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## PREPARATORY ASSISTANCE FOR THE FIRST TIMOR-LESTE AGRICULTURE CENSUS (TLAC)

June 2020

SDGs:



Countries:

Timor-Leste

Project Codes:

TCP/TIM/3608

FAO Contribution

USD 407 000

Duration:

17 April 2017 – 31 December 2019

Contact Info:

FAO Representation in Timor-Leste

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## Implementing Partners

Ministry of Agriculture and Fisheries (MAF).

## Beneficiaries

The Directorate General of Statistics (DGS), the Ministry of Finance (MoF) and the MAF; Government administration at municipal and village level; the population of Timor-Leste.

## Country Programming Framework (CPF) Outputs

Priority Area 2 – Support to first Timor-Leste agriculture census and enhanced capacity for statistics, information and knowledge management systems for agriculture sector and food and nutrition security.



## BACKGROUND

Agriculture is the most important economic sector in Timor-Leste; however, roughly two-thirds of the country's population suffers from food insecurity, and poverty and malnutrition are major issues. Food production is low, which leaves many people with shortages for several months a year.

A contributing factor to the problems faced by the agriculture sector in Timor-Leste is a lack of accurate data on the structure of agriculture in the country, owing to an unreliable agricultural statistics system. Prior to this project, the only available data came from administrative reports provided by agricultural extension workers, which did not include any benchmarks or standardization.

Both the Government of Timor-Leste and the MAF aim to resolve the issue of food insecurity in the country. Achieving this goal is extremely challenging without current, reliable data to measure progress, to formulate and implement comprehensive policies and programmes, and to effectively provide services and resources to stakeholders in the agriculture sector.

A crucial first step towards rectifying this issue and working towards a reduction in food insecurity in the country was to conduct an agriculture census, which was included in both the Strategic Plan of the MAF and the FAO CPF Outputs for Timor-Leste. This project was designed to meet this need by supporting the development and implementation of the first ever Timor-Leste Agriculture Census (TLAC). The charge was led jointly by the MAF and the DGS, with technical support provided by FAO.

In addition to providing a basis for measuring national development targets and informing policy-making and programming in the agriculture sector, the data gathered through the census can also be utilized to monitor the country's progress towards achieving the SDGs.

## IMPACT

This project enabled the Government of Timor-Leste to carry out its first agriculture census. The reliable, up-to-date data that were acquired through this process are expected to contribute to poverty reduction and food security by facilitating the improvement and creation of effective agricultural and rural development policies and programmes. The data are also expected to contribute to the monitoring of SDG indicators.

## ACHIEVEMENT OF RESULTS

Through the TLAC, agricultural statistics were made available, closing what was previously a significant information gap in Timor-Leste. The data can be used to gauge progress towards both national development and SDG indicators. It should be noted that the TLAC did not specifically include questions on the farm-based SDG indicators, as most of these indicators did not have approved international methodologies at the time that the questionnaire was being developed and finalized.

The achievements of the project exceeded those that were originally targeted. The integration of an agriculture module into the 2015 Population and Housing Census (PHC) and the production of an Agriculture Monograph Report from the population census data were among these achievements. Technical support was provided through to the full enumeration of the first agriculture census, which was beyond the initial scope of the project. Additional products were also delivered, including the above-mentioned Agriculture Monograph Report. The data were also analysed, and a final report was prepared and submitted by the FAO international consultants. Both the data analysis and the report were prepared in collaboration with Government officials and the Lead Technical Officer (LTO) of the project.

The main goal of the project, which was the carrying out of the census itself, was achieved through four main Outputs. The first Output focused on developing the institutional and administrative structure required to support the implementation of the project. This included the organization of a National Steering Committee and a Technical Committee, as well as the preparation and approval of an agricultural census law. The Technical Committee met regularly to discuss issues related to the census and to finalize the various instruments required to carry it out.

