32	24	22	0	0
Niuas	114	30	36	28	20	0
Niuatoputapu	85	19	18	28	20	0
Niuafo'ou	29	11	18	0	0	0

 $Table 51: Number\ of\ household\ s\ keeping\ chickens\ by\ size\ by\ location\ of\ household\ -\ 2015$ 

	Total Number		Size of C	hicken in th	e Holding	
	of Households	Less				50
	keeping	than 5	5 - 9	10 - 19	20 - 49	chicken
District	Chicken	chicken	chicken	chicken	chicken	and over
Total	4,797	522	1,037	1,551	1,420	267
Tongatapu	2,705	305	553	831	841	175
Kolofo'ou	519	64	81	151	199	24
Kolomotu'a	461	44	87	141	148	41
Vaini	544	65	113	164	154	48
Tatakamotonga	415	49	105	127	110	24
Lapaha	326	34	76	122	84	10
Nukunuku	268	36	56	70	87	19
Kolovai	172	13	35	56	59	9
Vava'u	1,020	104	247	342	283	44
Neiafu	342	38	100	117	78	9
Pangaimotu	84	6	21	28	23	$\epsilon$
Hahake	182	19	34	59	53	17
Leimatu'a	172	16	44	54	51	7
Hihifo	166	23	35	59	45	4
Motu	74	2	13	25	33	1
Ha'apai	528	55	115	192	133	33
Pangai Hp	174	26	32	58	46	12
Foa	111	10	31	49	19	2
Lulunga	79	7	12	26	24	10
Mu'omu'a	49	4	11	17	12	5
Ha'ano	49	3	13	21	10	2
'Uiha	66	5	16	21	22	2
'Eua	338	36	82	115	98	7
'Eua Motu'a	180	15	48	70	43	4
'Eua Fo'ou	158	21	34	45	55	3
Niuas	206	22	40	71	65	8
Niuatoputapu	118	13	21	39	43	2
Niuafo'ou	88	9	19	32	22	$\epsilon$

Table 52: Number of chickens by size by location of household - 2015

	Total		Size of (	Chicken in th	e Holding	
	Number	Less				50
	of	than 5	5 - 9	10 - 19	20 - 49	chicken
District	Chicken	chicken	chicken	chicken	chicken	and over
Total	92,071	1,390	7,126	20,990	39,386	23,179
Tongatapu	55,756	780	3,758	11,162	23,264	16,792
Kolofo'ou	9,776	165	550	1,984	5,486	1,591
Kolomotu'a	11,554	112	563	1,817	4,058	5,004
Vaini	13,032	162	788	2,264	4,160	5,658
Tatakamotonga	7,450	126	728	1,745	3,192	1,659
Lapaha	5,133	76	513	1,640	2,233	671
Nukunuku	5,614	103	383	953	2,501	1,674
Kolovai	3,197	36	233	759	1,634	535
Vava'u	17,629	285	1,725	4,658	8,035	2,926
Neiafu	5,137	110	704	1,573	2,125	625
Pangaimotu	1,614	17	154	378	674	391
Hahake	3,727	46	227	803	1,543	1,108
Leimatu'a	3,034	45	288	724	1,500	477
Hihifo	2,633	60	254	828	1,221	270
Motu	1,484	7	98	352	972	55
Ha'apai	9,805	158	808	2,622	3,825	2,392
Pangai Hp	3,273	69	225	814	1,315	850
Foa	1,495	32	214	625	499	125
Lulunga	1,996	20	84	339	766	787
Mu'omu'a	1,044	10	83	246	329	376
Ha'ano	771	7	86	295	269	114
'Uiha	1,226	20	116	303	647	140
'Eua	5,170	104	548	1,553	2,499	466
'Eua Motu'a	2,868	47	326	981	1,198	316
'Eua Fo'ou	2,302	57	222	572	1,301	150
Niuas	3,711	63	287	995	1,763	603
Niuatoputapu	2,091	39	148	523	1,192	189
Niuafo'ou	1,620	24	139	472	571	414

Table 53: Number of households keeping ducks by size by location of household - 2015

Number of nousehold	Total			Duck in the	Holding	
	Number of		0.200.			
	Households	Less than	5 - 9	10 - 19	20 - 49	50 duck
District	keeping Duck	5 duck	duck	duck	duck	and over
Total	322	175	83	35	20	9
Tongatapu	287	151	73	34	20	9
Kolofo'ou	38	19	14	4	1	0
Kolomotu'a	47	33	5	3	4	2
Vaini	50	29	9	7	4	1
Tatakamotonga	49	23	17	5	2	2
Lapaha	47	25	14	7	1	0
Nukunuku	38	18	11	6	2	1
Kolovai	18	4	3	2	6	3
Vava'u	13	10	3	0	0	0
Neiafu	3	2	1	0	0	0
Pangaimotu	0	0	0	0	0	0
Hahake	4	3	1	0	0	0
Leimatu'a	3	2	1	0	0	0
Hihifo	1	1	0	0	0	0
Motu	2	2	0	0	0	0
Ha'apai	6	5	1	0	0	0
Pangai Hp	4	3	1	0	0	0
Foa	1	1	0	0	0	0
Lulunga	0	0	0	0	0	0
Mu'omu'a	1	1	0	0	0	0
Ha'ano	0	0	0	0	0	0
'Uiha	0	0	0	0	0	0
'Eua	14	7	6	1	0	0
'Eua Motu'a	6	3	3	0	0	0
'Eua Fo'ou	8	4	3	1	0	0
Niuas	2	2	0	0	0	0
Niuatoputapu	0	0	0	0	0	0
Niuafo'ou	2	2	0	0	0	0

Table 54: Number of ducks by size by location of household - 2015

			Size of	Duck in the	Holding	
	Total	Less				
	Number	than 5	5 - 9	10 - 19	20 - 49	50 duck
District	of Duck	duck	duck	duck	duck	and over
Total	2,705	434	529	449	525	768
Tongatapu	2,565	378	458	436	525	768
Kolofo'ou	217	53	92	50	22	0
Kolomotu'a	374	82	33	42	97	120
Vaini	422	72	53	83	114	100
Tatakamotonga	405	60	107	59	57	122
Lapaha	247	51	89	87	20	0
Nukunuku	407	48	63	79	57	160
Kolovai	493	12	21	36	158	266
Vava'u	39	18	21	0	0	0
Neiafu	11	3	8	0	0	0
Pangaimotu	0	0	0	0	0	0
Hahake	12	5	7	0	0	0
Leimatu'a	11	5	6	0	0	0
Hihifo	1	1	0	0	0	0
Motu	4	4	0	0	0	0
Ha'apai	21	14	7	0	0	0
Pangai Hp	15	8	7	0	0	0
Foa	4	4	0	0	0	0
Lulunga	0	0	0	0	0	0
Mu'omu'a	2	2	0	0	0	0
Ha'ano	0	0	0	0	0	0
'Uiha	0	0	0	0	0	0
'Eua	77	21	43	13	0	0
'Eua Motu'a	30	11	19	0	0	0
'Eua Fo'ou	47	10	24	13	0	0
Niuas	3	3	0	0	0	0
Niuatoputapu	0	0	0	0	0	0
Niuafo'ou	3	3	0	0	0	0

Table 55: Number of each type of livestock species dispose for consumption -2015

						Livesto	ock					
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens
TONGA	35,392	537	17	1,016	79	345	7,240	13,423	1,406	52	255	11,022
Tongatapu	16,480	257	13	1,005	44	90	1,344	8,790	172	21	20	4,724
Kolofo'ou	3,223	22	-	263	14	14	118	1,762	44	-	1	985
Kolomotu'a	1,688	30	1	53	1	2	25	1,060	33	-	5	478
Vaini	4,799	57	12	453	8	26	472	2,100	35	12	13	1,611
Tatakamotonga	1,896	55	-	5	1	17	13	1,077	12	3	-	713
Lapaha	2,478	75	-	87	5	22	231	1,752	29	-	-	277
Nukunuku	1,785	16	-	144	15	6	158	902	13	6	-	525
Kolovai	611	2	-	-	-	3	327	137	6	-	1	135
Vava'u	7,802	92	2	4	9	36	2,222	2,755	122	14	11	2,535
Neiafu	1,358	20	2	-	-	9	827	7	25	2	2	464
Pangaimotu	1,192	18	-	-	-	1	27	977	2	-	-	167
Hahake	1,440	23	-	2	1	12	448	379	33	-	8	534
Leimatu'a	2,040	22	-	2	8	10	293	1,130	14	12	-	549
Hihifo	973	6	-	-	-	1	252	236	31	-	-	447
Motu	799	3	-	-	-	3	375	26	17	-	1	374
Ha'apai	4,442	124	2	-	12	170	1,054	1,166	1,024	-	182	708
Pangai Hp	979	11	2	-	7	6	467	3	23	-	1	459
Foa	2,120	110	-	-	-	130	36	953	701	-	120	70
Lulunga	439	1	-	-	5	2	156	38	176	-	1	60
Mu'omu'a	209	-	-	-	-	-	179	2	8	-	-	20
Ha'ano	367	-	-	-	-	32	-	170	105	-	60	-
Uiha	328	2	-	-	-	-	216	-	11	-	-	99
'Eua	2,424	64	-	-	9	18	1,185	353	24	15	41	715
'Eua Motu'a	1,898	59	-	-	9	16	1,083	18	21	5	38	649
'Eua Fo'ou	526	5	-	-	-	2	102	335	3	10	3	66
Niuas	4,244	-	-	7	5	31	1,435	359	64	2	1	2,340
Niuatoputapu	1,125	-	-	7	2	8	723	1	22	2	-	360
Niuafo'ou	3,119	-	-	-	3	23	712	358	42	-	1	1,980

 $Table\ 56: Number\ of\ each\ type\ of\ livestock\ species\ dispose\ for\ social\ obligations\ -\ 2015$ 

						Livestock						
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens
TONGA	56,803	2,415	66	1,752	276	768	13,868	24,519	3,641	66	252	9,180
Tongatapu	26,759	1,034	43	1,705	149	423	2,344	16,004	1,410	20	33	3,594
Kolofo'ou	3,951	102	1	391	51	50	97	2,466	262	-	-	531
Kolomotu'a	3,655	104	5	136	12	30	71	2,644	223	-	2	428
Vaini	7,413	238	36	785	22	81	803	3,740	343	12	26	1,327
Tatakamotonga	3,702	254	1	-	9	104	26	2,644	155	8	-	501
Lapaha	4,054	230	-	163	28	95	304	2,803	159	-	-	272
Nukunuku	2,840	75	-	230	24	57	281	1,514	199	-	-	460
Kolovai	1,144	31	-	-	3	6	762	193	69	-	5	75
Vava'u	15,668	949	17	17	64	133	5,504	6,071	800	16	42	2,055
Neiafu	3,021	277	17	10	20	24	1,606	476	155	3	41	392
Pangaimotu	2,456	101	-	-	18	24	336	1,824	109	-	1	43
Hahake	2,671	249	-	2	9	19	1,219	691	137	13	-	332
Leimatu'a	3,244	176	-	2	17	53	696	1,979	116	-	-	205
Hihifo	2,619	139	-	3	-	10	795	1,068	166	-	-	438
Motu	1,657	7	-	-	-	3	852	33	117	-	-	645
Ha'apai	5,670	237	6	-	38	134	1,962	1,534	1,088	-	130	541
Pangai Hp	1,378	80	6	-	5	3	931	21	81	-	10	241
Foa	1,288	122	-	-	-	64	34	526	378	-	60	104
Lulunga	830	-	-	-	31	3	225	351	200	-	-	20
Mu'omu'a	431	1	-	-	2	-	369	5	21	-	-	33
Ha'ano	1,242	30	-	-	-	64	-	624	394	-	60	70
Uiha	501	4	-	-	-	-	403	7	14	-	-	73
'Eua	3,715	191	-	-	8	23	1,826	668	199	30	38	732
'Eua Motu'a	2,704	159	-	-	8	10	1,655	18	147	27	33	647
'Eua Fo'ou	1,011	32	-	-	-	13	171	650	52	3	5	85
Niuas	4,991	4	-	30	17	55	2,232	242	144	-	9	2,258
Niuatoputapu	1,475	-	-	30	2	3	1,024	4	46	-	8	358
Niuafo'ou	3,516	4	-	-	15	52	1,208	238	98	-	1	1,900

Table 57: Number of each type of livestock species sold - 2015

					Live	stock code - N	No.					
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens
TONGA	14,810	943	31	538	88	245	4,040	7,111	869	38	56	851
Tongatapu	8,492	624	25	525	66	174	709	5,557	498	28	20	266
Kolofo'ou	1,389	28	-	165	23	27	113	895	96	-	7	35
Kolomotu'a	1,060	67	11	-	2	12	105	747	88	-	9	19
Vaini	2,360	155	12	228	17	37	157	1,567	95	7	-	85
Tatakamotonga	1,209	198	-	-	3	24	17	826	89	21	1	30
Lapaha	1,336	105	2	118	5	17	146	903	40	-	-	-
Nukunuku	954	54	-	14	16	53	91	573	76	-	-	77
Kolovai	184	17	-	-	-	4	80	46	14	-	3	20
Vava'u	3,327	211	2	13	9	48	1,479	912	161	6	3	483
Neiafu	369	62	2	-	-	7	162	40	16	-	-	80
Pangaimotu	123	13	-	-	-	3	33	72	2	-	-	-
Hahake	1,129	68	-	10	7	22	503	293	43	-	2	181
Leimatu'a	689	48	-	-	2	7	259	311	25	6	1	30
Hihifo	376	17	-	3	-	6	130	187	23	-	-	10
Motu	641	3	-	-	-	3	392	9	52	-	-	182
Ha'apai	951	60	2	-	6	7	510	208	113	-	13	32
Pangai Hp	418	18	2	-	6	2	345	6	18	-	6	15
Foa	207	41	-	-	-	5	7	110	41	-	3	-
Lulunga	113	-	-	-	-	-	22	71	16	-	4	-
Mu'omu'a	72	-	-	-	-	-	67	-	5	-	-	-
Ha'ano	24	-	-	-	-	-	-	16	8	-	-	-
Uiha	117	1	-	-	-	-	69	5	25	-	-	17
'Eua	1,303	48	2	-	2	1	714	391	55	4	20	66
'Eua Motu'a	866	48	2	-	2	1	669	14	40	4	20	66
'Eua Fo'ou	437	-	-	-	-	-	45	377	15	-	-	-
Niuas	737	-	-	-	5	15	628	43	42	-	-	4
Niuatoputapu	333	-	-	-	-	1	315	2	14	-	-	1
Niuafo'ou	404	-	-	-	5	14	313	41	28	-	-	3

Table 58: Value in Tongan pa'anga of each type of livestock species sold - 2015

						Livestock code -	Value					
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens
TONGA	3,219,978	1,109,885	45,300	94,350	48,460	120,760	398,711	756,200	588,990	42,250	7,740	7,332
Tongatapu	2,083,801	767,800	39,900	81,230	33,560	90,670	65,901	617,100	341,290	41,900	1,640	2,810
Kolofo'ou	310,630	39,900	-	28,750	11,610	24,700	11,610	110,730	82,300	-	690	340
Kolomotu'a	266,131	132,700	14,000	-	1,100	5,450	10,461	61,520	40,550	-	150	200
Vaini	532,340	227,700	22,100	26,600	8,330	16,800	10,860	154,560	63,740	800	-	850
Tatakamotonga	376,640	167,500	-	-	1,600	9,320	1,700	116,420	38,500	41,100	200	300
Lapaha	301,940	110,600	3,800	22,590	4,020	11,150	14,350	90,880	44,550	-	-	-
Nukunuku	248,970	70,600	-	3,290	6,900	20,850	8,520	78,140	59,650	-	-	1,020
Kolovai	47,150	18,800	-	-	-	2,400	8,400	4,850	12,000	-	600	100
Vava'u	641,580	234,700	2,100	13,120	11,200	20,440	145,870	94,860	115,600	-	400	3,290
Neiafu	102,450	67,600	2,100	-	-	2,320	14,970	3,310	11,750	-	-	400
Pangaimotu	27,120	18,100	-	-	-	1,100	3,300	3,820	800	-	-	-
Hahake	227,430	77,700	-	13,000	10,500	9,420	45,680	35,510	34,200	-	200	1,220
Leimatu'a	129,570	48,800	-	-	700	2,100	26,080	34,540	16,950	-	200	200
Hihifo	72,410	19,500	-	120	-	4,600	15,690	16,550	15,800	-	-	150
Motu	82,600	3,000	-	-	-	900	40,150	1,130	36,100	-	-	1,320
Ha'apai	208,497	57,585	2,000	-	400	2,650	56,780	27,980	58,300	-	2,600	202
Pangai Hp	59,892	12,200	2,000	-	400	300	33,170	480	10,500	-	700	142
Foa	89,885	43,385	-	-	-	2,350	700	17,650	24,300	-	1,500	-
Lulunga	26,300	-	-	-	-	-	2,200	7,100	16,600	-	400	-
Mu'omu'a	9,700	-	-	-	-	-	6,700	-	3,000	-	-	-
Ha'ano	3,600	-	-	-	-	-	-	2,400	1,200	-	-	-
Uiha	19,120	2,000	-	-	-	-	14,010	350	2,700	-	-	60
'Eua	180,670	49,800	1,300	-	1,800	800	67,500	11,120	44,300	350	3,100	600
'Eua Motu'a	163,100	49,800	1,300	-	1,800	800	63,800	1,850	39,700	350	3,100	600
'Eua Fo'ou	17,570	-	-	-	-	-	3,700	9,270	4,600	-	-	-
Niuas	105,430	-	-	-	1,500	6,200	62,660	5,140	29,500	-	-	430
Niuatoputapu	48,660	-	-	-	-	3,000	31,360	400	13,500	-	-	400
Niuafo'ou	56,770	-	-	-	1,500	3,200	31,300	4,740	16,000	-	-	30

Table 59: Number of each livestock species lost - 2015

	Livestock code - No.												
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens	
TONGA	23,800	534	21	943	274	2,020	7,153	9,315	790	119	75	2,556	
Tongatapu	13,275	368	16	925	205	1,445	1,891	6,294	468	111	19	1,533	
Kolofo'ou	1,953	25	4	209	25	156	308	785	78	36	6	321	
Kolomotu'a	1,386	33	1	19	17	91	240	807	56	18	11	93	
Vaini	3,487	68	4	412	94	337	381	1,617	89	16	1	468	
Tatakamotonga	1,919	103	2	-	22	324	220	1,063	54	40	1	90	
Lapaha Nukunuku	3,226 1,049	86 24	4 1	244 41	21 22	380 115	509 119	1,458 534	139 36	- 1	-	385 156	
Kolovai	255	29	-	-	4	42	114	30	16	-	-	20	
Vava'u	6,063	93	4	11	35	360	2,691	2,068	176	4	16	605	
Neiafu Pangaimotu	694 394	28 11	4 -	-	2 -	25 10	453 67	96 292	12 2	-	-	74 12	
Hahake Leimatu'a	1,633 1,761	21 17	-	9 -	9 24	114 58	674 686	572 685	51 66	4 -	-	179 225	
Hihifo	1,291	9	-	2	-	118	634	412	40	-	-	76	
Motu	290	7	-	-	-	35	177	11	5	-	16	39	
Ha'apai Pangai Hp	1,721 595	58 8	1 1	-	23 19	112 46	541 374	642 21	98 7	-	13 -	233 119	
Foa	618	41	-	-	-	50	40	342	49	-	12	84	
Lulunga	124	-	-	-	4	1	21	94	4	-	-	-	
Mu'omu'a	28	-	-	-	-	3	20	4	1	-	-	-	
Ha'ano	281	9	-	-	-	11	12	181	37	-	1	30	
Uiha	75	-	-	-	-	1	74	-	-	-	-	-	
'Eua	1,231	15	-	-	10	65	803	199	33	4	26	76	
'Eua Motu'a	1,007	15	-	-	8	63	776	16	25	2	26	76	
'Eua Fo'ou Niuas	224 1,510	- -	-	- 7	2 1	2 38	27 1,227	183 112	8 15	2 -	- 1	- 109	
Niuatoputapu Niuafo'ou	1,123 387	-	- -	7 -	1 -	36 2	972 255	- 112	7 8	-	1 -	99 10	

Table 60: Value in Tongan pa'anga of each livestock species lost - 2015

	Livestock code - Value											
District	Total	Beef cattle	Milk cattle	Pigs	Boar	Sow	Piglet	Weaner	Barrow	Sheep	Goats	Chickens
TONGA	4,380,002	724,749	29,700	196,810	116,743	1,037,280	698,415	1,059,960	456,482	18,702	11,470	29,691
Tongatapu	2,871,422	524,699	24,700	185,510	88,553	785,000	163,025	778,080	281,602	18,222	1,920	20,111
Kolofo'ou	376,525	32,100	5,000	46,160	13,850	88,190	25,560	102,550	54,850	4,160	1,120	2,985
Kolomotu'a	230,106	38,300	2,000	1,170	10,103	49,980	17,990	79,600	26,500	2,700	550	1,213
Vaini	703,342	97,800	7,400	72,620	26,350	171,320	31,930	231,600	55,802	3,200	100	5,220
Tatakamotonga	565,070	166,480	4,300	-	9,650	186,500	19,420	127,720	41,600	8,000	150	1,250
Lapaha	670,468	117,100	5,000	53,910	10,600	199,610	46,530	169,130	61,300	-	-	7,288
Nukunuku	229,182	26,100	1,000	11,650	12,700	71,650	9,285	64,830	29,900	162	-	1,905
Kolovai	96,729	46,819	-	-	5,300	17,750	12,310	2,650	11,650	-	-	250
Vava'u	851,720	93,950	3,500	10,600	12,260	167,440	284,920	194,300	77,580	320	1,600	5,250
Neiafu	104,120	27,850	3,500	-	2,260	10,600	44,300	8,550	6,100	-	-	960
Pangaimotu	41,670	6,900	-	-	-	5,020	5,060	24,460	200	-	-	30
Hahake	264,780	27,100	-	10,500	5,700	60,830	67,570	58,920	31,680	320	-	2,160
Leimatu'a	211,115	16,700	-	-	4,300	27,500	77,760	60,630	23,000	-	-	1,225
Hihifo	178,205	8,400	-	100	-	48,850	69,170	38,440	12,600	-	-	645
Motu	51,830	7,000	-	-	-	14,640	21,060	3,300	4,000	-	1,600	230
Ha'apai	348,230	91,800	1,500	-	11,530	47,140	51,030	59,210	79,000	-	4,850	2,170
Pangai Hp	89,070	16,700	1,500	-	9,930	15,690	35,710	1,960	6,500	-	-	1,080
Foa	166,110	62,300	-	-	-	24,450	3,820	29,750	40,600	-	4,350	840
Lulunga	17,400	-	-	-	1,600	500	2,100	11,000	2,200	-	-	-
Mu'omu'a	6,300	-	-	-	174	1,500 4	2,000	800	2,000	-	-	-

