Coconut Resource Inventory

Abaiang Island

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Overview

- Introduction
- Benefits
- Methodology
- Results

Introduction

- Fully funded by USAIDS Food Security Programme
- Technical support from SPC – SOPAC
- Provide statistically sound information – coconut inventory
- Island covered by this project – Christmas island, Abaiang Island and North & South Tarawa

Benefits

- Understanding of current status – coconut resource
- Calibrate general coconut production figures
- Findings have to be discussed and documented to plan further activities

Inventory methods:

- Sample plot distribution
  - Selection of plot randomly
  - Plot size - approximately 40 m x 40 m
    - At least 15 plots but more is recommended
- Field measurements
  - GPS mapping (high accuracy GPS)
    - Records the corner coordinates from every plot (future reference)
  - Palm height measurements (clinometers)
    - Required to estimate the age of each palm
  - Diameter measurement (diameter tape)
    - Timber volume
  - Fertility judgment (binocular)

Cont'd

- Databank handling
  - Input of field measurements
  - Calculation of palm parameters (age, height, fertility, & diseases)
  - Calculation of parameters (hectare basis)

Results

Abaiang Island Coconut summary

Class	Area (Ha)	Palms per Hactare	# of Palms
Dense Coconut	409	237	96933
Medium dense Coconut	215	131	28165
Scattered Coconut	430	67	28810
	1054	435	153908

Results

ABAIANG ISLAND

Plot Information per Hectare

Plot #	Palms/ha	Height	DBH	Basa Area(m2)	Age	Insect	%	Hybrids	%	Volume(m3)/ha	Production
01	206	9.7	30	14.83	27	0	0	0	0	104.12	7600
02	69	6.6	28.8	4.56	16	0	0	0	0	22.19	2350
03	112	9.1	33.7	10.19	24	0	0	0	0	65.94	7225
04	238	14.3	33	20.54	30	0	0	0	0	206.84	12775
05	112	10.7	32.5	9.62	27	0	0	0	0	78.11	12900
06	56	15.1	34.7	5.49	33	0	0	0	0	60.71	3325
07	181	11.7	31.2	14.01	32	0	0	0	0	119.32	7750
08	200	12	29.8	14.21	24	0	0	0	0	122.04	10350
09	81	8.9	31.3	6.43	25	0	0	0	0	42.41	5575
10	62	9.4	38.2	7.31	16	0	0	0	0	50.74	3675
11	31	12.2	30.4	2.29	31	0	0	0	0	19.5	1275
12	125	10.2	33.8	11.34	23	0	0	0	0	81.96	6675
13	100	9.8	31.6	7.98	20	0	0	0	0	57.04	9425
14	56	8.4	37.4	6.23	18	0	0	0	0	36.74	3325
15	31	15.9	32.4	2.62	28	0	0	0	0	31.39	1475

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- USAIDS Food Security Programme
- Technical supports from SPC - SOPAC

THANKS