Output 2 facilitated the design of both the census strategy and methodology. To start, the methodology for measuring agriculture holdings was established. Measurements were taken of a sample of parcels and plots using Global Positioning System (GPS) technology during field data collection, and this information was combined with self-reporting from farmers. This was done to ascertain the area of land that is utilized for agriculture in Timor-Leste. The scope of the census was then determined, as defined under the framework of the World Census of Agriculture 2020 (WCA2020). This ensured that the TLAC would be comparable internationally, while also suiting the needs of the Government of Timor-Leste. The questionnaires and manuals were designed and pilot tested in the field, and maps of Enumeration Areas (EAs) were obtained from the 2015 PHC. Finally, software was identified for data collection and processing. The selected programs included Computer Assisted Personal Interviewing (CAPI) software, the Census and Survey Processing System (CSPRO), Stata and the Statistical Package for the Social Sciences (SPSS).

The focus of Output 3 was the development of a Project Document in order to secure funding for the census. The preparation of this document was delayed by nearly two years, owing to some internal changes that occurred in the Government. That being said, during that time, the above-mentioned Steering and Technical Committees were formed, and the Agricultural Monograph Report was produced. In the end, a Project Document was not required, as the Government decided to self-finance the census. FAO provided technical support on the preparation of the methodology, the activity plan, the budget, the training on the CAPI software, field operations estimations, and other processes and protocols, all of which assisted the Government in determining the amount of funding required. Meetings with potential donors were also carried out under this Output; however, none of them were able to provide funding for the project.

A pre-test and a pilot test, as well as training activities, were all carried out under Output 4. A Training of Trainers (ToT) workshop was organized for a group of staff members from the MAF and the DGS, who made up the core team for the census. This team then provided training for supervisors and coordinators at municipality level. Training sessions were then carried out at submunicipality level for enumerators, field supervisors, and those taking GPS measurements. All of these training activities were monitored.

The GPS technology for taking measurements was pre-tested, and the other TLAC instruments were tested as well. Training included both lectures and field trials. The census tabulation plan was then prepared, and a form was distributed to collect feedback and field observations from the pre-testing. This feedback was utilized to improve the finalization of the census instruments and methodology. The census itself was then carried out. Owing to a lack of internet coverage in some parts of the country, the data could not be uploaded directly to the server; however, they were processed, and the final report on the census was prepared.

## IMPLEMENTATION OF WORK PLAN

Some activities were delayed, which resulted in the project having to be extended beyond the original timeframe. These delays were caused by changes in the Government resulting from two elections that took place during the life cycle of the project. These changes led to uncertainties surrounding the financing of the agriculture census in the initial years of the project. The budget for the TLAC was approved after the second election, when a new Government was formed.

Owing to the changes in the Government, the project had to accommodate for some unplanned activities and equipment that was required for the pilot census. A national consultant was needed for a longer period than originally planned. International consultants with different expertise also had to be hired for an extended period of time, because the national team lacked sufficient knowledge of some of the new technologies and methodologies used.

Several adjustments had to be made to the original plan as the project was implemented. These changes placed an extra burden on the project budget, which was exhausted prior to the completion of the data collection. For this reason, a cost extension was requested and approved by the FAO Regional Office for Asia and the Pacific (RAP), which allowed for the technical assistance provided by FAO to be maintained throughout the implementation of the project. Two no-cost extensions were also requested and approved.



The risks that were identified during project formulation were monitored closely. As mentioned above, some changes occurred in the Government. As a mitigation measure, substantial efforts were made to maintain Government interest and ownership of every decision made regarding the census. A possible lack of commitment from technical Government staff was also foreseen as an issue, but thanks to outreach and engagement efforts, it was managed successfully. The frequent rotation of MAF staff was also identified as a risk to project implementation. Owing to the establishment of the core team and the engagement of officials through the ToT session, this issue was also mitigated successfully.

The deterioration of rural roads was included as a potential problem, therefore; sufficient time was allowed to accommodate for delays in reaching target communities. A lack of willingness to participate in the project on the part of stakeholders was also foreseen as a risk to the project; however, thanks to clear communication on the advantages of the census, this did not prove to be an issue. In fact, stakeholders, including households that responded to the agriculture census listing and questionnaire, were highly engaged and motivated.