Ha'ano	61,650	12,800	-	-	-	4,700	-	15,700	27,700	-	500	250
Uiha	7,700	-	-	-	-	300	7,400	-	-	-	-	-
'Eua	149,800	14,300	-	-	3,400	23,700	73,040	15,930	15,500	160	3,000	770
'Eua Motu'a	133,670	14,300	-	-	2,600	23,200	70,740	3,800	15,100	160	3,000	770
'Eua Fo'ou	16,130	-	-	-	800	500	2,300	12,130	400	-	-	-
Niuas	158,830	-	-	700	1,000	14,000	126,400	12,440	2,800	-	100	1,390
Niuatoputapu	116,440	-	-	700	1,000	13,200	99,400	-	700	-	100	1,340
Niuafo'ou	42,390	-	-	-	-	800	27,000	12,440	2,100	-	-	50

Table 61: Number of households active in livestock and uses the veterinary services – 2015

	Ног	ısehold use veto	erinary services	
District	Total	Yes	No	
TONGA	12,859	983	11,876	
Tongatapu	9,077	841	8,236	
Kolofo'ou	2,108	214	1,894	
Kolomotu'a	1,624	128	1,496	
Vaini	1,673	154	1,519	
Tatakamotonga	1,060	68	992	
Lapaha	1,072	83	989	
Nukunuku	1,025	139	886	
Kolovai	515	55	460	
Vava'u	2,080	21	2,059	
Neiafu	774	12	762	
Pangaimotu	172	1	171	
Hahake	311	1	310	
Leimatu'a	371	2	369	
Hihifo	322	2	320	
Motu	130	3	127	
Ha'apai	869	42	827	
Pangai Hp	319	30	289	
Foa	182	1	181	
Lulunga	118	3	115	
Mu'omu'a	80	2	78	
Ha'ano	78	-	78	
Uiha	92	6	86	
'Eua	598	69	529	
'Eua Motu'a	333	67	266	
'Eua Fo'ou	265	2	263	
Niuas	235	10	225	
Niuatoputapu	137	10	127	
Niuafo'ou	98	-	98	

 $Table\ 62: Number\ of\ active\ households\ who\ uses\ the\ vaccination\ services\ by\ livestock\ species\ -\ 2015$ 

		attle		Goat		Pigs		nicken	Н	orse		Dog
District	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
TONGA	160	823	7	976	506	477	12	971	11	972	196	787
Tongatapu	136	705	5	836	474	367	10	831	7	834	183	658
Kolofo'ou	13	201	-	214	98	116	3	211	-	214	88	126
Kolomotu'a	20	108	-	128	74	54	-	128	3	125	32	96
Vaini	33	121	2	152	113	41	4	150	-	154	40	114
Tatakamotonga Lapaha	14 21	54 62	1 1	67 82	24 43	44 40	2	66 83	1	67 83	4 8	64 75
						30	_			136	9	
Nukunuku	33	106	1	138	109		1	138	3			130
Kolovai	2	53	-	55	13	42	-	55	-	55	2	53
Vava'u	12	9	1	20	7	14	-	21	-	21	2	19
Neiafu	6	6	-	12	3	9	-	12	-	12	2	10
Pangaimotu	1	-	-	1	-	1	-	1	-	1	-	1
Hahake	1	-	-	1	1	-	-	1	-	1	-	1
Leimatu'a	2	-	-	2	1	1	-	2	-	2	-	2
Hihifo	1	1	1	1	2	-	-	2	-	2	-	2
Motu	1	2	-	3	-	3	-	3	-	3	-	3
Ha'apai	5	37	-	42	11	31	-	42	1	41	2	40
Pangai Hp	4	26	-	30	8	22	-	30	-	30	2	28
Foa	-	1	-	1	-	1	-	1	1	-	-	1
Lulunga	-	3	-	3	2	1	-	3	-	3	-	3
Mu'omu'a	-	2	-	2	-	2	-	2	-	2	-	2
Ha'ano	-	-	-	-	-	-	-	-	-	-	-	-
Uiha	1	5	-	6	1	5	-	6	-	6	-	6
'Eua	7	62	1	68	14	55	1	68	3	66	-	69
'Eua Motu'a	7	60	1	66	14	53	1	66	3	64	-	67
'Eua Fo'ou	-	2	-	2	-	2	-	2	-	2	-	2
Niuas	_	10	-	10	-	10	1	9	-	10	9	1
Niuatoputapu	-	10	-	10	-	10	1	9	-	10	9	1
Niuafo'ou	_	-	_	-	-	-	_	-	_	-	_	-

Table 63: Number of active households who uses the artificial insemination services by livestock species - 2015

	Catt	:le	Go	at	Pig	S	Chic	ken	Hor	se	Dog	g
District	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
TONGA	11	972	1	982	38	945	12	971	11	972	13	970
Tongatapu	10	831	1	840	36	805	10	831	7	834	13	828
Kolofo'ou	1	213	-	214	4	210	3	211	-	214	5	209
Kolomotu'a	1	127	-	128	10	118	-	128	3	125	2	126
Vaini	-	154	-	154	1	153	4	150	-	154	2	152
Tatakamotonga Lapaha	2 2	66 81	1 -	67 83	2 1	66 82	2 -	66 83	1 -	67 83	3 1	65 82
Nukunuku	3	136	-	139	18	121	1	138	3	136	-	139
Kolovai	1	54	-	55	-	55	-	55	-	55	-	55
Vava'u	1	20	-	21	1	20	-	21	-	21	-	21
Neiafu	1	11	-	12	1	11	-	12	-	12	-	12
Pangaimotu	-	1	-	1	-	1	-	1	-	1	-	1
Hahake	-	1	-	1	-	1	-	1	-	1	-	1
Leimatu'a	-	2	-	2	-	2	-	2	-	2	-	2
Hihifo	-	2	-	2	-	2	-	2	-	2	-	2
Motu	-	3	-	3	-	3	-	3	-	3	-	3
Ha'apai	-	42	-	42	1	41	-	42	1	41	-	42
Pangai Hp	-	30	-	30	1	29	-	30	-	30	-	30
Foa	-	1	-	1	-	1	-	1	1	-	-	1
Lulunga	-	3	-	3	-	3	-	3	-	3	-	3
Mu'omu'a	-	2	-	2	-	2	-	2	-	2	-	2
Ha'ano	-	-	-	-	-	-	-	-	-	-	-	-
Uiha	-	6	-	6	-	6	-	6	-	6	-	6
'Eua	-	69	-	69	-	69	1	68	3	66	-	69
'Eua Motu'a	-	67	-	67	-	67	1	66	3	64	-	67
'Eua Fo'ou	-	2	-	2	-	2	-	2	-	2	-	2
Niuas	-	10	-	10	-	10	1	9	-	10	-	10
Niuatoputapu	-	10	-	10	-	10	1	9	-	10	-	10
Niuafo'ou	-	-	-	-	-	-	-	-	-	-	-	-

Table 64: Number of active households who uses the castration services by livestock species - 2015

	Catt	le	Goat		Pigs		Chi	cken	Но	rse	Do	g
District	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
TONGA	18	965	-	983	298	685	3	980	3	980	83	900
Tongatapu	13	828	-	841	213	628	2	839	1	840	72	769
Kolofo'ou	3	211	-	214	41	173	1	213	-	214	32	182
Kolomotu'a Vaini	1	127 154	-	128 154	32 7	96 147	-	128 154	-	128 154	23 1	105 153
Tatakamotonga			_			57						
Lapaha	4	64 83	-	68 83	11 21	62	1	67 83	1 -	67 83	13 2	55 81
Nukunuku	2	137	-	139	61	78	-	139	-	139	1	138
Kolovai	3	52	-	55	40	15	-	55	-	55	-	55
Vava'u	3	18	-	21	1	20	1	20	-	21	-	21
Neiafu	1	11	-	12	-	12	1	11	-	12	-	12
Pangaimotu	-	1	-	1	-	1	-	1	-	1	-	1
Hahake	_	1	-	1	-	1	-	1	-	1	-	1
Leimatu'a	_	2	-	2	-	2	-	2	-	2	-	2
Hihifo	_	2	-	2	-	2	-	2	-	2	-	2
Motu	2	1	-	3	1	2	-	3	-	3	-	3
Ha'apai	_	42	-	42	27	15	-	42	1	41	3	39
Pangai Hp	_	30	-	30	20	10	-	30	1	29	3	27
Foa	_	1	-	1	-	1	-	1	-	1	-	1
Lulunga	_	3	-	3	1	2	-	3	-	3	-	3
- Mu'omu'a	_	2	-	2	2	-	-	2	-	2	-	2
Ha'ano	_	_	-	-	-	-	-	_	-	-	-	-
Uiha	_	6	-	6	4	2	-	6	-	6	-	6
'Eua	2	67	-	69	57	12	_	69	1	68	8	61
'Eua Motu'a	1	66	-	67	56	11	_	67	1	66	7	60
'Eua Fo'ou	1	1	-	2	1	1	-	2	_	2	1	1
Niuas	_	10	-	10	-	10	-	10	_	10	_	10
Niuatoputapu	_	10	-	10	-	10	_	10	_	10	_	10
Niuafo'ou		-	_	-	_	-	_	-	_	-	_	

Table 65: Number of active households who uses each type of fishing - 2015

		110432110143 1111				pe of Fishing					
	Handline /	Handline /			Spear fishing	Spear fishing	Reef	Octopus		Fish	Other type
District	shallow	deep-sea	Gillnet	Cast net	(night)	(day)	gleaning	fishing	Trolling	fence	of fishing
TONGA	699	495	271	273	692	347	639	151	69	28	68
Tongatapu	258	166	129	111	258	147	189	54	14	20	41
Kolofo'ou	79	67	23	14	64	41	68	13	4	6	9
Kolomotu'a	36	24	10	13	18	7	5	8	2	3	3
Vaini	34	18	53	20	29	10	6	6	0	1	16
Tatakamotonga	25	13	15	16	37	24	9	8	2	1	0
Lapaha	38	31	21	17	58	34	44	6	5	3	2
Nukunuku	28	7	2	13	18	13	24	7	1	3	8
Kolovai	18	6	5	18	34	18	33	6	0	3	3
Vava'u	230	155	86	106	211	85	387	48	29	5	20
Neiafu	64	56	18	25	37	16	100	13	4	0	0
Pangaimotu	20	14	7	5	33	10	46	0	0	1	0
Hahake	33	7	17	22	45	9	81	1	0	2	8
Leimatu'a	18	9	13	11	31	7	68	0	1	0	1
Hihifo	39	22	18	9	30	14	48	1	1	1	10
Motu	56	47	13	34	35	29	44	33	23	1	1
Ha'apai	116	133	23	38	186	90	30	49	16	0	0
Pangai Hp	49	33	8	22	46	29	15	20	4	0	0
Foa	12	20	5	10	38	8	1	4	0	0	0
Lulunga	14	18	2	2	39	14	3	1	2	0	0
Mu'omu'a	25	29	2	3	23	17	4	14	6	0	0
Ha'ano	2	20	5	1	22	7	4	4	2	0	0
Uiha	14	13	1	0	18	15	3	6	2	0	0
'Eua	21	20	0	4	14	16	15	0	4	0	0
'Eua Motu'a	4	10	0	3	11	11	6	0	4	0	0
'Eua Fo'ou	17	10	0	1	3	5	9	0	0	0	0
Niuas	74	21	33	14	23	9	18	0	6	3	7
Niuatoputapu	30	14	10	14	16	5	18	0	4	3	6
Niuatoputapu Niuafo'ou	44		23		7		0	0		0	
เทเนสเบ บน	44	7	23	0		4	U	0	2	U	1

Table 66: Number of active households and species harvested - 2015

ible oo. Number		•			ecies Harvested	I			
	Tuna &			Sea		Ornamental			Other
District	pelagic fish	Lobster	Shellfish	cucumber	Seaweeds	coral or fish	Reef finfish	Sea urchin	species
Total	936	504	710	527	389	389	1386	377	749
Tongatapu	326	142	241	131	102	76	570	173	328
Kolofo'ou	85	18	97	25	17	15	179	72	129
Kolomotu'a	21	10	9	5	6	7	59	20	50
Vaini Tatakamotonga	26 14	11 32	10 24	3 1	3	2 1	109 59	6 25	55 9
Lapaha	106	14	39	52	34	8	98	25	15
Nukunuku	35	26	29	26	20	27	31	12	30
Kolovai	39	31	33	19	19	16	35	13	40
Vava'u	352	229	352	325	253	233	465	145	316
Neiafu	132	113	132	101	92	62	95	33	36
Pangaimotu	43	11	28	38	34	22	60	19	68
Hahake	29	30	65	62	45	20	105	44	69
Leimatu'a	34	18	58	43	43	30	61	26	57
Hihifo	69	27	55	39	34	87	88	16	41
Motu	45	30	14	42	5	12	56	7	45
Ha'apai	207	112	93	57	25	74	190	53	53
Pangai Hp	41	30	29	20	6	20	40	17	19
Foa	53	15	10	12	3	10	43	7	13
Lulunga	40	21	21	12	7	22	43	7	14
Mu'omu'a	27	22	17	5	2	11	23	12	4
Ha'ano	25	10	8	8	5	2	25	6	0
Uiha	21	14	8	0	2	9	16	4	3
'Eua	35	16	7	6	3	4	31	4	35
'Eua Motu'a	22	9	4	5	2	4	13	1	17
'Eua Fo'ou	13	7	3	1	1	0	18	3	18
Niuas	16	5	17	8	6	2	130	2	17
Niuatoputapu	13	3	16	8	6	2	69	2	10
Niuafo'ou	3	2	1	0	0	0	61	0	7

Table 67: Number of fishing households by habitat type - 2015

			iolus by Habi			HABITA							
			ef flat				goon				grass		
District	Total	Always	Sometimes	Never	Total	Always	Sometimes	Never	Total	Always	Sometimes	Never	
Total	2,360	514	1,092	754	2,360	625	1,036	699	2,360	555	916	889	
Tongatapu	980	201	292	487	980	271	338	371	980	238	276	466	
Kolofo'ou	286	74	82	130	286	81	74	131	286	58	49	179	
Kolomotu'a Vaini	96 137	9 5	55 13	32 119	96 137	31 31	44 19	21 87	96 137	19 78	51 9	26 50	
Tatakamotonga	74	27	16	31	74	45	14	15	74	9	17	48	
Lapaha	202	40	36	126	202	45	80	77	202	19	52	131	
Nukunuku	79	9	46	24	79	9	44	26	79	30	33	16	
Kolovai	106	37	44	25	106	29	63	14	106	25	65	16	
Vava'u	835	180	509	146	835	264	374	197	835	272	356	207	
Neiafu	214	29	154	31	214	31	109	74	214	13	112	89	
Pangaimotu	101	18	64	19	101	42	36	23	101	38	43	20	
Hahake	166	16	112	38	166	63	70	33	166	85	59	22	
Leimatu'a	123	10	89	24	123	35	56	32	123	58	44	21	
Hihifo	143	59	51	33	143	63	50	30	143	62	35	46	
Motu	88	48	39	1	88	30	53	5	88	16	63	9	
Ha'apai	317	44	230	43	317	21	242	54	317	26	224	67	
Pangai Hp	83	14	53	16	83	5	54	24	83	6	45	32	
Foa	69	20	38	11	69	2	57	10	69	5	54	10	
Lulunga	54	3	50	1	54	8	38	8	54	5	42	7	
Mu'omu'a	38	4	27	7	38	4	29	5	38	4	29	5	
Ha'ano	45	2	36	7	45	1	39	5	45	5	35	5	
Uiha	28	1	26	1	28	1	25	2	28	1	19	8	
'Eua	69	26	25	18	69	17	31	21	69	2	22	45	
'Eua Motu'a	36	11	14	11	36	6	17	13	36	2	20	14	
'Eua Fo'ou	33	15	11	7	33	11	14	8	33	0	2	31	
Niuas	159	63	36	60	159	52	51	56	159	17	38	104	
Niuatoputapu	94	43	34	17	94	19	46	29	94	17	38	39	
Niuafo'ou	65	20	2	43	65	33	5	27	65	0	0	65	

	HABITAT TYPE  Reef slope  Open sea									
			f slope	_						
District	Total	Always	Sometimes	Never	Total	Always	Sometimes	Never		
Total	2,360	421	991	948	2,360	371	758	1,231		
Tongatapu	980	181	266	533	980	193	209	578		
Kolofo'ou	286	78	56	152	286	83	42	161		
Kolomotu'a	96	22	41	33	96	14	37	45		
Vaini	137	20	18	99	137	34	7	96		
Tatakamotonga	74	23	21	30	74	16	20	38		
Lapaha	202	19	49	134	202	24	60	118		
Nukunuku	79	3	40	36	79	8	14	57		
Kolovai	106	16	41	49	106	14	29	63		
Vava'u	835	148	403	284	835	69	318	448		
Neiafu	214	12	95	107	214	9	78	127		
Pangaimotu	101	9	63	29	101	6	39	56		
Hahake	166	26	90	50	166	6	71	89		
Leimatu'a	123	13	66	44	123	9	44	70		
Hihifo	143	41	48	54	143	21	30	92		
Motu	88	47	41	0	88	18	56	14		
Ha'apai	317	31	242	44	317	42	193	82		
Pangai Hp	83	10	55	18	83	11	44	28		
Foa	69	6	50	13	69	11	41	17		
Lulunga	54	6	44	4	54	12	34	8		
Mu'omu'a	38	5	30	3	38	4	24	10		
Ha'ano	45	3	39	3	45	4	37	4		
Uiha	28	1	24	3	28	0	13	15		
'Eua	69	16	35	18	69	34	12	23		
'Eua Motu'a	36	7	20	9	36	18	8	10		
'Eua Fo'ou	33	9	15	9	33	16	4	13		
Niuas	159	45	45	69	159	33	26	100		
Niuatoputapu	94	18	42	34	94	26	25	43		
Niuafo'ou	65	27	3	35	65	7	1	57		

Table 68: Average number of trips per week by each type of fishing - 2015

Table 68: Av				<u> </u>		Type of F	ishing					
District	Takal	Handline	Handline / deep-	Cillant	Continue	Spear fishing	Spear fishing	Reef	Octopus	T II'	Fish famou	Other type of
District	Total	/ shallow	sea	Gillnet	Cast net	(night)	(day)	gleaning	fishing	Trolling	Fish fence	fishing
Total	9,368	1,560	1,200	837	777	1,801	894	1,346	438	203	120	192
Tongatapu	4,018	649	417	407	376	797	451	458	171	36	100	156
Kolofo'ou	1,179	214	161	81	35	244	167	161	45	12	25	34
Kolomotu'a	476	129	65	32	84	66	20	13	23	3	30	11
Vaini	488 376	51 41	41 39	170 49	51 40	71 90	30 62	5 17	19 30	0 2	3 6	47 0
Tatakamotonga Lapaha	733	91	39 84	49 61	40 60	90 167	98	17 124	30 14	13	14	7
Nukunuku	367	67	14	2	46	58	26	68	20	6	10	, 50
Kolovai	399	56	13	12	60	101	48	70	20	0	12	7
Vava'u	2,776	427	346	174	248	459	159	710	111	101	13	28
Neiafu	595	101	98	37	48	76	29	181	21	4	0	0
Pangaimotu	326	45	38	19	10	72	18	120	0	0	4	0
Hahake	350	56	11	31	35	65	13	121	2	0	7	9
Leimatu'a	270	33	15	19	17	61	9	114	0	1	0	1
Hihifo	355	69	40	32	27	70	28	68	3	1	1	16
Motu	880	123	144	36	111	115	62	106	85	95	1	2
Ha'apai	1,913	303	326	185	110	471	208	111	156	43	0	0
Pangai Hp	430	96	51	14	56	93	49	24	43	4	0	0
Foa	252	45	42	13	37	81	16	2	16	0	0	0
Lulunga	264	35	51	5	4	113	37	12	3	4	0	0
Mu'omu'a	620	89	111	130	10	83	55	53	61	28	0	0
Ha'ano	182	5	39	21	3	61	17	15	16	5	0	0
Uiha	165	33	32	2	0	40	34	5	17	2	0	0
'Eua	308	65	79	0	17	33	60	39	0	15	0	0
'Eua Motu'a	170	11	45	0	15	23	43	18	0	15	0	0
'Eua Fo'ou	138	54	34	0	2	10	17	21	0	0	0	0
Niuas	353	116	32	71	26	41	16	28	0	8	7	8
Niuatoputapu	226	56	25	29	26	30	12	28	0	6	7	7
Niuafo'ou	127	60	7	42	0	11	4	0	0	2	0	1

