

## Monitoring Production and Adoption of OFSP: Lessons from TIA



by MINAG/Direcção de Economia



## What is TIA?

Trabalho de Inquérito **A**grícola

The National Agricultural Survey  
Directorate of Economics  
Ministry of Agriculture

## Sampling frame

**2002-2007** based on the Agricultural Census of 1999/2000 (CAP), which in turn is based on *Population Census of 1997*

**2008** based on *Population Census of 2007*

## Basic Objectives

- Collect data on agricultural production, livestock, area cultivated, use of inputs
- Collect data on indicators used by ProAgri and the PARPA (PRSP)

- Survey includes **small, medium** and **large** landholders.
- Classification is based on cultivated land, number of livestock and (in 2005, 2006) number of fruit trees.

- TIA is representative at the provincial-level.
- Crops that are very localized like jatropa and wheat are not covered by TIA.

## Number of districts covered

1996	<b>66</b>
2002, 2003	<b>80</b>
2005, 2006, 2007	<b>94</b>
2008	<b>128</b>

*Excludes Maputo City, Matola, Beira and Nampula.*

## TIA 2008

Number of enumeration areas ... **687**

Number of small- and medium-holders  
interviewed ... **5972**

## Sweet potato production

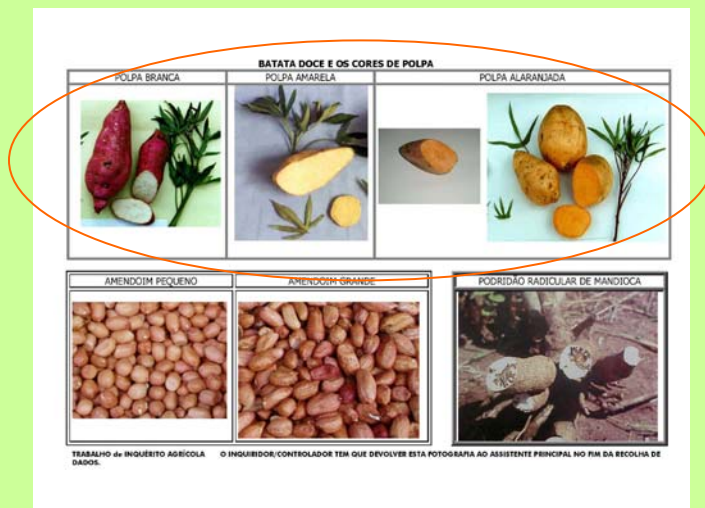
- Up to 2003, TIA collected data on sweet potato production in general
- Starting in 2005, a separate category was created for OFSP!

## Challenges of collecting OFSP production data

1. Identification of OFSP
2. Estimating total production of a crop harvested, usually, in small quantities
3. Estimating area (a challenge for all crops!)

# 1. Identifying OFSP

*Enumerators have to show pictures*



## 2. Estimating production of crop harvested in small quantities

- *Assessment and improvement of the survey instrument*
- *Intensive preparation of enumerators thru training and testing*

First, respondents are asked :

1. Months of major harvests ...
2. Months of minor harvests ...
3. Months without any harvest...

... in the last 12 months.

In 2002, respondents were asked quantity harvested per week/month during the months of major harvest and minor harvest.

BUT in the majority of cases, respondents and enumerators had to do calculations, resulting sometimes in error and contributing to both respondent and enumerator fatigue.

- From 2005 onwards, the question has been changed to allow respondent to state the actual frequency of harvest, e.g.,

*2 x a day*

*3 x month*

*production for the whole season*

Training consists of lectures, practice interviews, tests and exercises until the concepts are well understood.

*The enumerator is given exercises until he/she answers the exercises correctly.*



**INQUIRIDOR(A):**

“ nos últimos 12 meses ...  
 quais são os meses de  
 colheita de **GRANDES**  
 quantidades ...”

“ ... quais são os meses de  
 colheita de **MENORES**  
 quantidades ...”