One unforeseen risk that arose was due to the budget cycle of the Government, which aligns with the calendar year. The timing of the cycle led to delays in the procurement of certain data collection equipment. That being said, all final deadlines were met, thanks to strong collaboration and leadership.

## FOLLOW-UP FOR GOVERNMENT ATTENTION

As a follow-up to this project, based on a request from the Government of Timor Leste, FAO has included an activity in a regional TCP Project for the 2020-2021 biennium to collaborate with the DGS to prepare an anonymized microdata file based on the 2019 agriculture census. This will include developing training materials on standard anonymization techniques and working with Government officials to prepare these anonymized files.

## SUSTAINABILITY

### 1. Capacity development

The implementation of the census was made possible by the passing of Government Resolution No 23/2017, which legalized the establishment of a National Steering Committee and a National Technical Committee and tasked them with providing leadership throughout the planning and implementation of the TLAC. It is expected that the Government will take full ownership of the data and follow-up processes, owing to the fact that the census was self-financed.

The Minister of Agriculture and the Minister of Finance (which is the ministry that is responsible for national statistics) co-chair the National Steering Committee of the agriculture census, and the Technical Committee is chaired by the Director-General of Statistics. The MAF provides secretarial support for all census operations.

Thanks to lobbying efforts, strong partnerships were formed among the MAF, the DGS and FAO in 2015 when the DGS agreed to include an agriculture census in their workplan. Among other statistical work that was already in the plan of the DGS between 2016 – 2020, the agriculture census and the next population censuses were made priorities. The Government announced that the agriculture census would be conducted in 2019. This raised some concerns among partners supporting the population census, due to the timing of the two censuses that were seen as being too close to each other. Various discussions and briefing sessions were facilitated under this project, and they led to an agreement to have the two censuses proceed as planned, which allowed the agriculture census data collection to be completed in October 2019.

FAO also consulted with the United Nations Population Fund (UNFPA) to ensure that the tablets purchased for the agriculture census could be reutilized for the 2020 PHC, and that the selected tablets were compatible with CAPI software, in alignment with UNFPA and DGS requirements. FAO also advocated for the sharing of data with the PHC – including the GPS coordinates of households – to reduce the amount of work and costs associated with listing households for the 2020 PHC.

The agriculture census is an exercise conducted every 10 years, so an exit strategy is not necessary. Nonetheless, as a standard, the FAO Census Team based at FAO headquarters in Rome ensured that the questionnaire, main tables, and methodology documents were archived and published internationally to ensure global information sharing and the preservation of the results, methodologies and metadata. A separate regional project will work with the agriculture census team in Timor-Leste to produce anonymized microdata to enable more research, while protecting the privacy and confidentiality of households.



The follow-up regional project to produce anonymized microdata files from the agriculture census will also help widen the availability of in-depth data by researchers and policy-makers in the Government of Timor-Leste, further enhancing the value and relevance of the data, and the sustainability of its value over time.

## 2. Gender equality

The census questionnaire was duly reviewed from a gender perspective to ensure that the data collection captured important information on the roles and status of both men and women in farming and agriculture.

The agriculture census remains an important source of sex-disaggregated data, including information regarding heads of households by sex, which provides input to inform gender-based policy planning.

## 3. Environmental sustainability

No negative environmental impacts were foreseen as a result of the implementation of the project. On the contrary, the use of tablets for data collection had a positive environmental impact, compared to traditional approaches that require the printing of thousands of questionnaires. Furthermore, by ensuring the tablets purchased had specifications that also met the needs of the PHC, the tablets can be re-used for that as well.

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

As in most countries, the conducting of the TLAC provided an opportunity to expand employment, because it was necessary to hire enumerators for data collection. Through use of tablets and software, the TLAC created jobs for about 2 000 individuals – many of them young people – to collect data and expand their knowledge on conducting surveys digitally and utilizing tablets.