Table 69: Average person hour per trip by each type of fishing - 2015

						Type of						
		Total			indline / shal			ndline / deep			Gillnet	
District	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Total	14006	12461	1545	2545	2417	128	3115	3014	101	1128	1029	99
Tongatapu	7003	6440	563	1233	1212	21	1647	1559	88	698	622	76
Kolofo'ou	2933	2663	270	497	477	20	766	758	8	226	161	65
Kolomotu'a	709	682	27	170	170	0	257	257	0	59	51	8
Vaini	1192	1166	26	243	243	0	256	256	0	247	247	0
Tatakamotonga	743	645	98	121	121	0	205	125	80 0	89 53	89	0
Lapaha Nukunuku	680 369	623 332	57 37	100 53	100 52	0 1	113 31	113 31	0	53 8	51 8	2
Kolovai	377	329	48	49	49	0	19	19	0	16	15	1
Vava'u	3536	2709	827	542	509	33	491	478	13	248	236	12
Neiafu	637	476	161	112	99	13	150	144	6	33	30	3
Pangaimotu	579	421	158	64	63	13	118	118	0	27	27	0
Hahake	850	630	220	125	113	12	48	48	0	71	70	1
Leimatu'a	526	395	131	60	59	1	47	47	0	41	41	0
Hihifo	495	442	53	109	109	0	60	60	0	55	52	3
Motu	449	345	104	72	66	6	68	61	7	21	16	5
	2667	2559	104	486	418	68	838	838	0	81	75	6
Ha'apai									_			
Pangai Hp	674	661	13	152	150	2	140	140	0	16	16	0
Foa	587	497	90	123	57	66	219	219	0	44	38	6
Lulunga	452	449	3	53	53	0	155	155	0	4	4	0
Mu'omu'a	455	455	0	95	95	0	139	139	0	4	4	0
Ha'ano	226	224	2	5	5	0	121	121	0	12	12	0
Uiha	273	273	0	58	58	0	64	64	0	1	1	0
'Eua	186	165	21	39	36	3	42	42	0	0	0	0
'Eua Motu'a	118	108	10	13	13	0	24	24	0	0	0	0
'Eua Fo'ou	68	57	11	26	23	3	18	18	0	0	0	0
Niuas	614	588	26	245	242	3	97	97	0	101	96	5
Niuatoputapu	270	251	19	68	68	0	62	62	0	15	14	1
Niuafo'ou	344	337	7	177	174	3	35	35	0	86	82	4

	Type of Fishing											
		Cast net	_		Spear fishing (nig			pear fishing (da			Reef gleaning	
District	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Total	697	655	42	2586	2520	66	1144	1104	40	50442	904	992
Tongatapu	344	328	16	1235	1195	40	622	595	27	25564	449	270
Kolofo'ou Kolomotu'a	51 37	48 37	3	516 87	508 77	8	311 20	289	22 0	10600 2678	262 7	138 7
			0			10		20	0			
Vaini	86	86	0	169	161	8	51	51	_	4488	11	13
Tatakamotonga	61	54	7	137	130	7	78	78	0	2868	22	4
Lapaha	33	30	3	179	174	5	78	78	0	2472	39	45
Nukunuku	39	39	0	57	57	0	41	38	3	1196	58	26
Kolovai	37	34	3	90	88	2	43	41	2	1262	50	37
Vava'u	215	194	21	631	617	14	199	186	13	11724	363	687
Neiafu	28	28	0	76	76	0	41	29	12	2154	58	117
Pangaimotu	10	10	0	134	133	1	44	44	0	1952	24	156
Hahake	54	54	0	185	175	10	30	30	0	2726	109	196
Leimatu'a	35	35	0	108	108	0	26	26	0	1686	77	130
Hihifo	29	29	0	85	85	0	24	24	0	1714	54	50
Motu	59	38	21	43	40	3	34	33	1	1492	41	38
Ha'apai	99	96	3	637	626	11	284	284	0	10184	62	8
Pangai Hp	51	51	0	153	153	0	73	73	0	2518	25	5
Foa	31	28	3	131	123	8	27	27	0	2324	0	3
Lulunga	4	4	0	151	148	3	60	60	0	1758	10	0
Mu'omu'a	12	12	0	88	88	0	57	57	0	1700	9	0
Ha'ano	1	1	0	49	49	0	15	15	0	858	7	0
Uiha	0	0	0	65	65	0	52	52	0	1026	11	0
'Eua	9	9	0	25	25	0	20	20	0	642	18	16
'Eua Motu'a	8	8	0	22	22	0	15	15	0	400	11	8
'Eua Fo'ou	1	1	0	3	3	0	5	5	0	242	7	8
Niuas	30	28	2	58	57	1	19	19	0	2328	12	11
Niuatoputapu	30	28	2	35	34	1	7	7	0	974	12	11
Niuafo'ou	0	0	0	23	23	0	12	12	0	1354	0	0

						Type of F	ishing					
		Octopus fisl	hing		Trolling	5		Fish fence		Oth	er type of f	ishing
District	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Total	402	353	49	167	163	4	68	64	4	258	238	20
Tongatapu	214	207	7	43	43	0	52	50	2	196	180	16
Kolofo'ou	59	54	5	13	13	0	19	19	0	75	74	1
Kolomotu'a	37	37	0	10	10	0	5	5	0	13	11	2
Vaini	34	34	0	0	0	0	4	4	0	78	73	5
Tatakamotonga	21	21	0	4	4	0	1	1	0	0	0	0
Lapaha	14	13	1	8	8	0	8	8	0	10	9	1
Nukunuku	34	33	1	8	8	0	4	4	0	10	4	6
Kolovai	15	15	0	0	0	0	11	9	2	10	9	1
Vava'u	67	37	30	35	33	2	12	10	2	46	46	0
Neiafu	17	8	9	5	4	1	0	0	0	0	0	0
Pangaimotu	0	0	0	0	0	0	2	2	0	0	0	0
Hahake	2	2	0	0	0	0	2	1	1	28	28	0
Leimatu'a	0	0	0	1	1	0	0	0	0	1	1	0
Hihifo	3	3	0	4	4	0	6	6	0	16	16	0
Motu	45	24	21	25	24	1	2	1	1	1	1	0
Ha'apai	121	109	12	51	51	0	0	0	0	0	0	0
Pangai Hp	51	45	6	8	8	0	0	0	0	0	0	0
Foa	9	5	4	0	0	0	0	0	0	0	0	0
Lulunga	1	1	0	14	14	0	0	0	0	0	0	0
Mu'omu'a	35	35	0	16	16	0	0	0	0	0	0	0
Ha'ano	8	6	2	8	8	0	0	0	0	0	0	0
Uiha	17	17	0	5	5	0	0	0	0	0	0	0
'Eua	0	0	0	17	15	2	0	0	0	0	0	0
'Eua Motu'a	0	0	0	17	15	2	0	0	0	0	0	0
'Eua Fo'ou	0	0	0	0	0	0	0	0	0	0	0	0
Niuas	0	0	0	21	21	0	4	4	0	16	12	4
Niuatoputapu	0	0	0	12	12	0	4	4	0	14	10	4
Niuafo'ou	0	0	0	9	9	0	0	0	0	2	2	0

Table 70: Average value of fish sold by district and type of fishing (Tongan pa'anga) - 2015

Tuble 70.11	verage van	ue 01 11311 3	old by dist	i ici ana i	ype of fishin		Fishing (TO					
District			Handline / deep-sea	Gillnet	Cast net	fishing			Octopus fishing	Trolling		Other type of fishing
Total	\$642,603	\$85,107	\$194,677	\$61,329	\$21,662	\$133,529	\$63,302	\$31,861	\$21,506	\$10,576	\$6,784	\$12,270
Tongatapu	\$433,432	\$45,324	\$151,805	\$46,695	\$13,059	\$80,137	\$42,550	\$18,325	\$13,360	\$4,060	\$6,327	\$11,790
Kolofo'ou	\$208,514	\$16,915	\$103,540	\$8,790	\$940	\$34,409	\$25,655	\$7,280	\$3,125	\$2,200	\$2,900	\$2,760
Kolomotu'a	\$33,270	\$7,055	\$10,590	\$4,725	\$1,370	\$5,290	\$980	\$110	\$2,530	\$170	\$180	\$270
Vaini	\$77,040	\$8,250	\$17,290	\$21,970	\$2,890	\$11,750	\$3,730	\$60	\$2,960	\$0	\$200	\$7,940
Tatakamotonga	\$21,106	\$1,419	\$8,410	\$3,800	\$1,569	\$4,048	\$980	\$10	\$350	\$20	\$500	\$0
Lapaha	\$52,002	\$9,310	\$10,540	\$5,000	\$3,300	\$9,990	\$5,290	\$5,630	\$470	\$870	\$1,412	\$190
Nukunuku	\$13,115	\$825	\$470	\$40	\$1,510	\$3,190	\$1,210	\$2,490	\$2,255	\$800	\$155	\$170
Kolovai	\$28,385	\$1,550	\$965	\$2,370	\$1,480	\$11,460	\$4,705	\$2,745	\$1,670	\$0	\$980	\$460
Vava'u	\$70,423	\$19,326	\$7,544	\$6,909	\$2,962	\$16,075	\$5,114	\$10,186	\$630	\$750	\$457	\$470
Neiafu	\$17,804	\$10,735	\$806	\$752	\$500	\$1,830	\$270	\$2,501	\$160	\$250	\$0	\$0
Pangaimotu	\$11,808	\$450	\$1,788	\$480	\$180	\$5,210	\$1,010	\$2,690	\$0	\$0	\$0	\$0
Hahake	\$14,646	\$1,905	\$400	\$3,152	\$1,241	\$3,667	\$159	\$3,625	\$0	\$0	\$447	\$50
Leimatu'a	\$3,728	\$136	\$160	\$300	\$166	\$1,506	\$190	\$670	\$0	\$500	\$0	\$100
Hihifo	\$7,694	\$2,790	\$970	\$840	\$10	\$1,264	\$1,090	\$470	\$0	\$0	\$0	\$260
Motu	\$14,743	\$3,310	\$3,420	\$1,385	\$865	\$2,598	\$2,395	\$230	\$470	\$0	\$10	\$60

						Type of F	Fishing (TO	P\$)				
District		Handline / shallow	Handline / deep-sea	Gillnet	Cast net	fishing	Spear fishing (day)	Reef gleaning	Octopus fishing	Trolling	Fish fence	Other type of fishing
Ha'apai	\$110,513	\$16,757	\$26,328	\$5,950	\$4,631	\$33,187	\$11,828	\$2,500	\$7,516	\$1,816	\$0	\$0
Pangai Hp	\$34,732	\$7,002	\$6,295	\$2,605	\$2,216	\$8,265	\$3,359	\$1,445	\$3,205	\$340	\$0	\$0
Foa	\$14,259	\$1,305	\$3,451	\$1,600	\$1,805	\$5,413	\$545	\$0	\$140	\$0	\$0	\$0
Lulunga	\$16,844	\$1,511	\$2,408	\$210	\$210	\$8,305	\$3,240	\$530	\$100	\$330	\$0	\$0
Mu'omu'a	\$30,907	\$6,028	\$9,808	\$100	\$300	\$7,240	\$3,525	\$80	\$2,996	\$830	\$0	\$0
Ha'ano	\$8,075	\$0	\$3,450	\$1,385	\$100	\$1,745	\$100	\$355	\$660	\$280	\$0	\$0
'Uiha	\$5,696	\$911	\$916	\$50	\$0	\$2,219	\$1,059	\$90	\$415	\$36	\$0	\$0
'Eua	\$15,525	\$1,335	\$5,220	\$0	\$700	\$2,820	\$3,020	\$380	\$0	\$2,050	\$0	\$0
'Eua Motu'a	\$11,555	\$165	\$3,870	\$0	\$700	\$2,270	\$2,250	\$250	\$0	\$2,050	\$0	\$0
'Eua Fo'ou	\$3,970	\$1,170	\$1,350	\$0	\$0	\$550	\$770	\$130	\$0	\$0	\$0	\$0
Niuas	\$12,710	\$2,365	\$3,780	\$1,775	\$310	\$1,310	\$790	\$470	\$0	\$1,900	\$0	\$10
Niuatoputapu	\$12,030	\$2,200	\$3,780	\$1,660	\$310	\$1,110	\$590	\$470	\$0	\$1,900	\$0	\$10
Niuafo'ou	\$680	\$165	\$0	\$115	\$0	\$200	\$200	\$0	\$0	\$0	\$0	\$0

Table 71: Season of fishing and time of fishing by number of households - 2015

10010 7 210				ie oi iisnin	g 0 , 11411			Season of	fishing							
			Total			Α	ll year			Sı	ımmer			W	/inter	
51		_		Day and				Day and		_		Day and		_		Day and
District	Total	Day	Night	night	Total	Day	Night	night	Total	Day	Night	night	Total	Day	Night	night
Total	2360	907	494	959	1782	678	370	734	541	209	116	216	37	20	8	9
Tongatapu	980	371	215	394	788	282	168	338	178	86	42	50	14	3	5	6
Kolofo'ou	286	108	69	109	251	93	58	100	31	14	11	6	4	1	0	3
Kolomotu'a	96	23	26	47	83	16	23	44	12	7	2	3	1	0	1	0
Vaini	137	41	21	75	107	28	16	63	26	12	3	11	4	1	2	1
Tatakamotonga	74	11	17	46	48	5	11	32	24	6	5	13	2	0	1	1
Lapaha	202	102	44	56	178	91	35	52	24	11	9	4	0	0	0	0
Nukunuku Kolovai	79 106	50 36	11 27	18 43	52 69	31 18	7 18	14 33	26 35	18 18	4 8	4 9	1 2	1 0	0 1	0 1
												_				
Vava'u Neiafu	835 214	390 88	161 53	284 73	535 68	276 23	96 16	163 29	283 129	99 50	63 35	121 44	17 17	15 15	2 2	0
Pangaimotu	101	69	17	15	101	69	17	15	0	0	0	0	0	0	0	0
Hahake	166	88	31	47	146	78	29	39	20	10	2	8	0	0	0	0
Leimatu'a	123	76	18	29	105	65	14	26	18	11	4	3	0	0	0	0
Hihifo	143	52	30	61	101	37	20	44	42	15	10	17	0	0	0	0
Motu	88	17	12	59	14	4	0	10	74	13	12	49	0	0	0	0
Ha'apai	317	56	101	160	254	40	90	124	58	14	10	34	5	2	1	2
Pangai Hp	83	19	20	44	52	9	11	32	29	9	9	11	2	1	0	1
Foa	69	13	35	21	69	13	35	21	0	0	0	0	0	0	0	0
Lulunga	54	10	21	23	43	6	20	17	10	4	0	6	1	0	1	0
Mu'omu'a	38	2	0	36	34	2	0	32	3	0	0	3	1	0	0	1
Ha'ano	45	9	20	16	45	9	20	16	0	0	0	0	0	0	0	0
Uiha	28	3	5	20	11	1	4	6	16	1	1	14	1	1	0	0
'Eua	69	20	6	43	48	11	5	32	21	9	1	11	0	0	0	0
'Eua Motu'a	36	14	6	16	18	5	5	8	18	9	1	8	0	0	0	0
'Eua Fo'ou	33	6	0	27	30	6	0	24	3	0	0	3	0	0	0	0
Niuas	159	70	11	78	157	69	11	77	1	1	0	0	1	0	0	1
Niuatoputapu	94	39	8	47	92	38	8	46	1	1	0	0	1	0	0	1
Niuafo'ou	65	31	3	31	65	31	3	31	0	0	0	0	0	0	0	0

Table 72: Ten most common trees in town allotment (nos.) - 2015

District	Breadfruit	Mango	Banana	Moli	Coconut	Sandalwood	Lou'akau	Pacific litchi	Plantain	Papaya
TONGA	27168	24188	16772	16277	14765	13976	11089	9454	6529	6364
Tongatapu	17948	18032	10719	14506	11238	9674	1968	7906	2542	3428
Kolofo'ou	3372	3721	3742	664	3333	366	443	1605	487	680
Kolomotu'a	2869	3131	2010	10566	1912	420	343	1486	336	656
Vaini	3836	4314	145	975	2626	7918	254	1943	94	649
Tatakamotonga	2552	2270	941	761	968	259	422	796	197	309
Lapaha	2108	1725	2261	434	1573	107	284	890	282	305
Nukunuku	1855	1814	909	840	656	360	179	767	831	560
Kolovai	1356	1057	711	266	170	244	43	419	315	269
Vava'u	5204	3129	3943	819	1609	1079	4753	1019	2194	1383
Neiafu	1321	1027	1531	195	621	258	539	258	773	628
Pangaimotu	814	237	347	90	114	10	816	78	116	116
Hahake	928	552	658	98	277	250	1519	259	233	237
Leimatu'a	849	489	707	172	186	94	905	206	543	152
Hihifo	774	454	636	99	192	181	682	142	490	201
Motu	518	370	64	165	219	286	292	76	39	49
Ha'apai	1820	1209	1008	152	641	281	2416	185	440	1033
Pangai Hp	645	309	553	52	222	90	1069	82	178	601
Foa	417	296	45	48	40	142	382	38	6	108
Lulunga	242	209	83	16	59	1	427	31	16	59
Mu'omu'a	179	163	139	9	105	30	194	21	2	35
Ha'ano	148	103	33	15	35	12	171	0	114	106
Uiha	189	129	155	12	180	6	173	13	124	124
'Eua	1047	993	983	710	615	1967	490	270	934	479
'Eua Motu'a	578	639	251	461	286	1221	195	165	268	212
'Eua Fo'ou	469	354	732	249	329	746	295	105	666	267
Niuas	1149	825	119	90	662	975	1462	74	419	41
Niuatoputapu	746	499	109	39	268	666	1238	59	399	25
Niuafo'ou	403	326	10	51	394	309	224	15	20	16

Table 73: Number of trees grown in bush allotment as source of food - 2015

14510 70: 1441		cs grown	in busin anoi	ment as sour		OURCE OF	FOOD				
District	Coconut	Mango	Breadfruit	Pacific litchi (Tava)	Moli	Ifi	Guava	Rose apple (Fekika)	Avocado	Indian mulberry Nonu	Others
TONGA	705,511	29,119	17,577	9,953	8,115	4,923	4,231	3,015	2,862	2,534	10,871
Tongatapu	498,569	20,857	11,829	7,507	3,514	3,481	3,607	692	2,584	1,448	7,367
Kolofo'ou	43,527	1,753	662	441	163	140	238	34	110	155	296
Kolomotu'a	60,101	1,937	1,544	851	353	262	1,424	111	181	66	1,794
Vaini	111,591	4,485	2,301	1,078	395	681	406	86	1,417	169	534
Tatakamotonga	97,020	4,902	2,334	1,477	784	669	406	206	372	788	1,593
Lapaha	136,791	4,272	2,070	1,983	1,031	923	347	32	96	104	1,915
Nukunuku	43,362	2,171	1,876	937	592	488	682	169	279	146	826
Kolovai	6,177	1,337	1,042	740	196	318	104	54	129	20	409
Vava'u	188,448	6,592	4,397	2,140	2,839	1,084	516	1,544	206	937	2,900
Neiafu	3,923	459	175	142	97	42	48	76	12	9	144
Pangaimotu	26,235	983	647	348	592	57	12	108	40	24	225
Hahake	49,468	1,341	823	464	699	189	210	356	72	553	731
Leimatu'a	50,351	1,767	1,344	477	603	258	37	500	21	203	339
Hihifo	39,234	1,203	1,051	295	269	289	110	436	26	119	1,012
Motu	19,237	839	357	414	579	249	99	68	35	29	449
Ha'apai	22	5	6	0	0	0	0	0	0	0	2
Pangai Hp	12	5	1	0	0	0	0	0	0	0	2
Foa	10	0	5	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	1,476	455	600	248	1,318	165	108	105	72	139	286
'Eua Motu'a	115	224	190	100	299	105	86	65	15	48	119
'Eua Fo'ou	1,361	231	410	148	1,019	60	22	40	57	91	167
Niuas	16,996	1,210	745	58	444	193	0	674	0	10	316
Niuatoputapu	12,271	482	159	34	351	22	0	45	0	2	73
Niuafo'ou	4,725	728	586	24	93	171	0	629	0	8	243

Table 74: Number of trees grown for timber and high value wood in bush allotments - 2015

Table 74: Nu						IBER		- · •			HIGH VALUE WOOD
District	Pine	Pulukamu	Sita	Kauli	Mahokani	Kofe	'Oke	Kofe pitu	Kotia	Cauliflower	Sandalwood
TONGA	15,055	10,290	6,057	4,129	556	475	294	264	513	30	6,355
Tongatapu	7,125	7,890	2,256	2,982	104	439	256	104	110	0	3,633
Kolofo'ou	579	626	495	384	16	0	2	0	0	0	67
Kolomotu'a	651	549	265	567	4	6	0	0	55	0	83
Vaini	779	1,031	321	515	0	129	74	90	0	0	1,007
Tatakamotonga	3,226	2,985	798	1,334	43	145	116	0	55	0	2,069
Lapaha	799	1,251	195	63	0	121	7	0	0	0	80
Nukunuku	431	1,135	158	25	4	10	50	14	0	0	159
Kolovai	660	313	24	94	37	28	7	0	0	0	168
Vava'u	978	1,961	1,279	489	180	36	0	160	390	30	1,153
Neiafu	54	549	34	0	0	0	0	0	80	0	158
Pangaimotu	0	146	68	60	0	20	0	0	0	0	10
Hahake	360	376	297	419	50	0	0	0	60	0	599
Leimatu'a	282	215	165	2	130	16	0	160	0	0	137
Hihifo	282	517	715	8	0	0	0	0	250	30	181
Motu	0	158	0	0	0	0	0	0	0	0	68
Ha'apai	187	16	30	18	0	0	0	0	0	0	0
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	187	16	30	18	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	6,765	423	2,492	600	272	0	38	0	13	0	1,564
'Eua Motu'a	2,001	59	1,108	16	209	0	0	0	5	0	979
'Eua Fo'ou	4,764	364	1,384	584	63	0	38	0	8	0	585
Niuas	0	0	0	40	0	0	0	0	0	0	5
Niuatoputapu	0	0	0	0	0	0	0	0	0	0	0

Table 75: Number of trees with a purpose for handicrafts in bush allotments - 2015