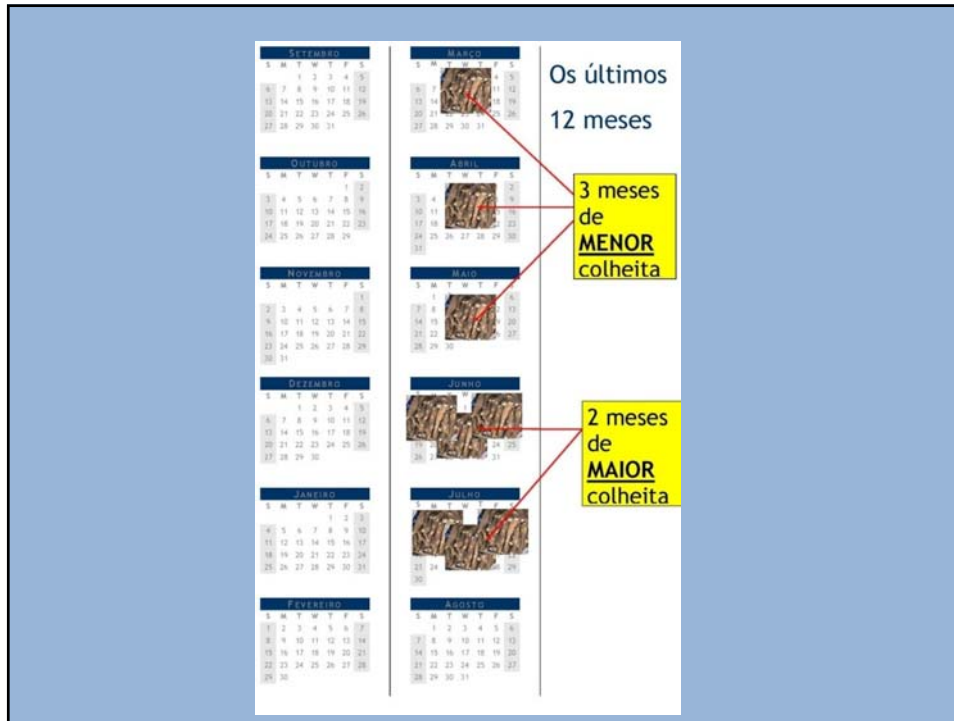


Os últimos  
 12 meses

**INQUIRIDA:**

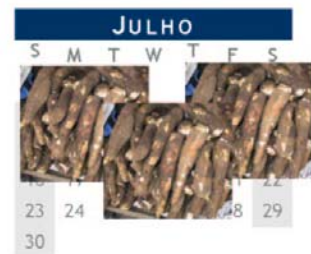
“... grandes  
 quantidades em  
**Junho e Julho**”

“... menores  
 quantidades em  
**Março, Abril e  
 Maio...**”



## Preenchimento de meses de maior / menor colheita

106											
Gostaríamos de saber quais dos ÚLTIMOS 12 MESES que o seu agregado familiar fez colheita de grandes quantidades de [..cultura..] e quais são os meses que fez colheita de menores quantidades para o consumo ou venda?											
2- Mês de MAIOR colheita 1- Mês de MENOR colheita 0- Mês SEM colheita											
Set	Out	Nov	Dez	Jan	Fev	Mar	Abr	Mai	Jun	Jul	Ago
07	07	07	07	08	08	08	08	08	08	08	08
0	0	0	0	0	0	1	1	1	2	2	0



## INQUIRIDOR(A):

“Durante os meses de **maior** colheita, *Junho e Julho*, quantos vezes por dia, semana ou mês fez colheita?”

Aqui estamos a deixar o agregado familiar indicar a frequência da colheita.

**INQUIRIDA:** “A minha irma e eu fomos **3 vezes por semana**”



## Como preencher "3 vezes por semana"

3 vezes ...

por semana

107	
Durante os meses de maior colheita [LEIA MESES] quantas vezes por dia, semana ou mês fez colheita?	
Vezes	1 Dia 2 Sem 3 Mês
3	2

**INQUIRIDOR(A):** "... maior colheita ...de cada uma das vezes que colheu, quanto é que tirou"

JULHO						
S	M	T	W	T	F	S
				2		4
5		7		9		11
12		14		16		18
19		21		23		25
26		28		30		

**INQUIRIDO:**

**“Cada vez que colhei, tirei um cesto de mandioca fresca”**



**INQUIRIDOR(A):**

**“ Quantos quilogramas, mais ou menos, de mandioca fresca em cada cesto?”**
































**INQUIRIDA:**

**“ Hmmm. 5 quilogramas”**

## Como preencher “5 quilos de mandioca fresca”

108	10
De cada uma das vezes que colheu quanto é que tirou?	
Quantidade	Unidade
	Estado
	1 Fresca
	8 Seca
	9 Tapioca
<b>5</b>	<b>1 1</b>

“...nos meses de maior colheita, fui tirar mandioca 3 vezes por dia...”

JULHO						
S	M	T	W	T	F	S
			 1 2 3	 1 2 3	 1 2 3	 1 2 3
 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3
 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3
 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3
 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	 1 2 3	

no mês de maior colheita...



fui 3 vezes por dia



1 2 3

cada vez tirei 5 kg



### 3a. Measuring Plot Area

1. Respondent-declared area data are collected for all plots.
2. In 25% of households, the area is also measured with GPS or Compass and Tape. The relationship between measured and declared area is determined using regression analysis.
3. The area for the remaining 75% of the households are adjusted using coefficients derived from the above analysis.

### 3b. Measuring Crop Area of Intercropped Plots

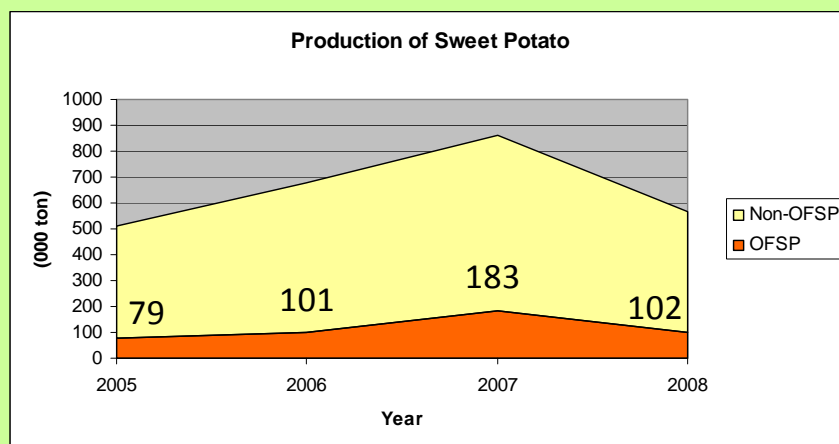
To estimate area of intercropped plots, we use the “jogo de feijões” or beans to show relative space occupied by each crop.



## % growing OFSP 2005-2008

TIA	%
2005	2.4
2006	4.8
2007	4.3
2008	3.7

## Production of Sweet Potato (000 ton)



## Area planted to OFSP 2005-2008 (ha)

TIA	First Season	Second Season
2005	9162	
2006	15990	
2007	17368	
2008	16230	

- In TIA, plots are measured based on area planted during the first season. Sweet potato is planted extensively during the second season. It is an estimation/survey issue that DE will address.



MUITO OBRIGADA