## 5. Technological sustainability

The CAPI software utilized on Android tablets was the main technology recommended for use in the collection of data for the agriculture census, as smartphones are very commonly used in the country by the majority of young people (prospective enumerators at the time of planning). The use of CAPI software was considered to be cost effective and time efficient, compared to paper-based methods of data collection. It was also appropriate and flexible for the data collection team to go back to each questionnaire to verify information whenever needed. The same tablets can be reutilized for other statistical work, particularly the PHC.

Under the project, capacities were built at both the MAF and DGS offices for planning and carrying out agriculture censuses. Prior to the project, these capacities did not exist. There were around seven senior government officers (five in the DGS and two in the MAF) that were engaged throughout the whole process of preparing and implementing the agriculture census. Around 25 master trainers were trained on the CAPI application. These master trainers were then expected to echo the training to 60 supervisors and nearly 3 000 enumerators. This pool of trainers will remain in the country, and it will be mobilized to support the next population census, which will also be carried out using the CAPI application. Owing to the fact that the agriculture census is only done once every ten years and that it was the first experience for most of the supervisors and enumerators involved, they may need further technical assistance in the future.

## 6. Economic sustainability

Because Timor-Leste was a regional leader in implementing an agriculture census under the WCA2020 methodology, and in the use of CAPI software, the country has received additional funding from a regional project to assist in anonymizing the microdata. This anonymization, while protecting privacy and confidentiality, will provide data for evidence-based policy-making in the agriculture sector and subsectors. Officials in Timor-Leste have also been invited to share their expertise at various group meetings, funded by other projects, which will also further strengthen their capacities.

Having the Government fund the full operation of the data collection itself demonstrated that the products and services are affordable.

## DOCUMENTS AND OUTREACH PRODUCTS

### Documents

- Advocacy and Publicity Booklet TLAC. DGS & FAO. 2018. 10 pp.
- Census Sticker. DGS & FAO. 2018-19. 1 pp.
- Check Points on Coverage, Quantity & Value. DGS & FAO. 2019. 11 pp.
- Concepts and Terms Used for TLAC. DGS & FAO. 2018. 13 pp.
- CSPro manual for CAPI application for TLAC. DGS & FAO. 2018-19. 15 pp.
- Detailed Training PPTs for ENMs, GPSTs & Field Supervisors. DGS & FAO. 2018. 357 slides.
- Detailed Work Plan Main Census. DGS & FAO. 2018-19. 9 pp.
- Detailed Work Plan Pilot Census. DGS & FAO. 2018. 3 pp.
- Field Instructions Manual TLAC. DGS & FAO. 2018-19. 60 pp.
- Field Scrutiny Checks. DGS & FAO. 2018-19. 6 pp.
- Form 1: Listing of Households-Institutions in. DGS & FAO. 2018. 5 pp.
- Form 2: Particulars of Agriculture Household, Holding and Holding Activities. DGS & FAO. 2018. 27 pp.
- Form 3: Particulars of Suco and Facilities Available. DGS & FAO. 2018. 8 pp.
- Forms A, B, C & E: Daily Accomplishment Report of EN, Completion Certificate for TS & MCS, Call-back Slip. DGS & FAO. 2018-19. 5 pp.
- Frame of EAs for TLAC. DGS & FAO. 2018. 49 pp.
- General Budget for TLAC. DGS. 2018. 154 pp.
- Guidelines for Quality Control during the Field Supervision. DGS & FAO. 2018. 8 pp.
- Layout of Brochure giving Provisional Key Results of TLAC. DGS & FAO. 2019. 4 pp.
- List of Crops and Code. DGS & FAO. 2018. 2 pp.
- List of EAs for Pilot Census. DGS & FAO. 2018. 1 p.
- List of Livestock and Code. DGS & FAO. 2018. 6 pp.
- Man-Power for Main Census. DGS & FAO. 2018-19. 1 p.
- Master Tabulation Plan: List of Tables Formats. DGS & FAO. 2018-19. 111 pp.
- Materials for Fund Mobilization Discussion for TLAC. DGS & FAO. 2018-19. 5 pp.
- Materials for Meeting of Census Technical Committee. DGS & FAO. 2018. 1 p.
- Methodological Note for Main Census. DGS & FAO. 2018-19. 10 pp.
- Methodological Note for Pilot Census. DGS & FAO. 2018. 10 pp.
- Methodology of Area Measurement in TLAC. DGS & FAO. 2018. 11 pp.
- Procurement Plan for Main Census. DGS & FAO. 2018-19. 5 pp.
- Procurement Plan for Pilot Census. DGS & FAO. 2018. 4 pp.
- Protocol for Field Data Collection using CAPI and Area Measurement in GPS in Sample Households. DGS & FAO. 2018-19. 4 pp.
- Protocol Note for GPS Measurement for TLAC. DGS & FAO. 2018. 5 pp.
- Schedule for Pilot Census Monitoring: December 2018. DGS & FAO. 2018. 1 p.
- Specification for Android Smart phones for TLAC. DGS & FAO. 2018. 2 pp.
- Survey Weight Calculation Procedure with Example. DGS & FAO. 2019. 1 p.
- Timor-Leste First Agriculture Census Report. B. Giri et al. 2019. 285 pp.
- Timor-Leste Population and Housing Census 2015, Thematic Report Volume 12 Analytical Report on Agriculture and Fisheries. D. Brereton et al. 2018. 154 pp.
- Work Plan for TLAC. DGS & FAO. 2018. 3 pp.