					HA	NDICRAFT:	S				
District	LOU'AKAU	Fau	Fanakio	Paongo	Kie	Pipi tui	Fa	Kalosipani	Olive	Huni	Other Handicrafts
TONGA	16,355	7,976	7,363	2,022	379	366	262	140	134	129	320
Tongatapu	1,872	3,872	105	143	108	78	184	140	134	128	291
Kolofo'ou	267	580	0	30	11	4	50	0	8	0	16
Kolomotu'a	104	1,121	105	8	1	6	0	0	2	2	50
Vaini	484	521	0	58	81	16	9	0	0	5	41
Tatakamotonga	537	555	0	5	4	18	118	131	122	121	79
Lapaha	237	503	0	4	0	0	0	0	0	0	6
Nukunuku	172	402	0	38	11	23	7	2	2	0	81
Kolovai	71	190	0	0	0	11	0	7	0	0	18
Vava'u	11,098	1,224	70	1,873	271	254	78	0	0	1	7
Neiafu	298	177	0	0	0	4	10	0	0	0	2
Pangaimotu	1,487	172	0	354	40	27	0	0	0	0	0
Hahake	3,227	270	70	135	0	16	0	0	0	0	5
Leimatu'a	3,611	181	0	720	118	48	0	0	0	0	0
Hihifo	2,124	126	0	664	113	159	68	0	0	1	0
Motu	351	298	0	0	0	0	0	0	0	0	0
Ha'apai	20	0	0	0	0	0	0	0	0	0	0
Pangai Hp	20	0	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	2,406	273	0	6	0	34	0	0	0	0	22
'Eua Motu'a	209	273	0	6	0	26	0	0	0	0	22
'Eua Fo'ou	2,197	0	0	0	0	8	0	0	0	0	0
Niuas	959	2,607	7,188	0	0	0	0	0	0	0	0
Niuatoputapu	403	674	0	0	0	0	0	0	0	0	0
Niuafo'ou	556	1,933	7,188	0	0	0	0	0	0	0	0

Table 76: Number of trees with a purpose for medicine in bush allotments - 2015

Table 76: Number o	T ti ccs w	itii a purp	Jose for meure	ine in bu	isii aiiot	MEDICINA	٩L				
								Ylang Ylang	Milo tahi	Pua	
District	Tavahi	Toi	Siale tonga	Tuitui	Fo'ui	Manonu kahi	Sipaisi	(Mohokoi)	(Niuas)	tonga	Others
TONGA	37,334	15,473	13,314	1,912	1,298	1,283	1,257	669	505	468	1,830
Tongatapu	3,197	342	11,869	1,189	64	46	308	520	15	150	997
Kolofo'ou	465	18	1,066	13	0	11	0	2	0	3	63
Kolomotu'a	282	4	8	111	0	0	0	45	0	8	68
Vaini	732	26	1,109	163	0	3	45	229	4	15	86
Tatakamotonga	879	150	1,352	659	32	30	256	160	0	66	33
Lapaha	563	135	8,137	30	32	0	6	54	0	7	655
Nukunuku	141	9	10	142	0	2	1	14	10	33	71
Kolovai	135	0	187	71	0	0	0	16	1	18	21
Vava'u	28,557	14,265	1,445	588	1,233	933	497	148	0	8	604
Neiafu	970	482	12	4	0	0	5	7	0	0	7
Pangaimotu	1,748	1,136	0	0	30	0	88	8	0	0	26
Hahake	8,755	1,928	212	192	20	43	8	84	0	4	245
Leimatu'a	6,341	3,042	474	59	15	58	50	30	0	4	116
Hihifo	5,296	4,618	461	318	1,148	832	346	7	0	0	192
Motu	5,447	3,059	286	15	20	0	0	12	0	0	18
Ha'apai	0	0	0	0	0	0	0	0	0	0	0
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	952	83	0	4	0	181	316	1	0	10	8
'Eua Motu'a	471	55	0	4	0	121	12	0	0	10	6
'Eua Fo'ou	481	28	0	0	0	60	304	1	0	0	2
Niuas	4,628	783	0	131	1	123	136	0	490	300	221
Niuatoputapu	1,665	30	0	0	0	0	0	0	0	300	1
Niuafo'ou	2,963	753	0	131	1	123	136	0	490	0	220

Table 77: Number of trees with a purpose for other uses in bush allotments - 2015

					0	THER US	SES				
District	Siale mohemohe	Loupata	Koka	Ngatata (kula)	Motou	Lopa	Ngatae	Tropical America	Malolo masikoka	Piti	Others
TONGA	25,829	16,403	7,628	5,319	4,895	3,756	2,293	1,563	1,186	1,099	10,162
Tongatapu	18,455	3,142	3,477	415	77	218	232	51	81	0	3,095
Kolofo'ou	2,451	376	184	0	0	3	15	0	21	0	200
Kolomotu'a	569	560	421	0	63	39	34	31	12	0	258
Vaini	120	469	843	11	0	55	21	0	14	0	496
Tatakamotonga	2,350	820	693	306	0	43	26	14	8	0	982
Lapaha	12,942	646	527	98	0	43	8	1	5	0	248
Nukunuku	23	221 50	520 289	0	14 0	28 7	106 22	5 0	16 5	0	437
Kolovai	7.053			0					_	0	474
Vava'u	7,052	11,657	4,038	4,654	4,818	3,493	2,052	1,412	1,077	948	6,271
Neiafu	0	153	271	164	10	12	2	0	124	0	263
Pangaimotu	929	1,206	219	132	330	593	611	100	174	114	328
Hahake	1,706	4,027	374	1,650	815	231	725	623	335	0	1,874
Leimatu'a	353	2,625	454	584	1,158	374	595	60	221	20	765
Hihifo	2,946	3,145	2,285	1,131	2,180	1,969	119	629	202	814	2,461
Motu	1,118	501	435	993	325	314	0	0	21	0	580
Ha'apai	0	0	0	0	0	0	0	0	0	0	24
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	24
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	211	131	74	66	0	3	3	100	14	151	210
'Eua Motu'a	11	128	70	66	0	3	0	100	11	151	147
'Eua Fo'ou	200	3	4	0	0	0	3	0	3	0	63
Niuas	111	1,473	39	184	0	42	6	0	14	0	562
Niuatoputapu	0	253	30	150	0	0	0	0	0	0	208

Niuafo'ou

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Table 78: Number of households growing trees with a purpose as source of food in bush allotments - 2015

Table 78: Number o	g.	g				OF FOOD		<u> </u>			
								Rose			
District	Coconut	Mango	Breadfruit	Pacific litchi	Ifi	Moli	Avocado	apple	Vi	Guava	Others
TONGA	5,605	4,991	3,064	2,199	1,362	1,200	586	549	335	325	1,124
Tongatapu	4,389	3,959	2,349	1,719	1,063	695	528	244	202	273	838
Kolofo'ou	512	325	152	120	36	31	37	16	16	18	41
Kolomotu'a	622	459	309	236	89	91	46	56	38	48	138
Vaini	1,101	896	450	259	241	114	146	35	34	35	126
Tatakamotonga	802	626	355	247	179	111	92	23	23	29	170
Lapaha	807	667	349	337	192	144	37	16	23	32	102
Nukunuku	475	634	486	310	209	143	122	77	40	86	182
Kolovai	70	352	248	210	117	61	48	21	28	25	79
Vava'u	1,043	799	541	379	213	285	32	246	98	42	207
Neiafu	72	62	40	32	15	21	3	17	9	3	25
Pangaimotu	134	106	76	46	10	48	5	21	7	1	23
Hahake	260	174	111	91	50	55	7	65	15	15	53
Leimatu'a	271	240	167	82	58	66	8	84	14	6	37
Hihifo	181	128	101	60	40	35	7	40	30	8	44
Motu	125	89	46	68	40	60	2	19	23	9	25
Ha'apai	2	1	2	0	0	0	0	0	0	0	2
Pangai Hp	1	1	1	0	0	0	0	0	0	0	2
Foa	1	0	1	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	61	130	116	84	67	175	26	33	11	10	60
'Eua Motu'a	8	67	50	44	46	56	8	22	7	7	27
'Eua Fo'ou	53	63	66	40	21	119	18	11	4	3	33
Niuas	110	102	56	17	19	45	0	26	24	0	17
Niuatoputapu	64	54	21	9	9	33	0	10	21	0	2
Niuafo'ou	46	48	35	8	10	12	0	16	3	0	15

Table 79: Number of households growing trees with a purpose for timber and high value wood in bush allotments - 2015

Table 79: Numb	Of House	cholus grown	ing trees	with a pu	i pose ioi	TIMBER	gii value v	voou iii bu	sii anotinent	2013	HIGH VALUE
District	Pine	Pulukamu	Sita	Kauli	'Oke	Mahokani	Kofe	Kotia	Kofe pitu	Sita kula	Sandalwood
TONGA	403	351	211	98	36	21	25	11	9	3	209
Tongatapu	196	240	68	52	33	11	23	3	7	3	96
Kolofo'ou	20	23	7	3	1	1	0	0	0	1	12
Kolomotu'a	20	18	8	10	0	1	1	1	0	1	11
Vaini	28	52	14	13	12	0	10	0	6	1	10
Tatakamotonga	58	60	13	16	11	3	5	2	0	0	24
Lapaha	22	34	8	5	1	0	3	0	0	0	12
Nukunuku	29	39	15	1	5	3	2	0	1	0	16
Kolovai	19	14	3	4	3	3	2	0	0	0	11
Vava'u	22	67	55	17	0	4	2	4	2	0	31
Neiafu	1	7	3	0	0	0	0	1	0	0	7
Pangaimotu	0	8	2	4	0	0	1	0	0	0	1
Hahake	9	23	20	11	0	1	0	1	0	0	6
Leimatu'a	5	12	14	1	0	3	1	0	2	0	3
Hihifo	7	13	16	1	0	0	0	2	0	0	9
Motu	0	4	0	0	0	0	0	0	0	0	5
Ha'apai	10	2	1	2	0	0	0	0	0	0	0
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	10	2	1	2	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	175	42	87	25	3	6	0	4	0	0	81
'Eua Motu'a	60	18	39	4	0	3	0	2	0	0	54
'Eua Fo'ou	115	24	48	21	3	3	0	2	0	0	27
Niuas	0	0	0	2	0	0	0	0	0	0	1
Niuatoputapu	0	0	0	0	0	0	0	0	0	0	0
Niuafo'ou	0	0	0	2	0	0	0	0	0	0	1

Table 80: Number of households growing trees with a purpose for handicrafts in bush allotments -2015

ible 80: Number of n						ICRAFTS					
District	Fau	LOU'AKAU	Paongo	Fanakio	Pipi tui	Hehea	Kie	Fa	Huni	Kalosipani	Others
TONGA	416	401	80	68	57	37	25	20	6	6	6
Tongatapu	303	96	18	1	41	33	12	14	5	6	5
Kolofo'ou	55	17	3	0	3	4	3	2	0	0	1
Kolomotu'a	64	8	2	1	5	8	1	0	1	0	1
Vaini	54	26	6	0	10	4	5	5	1	0	3
Tatakamotonga	39	24	1	0	4	9	1	5	3	2	0
Lapaha	21	10	1	0	0	2	0	0	0	0	0
Nukunuku	53	6	5	0	13	5	2	2	0	2	0
Kolovai	17	5	0	0	6	1	0	0	0	2	0
Vava'u	50	233	61	1	11	3	13	6	1	0	0
Neiafu	6	10	0	0	2	1	0	1	0	0	0
Pangaimotu	8	35	10	0	2	0	2	0	0	0	0
Hahake	8	45	3	1	3	2	0	0	0	0	0
Leimatu'a	15	63	18	0	1	0	4	0	0	0	0
Hihifo	4	72	30	0	3	0	7	5	1	0	0
Motu	9	8	0	0	0	0	0	0	0	0	0
Ha'apai	0	1	0	0	0	0	0	0	0	0	0
Pangai Hp	0	1	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	23	63	1	0	5	1	0	0	0	0	1
'Eua Motu'a	23	15	1	0	4	1	0	0	0	0	1
'Eua Fo'ou	0	48	0	0	1	0	0	0	0	0	0
Niuas	40	8	0	66	0	0	0	0	0	0	0
Niuatoputapu	11	2	0	0	0	0	0	0	0	0	0

Niuafo'ou	29	6	0	66	0	0	0	0	0	0	0

Table 81: Number of households growing trees with a purpose for medicine in bush allotments - 2015

				<u> </u>		MEDICNA	AL				
				Manonu	Heilala		Milo tahi				Other
District	Tavahi	Tuitui	Siale tonga	kahi	mo'onia	Uhi	(Niuas)	Mangele	Volovalo	Langakali	Medical
TONGA	1,113	201	110	71	48	33	18	13	9	8	29
Tongatapu	257	164	86	6	48	30	4	11	6	8	24
Kolofo'ou	30	5	5	2	3	4	0	0	0	2	3
Kolomotu'a	35	30	1	0	6	3	0	1	1	1	6
Vaini	57	26	10	2	7	6	1	4	0	0	1
Tatakamotonga	38	34	11	1	11	3	0	1	3	2	2
Lapaha	42	12	51	0	4	1	0	1	0	0	3
Nukunuku	39	43	1	1	9	12	2	4	0	2	8
Kolovai	16	14	7	0	8	1	1	0	2	1	1
Vava'u	704	31	24	15	0	0	0	1	3	0	5
Neiafu	43	1	1	0	0	0	0	0	1	0	0
Pangaimotu	74	0	0	0	0	0	0	0	1	0	1
Hahake	173	9	5	3	0	0	0	0	1	0	3
Leimatu'a	186	7	14	4	0	0	0	1	0	0	1
Hihifo	147	12	3	8	0	0	0	0	0	0	0
Motu	81	2	1	0	0	0	0	0	0	0	0
Ha'apai	0	0	0	0	0	0	0	0	0	0	0
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	0
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	91	2	0	41	0	2	0	1	0	0	0
'Eua Motu'a	60	2	0	28	0	1	0	1	0	0	0
'Eua Fo'ou	31	0	0	13	0	1	0	0	0	0	0
Niuas	61	4	0	9	0	1	14	0	0	0	0
Niuatoputapu	21	0	0	0	0	1	0	0	0	0	0

l Niuafo'ou	40	4	Ω	9	0 0	14	Λ	Ω	Ω	0
I Middio od	T-U	7	•	,	0 0	<u></u>	0	0	0	0

Table 82: Number of households growing trees with a purpose for other uses in bush allotments

					es with a pur pose i		OTHERS				
District	Koka	Loupata	Toi	Lopa	Siale mohemohe	Motou	Ngatae	Ngatata (kula)	Pili-nut tree	Malolo masikoka	Others
TONGA	988	748	656	223	222	173	149	133	111	107	944
Tongatapu	688	374	57	82	130	4	56	9	21	28	516
Kolofo'ou	44	37	4	2	22	0	6	0	0	4	34
Kolomotu'a	94	70	3	13	15	3	12	0	7	6	81
Vaini	141	74	10	24	8	0	5	2	9	4	103
Tatakamotonga	85	65	16	10	7	0	6	3	3	3	111
Lapaha	106	78	21	13	76	0	3	4	0	3	67
Nukunuku	142 76	40 10	3	16	2 0	7	22 2	0 0	2	6	90 30
Kolovai			-	4		0		•	0	2	
Vava'u	266	314	552	130	71	169	90	110	83	70	339
Neiafu	30	13	31	2	0	4	1	6	7	5	28
Pangaimotu	15	63	62	39	20	19	26	7	3	5	34
Hahake	56	73	114	18	12	34	29	36	13	24	89
Leimatu'a	52	92	144	40	9	48	31	18	34	24	75
Hihifo	76	55	129	24	20	48	3	24	23	9	80
Motu	37	18	72	7	10	16	0	19	3	3	33
Ha'apai	0	0	0	0	0	0	0	0	0	0	1
Pangai Hp	0	0	0	0	0	0	0	0	0	0	0
Foa	0	0	0	0	0	0	0	0	0	0	1
Lulunga	0	0	0	0	0	0	0	0	0	0	0
Mu'omu'a	0	0	0	0	0	0	0	0	0	0	0
Ha'ano	0	0	0	0	0	0	0	0	0	0	0
Uiha	0	0	0	0	0	0	0	0	0	0	0
'Eua	27	32	23	3	13	0	1	9	7	5	63
'Eua Motu'a	26	31	18	3	2	0	0	9	6	3	39
'Eua Fo'ou	1	1	5	0	11	0	1	0	1	2	24
Niuas	7	28	24	8	8	0	2	5	0	4	25
Niuatoputapu	2	3	1	0	0	0	0	1	0	0	5
Niuafo'ou	5	25	23	8	8	0	2	4	0	4	20

Table 83: Proportion of raw materials for handicraft bought - 2015

7. I Toportion of Taw materials	Proportion of raw materials for handicraft bought								
				26 -	51 -	76 -			
District	Total	None	1 - 25%	50%	75%	100%			
TONGA	6,157	3,354	1,267	696	300	540			
Tongatapu	3,487	1,456	768	529	236	498			
Kolofo'ou	607	225	85	108	36	153			
Kolomotu'a	643	283	170	66	31	93			
Vaini	703	270	192	98	48	95			
Tatakamotonga	300	121	52	63	33	31			
Lapaha	618	266	90	124	47	91			
Nukunuku	449	213	138	51	26	21			
Kolovai	167	78	41	19	15	14			
Vava'u	1,376	1,031	251	69	21	4			
Neiafu	309	268	29	10	2	0			
Pangaimotu	140	69	66	4	1	0			
Hahake	254	156	66	22	9	1			
Leimatu'a	286	206	58	17	2	3			
Hihifo	279	238	19	16	6	0			
Motu	108	94	13	0	1	0			
Ha'apai	687	408	187	40	25	27			
Pangai Hp	228	114	77	10	5	22			
Foa	144	61	47	16	18	2			
Lulunga	93	69	17	5	1	1			
Mu'omu'a	74	64	6	4	0	0			
Ha'ano	69	45	23	0	0	1			
Uiha	79	55	17	5	1	1			
'Eua	396	274	56	47	15	4			
'Eua Motu'a	273	184	33	39	13	4			
'Eua Fo'ou	123	90	23	8	2	0			
Niuas	211	185	5	11	3	7			
Niuatoputapu	127	105	2	10	3	7			
Niuafo'ou	84	80	3	1	0	0			

Table 84: Proportion of raw materials for handicraft sold - 2015

Toportion of raw materia	Proportion of raw materials sold									
District	Total	None	1 - 25%	26 - 50%	51 - 75%	76 - 100%				
TONGA	6,157	4,806	806	371	134	40				
Tongatapu	3,487	2,770	413	195	84	25				
Kolofo'ou	607	530	43	23	9	2				
Kolomotu'a	643	505	113	15	9	1				
Vaini	703	541	94	45	18	5				
Tatakamotonga	300	262	15	13	7	3				
Lapaha	618	559	25	25	7	2				
Nukunuku	449	262	105	59	21	2				
Kolovai	167	111	18	15	13	10				
Vava'u	1,376	1,185	127	52	5	7				
Neiafu	309	265	34	8	2	0				
Pangaimotu	140	132	8	0	0	0				
Hahake	254	205	36	12	0	1				
Leimatu'a	286	255	18	9	0	4				
Hihifo	279	247	10	18	2	2				
Motu	108	81	21	5	1	0				
Ha'apai	687	399	173	74	35	6				
Pangai Hp	228	160	59	5	2	2				
Foa	144	81	15	27	21	0				
Lulunga	93	52	27	12	2	0				
Mu'omu'a	74	21	30	15	4	4				
Ha'ano	69	46	9	13	1	0				
Uiha	79	39	33	2	5	0				
'Eua	396	334	28	27	5	2				
'Eua Motu'a	273	217	26	24	4	2				
'Eua Fo'ou	123	117	2	3	1	0				
Niuas	211	118	65	23	5	0				
Niuatoputapu	127	52	53	17	5	0				
Niuafo'ou	84	66	12	6	0	0				

Table 85: Proportion of finished product of handicrafts sold - 2015

5. 1 Toportion of finished produ				ned product	of handicra	fts sold
District	Total	None	1 - 25%	26 - 50%	51 - 75%	76 - 100%
TONGA	6,157	2,661	1,435	1,193	602	266
Tongatapu	3,487	1,351	794	767	384	191
Kolofo'ou	607	222	98	120	94	73
Kolomotu'a	643	288	191	114	40	10
Vaini	703	225	136	182	112	48
Tatakamotonga	300	109	68	83	21	19
Lapaha	618	332	89	113	54	30
Nukunuku	449	117	154	121	52	5
Kolovai	167	58	58	34	11	6
Vava'u	1,376	835	297	148	57	39
Neiafu	309	221	54	24	8	2
Pangaimotu	140	95	29	8	3	5
Hahake	254	142	57	45	7	3
Leimatu'a	286	172	79	22	8	5
Hihifo	279	136	51	37	31	24
Motu	108	69	27	12	0	0
Ha'apai	687	265	171	123	111	17
Pangai Hp	228	92	80	35	11	10
Foa	144	48	16	25	54	1
Lulunga	93	37	25	18	12	1
Mu'omu'a	74	31	16	15	10	2
Ha'ano	69	23	5	20	21	0
Uiha	79	34	29	10	3	3
'Eua	396	137	112	103	29	15
'Eua Motu'a	273	87	84	69	22	11
'Eua Fo'ou	123	50	28	34	7	4
Niuas	211	73	61	52	21	4
Niuatoputapu	127	49	48	26	2	2
Niuafo'ou	84	24	13	26	19	2

Table 86: Total value of raw materials and finished product sold - 2015

	Total value of raw	Total of finished
District	material sold	product sold
TONGA	\$962,524	\$7,070,336
Tongatapu	\$508,966	\$4,123,305
Kolofo'ou	\$86,803	\$1,170,125
Kolomotu'a	\$85,906	\$658,520
Vaini	\$121,947	\$942,104
Tatakamotonga	\$28,060	\$230,470
Lapaha	\$57,860	\$676,265
Nukunuku	\$98,530	\$328,076
Kolovai	\$29,860	\$117,745
Vava'u	\$82,471	\$1,008,932
Neiafu	\$15,140	\$96,817
Pangaimotu	\$1,525	\$70,390
Hahake	\$32,405	\$298,865
Leimatu'a	\$9,895	\$180,230
Hihifo	\$6,656	\$308,730
Motu	\$16,850	\$53,900
Ha'apai	\$240,845	\$1,067,925
Pangai Hp	\$26,015	\$358,660
Foa	\$124,085	\$252,430
Lulunga	\$16,755	\$146,800
Mu'omu'a	\$46,190	\$112,500
Ha'ano	\$7,130	\$79,385
Uiha	\$20,670	\$118,150
'Eua	\$46,175	\$534,724
'Eua Motu'a	\$41,825	\$422,904
'Eua Fo'ou	\$4,350	\$111,820
Niuas	\$84,067	\$335,450
Niuatoputapu	\$65,630	\$100,750
Niuafo'ou	\$18,437	\$234,700

Table 87: Number of household engage in group production of handicrafts (katoanga) - 2015

7. Number of flousefiold enga		gage in group product (Katoanga)	
District	Total	Yes	No
Total	6157	1386	4771
Tongatapu	3487	413	3074
Kolofo'ou	607	79	528
Kolomotu'a	643	76	567
Vaini	703	91	612
Tatakamotonga	300	63	237
Lapaha	618	32	586
Nukunuku	449	45	404
Kolovai	167	27	140
Vava'u	1376	615	761
Neiafu	309	130	179
Pangaimotu	140	45	95
Hahake	254	127	127
Leimatu'a	286	122	164
Hihifo	279	163	116
Motu	108	28	80
Ha'apai	687	229	458
Pangai Hp	228	54	174
Foa	144	65	79
Lulunga	93	27	66
Mu'omu'a	74	32	42
Ha'ano	69	29	40
Uiha	79	22	57
'Eua	396	77	319
'Eua Motu'a	273	43	230
'Eua Fo'ou	123	34	89
Niuas	211	52	159
Niuatoputapu	127	50	77
Niuafo'ou	84	2	82

Table 88: Number of household use permanent labourers and number of labourers by gender - 2015

	Household u	ise any perman	ent labourers		Gende	er
District	Total	Yes	No	Total	Male	Female
Total	16,121	306	15,815	610	433	177
Tongatapu	11,913	279	11,634	552	390	162
Kolofo'ou	2,805	110	2,695	206	113	93
Kolomotu'a	2,578	47	2,531	82	57	25
Vaini	2,165	47	2,118	99	82	17
Tatakamotonga	1,246	8	1,238	16	16	0
Lapaha	1,229	23	1,206	47	33	14
Nukunuku	1,250	36	1,214	85	78	7
Kolovai	640	8	632	17	11	6
Vava'u	2,360	15	2,345	34	24	10
Neiafu	955	9	946	19	12	7
Pangaimotu	183	0	183	0	0	0
Hahake	327	3	324	10	7	3
Leimatu'a	399	1	398	2	2	0
Hihifo	343	2	341	3	3	0
Motu	153	0	153	0	0	0
Ha'apai	934	9	925	21	16	5
Pangai Hp	342	5	337	14	13	1
Foa	194	3	191	5	1	4
Lulunga	126	1	125	2	2	0
Mu'omu'a	92	0	92	0	0	0
Ha'ano	83	0	83	0	0	0
Uiha	97	0	97	0	0	0
'Eua	644	3	641	3	3	0
'Eua Motu'a	358	2	356	2	2	0
'Eua Fo'ou	286	1	285	1	1	0
Niuas	270	0	270	0	0	0
Niuatoputapu	164	0	164	0	0	0
Niuafo'ou	106	0	106	0	0	0

Table 89: Labourers hours work and sum of wages by gender - 2015

	Lak	f Labourers W	/ages			
District	Total	Male	Female	Total	Male	Female
Total	7,440	4,656	2,784	\$260,063	\$173,126	\$86,937
Tongatapu	7,107	4,449	2,658	\$245,558	\$164,431	\$81,127
Kolofo'ou	2,979	1,471	1,508	\$108,657	\$55,653	\$53,004
Kolomotu'a	1,693	977	716	\$34,516	\$24,018	\$10,498
Vaini	862	739	123	\$41,513	\$34,543	\$6,970
Tatakamotonga	436	436	0	\$7,068	\$7,068	\$0
Lapaha	336	200	136	\$14,135	\$9,595	\$4,540
Nukunuku	472	427	45	\$30,519	\$27,419	\$3,100
Kolovai	329	199	130	\$9,150	\$6,135	\$3,015
Vava'u	265	153	112	\$10,872	\$6,512	\$4,360
Neiafu	201	99	102	\$7,112	\$4,352	\$2,760
Pangaimotu	0	0	0	\$0	\$0	\$0
Hahake	30	20	10	\$2,880	\$1,280	\$1,600
Leimatu'a	16	16	0	\$80	\$80	\$0
Hihifo	18	18	0	\$800	\$800	\$0
Motu	0	0	0	\$0	\$0	\$0
Ha'apai	35	21	14	\$2,585	\$1,135	\$1,450
Pangai Hp	21	15	6	\$645	\$595	\$50
Foa	12	4	8	\$1,900	\$500	\$1,400
Lulunga	2	2	0	\$40	\$40	\$0
Mu'omu'a	0	0	0	\$0	\$0	\$0
Ha'ano	0	0	0	\$0	\$0	\$0
Uiha	0	0	0	\$0	\$0	\$0
'Eua	33	33	0	\$1,048	\$1,048	\$0
'Eua Motu'a	9	9	0	\$848	\$848	\$0
'Eua Fo'ou	24	24	0	\$200	\$200	\$0
Niuas	0	0	0	\$0	\$0	\$0
Niuatoputapu	0	0	0	\$0	\$0	\$0
Niuafo'ou	0	0	0	\$0	\$0	\$0

Table 90: Other benefits received by labourer - 2015

o: Other benefits rec	, , , , , , , , , , , , , , , , , , ,		er benefits rece	ived	
District	Total	Magla anh	Housing	Both meals	Othors
District	Total	Meals only	only	and housing	Others
TONGA	610	280	20	138	172
Tongatapu	552	267	10	129	146
Kolofo'ou	206	98	3	50	55
Kolomotu'a	82	46	1	11	24
Vaini	99	68	2	16	13
Tatakamotonga	16	7	0	7	2
Lapaha	47	26	1	8	12
Nukunuku	85	17	0	33	35
Kolovai	17	5	3	4	5
Vava'u	34	7	1	6	20
Neiafu	19	2	1	2	14
Pangaimotu	0	0	0	0	0
Hahake	10	5	0	4	1
Leimatu'a	2	0	0	0	2
Hihifo	3	0	0	0	3
Motu	0	0	0	0	0
Ha'apai	21	5	9	1	6
Pangai Hp	14	3	5	0	6
Foa	5	0	4	1	0
Lulunga	2	2	0	0	0
Mu'omu'a	0	0	0	0	0
Ha'ano	0	0	0	0	0
Uiha	0	0	0	0	0
'Eua	3	1	0	2	0
'Eua Motu'a	2	1	0	1	0
'Eua Fo'ou	1	0	0	1	0
Niuas	0	0	0	0	0
Niuatoputapu	0	0	0	0	0
Niuafo'ou	0	0	0	0	0

Table 91: Number of agriculturally active households with the proportion of their total income generated from agriculture activity (%) - 2015

		Inc	ome from	n agriculture	e activity	
District	Total	None	1-25%	26-50%	51-75%	76-100%
TONGA	13,943	6,506	3,111	2,173	1,182	971
Tongatapu	9,962	4,984	2,019	1,544	798	617
Kolofo'ou	2,271	1,638	252	179	126	76
Kolomotu'a	1,863	1,572	160	87	35	9
Vaini	1,849	415	548	485	229	172
Tatakamotonga	1,138	553	251	199	103	32
Lapaha	1,149	70	305	359	163	252
Nukunuku	1,132	477	342	165	94	54
Kolovai	560	259	161	70	48	22
Vava'u	2,191	976	527	262	177	249
Neiafu	798	677	80	15	19	7
Pangaimotu	183	68	83	21	7	4
Hahake	323	66	110	96	40	11
Leimatu'a	396	89	151	64	32	60
Hihifo	340	55	24	45	56	160
Motu	151	21	79	21	23	7
Ha'apai	916	477	207	139	79	14
Pangai Hp	330	222	83	17	3	5
Foa	192	51	53	47	38	3
Lulunga	124	44	23	31	23	3
Mu'omu'a	91	81	4	5	0	1
Ha'ano	82	3	29	36	13	1
Uiha	97	76	15	3	2	1
'Eua	620	52	327	157	59	25
'Eua Motu'a	347	37	124	114	48	24
'Eua Fo'ou	273	15	203	43	11	1
Niuas	254	17	31	71	69	66
Niuatoputapu	152	13	26	60	39	14
Niuafo'ou	102	4	5	11	30	52

Table 92: Total number of agriculturally active households with source and purpose of loan - 2015

		Sou	irce of loan					Purpose of loan		
		Tonga development	Other	Exporters	Other		Agricultur	Agricultural		Othe
District	Total	bank	banks	(in kind)	sources	Total	e inputs	development	Marketing	r
TONGA	1,405	650	142	9	604	1,405	606	258	26	515
Tongatapu	646	205	84	7	350	646	366	107	12	161
Kolofo'ou	77	26	10	0	41	77	46	4	5	22
Kolomotu'a	24	9	3	1	11	24	11	6	2	5
Vaini	195	52	29	1	113	195	128	25	0	42
Tatakamotonga	69	41	8	0	20	69	38	10	4	17
Lapaha	109	31	14	0	64	109	85	18	1	5
Nukunuku	112	20	11	3	78	112	27	29	0	56
Kolovai	60	26	9	2	23	60	31	15	0	14
Vava'u	408	220	29	1	158	408	157	65	3	183
Neiafu	33	24	3	0	6	33	21	3	0	9
Pangaimotu	70	25	0	0	45	70	9	1	0	60
Hahake	85	30	8	0	47	85	18	31	2	34
Leimatu'a	97	41	8	0	48	97	40	8	0	49
Hihifo	102	81	8	1	12	102	56	22	1	23
Motu	21	19	2	0	0	21	13	0	0	8
Ha'apai	85	42	9	1	33	85	30	27	1	27
Pangai Hp	50	22	5	1	22	50	16	13	0	21
Foa	21	13	1	0	7	21	8	8	1	4
Lulunga	1	1	0	0	0	1	1	0	0	0
Mu'omu'a	2	2	0	0	0	2	1	1	0	0
Ha'ano	5	1	0	0	4	5	0	3	0	2
Uiha	6	3	3	0	0	6	4	2	0	0
'Eua	201	121	17	0	63	201	45	53	10	93
'Eua Motu'a	107	72	13	0	22	107	35	34	10	28
'Eua Fo'ou	94	49	4	0	41	94	10	19	0	65
Niuas	65	62	3	0	0	65	8	6	0	51
Niuatoputapu	37	34	3	0	0	37	4	0	0	33
Niuafo'ou	28	28	0	0	0	28	4	6	0	18

Table 93: Total number of households by their first choice for the agriculture drawbacks - 2015

Table 93: Total nun				Agriculture - f			
		Lack of production	Lack of source of	Lack of management	Lack of	Lack of new technologies /	Not
District	Total	inputs	finance	skills	market	infrastructures	Interested
TONGA	16122	5500	3216	2155	841	758	3652
Tongatapu	11914	4136	2053	1909	472	218	3126
Kolofo'ou	2805	1214	228	319	101	38	905
Kolomotu'a	2578	621	184	266	84	28	1395
Vaini	2165	686	459	459	23	58	480
Tatakamotonga	1246	388	449	355	24	27	3
Lapaha	1229	627	236	302	19	19	26
Nukunuku	1250	440	332	95	134	41	208
Kolovai	640	160	165	113	87	7	108
Vava'u	2360	814	742	176	268	82	278
Neiafu	955	393	145	18	212	70	117
Pangaimotu	183	65	64	14	6	2	32
Hahake	327	117	58	78	19	6	49
Leimatu'a	399	137	130	54	11	0	67
Hihifo	343	47	268	4	15	4	5
Motu	153	55	77	8	5	0	8
Ha'apai	934	306	246	35	2	141	204
Pangai Hp	342	60	134	12	1	6	129
Foa	194	62	16	17	0	67	32
Lulunga	126	59	39	1	1	18	8
Mu'omu'a	92	41	24	1	0	11	15
Ha'ano	83	31	8	2	0	33	9
Uiha	97	53	25	2	0	6	11
'Eua	644	130	136	28	61	282	7
'Eua Motu'a	358	104	84	19	47	97	7
'Eua Fo'ou	286	26	52	9	14	185	0
Niuas	270	114	39	7	38	35	37
Niuatoputapu	164	94	27	2	4	9	28
Niuafo'ou	106	20	12	5	34	26	9

Table 94: Total number of households by their second choice of agriculture drawbacks - 2015

			<b>,</b>	Agriculture - 2			
		Lack of	Lack of	Lack of		Lack of new	
		production	source of	management	Lack of	technologies /	Not
District	Total	inputs	finance	skills	market	infrastructures	Interested
TONGA	16122	2732	5410	2420	838	756	3966
Tongatapu	11914	1846	3934	1855	469	488	3322
Kolofo'ou	2805	187	964	420	138	102	994
Kolomotu'a	2578	146	507	275	101	50	1499
Vaini	2165	543	783	248	35	75	481
Tatakamotonga	1246	405	352	328	57	100	4
Lapaha	1229	227	777	149	23	27	26
Nukunuku	1250	174	403	283	83	99	208
Kolovai	640	164	148	152	32	35	109
Vava'u	2360	493	847	373	211	90	346
Neiafu	955	178	438	92	62	39	146
Pangaimotu	183	38	57	48	2	4	34
Hahake	327	46	122	65	20	9	65
Leimatu'a	399	85	122	60	34	10	88
Hihifo	343	98	54	84	77	25	5
Motu	153	48	54	24	16	3	8
Ha'apai	934	216	275	78	12	101	252
Pangai Hp	342	92	54	17	5	15	159
Foa	194	37	62	33	2	23	37
Lulunga	126	30	40	18	5	24	9
Mu'omu'a	92	10	41	3	0	16	22
Ha'ano	83	33	28	6	0	7	9
Uiha	97	14	50	1	0	16	16
'Eua	644	141	259	99	79	59	7
'Eua Motu'a	358	90	82	64	67	48	7
'Eua Fo'ou	286	51	177	35	12	11	0
Niuas	270	36	95	15	67	18	39
Niuatoputapu	164	17	69	1	45	4	28
Niuafo'ou	106	19	26	14	22	14	11

Table 95: Total number of households by their third choice of agriculture drawbacks - 2015

Table 95: Total r				Agriculture - 3			
		Lack of	Lack of	Lack of		Lack of new	
		production	source of	management	Lack of	technologies /	Not
District	Total	inputs	finance	skills	market	infrastructures	Interested
TONGA	16122	2549	1694	3815	1798	1704	4562
Tongatapu	11914	1649	1216	3030	1061	1302	3656
Kolofo'ou	2805	207	205	593	207	456	1137
Kolomotu'a	2578	141	191	352	109	101	1684
Vaini	2165	347	281	786	80	185	486
Tatakamotonga	1246	306	195	362	95	282	6
Lapaha	1229	314	107	411	330	41	26
Nukunuku	1250	228	150	341	196	128	207
Kolovai	640	106	87	185	44	109	109
Vava'u	2360	456	212	514	530	207	441
Neiafu	955	176	113	153	252	73	188
Pangaimotu	183	39	11	65	8	21	39
Hahake	327	51	46	60	61	32	77
Leimatu'a	399	70	25	93	58	30	123
Hihifo	343	89	11	92	110	35	6
Motu	153	31	6	51	41	16	8
Ha'apai	934	89	112	141	42	133	417
Pangai Hp	342	12	4	19	11	11	285
Foa	194	29	48	38	19	24	36
Lulunga	126	21	19	22	7	45	12
Mu'omu'a	92	10	3	20	3	22	34
Ha'ano	83	10	33	19	1	11	9
Uiha	97	7	5	23	1	20	41
'Eua	644	303	104	102	81	45	9
'Eua Motu'a	358	114	84	56	64	31	9
'Eua Fo'ou	286	189	20	46	17	14	0
Niuas	270	52	50	28	84	17	39
Niuatoputapu	164	14	39	5	62	16	28
Niuafo'ou	106	38	11	23	22	1	11

#### **APPENDICES**

# **Appendix 1: CONCEPTS AND DEFINITIONS**

## a. Agriculture holdings

**Holding** is an economic unit of agricultural production, under single management, comprising all livestock kept and all land used wholly or, partly for agricultural production purposes, without regard to title, legal form, or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe or by a juridical person such as a corporation, cooperative or government agency.

The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more block of areas, providing the parcels share the same production means utilized by the holding such as labour, farm buildings or machinery.

**Holding parcel** is any piece of land entirely surrounded by other land, water, road, forest, etc. not forming part of this holding. A parcel may consist of one or more plots adjacent to each other.

**Plot** is a part or whole of a parcel on which a specific crop or crop mixture is cultivated. A plot can also be fallow land or land ready for planting.

### b. Agricultural land area

**Agricultural land** includes land used for annual or perennial crop cultivation, animal yards, and pasture, temporary or permanent fallow land. All fallow land is categorised as agricultural land because in Tonga most of this land is fallow due to landowners migrating overseas or being unable to develop it.

In the 2015 TNAC, agricultural land area was assessed for both the bush and town allotment. Though the agricultural activities in the town allotment are minimal this is considered significant in terms of domestic food supply.

## c. Agriculturally active households

**Household** consists of one or more people who live in the same <u>dwelling</u> and also share meals or living accommodation. They may consist of a single family or some other grouping of people.

A household is considered **active in cropping** if it can be classified into subsistence, semi-subsistence or commercial cropping activities.

A household is **active in livestock** if it can be classified into subsistence, semisubsistence or commercial livestock activities.

A household is **active in fishery** if it can be classified into either: subsistence, semi-subsistence or commercial fishery activities.

A household is **active in forestry** if it can be classified into either: subsistence, semi-subsistence or commercial forestry activities.

A household is **active in handicraft** if it can be classified into either: subsistence, semi-subsistence or commercial handicraft activities.

A household is **active in agriculture** if it can be classified into any of active cropping, livestock, fishery, forestry or handicraft activities.

A household is **non-active in agriculture** if it cannot be classified into any of active cropping, livestock, fishery, forestry or handicraft activities.

**Head of household** is a person who has the chief responsibility for the maintenance of the household. Thus the head need not necessarily be the eldest male member, but may be a female or a younger member of either gender.

## d. Level of agricultural activities

**Subsistence** a type of agriculture activity (cropping; livestock; fishing; forestry or handicraft making) in which most of the produce is consumed by the farmer and his family, leaving little or nothing to be marketed.

**Semi-subsistence** a type of agriculture activity in which some of the produce is consumed by the farmer and his family and some is sold to the market. **Commercial** is a type of agriculture activity in which most of the produce is to be

sold to the market.

## e. Definition of level of agricultural activity

For some of the sub-sectors (crop, livestock, forestry and handicraft) there was no question asked on the level or main purpose of agricultural activities. Therefore, definition was developed for each of the sub-sectors to categorise the level of agricultural activities into subsistence, semi-subsistence and commercial.

Cropping categorieswere measured by the total cultivated agricultural land area

Non Total agricultural land is 0 acres

Subsistence Between 0 and 1 acre

Semi-Subsistence Between 1 and 8 acres

Commercial More than 8 acres

Livestock categories were measured by the number of livestock kept

Subsistence Dairy Cattle and Beef Cattle =1

Sow = 1

Semi-Subsistence Dairy Cattle and Beef Cattle = 2 - 24

Sows = 2 - 9

Commercial Dairy Cattle and Beef Cattle > 24

Sows > 9

Egg laying hens >0 Broilers > 0

**Fishery** categories were determined by asking respondents directly whether their activities were subsistence, semi-subsistence or commercial.

**Forestry** was defined by the number of trees grown for timber or their high market value.

Subsistence number of trees 1 - 4

Semi- of trees 5 - 100

Commercial number of trees 101 -999

Handicraft categories were defined by the proportion of handicrafts sold

Subsistence None sold

Semi-Subsistence 1-75% sold

Commercial 76% - 100% sold

## f. Type of holding operation

**Operator of an agricultural holding** is the person exercising management control over the operation of the agricultural holding. Where the holding is being operated by a single household head, he/she is, in most cases, the operator. A holding can have more than one operator.

**Individual holding** is a holding with a personal account. This means that the operator/any member of the household bears the full economic responsibility by himself and does not share this with anybody else or with another household. He may or may not employ labour and/or have household members to help him.

**Partnership holding** is a holding operated by more than one person belonging to more than one household. They jointly share the economic responsibility. The holding is considered as a joint holding and the method of operation is partnership.

**Private person holding** is a holding in which an operator manages the operation of the holding for an individual and not for an institution. An operator managing land on behalf of the owner(s) living in the same place or a different place came under this category.

**Organization/institution** holding is a holding in which the operator manages the operation on behalf of an organization such as church or a private company or government or semigovernment organization.

## g. Type and method of planting

**Compact crops** referred to more than one type of crop planted jointly, packed together, closely, dense, solid and firmly united.

**Line crops** referred to crops that were planted in a line.

**Scatter crops** referred to crops not planted jointly, not packed together, not firmly united and not in a line.

A single crop is a crop planted without any other crop (root crops or vegetables) in a plot.

**A mixed crop** is a crop that planted together with any other crop (root crops or vegetables) in a plot. It may be combined with scattered crops or trees, but it is still considered mixed crop.

A scatter pattern is a crop without any major crops grown in a plot.

#### h. Main land use

The main land use was classified as follows:

**Land under annual crops** was land used for crops with less than a one year growing cycle. Crops included field crops like cassava, yam, taro, pineapple and vegetables like squash, capsicum, cabbage, tomato, etc.

**Land under perennial crops**was land cultivated for long term crops that do not have to be replanted for several years, such as coconut, vanilla, kava, mango, citrus, breadfruit, etc.

**Land under pasture** was land temporarily cultivated with herbaceous forage crops for mowing or pasture for a period of 5 years or less.

**Land under fallow** was land that was used for growing crops sometime in the past but was currently not being used for any agricultural activities. Fallow land is normally left idle for 5 years or less.

**Land under bush/forest growth** is land left uncultivated for more than 5 years and covered with bush/forest growth.

**Land under livestock** was land used for raising livestock such as cattle, goats, pigs and chickens.

**Land under non-agricultural uses** was land used for the operator's house, buildings and other uses apart from agriculture purposes.

# i. Main land tenure system

**'Owned'** means that the owner possesses the title of ownership. Consequently, the owner has the right to determine the nature and extent of use of the land.

**Short term lease** is any land leased with a written contract by which one party (lessor), usually in consideration of rent, conveys land to another (lessee) for 5 years or less.

**Long term lease** is any land leased with a written contract by which one party (lessor), usually in consideration of rent, conveys land to another (lessee) for more than 5 years.

'Other' is any other land tenure arrangement that may be different from the above categories. In the Tongan context, a lot of people do not own or lease bush allotments but can use them free of charge. The landowner could be a member of the same extended family that has migrated overseas or is unable to utilise the land.