### Outreach materials

- Agriculture trends in Timor-Leste from 2010 – 2015 (Infographic). D. Brereton, et al. 2018.
- Mudansas iha agrikultura Timor-Leste entre tinan 2010 – 2015* (Infographic in Tetun).
- Timor-Leste 1st Agriculture Census Highlights (in English and Tetun). B. Giri et al. 2020.



## ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

<b>Expected Impact</b>	<b>To contribute to poverty reduction, food security through improve and effective agriculture and rural development policies and programmes, defined and implemented on the basis of the reliable and up-to-date structural data on agriculture, as well as contribute to monitoring of the Sustainable Development Goals (SDGs)</b>		
<b>Outcome</b>	The Government of Timor-Leste enabled to carry out the first Timor-Leste Agriculture Census (TLAC)		
	<b>Indicator</b>	<ul style="list-style-type: none"> <li>- Census Committees (National Steering and Technical Committees) on TLAC organized and functional.</li> <li>- Approved agriculture census law.</li> <li>- Appropriate methodology for area measurement established.</li> <li>- TLAC design and methodology to be used decided on and approved.</li> <li>- Funding envelope secured.</li> <li>- TLAC instrument, manuals etc., developed, pre-tested/piloted and finalized.</li> </ul>	
	<b>Baseline</b>	<ul style="list-style-type: none"> <li>- No committees for TLAC.</li> <li>- No law on agriculture census.</li> <li>- Area measurement of fields is carried out using the GPS devices, but the same is not directly scalable on large-scale or on very small plots.</li> <li>- No TLAC design and methodology.</li> <li>- Limited finding to operationalize the TLAC (MAF 2017 50 000 USD and FAO 339 000 USD).</li> <li>- No TLAC instruments, manuals, etc.</li> </ul>	
	<b>End Target</b>	<ul style="list-style-type: none"> <li>- Functional committees for TLAC established.</li> <li>- Law on agriculture census passed.</li> <li>- Choice of appropriate area measurement methods for different situations.</li> <li>- Approved TLAC design and methodology based upon funding envelope.</li> <li>- Estimated 5 million USD in funding committed and allocated to conduct the TLAC.</li> <li>- TLAC instrument, manuals, etc. developed, pre-tested/piloted and finalized.</li> </ul>	
	<b>Comments and follow-up action to be taken</b>	The Government of Timor-Leste funded and completed its first round of agriculture data collection in October 2019 with technical assistance from FAO. The data was processed, and the final report was prepared.	
<b>Output 1</b>	Institutional and administrative structure and legal framework of the TLAC approved and operational		
	<b>Indicators</b>	<b>Target</b>	<b>Achieved</b>
	Approval of Agriculture Census Law and establishment of the Committees.	<ul style="list-style-type: none"> <li>- Steering and Technical Committees organized and functional.</li> <li>- Law approved.</li> </ul>	Yes
<b>Baseline</b>	No agricultural census committees or law		
<b>Comments</b>	Technical assistance was provided to the legal advisors of the MAF through the project. This assistance supported the drafting of a Government resolution and a decree-law on the first agriculture census and the formalization of a National Agriculture Census Steering Committee and a Technical Committee, both of which provided leadership from the preparatory stages of the census through to the implementation stage.		
<b>Activity 1.1</b>	Set-up and institutionalization of the National Steering Committee on TLAC		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Activity 1.2</b>	Set-up and institutionalization of the Technical Committee on TLAC		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Activity 1.3</b>	Conduct regular committee meetings		
	<b>Achieved</b>	Yes	
	<b>Comments</b>	The Technical Committee held several meetings to deliberate on various issues, to finalize census instruments and to carry out other activities related to the census.	
<b>Activity 1.4</b>	Preparation and approval of the Ag Census Law		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		