# j. Sector of employment

**Agriculture** is practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and / or other products.

**Mining /quarrying** is the extraction of valuable minerals or other geological materials from the earth, from an ore body, lode, vein, seam, or reef.

**Processing industry** is the branch of manufacturing associated with formulas and manufacturing recipes.

**Major commercial trade/retail, restaurant** is the action of buying and selling goods and services.

**Delivery, Communications** is the carrying and turning over of letters, goods, etc., to a designated recipient or recipients.

**Services** is a sector primarily consisting of truck transportation, messenger services and warehousing; information sector services; securities, commodities and other financial investment services; rental and leasing services; professional, scientific and technical services; administrative and support services; waste management and remediation; health care and social assistance; and arts, entertainment and recreation service.

# k. Employment status

**Own account** is a person who operates his/her own farm or business or is engaged independently in a trade or profession without any paid worker to assist him/her.

**An employer** is a person who operates his/her own farm or business or is engaged independently in a profession or trade and employs one or more paid workers.

A government employee is a person who works for the government.

A private employee is a person who works for a private firm or company such as Molisi, Gateway Rentals, etc.

**An unpaid worker** is a person who works without pay of any kind in a business or economic enterprise operated by a person living in the same household.

#### I. Fisheries activities

**Fisheries** include the following activities in the sea, rivers, lakes, ponds:

- Capturing fish and other marine products either in the lagoon or within the reef or outside or over the reef through the use of different fishing methods and with or without fishing vessel/boat; including deep-sea fishing.
- Collecting or gleaning or clearing seashells, sea cucumber, and other sea products along the shore.
  - Raising fish through fish farming or aquaculture

# m. Agricultural fertilizers and chemicals

**Inorganic fertilizers** are manufactured mineral substances applied to soil, or irrigation water, to supply plants with the necessary nutrients.

**Organic fertilizers** are materials of organic origin that can be used as a source of plant nutrients. The most commonly used organic fertilizers are compost, and chicken or other animal manure.

**Agriculture chemicals** are used for controlling or eliminating pests that destroy crops or livestock. They include insecticides, herbicides and other pesticides.

# n. Reference periods

Number		Reference Period
1	Enumeration	7 April – 30 June, 2015
2	Area of land use	As at time of enumeration
3	Ownership of bush allotment	As at time of enumeration
4	Purpose of production	Past twelve months
5	Food crop cultivation	Past twelve months
6	Use of fertilizer, chemical, irrigation	Past twelve months
7	Household membership and economic	Past week
	characteristics	
8	Livestock	As at time of enumeration,
		unless specified
9	Fisheries	Past twelve months
10	Equipment used	Past twelve months
11	Agro-forestry on the holding	As at time of enumeration
12	Labor inputs	Past month
13	Agricultural income and loan	Past twelve months, unless
		specified
7 8 9 10 11 12	Household membership and economic characteristics Livestock  Fisheries Equipment used Agro-forestry on the holding Labor inputs	As at time of enumeration, unless specified Past twelve months Past twelve months As at time of enumeration Past month Past twelve months, unless

# Appendix 2: 2015 TNAC HOLDING QUESTIONNAIRE

Holding ID  Williage Type of Hol	Nomber Centre ding L redeshed 2. Family	nuc struck ist	secretoria tro			lage Name			outs ont
Head of Hos			_	Em	imieratos	r's Name:			
Respondent	r's Name :				servisor'		_		
	MEMBERSHIP DEMOG							istales.	Sizir.
ext monet	Full Masse) and complete th	is Josephania of the bes	con receiving in	this neumannin	2.000				
	Full Name	See I Make	Phylodesia so framed of frequencies	Age (yrs.)	600405	Mater Autory (CVCK)	and date	Tourist of straightful Code	holding
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1				30 10	ш			ш	
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					ш	ш		ш	
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1				5 3	ш			Ш	1
					ш	ш		ш	
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1		-			ш	ш	$\vdash$	ш	ш.
	MALE		+	FEMALE			-	POTAL	
	NT IN SUBSECTORS er of your household creat rous	pe in these area?  See 2  He  1 He  2 He  3 He	Forest				1 100 2 100 1 100 2 100		

Page 1

	CODES FOR	SECTION B	
Code for Relation to head of house hold (Cot 4):  1. Head 2. Spouse 3. Beobacci - born son 8. foughter 4. Adopted - son 8. daughter 5. Brother / Seise 6. Grandchid 7. Parent of head 8. Parent of head 9. Child of spouse (step child) 10. Other relatives 13. No relation			Code for education (Col (i):  0 No schooling 1 Pre-primary education 2 Primary education 3 Secondary education 1 (F/I - F/IV) 4 Secondary education 2 (F/V - F/IV) 5 Past - secondary education (T/ICT) 6 Tertiary - First stage of tertiary education 7 Tertiary - Second stage of tertiary education 8 Other
	Code for sector of er	nployment (Col	95
OS Agriculture, forestry and fishing	11	Financial & Inc	arance activities
02 Wining and quarrying	12	3273-377	etal and leasing activities
08 Monufacturing	15	100000000000000000000000000000000000000	ctimos & technical activities
04 Electricity, gas, steam,	14	Administrative	& Support service activities
05 Water supply; sewerage, waste manager	ment & 15	Education	
Remediation act.	16	Human health	and Social work:
06 Construction	17	Arts, Entertain	ment and recreation
07 Trade	18	Otherservices	ectivities
08 Transportation & Storage	19	Public adminis	tration & defense; compulsory social security
09 Accomodation & Food service activities	20	Activities of ho	useholds as employers
10 Information & Communication	21	Extraterritorial	organization & Bodies
Code for activity (Col. 7 ):	Code for Employmen	t Status (Col 8)	Code for Activity in Holding (Col 10)
L. Forming	1. Own - account		2. Planting
2.Fishing	2 Employer		2. Harvesting
3. Uvestock	3. Employee Gover	ment:	3. Livestock rearing
4. Handicrafts	4. Employee Private	6	4. Fish Catching
A Foreitry	5. Unpaid Worker		5. Fish Processing
6 None of the Above	6. Students		& Forestry
	7. Others		7. Hondiscoft  8. Transporting
			9. Selling
			10. None of the Above

5	D. USE UP LAND AT TIME UP VISIT	TTIMEO	IF VISIT					I			
TOW TOW	B1. How many parcel OF land do you have? Town Allotment	OF land	do you have?	Tons	Town Allacment	ment			Bush Allotment		
	Arrest in Consess	2000			1 3	1			S)	land Use	
ances No.		Teture	Wilage Nerse		ě	DAMAGRA DOS		Residential	Home Garden	Animal Vers	Others
8	(2)	(3)	(4)	-		(5)		19.	(2)	(8)	(9)
		1			13			Squire meteri	Square meters	Square meters	Squire resters
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				-	-	-	-				
					-	-	-				
				100	-	-					
TOTAL											
무	for Land tenure	(3):1.0	Code for Land tenure (3): 1. Owned 2. Short-term lease 3. Long-term Lease 4. Others	9986 3.1	a-guo	en uu	85e 4.	Others			
C	nn you please na	ame the t	02. Can you please name the trees in your town alliotment and how marry trees (including Fruit trees, Food crops, forestry)?	ment an	a how	marry	reeslin	cluding fruit tre	es, food crops, for	restry)?	
Num	Name	Name of Trees	Code OFFICIAL USE		Number of Trees	erof	Num	1 5-30	Name of Traes	Code Ordicial USE	Number of Trees
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2				Γ		I	27		G.		
60					Γ	Γ	E				
4					Г		1.4				
un					Г	Γ	52				
iD.					Г		19		800		
1					Г	Γ	27				L
60					Г	Г	188				
m					Г		119				
10						Γ	30				

Access   Access   Land Under related   Access   Access															
Acresis crop Arienal Pasture Folice Others (15)  Acres 10 (10) (11) (12) (13) (13) (14) (15)  Acres 10 (10) (11) (12) (13) (13) (13) (13)  Acres 10 (10) (10) (10) (10) (10) (10) (10) (		A.	5			Contraction of the Contraction o				T.	and Use				
Acres   Acre				pue"	SC0200000000000000000000000000000000000	Village Code					Area	-	- 13.		1
3  (10) (31) (13) (13  (14  (15)     Array   Array   Array   Array   Array   Array   Array     Array   Array   Array   Array   Array   Array     Array   Array   Array   Array   Array   Array     Array   Array   Array     Array			1 (c) 1 (c) 1 (c) 1 (c)	1	Village Marrie	DESIGNAL USE	Perrental Crop	Aemail crop		Pasture	Faith	Fallow	Others	Pyrpere al Yelow	Charater of tallow (NS)
Acres   Acre		(3)	Ŧ	(5)	(9)		(8)		(10)	(11)		(13)		(13)	(116)
2 Press Age							Acre Fredh nof Acres	Azren n.ef Azren Azren	9 6	Acre and	Acre Period	Acts Fraction	5 m		
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2 Pees Age											-10	37			
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1 Yes															
Cehers 1 Nes 4 Acr												22			
1 Yes	TOTAL					DE LEGICIE			_						1
Coconut) in acres  1 Yes 4 No Total Area Rented Acr	ade for Lan	d teru	fallow	1.0wh	ed 2. Short-term Lease Improve Agricultural Pri	3. Long-term Lease othertwing, 2. Lack of 9	4. Others Shante, 30	Sthers							
1 Yes 4 No Total Area Rented	M Landun	derm	med in	asi pu	(e.g. pasture and coco	nut) in acres			-	_					
Total Area Rented	05 Have yo	ur bo	sohol	d rente	d fand to others ?			1 Yes	L						
Total Area Nented				1	[			[	W 2.80	125					
	26 at yes, it	E .	arry pa	rcell		Total Area Rented	_,]],	-	(Supplement)						

	1 miniforcia a criminaria	* Seth					F 2, 90 to 11-91
Crops Plan	A. Crops Planted in the last 12 months and still growing (exhiting crops)	wing (exhibit crops)		NIKENSKY.	2000		200 00000
Fartel	Name of Crops	Code	the population of	2004	Arest	33	No. of Plants
Burbs			LConnect LConnect 2.17m	Marking Limite Day (West Day	Acres Prie	Paction of NOT	
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1						1	
Partiel Partie	Parcel Name of Cross	code	Aeral	la la	Mon	Nomber	CTU Code
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t				Ī	+	+	
Units or CTU CODES							
(Stimming)	3 Basiot (Kata)	5 Heap (fluingal) 7 B	7 Bunch (Kau staine)		4 Harris	-	11 Others

F2 Did your bossesheld use any implicit decisions in this hooding in the past 12 months?  F3 Did your bossesheld use any Prediction in this past 12 months?  F4 Did your bossesheld one any Prediction in the past 12 months?  F5 Searth this cripp of these indiving fertilizers, Pestidies and Implicion.  F5 Searth this cripp of these indiving fertilizers, Pestidies and Implicion.  F6 Searth this cripp of these indiving fertilizers, Pestidies and Implicion.  F7 Searth this leads of Cripp  F7 Searth this lead this le	FI. Did your household use arr	FI. Did your household use any morganic fortilities in this hooking in the past twelve escential	in this holding in	the past 1	welve	Tullion.		1,465	2 %			
Spearify from crops and these findding, Settliners, Pesticides and singition   17ths 2.7kb   17ths		awhold use any arganic feetilizers in awhold use any feeticates in this ho	this holding in the Adeig in the past i	e pastra 2 month	de la co	1 Page		1 Yes		-		
		opined on any intestion in the pas	A 12 manths?					1 785			I	
Name of Crop   Code   Fortibate used (Code)   Pleaticide used (Code)   Prig. 2 No. 1 Yes. 2 No. 2		cops of these Holding, Pertitives, P.	stodes and migr	1001					10	all box	ses are	2, So to F61
159   141	Une No.	Name of Crop	Code		1 Yr	used (C	(apa	per.	1 Yes	2 No	8	- 9
		8		_		(8)		L	4	L		120
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	m e										П	
	. 0		-		+	1		1	1		Т	

2000	Code	Meads		1		
Species (t)	Loge	(3)	-	1		
1. Beef Cattle (11+12+13+14+15) (pulu kakano )	10			1		
I.L. Calves (< 6 months)	11			1		
1.2. Steer (young male cattle: 6 - 24 months)	12			1		
1.3 meller (young female cattle: 6 - 24 months)	13					
1.4 Bell (adult male cattle)	14			ll .		
3.5 Cow (adult female cattle)	15			ii .		
2. Doiry Cattle (21+22+23+24+25) (pulu hu'akau')	20					
2.1 Calves (< 6 months)	21			1		
2.2 Steer (young male cattle: 6 - 24 months)	22					
2.3 Helfer (youg female cardle: 6 - 24 months)	21					
2,4 Bull (adult male cattle)	24			1		
2.5 Cow (adult female cattle)	25			11		
3. Pig(81+32+33+34+35)	30					
S.1. Boer (puoka (au )	31			l		
3.2. Sow (puekir sinemenu)	32			11		
3.3. Figlet (fongonga ker hahu )	33			11		
3.4. Weaner (pueko mail)	34			11		
3.5. Berraw (fufula)	15			11		
4. Horse (41×42)	40			11		
4.1. Male	41			11		
A.2. Female	42			1		
S. Sheep (51+52+53)	30			1		
S.L. Larris ('shikV' sips')	51			1		
5.2: Ewe (sipi sinomany fefine)	52			1		
5.3 Rem (sipi trav)	55					
6. Goat (61=62)	50		18 1			
5.1. Male (kod tungato)	61					
8.2. Female (kos//efine)	62					
7. Chicken (71+72+73)	70	19				
7.1: Broiler (Inpa polang) kakana (	71			11		
7.2 Egg layer (moa polengi faketo )	72		100			
7.3 Damestic Breeds (maa Tonga)	73		1			
7.3.1 Male (rooster) (mod to one )	74			11		
7.3.2 Famula (hen)(maa fefine )	75					
B. Duck (parto )	80	- 54				
9. Dog (91+92)	90					
9.1 Male (Kull tongets)	91	10				
9.2 Female (ks//fefine)	92					
10. Crt (pis/)	100					

Kind of	Code		- 78			riber of Arim	Ber of Animals (Hisposed of In the last, 12 months							
Liventock		Cons	umed	Social Obligati (Social/Vesi			Sold				Lésit			
ni	Det	_	1)	. 6800.5	7 1	tumber		e (15)		riber	Value (	T\$) .		
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ka .	30													
Boar	31				11		$\neg$							
Sou	-32			$\vdash$	111	+1 $+$	-	++	1	+	-			
Pigiet	33			+	111	+	+	++	1	+	_	$\vdash$		
Wester	34	$\vdash$	H	+	41F	+	_	++	╫	+	_	-		
Ватом	35	$\vdash$	H	$\vdash$	411	+	+	++	4	+	_	-		
1000		$\vdash$	-	$\vdash$	-111	+	_	-		+	_			
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orti	601													
Nickens	70				Ш							8 1		
Did this.				Veterinary: Services r		in the pust 12	months?		2 Yes 2 No	# 2, 60 to H1				
		Carle	Goss E		Chicke	Hone I.	fleg		9	E 40 WH				
	1	Yes Z No	Yes 2. No	1 Ves 1 No	n/Dack s 1. Yes	Sec 2 No	1. Yes 2.56							
(1) Vaccing	tion	(2)	(3)	(4)	(5)	(6)	(7)							
Artificial		-												
been an arranged	tine.		_	-	-									

	6.8	D I	rs of the h		usually		-			-	PV.	orași	OF.
	D.	You 2	nunther		age Pena	on Hour p	HEL ILID		erage a service			6ty V	
Fishing Type:	D		trips per week		date	rem	ale:	11000	h (CTU) week	e Cod	of	CLEST	ped
Fundios/shallow (trampto's	1			$\top$	$\Box$		$\Box$		T	П	П		Г
memuha I Handine/dena see (Islamata)a Jototo I	2			T	П			П					Г
Gillnet (kupwspur/bloomone )	3							П					г
Cast net (kopengersik).	4			$\top$	$\Box$		П	П			П		Г
Spear fairing (right) (sev polish)	5			1				П			П	П	Г
Spearfehing (Day) (vita 'sho')	6			1	$\Box$			Ħ			П		Г
Beef Glearing (flosysta pe rufi pe he Askou pe (slavulu )	7			1	П			П					Г
Octopes fishing (diving/lune) (who folia/looks felle/lo/o felle)	8			T	П			П					Γ
Trolling (flukatele )	9			$\top$	$\Box$			П					Г
Flut Fence (pa liler)	10							П			П		Г
Others: (specify):	11				Η.			$\forall$			Н		г
Plantic bago (milemeta)	your i	eusel égatie	pn	g activity	8 Oth	ers							]
HS What were the species herwer Turns & Relage Lotester Shuffish	Sel Curu	200	1 Yes Server C ed 1		Reel	Seo unch		_	ed				
HE What type of habitat its you us Habitat type haef fet (fungs hebes pe 'ste'ste) Legaco flatt nessel		iding	Frequenc	-	н	Tibe ( 1.0) 2.N 3.D	SOUR COOK						

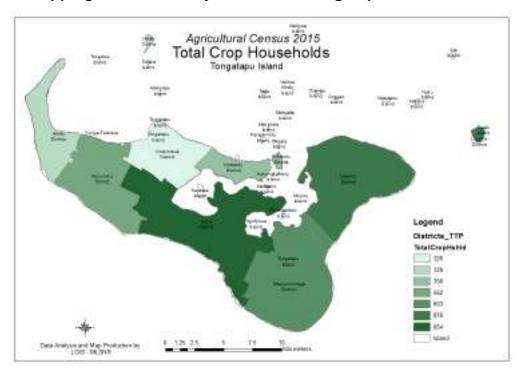
1	iame of Trees/Shrubs	COORTING er of (Codes)						Codes		Manher of Trees	Un (Cod	77
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-		_	_	-	-	Sac ilia	is (Col. 41)		_		_	_
	your household buy?	2 awmi	1% - 25) Vierials (	6 lou'akau	& tu		% 4 51% - 75% making handicrafts did or household usually sell?	1 80		200%		]
a,	Total value of raw mar	berials	iolal (tras	1537				Г	T	П		i
4.	What proportion of h	vando	rafts ma	de by you	who	useho	ld usually sell?		pi 1, 6	G to /6)		1
9.	Total of finished produ	act sol	at an ETO	2517								]
6,	is this foundhold eng loka'anga) in the last	200								1 7es 2 No of L G		
7.	What is the estimate months?	value	of your	product t	or st	te kato	anga for the last twelve			W	-	j

K LABOUR				7/10
XI Did your household hire and ur this holding in the last (welve)			el on	1 Yes 2 No (97, 60 to 60
of 1 FW the rable balow				19 24 100-101 100
12		Male	Fernale Tot	tal
Number of laboures				
Average number of days secre	ed:			
Average hour morked/day				
82 Old your household use any pe	emane	nt labourers?		1 Yes. 2 No
Num 1. Male septed in the best 2. Fermally tooling but 2	Wignap	or Manths Other tooy	ofts Status pole) 1. Fall Time 2.	192, 00 to U
3 4 5	H			
Codes for Other Bor 1 Mush cely 2 Hearing poly	selits.	3 Berth L & Z above	40then	
- Lanconcine		2 Maria 2 Mari	4000	
L MACHINERY AND EQUIPMENT			West and the second	
Type of Equipment	Dodle	Used in the past twolve	Special made or production and production of the control of the co	Stock Owned by Holding at
Add total name		rycette (nimber)		sein and a des heardest
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	10	(1)	120	
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CROP Equipment	10	CO CO	120	(1)
CAOP Equipment Tractor	11	CI)	120	91
CROP Equipment Tractor Tractor Implement	11 11 12	CI)	120	(1)
CROP Soutement Tractor Tractor Implement Actory hole	11 12 13	CO.	120	(1)
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CROP Equipment Tractor Tractor Implement Actory hoe Exappick Sprager Mat Blows:	111 12 13 14 15	CO CO	120	(1)
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CROP Squigment Tractor Tractor Tractor Implement Actory hoe Empoick Spraeer Mar Blower Weed Extens Chansaw	10 11 12 13 14 15 16 17	CO CO	120	(1)
CROP Spagment Tractor Tractor Tractor Inglement Actory hoe Exaptick Spraee Mat Bower Weed Fators Dramaw Others Speady)	10 14 12 13 14 15 16 17	CO CO	120	(1)
CROP Soutement Tractor Tractor Tractor Tractor Inglement Actory hoe Exaptick Spraee Mac Bower Mice Fators Dramaw Others Specify) Fishing Soutement	10 11 12 13 14 15 16 17 18 20	CO	120	(1)
CROP Soutement Tractor Tractor Intercer Actory hose Esspeciel Spraeer Mar Brown Weed Fators Chainsaw Others Specify) Fishing Soutement Fishing boom with in-board engine	11 12 13 14 15 16 17 18 20 21	CO	120	(1)
CROP Spagment Tractor Tractor Tractor Inglement Actory hoe Esspeciel Spreet Mar Bower Weed Fators Chainsaw Others Doestly) Fishing Spagment Fishing bosts with in-board angine Plaking bosts with in-board angine	101 114 12 13 14 15 16 17 18 20 21	CO CO	120	
CROP Spagement Tractor Tractor Tractor Inglement Accoryhole Esspeciel Spraeer Mar Blower Weed fators Chansaw Others Specify) Fishing Spagement Fishing beats with in-board engine Planing beats with out-board engine Cance Others Specify)	10 11 12 13 14 15 16 17 18 20 21 22 23	(1)	120	(1)
CROP Spagement Tractor Tractor Tractor Inglement Accoryhole Esspeciel Spraeer Mar Blower Weed fators Chansaw Others Specify) Fishing Spagement Fishing beats with in-board engine Planing beats with out-board engine Cance Others Specify)	10 11 12 13 14 15 16 17 18 20 21 22 23 24	CO CO	120	
ENDP Spalpment Tractor Tractor Tractor Tractor Implement Actoryhole Grappick Spraet Mar Blown Weed Fators Chansaw Others Specify) Fishing Spalpment Pishing Spalpment Pishing beats with out-board angine Cance Others Cance	10 11 12 13 14 15 16 17 18 20 21 22 23 24 30	(0)	120	
EROP Spalpment Tractor Tractor Tractor Implement Actory hole Grappick Sprayer Mat Blown Med Fators Chansaw Others Specify) Fishing Spars with in-board angine Pilining boars with in-board angine Pilining boars with out-board angine Canoo Others (Spacify) Tracapert Von dest than 2 tonnet.) Van Gitsnews and above)	10 11 12 13 14 15 16 17 18 20 21 22 23 24 30 31	(1)	120	
CROP Squigment  Tractor  Tractor  Tractor Implement  Actory hole  Exappick Spream  Mac Blown  Weed faithers  Chansaw  Others Specify)  Fishing Sours with in-board engine  Prining boars with in-board engine  Prining boars with out-board engine  Canoo  Others (Specify)  Tracapert  Van dest than 2 tonnet.)  Van (2 tonnes and above)  Frengy	10 11 12 13 14 15 16 17 18 20 21 22 23 24 30 31	(1)	120	
EXOP Spagement  Tractor  Mat Blown  Weed faithers  Chansaw  Others Specify)  Fishing South with in-board engine  Paining boars with in-board engine  Paining boars with out-board engine  Canno  Others Cancella)  Presspert  Van dess than 2 tonnes 3  Van Citternes and above)  Recopy  Excosor Generator	11 12 13 14 15 16 17 18 20 21 22 23 24 30 31 32 40	- (1)	120	
CROP Squigment Tractor Tractor Tractor Tractor Implement Actory hoe Exaport Spraem Mat Brown Weed fators Chansaw Others Specify Riching Louisment Fishing boars with in-board engine Fishing bests with out-board engine Cance Others Specify Tracapert Van dess than 2 tonnes.) Van (2 tonnes and above) Except Excep	11 12 13 14 15 16 17 18 20 21 22 23 24 30 31 32 00 61	- (1)	120	
CROP Squigment Tractor Mat Brave Med falters Chansaw Others Specify) Fishing Jougnment Fishing bosts with out-board angine Pishing bosts with out-board angine Canoo Others Cancers Tractor Wan dest than 2 tonnes; Van (2 tonnes and above) Except Except Except	10 11 12 13 14 15 16 17 18 20 21 22 23 24 30 31 32 40 41 42	- (1)	120	