<b>Output 2</b>	Census strategy and methodology designed		
	Indicators	Target	Achieved
	Appropriate methodology approved.	Approved TLAC design and methodology based upon funding envelope.	Yes
<b>Baseline</b>	No TLAC design or methodology		
<b>Comments</b>			
<b>Activity 2.1</b>	Establish suitable methodology for measuring agricultural land of agricultural holdings		
	Achieved	Yes	
	Comments	Besides the collection of data on land area as reported by farmers, a sample (20 percent) of household agricultural holdings (parcels and plots) were selected for GPS measurement. The measurements were taken using hand-held devices during field data collection to measure the actual land area utilized for agriculture.	
<b>Activity 2.2</b>	Determine scope of the agricultural census		
	Achieved	Yes	
	Comments	The scope of the TLAC was well defined under the framework of the WCA2020 guidelines, in order to maintain international comparability while also addressing the specific data needs of the Government of Timor-Leste.	
<b>Activity 2.3</b>	Design and pilot testing of questionnaires and manuals		
	Achieved	Yes	
	Comments	The draft questionnaires and manuals were pre-tested in the field to ascertain the feasibility of collecting data items and to inform the fine tuning of census instruments. Subsequently, a pilot census was conducted in about 32 EAs to test the methodology, field collection process and preparedness of the census.	
<b>Activity 2.4</b>	Cartographic works (prepare enumeration units, etc.)		
	Achieved	Yes	
	Comments	The list of EA maps obtained from the 2015 PHC was further updated before the census was carried out, and the updated list was used as the frame for the TLAC. All household and institutional holdings were identified and listed at EA level to facilitate detailed data collection on agricultural activities in all holdings.	
<b>Activity 2.5</b>	Data processing and software identification		
	Achieved	Yes	
	Comments	Data collection was undertaken using tablets and CAPI software. Most of the consistency checks were built into the application software using CSPro, a free CAPI software program developed and supported by the Census Bureau of the United States of America. Coverage and other consistency checks were developed subsequently using CSPro, Stata and SPSS, and they were applied on the full data set during validation and tabulation, according to the pre-approved tabulation plan.	



<b>Output 3</b>	Project Document(s) for funding the census prepared and support to the Government for resource mobilization provided.		
	Indicators	Target	Achieved
	Funding for the full census.	Funding security.	Yes
<b>Baseline</b>	Limited funding to operationalize the TLAC (MAF 2017 50 000 USD and FAO TCP 339 000 USD)		
<b>Comments</b>	The Government approved USD 5 million to fund the data collection of Timor-Leste's first agriculture census, which took place from August to October 2019. FAO provided technical assistance throughout the process. The Government expressed a strong desire for FAO technical assistance to be maintained to support data cleaning, tabulation, analysis and report writing. In order to meet this need, FAO approved an additional budget of USD 68 000 for the final year of the project, bringing the total budget to USD 407 000.		
<b>Activity 3.1</b>	Preparation of the Project Document		
	Achieved	Yes (activity modified).	
	Comments	The implementation of this activity was delayed for nearly two years due to internal changes in the Government. The decision to proceed with the census was only confirmed towards the end of 2018, when the Government approved the budget proposal. Beginning in 2015, foundational work and lobbying activities were carried out, which facilitated the approval of a Government decree-law formalizing the TLAC Steering and Technical Committees, and the production of the Agriculture Monograph Report based on the 2015 PHC. In the end, the preparation of a Project Document was not required by the Government, as they self-financed the census. FAO provided technical assistance and support to prepare the methodologies, activity plans, a detailed budget, CAPI training, field operations estimations (i.e. the number of enumerators and tablets needed) and other processes and protocols that helped the Government to decide on the amount of funds required.	
<b>Activity 3.2</b>	Conduct Donor's meetings for a commitment of full funding for the TLAC		
	Achieved	Yes	
	Comments	Individual meetings and workshops were carried out to discuss possible contributions from donors. Despite their expression of strong support to conduct the first census, in the end, no donors were able to co-fund the census due to a lack of availability of resources. The Australian Government offered to support the data analysis and the writing of the final report; however, the Government of Timor-Leste opted to have FAO provide this support instead.	

<b>Output 4</b>	Pretests & Pilots, including Training carried out		
	Indicators	Target	Achieved
	TLAC instrument, manuals, etc.	TLAC instrument, manuals, etc. developed, pre-tested/piloted and finalized.	Yes
<b>Baseline</b>	No TLAC instruments, manuals, etc.		
<b>Comments</b>			
<b>Activity 4.1</b>	Training of MAF, DGS staff, supervisors and enumerators on census pilots		
	Achieved	Yes	
	Comments	All instruments and manuals, as well as training materials (i.e. PowerPoint presentations), were prepared and shared with the core team of the agriculture census. The core team was made up of officials from the MAF and DGS. Training activities were organized at different levels. A ToT was carried out for the core group of trainers at national level. Supervisors and coordinators at the municipality level were also trained, and finally, training was provided for enumerators, GPS measurement takers and field supervisors that had been selected to participate in the carrying out of the census at the submunicipality level. Monitoring was done at all levels.	
<b>Activity 4.2</b>	Pre-testing and finalize of area measurement methods		
	Achieved	Yes	
	Comments	A pre-test of the measurement of the areas of parcels and plots (i.e. holdings) was carried out using GPS devices in municipalities. Information on land area was reported by farmers, and these data were coupled with a sample of 20 percent of agricultural holdings at household level that were selected for GPS measurement. Accordingly, a suitable methodology was developed for the selection of household holdings and the collection of data, so that the actual area of land utilized for agriculture could be measured.	
<b>Activity 4.3</b>	Pilot testing of TLAC Instruments		
	Achieved	Yes	
	Comments	All census instruments were prepared, and a methodology was developed for the pilot census to be carried out, in order to test the efficacy of the actual census. For the purpose of the pilot test, training materials were prepared and training sessions and discussions were organized. These sessions consisted of lectures and field trials.	
<b>Activity 4.4</b>	Preparation of Pilot Census Tabulation Plan		
	Achieved	Yes	
	Comments	A master tabulation plan was prepared to cover all data items contained in all the questionnaires. The tabulation of the pilot census data was included. A feedback form was also designed and distributed to all field enumerators, GPS measurement takers and field supervisors to record field observations, if any. Tables were designed to summarize all of the feedback that was received, so that the reported strengths and weaknesses of the process could assist in the improvement and finalization of the census instruments and methodology.	
<b>Activity 4.5</b>	Full pilot of TLAC		
	Achieved	Yes	
	Comments		
<b>Activity 4.6</b>	Analysis of the pilot census results		
	Achieved	Partially	
	Comments	The data collected through the pilot census could not be sent to the server from the field, as the internet was not available in all places. Coupled with other problems, only a few indicators were derived, based on partial data that demonstrated trends and data quality.	
<b>Activity 4.7</b>	Revision & finalization of TLAC methodology, instruments and manuals		
	Achieved	Yes	
	Comments	Based on field feedback, all census instruments, including the CAPI software, were revised for the main census.	

**Partnerships and Outreach**

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