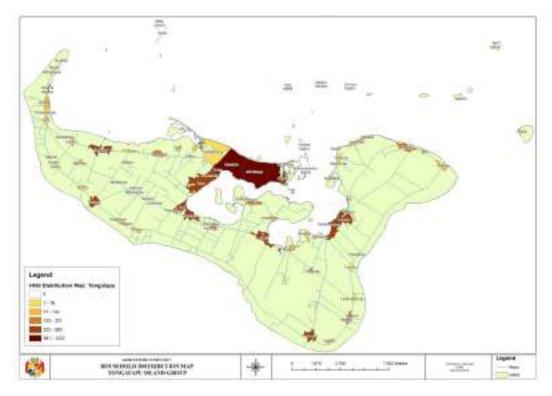
M. AC	UCULTURAL INCOM	E AND LOAN F	OR ALL SUBSECTOR	5	
MIL W	hat is the proportion	a of your house	hold's total income	(in castylo kind) usually	derived
from a	gricultural activities	during the past	twelve months?		
3. N		4. 51% - 75%			-
377.33	6-25%	5, 76% - 100%			
3.25	586-5096				
M2. Di	d any member of yo	ur household a	veil loan(s) for your	agricultural	1 Yes
activiti	es in this helding in	the last twelve	months?		2 No.
					DEZ, DINESIO
		Section 1	(300 ASA 253 A	Libert British Co.	11.2,111.20
Num	Source of Loan	Purpose of	Amount Loan	Repayment amount i	n
ber	(Code)	Loan	[TOPS]	months (TDPS)	-
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2					П
	$\overline{}$	$\square$		+++	H
3	$\overline{}$	$\vdash$	$\rightarrow$	+++	H
4		$\vdash$	$\rightarrow$	$\overline{}$	H
5				-	Н
6					LJ
	of Loan CDDE	1000	ose of Loan		
10000	a Development Bank	10.00	Southeral Inputs	23	
2000	r Sanks		nouteral Developmen	n	
	rts (in kind) r Source		rioting		
_	DESCRIPTION OF THE PROPERTY OF	4.06		and the factor and a data filter and	Secure bearing the Secure
					, forestry, handicrafts, fisheries
	и навелоска пресии	on the most (s	sease ingut the coa	es of the 3 drawbacks to	om first to third in the box)?
	1 Lack of Production	Inputs			
	2 Lack of source of fi				
17	3 Lack of management 4 Lack of Murber	t skills			
0	\$ Lack of new technic	lagies and new i	Wastructures		
	Agriculture	Forestry F	landicrafts Ficher	ies Livestock	
		Total Control		1 [	
Fit	st				
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Th	. —		$\vdash$		
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## **Appendix 3: DISTRIBUTION MAPS**

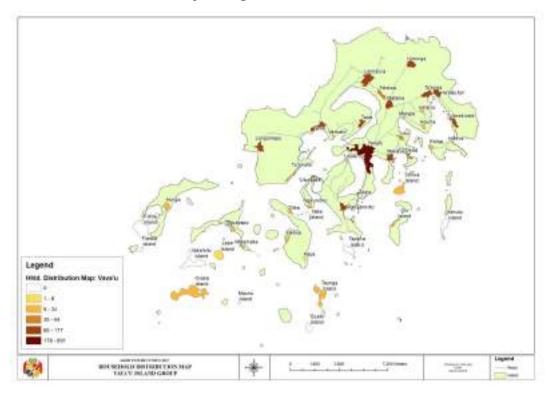
Map 1: Total Cropping Households by Districts in Tongatapu



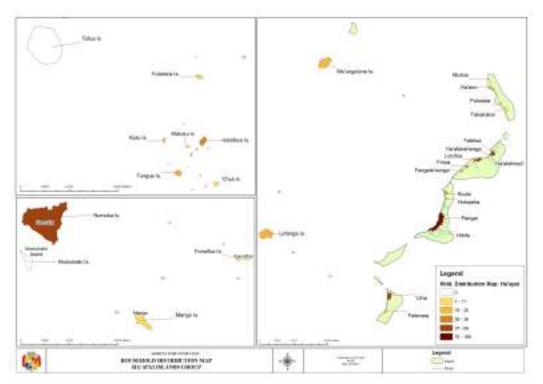
Map 2: Household distributions by Villages in Tongatapu



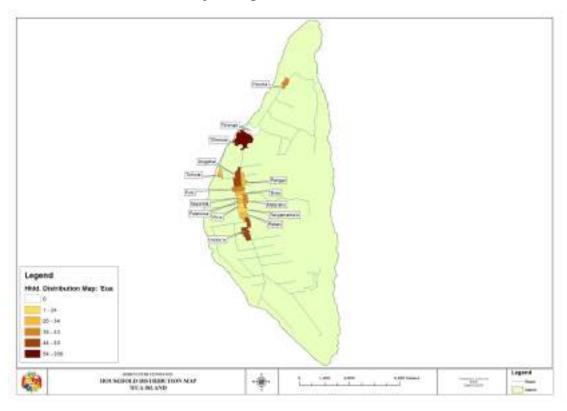
Map 3: Household distributions by Villages in Vava'u



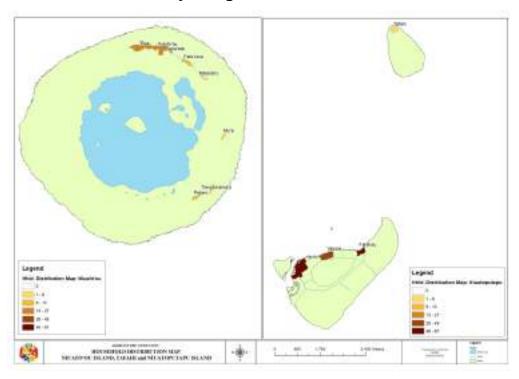
Map 4: Household distributions by Villages in Ha'apai



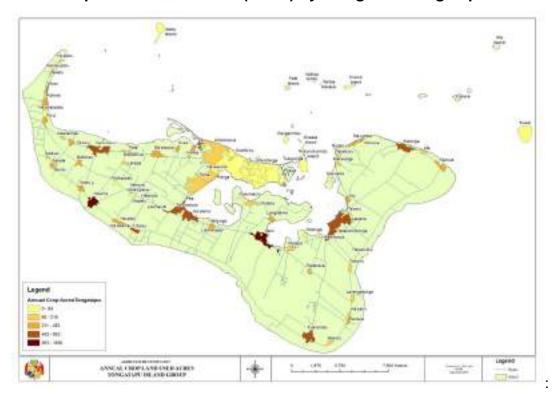
Map 5: Household distributions by Villages in 'Eua



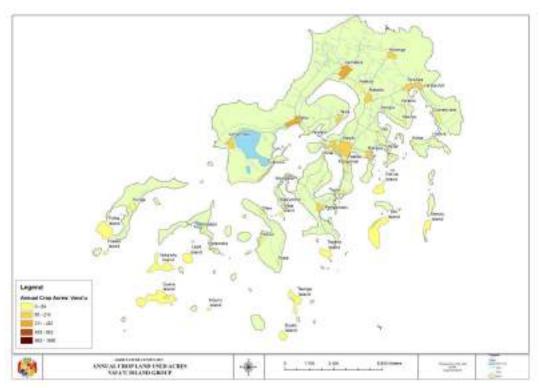
Map 6: Household distributions by Villages in the Niuas



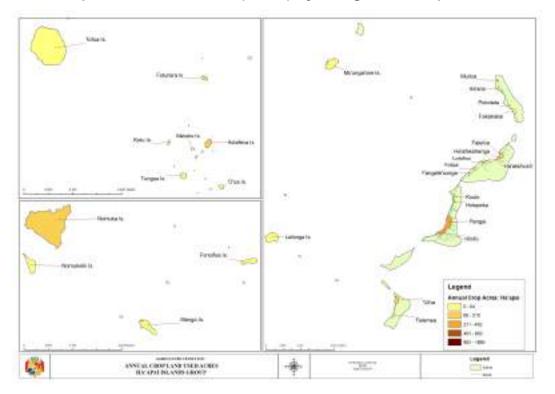
Map 7: Annual Crop Land distributions (acres) by Villages in Tongatapu



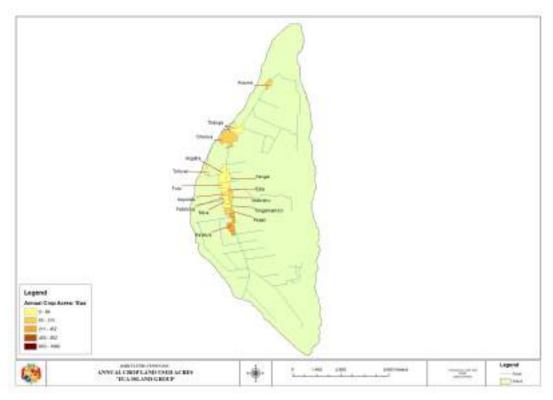
Map 8: Annual Crop Land distributions (acres) by Villages in Vava'u



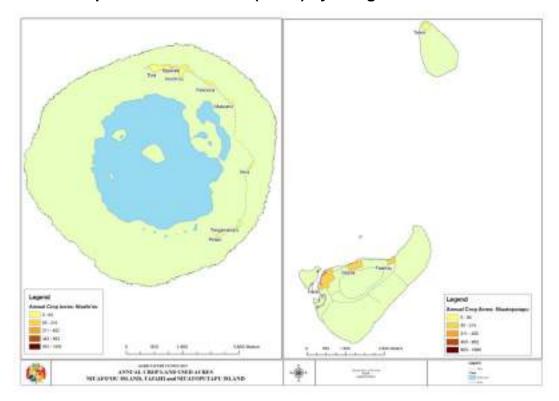
Map 9: Annual Crop Land distributions (acres) by Villages in Ha'apai



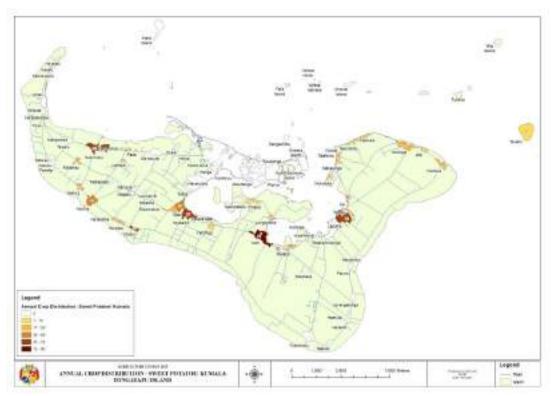
Map 10: Annual Crop Land distributions (acres) by Villages in 'Eua



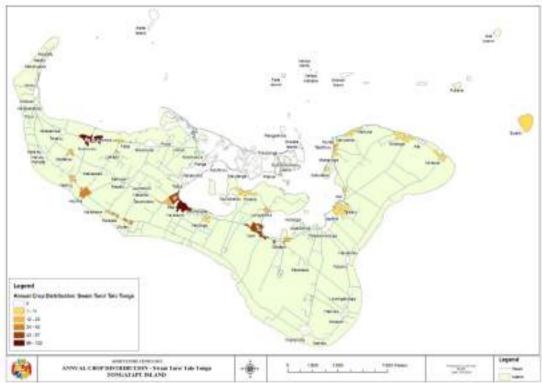
Map 11: Annual Crop Land distributions (acres) by Villages in the Niuas



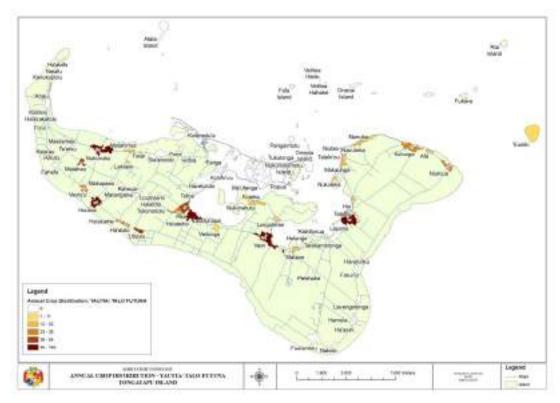
Map 12: Sweet potato distributions (acres) by Villages in Tongatapu



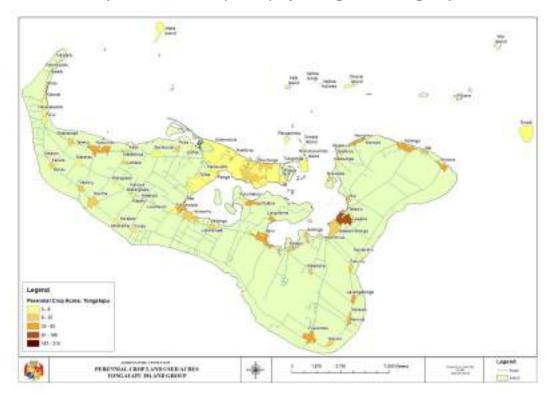
Map 13: Swamp taro distributions (acres) by Villages in Tongatapu



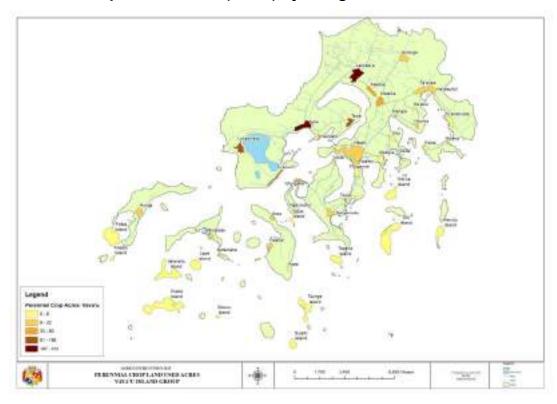
Map 14: Yautia taro distributions (acres) by Villages in Tongatapu



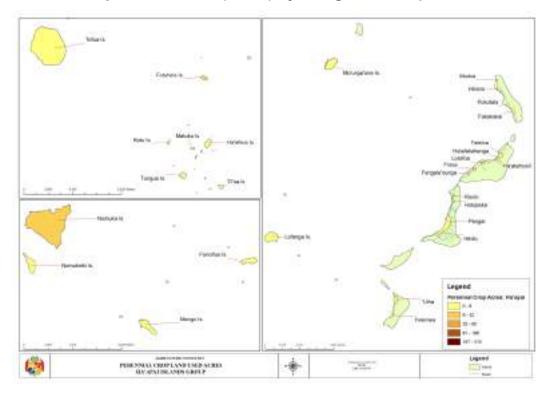
Map 15: Perennial crop distributions (acres) by Villages in Tongatapu



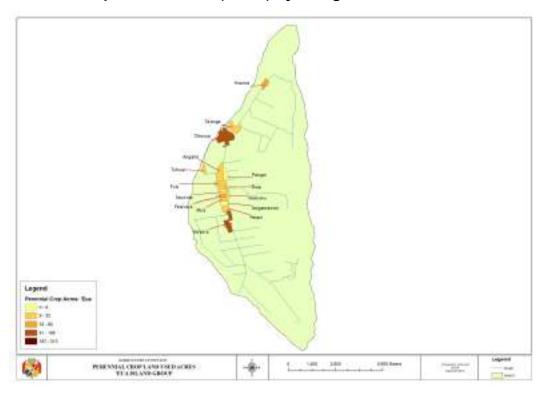
Map 16: Perennial crop distributions (acres) by Villages in Vava'u



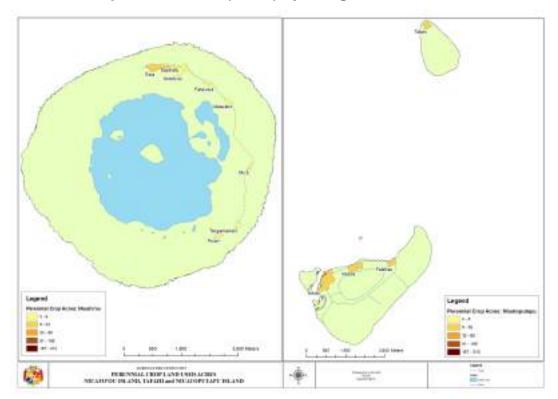
Map 17: Perennial crop distributions (acres) by Villages in Ha'apai



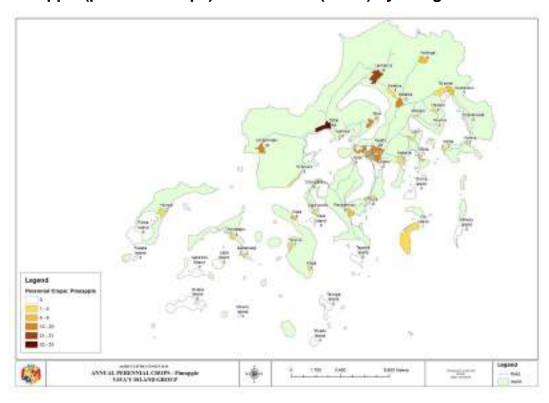
Map 18: Perennial crop distributions (acres) by Villages in 'Eua



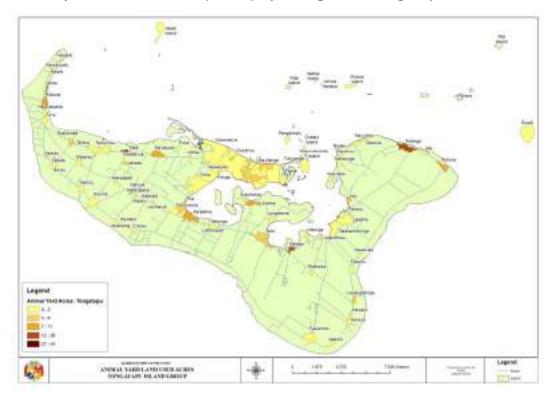




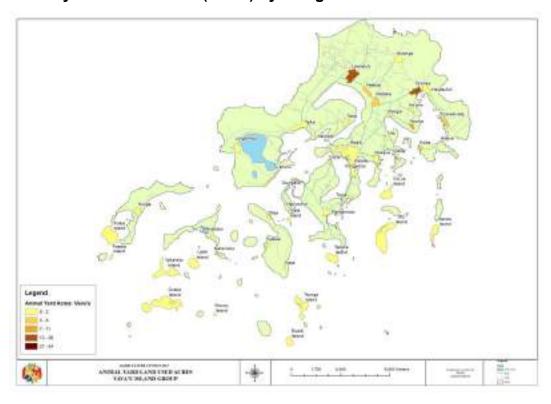
Map 20: Pineapple (perennial crops) distributions (acres) by Villages in Vava'u



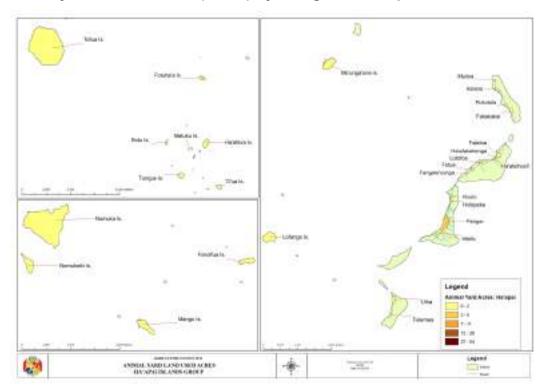
Map 21: Animal yard distributions (acres) by Villages in Tongatapu



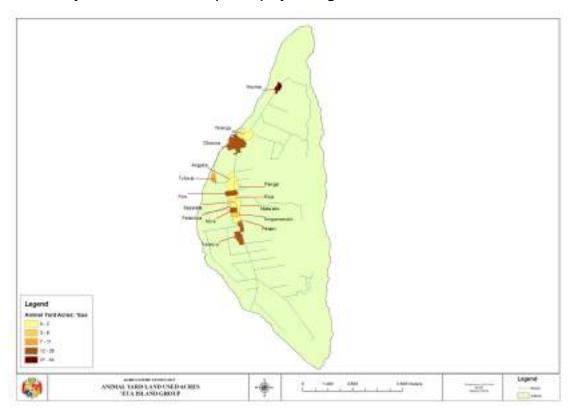
Map 22: Animal yard distributions (acres) by Villages in Vava'u



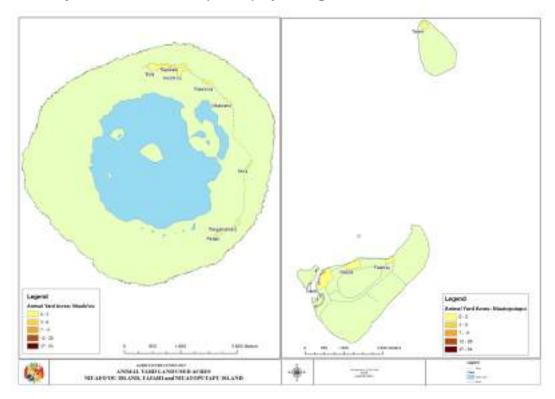
Map 23: Animal yard distributions (acres) by Villages in Ha'apai



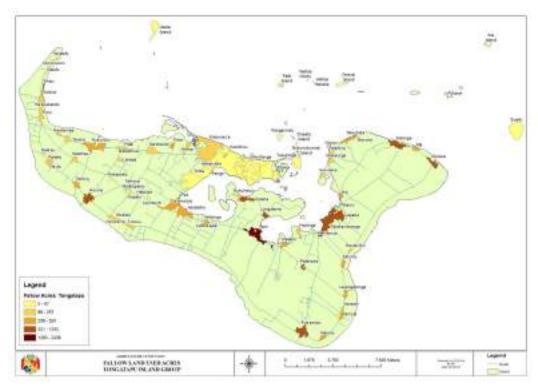
Map 24: Animal yard distributions (acres) by Villages in 'Eua



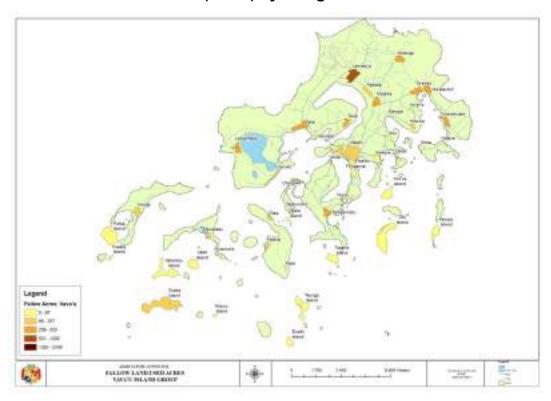




Map 26: Fallow Land distributions (acres) by Villages in Tongatapu



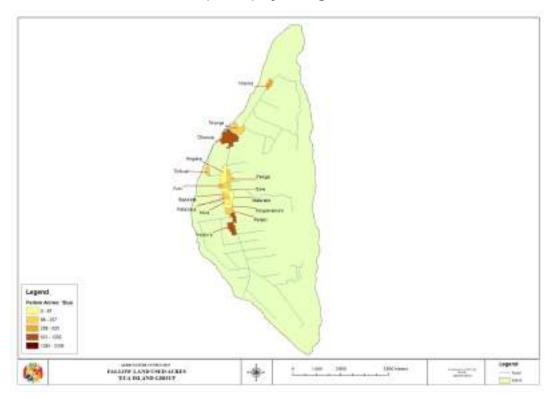
Map 27: Fallow Land distributions (acres) by Villages in Vava'u



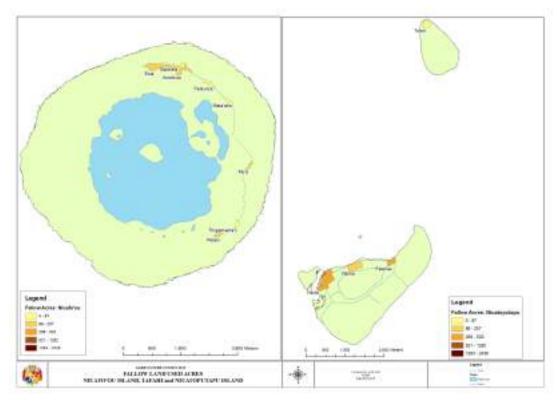
Map 28: Fallow Land distributions (acres) by Villages in Ha'apai



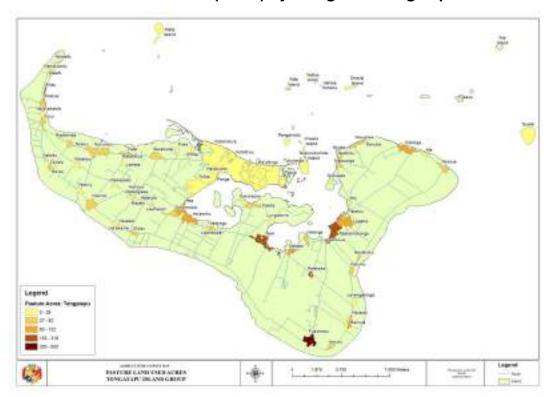
Map 29: Fallow Land distributions (acres) by Villages in 'Eua



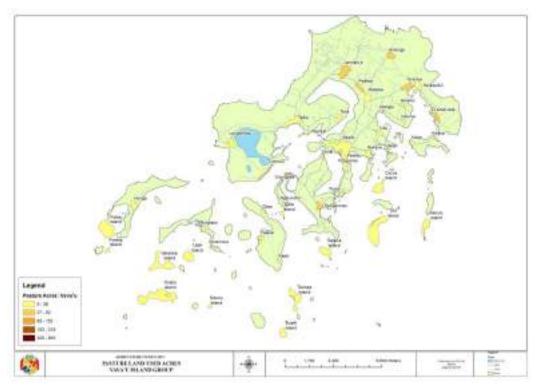
Map 30: Fallow Land distributions (acres) by Villages in the Niuas



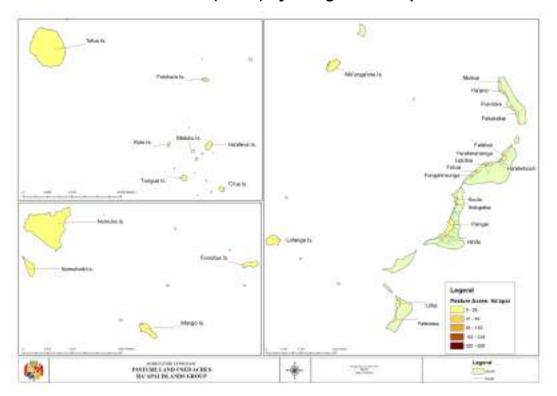
Map 31: Pasture Land distributions (acres) by Villages in Tongatapu



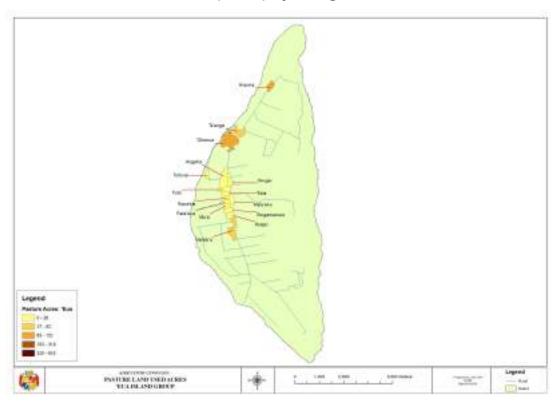
Map 32: Pasture Land distributions (acres) by Villages in Vava'u



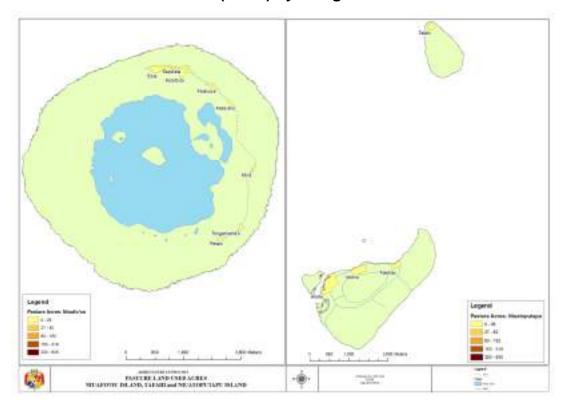
Map 33: Pasture Land distributions (acres) by Villages in Ha'apai



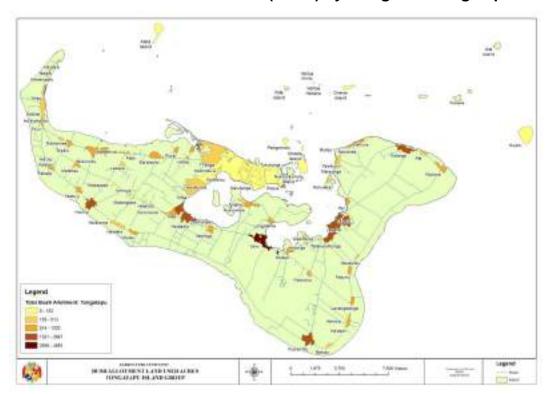
Map 34: Pasture Land distributions (acres) by Villages in 'Eua



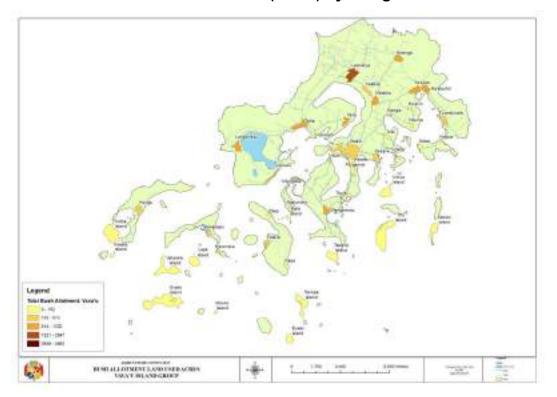
Map 35: Pasture Land distributions (acres) by Villages in the Niuas



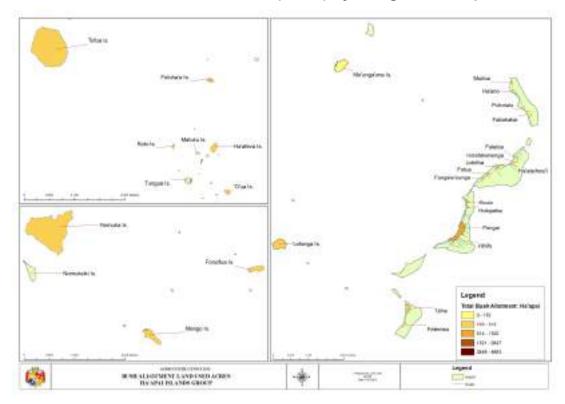
Map 36: Total Bush allotment distributions (acres) by Villages in Tongatapu



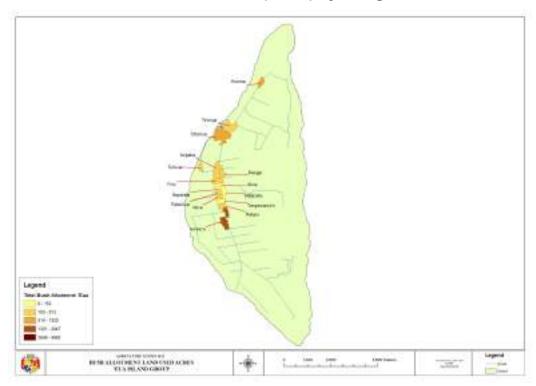
Map 37: Total Bush allotment distributions (acres) by Villages in Vava'u



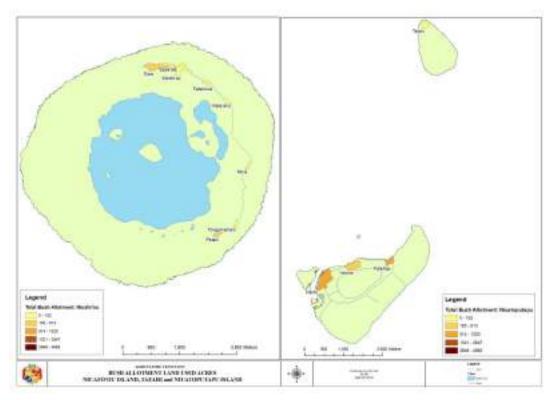
Map 38: Total Bush allotment distributions (acres) by Villages in Ha'apai



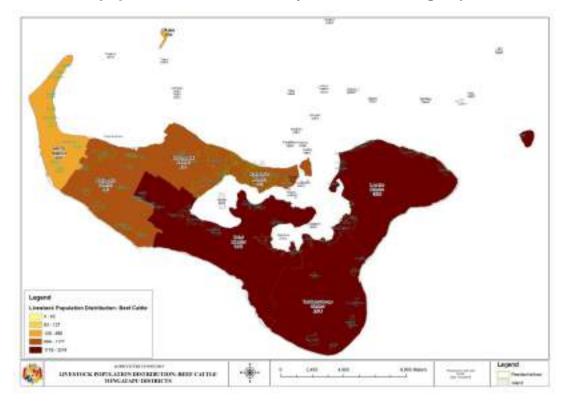
Map 39: Total Bush allotment distributions (acres) by Villages in 'Eua



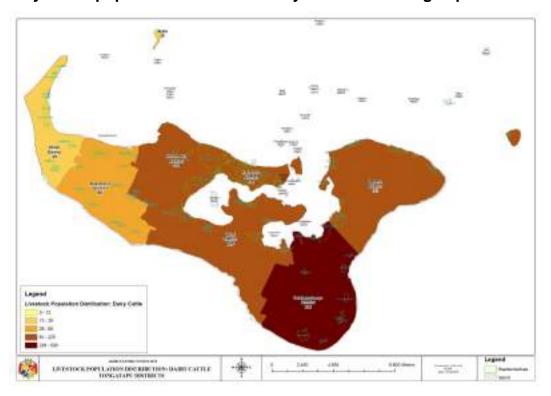
Map 40: Total Bush allotment distributions (acres) by Villages in the Niuas



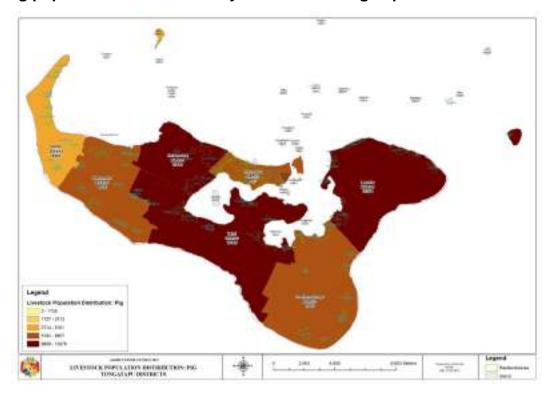
Map 41: Beef Cattle population distributions by Districts in Tongatapu



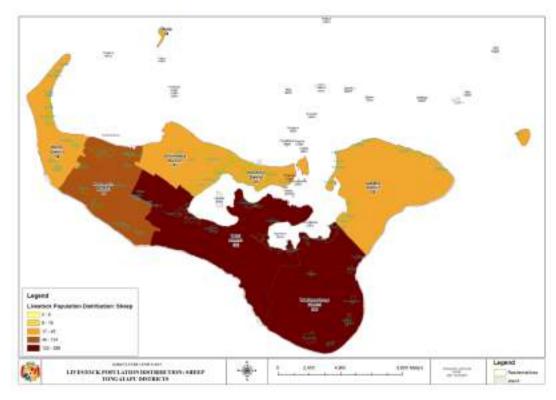
Map 42: Dairy Cattle population distributions by Districts in Tongatapu



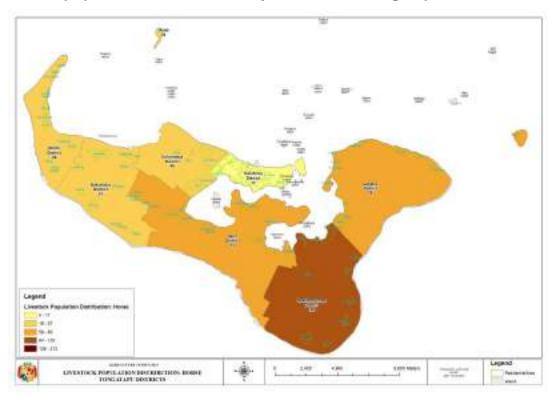
Map 43: Pig population distributions by Districts in Tongatapu



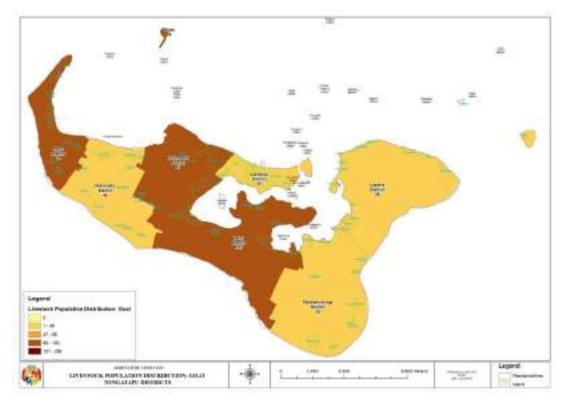
Map 44: Sheep population distributions by Districts in Tongatapu



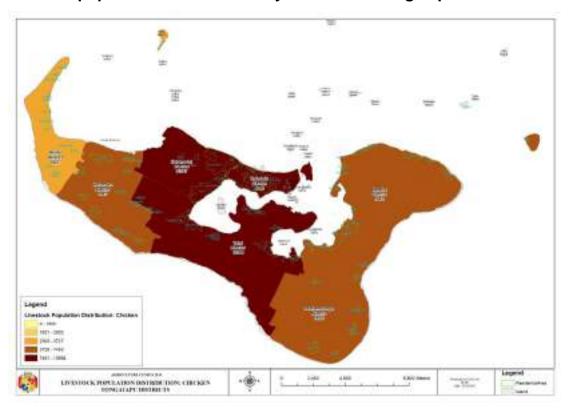
Map 45: Horses population distributions by Districts in Tongatapu



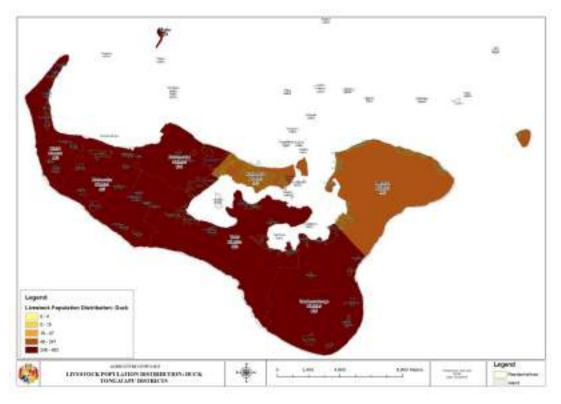
Map 46: Goat population distributions by Districts in Tongatapu



Map 47: Chicken population distributions by Districts in Tongatapu



Map 48: Duck population distributions by Districts in Tongatapu



## **End Notes**

Semi-subsistence is a type of agriculture activity in which some of the produce is consumed by the farmer and his family and some is for selling to the market.

<sup>2011</sup> Census Report: Analysis; TSD; Nuku'alofa, Tonga p.10

For this Report, there are five main agriculture sub-sectors referred to: crop; livestock; fisheries; forestry; and handicraft. This is to maintain coherence with the FAO classification of agriculture activities. It should be noted that the term Primary Sector is often used to refer to crop; livestock; fisheries and forestry activities especially in National accounts analysis.

iiiTonga Government Budget Statement Year ending June 2016, Ministry of Finance, Nuku'alofa, Tonga, p.32.

MAFFF and FAO Report on Cyclone Ian, MAFFF, Nuku'alofa, Tonga, and FAO

<sup>&</sup>lt;sup>v</sup> Domestic Market Survey Quarterly Report; September Quarter 2015; MAFFF, Nuku'alofa, Tonga.

viTonga Agriculture Sector Plan (TASP), MAFFF, Nuku'alofa, Tonga 2015, p.1. (unpublished)

vii IMF Report on Economic Conditions for Tonga, 2014.

viii 2015 TNAC Manual for Enumerators, MAFFF, 2015, Nuku'alofa, Tonga.

<sup>&</sup>lt;sup>ix</sup>2001 Tonga National Agriculture Census Report; p.11.

<sup>\*</sup>MAFFF/FAO Assessment Report of Cyclone Ian, 2014, Nuku'alofa, Tonga.

<sup>&</sup>lt;sup>xi</sup>Refer to the detail outlined in Definitions and Concepts.

xii Agriculture land area is the total bush allotment land area minus "other land". "Other land" includes all other land on bush allotment not elsewhere classified. In the case of Tonga, "other land", includes land used for farm house, residential for families living in the bush, grave yard, and other cultural purposes such as land reserved by nobles.

xiii In the 2001 TNAC the term "tax allotment" was used whereas in the 2015 TNAC the term bush allotment was being used. Bush allotment is different from tax allotment because tax allotment is land inherited by the eldest son which whereas bush allotment can either be a tax allotment or land owned through short or long term lease.

xiv Proportion of household with a bush allotment is measured using the number of households with a bush allotment as

proportion of total number of households.

<sup>2011</sup> Population Census for Tonga; Statistics Department; Nuku'alofa, Tonga, 2014

xvi Refer to the definition in (ii) above.

Average agriculture land area per household is measured using total agriculture land area divided into total agriculturally active households.

xviiiRefer to the Annex on Concepts and Definitions for a detailed explanation of how the level of agriculture activities is defined for each of the sub-sector: cropping; livestock; fisheries; forestry; and handicrafts. Subsistence is a type of agriculture activity) in which most of the produce is consumed by the farmer and his family, leaving nothing to be marketed.

Commercial is a type of agriculture activity in which most of the produce is marketed.

XIX This is different from the 2001 Census where the level of agriculture activities (subsistence; semi-subsistence and commercial) was measured based on cropping activities only.

<sup>&</sup>lt;sup>xx</sup>Components may not add up to total due to double counting. There were households who engaged in more than one type of activities.

xxiThe definition used in the 2015 TNAC for cultivated land area is in line with the classification of land use outlined in the FAO Report: "A system of integrated agricultural censuses and surveys; Volume 1 World Program for the Census of Agriculture 2010"; p.77. In the context of Tonga, fallow land kept for less than five years is considered cultivated land area because the main purposes for keeping land fallowed is either to improve agriculture productivity or because of lack of finance. Whereas, agriculture land area is cultivated land area + livestock land area + fallow land.

Refer to Appendix 1: Definition and Concepts for the details.