

250 coconut palms are lost per day in Sri Lanka

Dr. T S G Peiris (Principal Statistician) and Mr. J D J S Kularatne,

Coconut Research Institute, Lunuwila 61150

- 250 coconut palms are lost per day in Sri Lanka
- 1075 ha of coconut lands are lost per year in SL.
- The rate of decline of coconut lands is the highest in NWP (1060 ha/year).
- An average 600 ha/year is added to the national coconut extent from the NCP.
- The estimated coconut extent in Sri Lanka by 2005 is 391623 ha.

According to the Agricultural census carried out by the Department of Census and Statistics in Sri Lanka, the extent under coconut in 2002 (394,836 ha) is about 20% of the total extent under agriculture in the island. Of this total extent of coconut, 82% is under small holding sector (< 8 ha) and 18% is under estate sector (\geq 8ha).

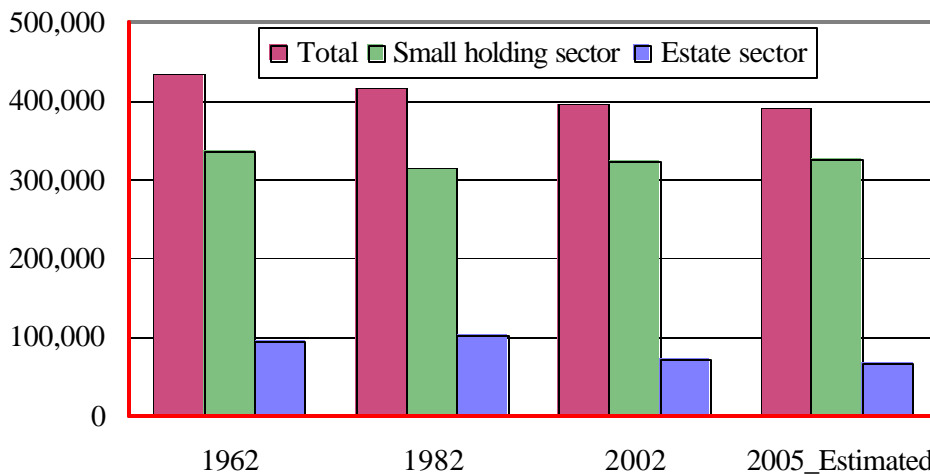


Figure 1. Progress of land extent under coconut from 1962 to 2002.

The extent under small holding sector and estate sector in 2002 has reduced by 3.9% and 26.0% respectively with respect to the corresponding values in 1962. With respect to the total coconut extent in 1982, the total coconut extent in 2002 has declined by 5.4% (Table 1). That is, on the assumption of the average density of coconut lands is 35 palms per acre (about 50% of the recommended density), 254 coconut palms have been lost per day in Sri Lanka, irrespective of location and type of sector.

This decline is more prominent in the estate sector and the percentage drop is 44.5%. That is, in the estate sector 376 coconut palms have been lost per day. In contrast, the extent under small holding sector has increased by 3.2% resulting 122 coconut palms have been added per day by the small holding sector.

Based on the corresponding rate of annual change the estimated coconut extent under small holding and estate sector in 2005 is 325,044 ha and 66,580 ha respectively.

Table 1. Progress of land extent under coconut (hectares)

Sector	1982 (ha)	2002 (ha)	% of change	Rate of change	
				Ha/year	Palms/day
Small holding	313,124	323,489	3.2	518	122
Estate	103,129	71,347	-44.5	-1589	-376
Total	416,253	394,836	-5.4	-1071	-254

A detailed comparison of the change of land extent during 1982 - 2002 at province and district levels is shown in Table 2.

Table 2. Extent under coconut by districts during 1982 and 2002

Province	District	Extent in		Change of extent	Rate of change		Extent in 2005 ⁺
		1982	2002		ha/y	palms/d	
NWP	Kurunagala	149106	133570	-15536	-776.8	-184	131240
	Puttalam	51784	46091	-5693	-284.7	-67	45237
	Sub total	200890	179661	-21229	-1061.5	-251	176477
WP	Colombo	9222	7292	-1930	-96.5	-23	7003
	Gampaha	57049	43130	-13919	-696.0	-165	41042
	Kalutara	12358	11276	-1082	-54.1	-13	11114
	Sub total	78629	61698	-16931	-846.6	-201	59158
SP	Galle	13244	12544	-700	-35.0	-8	12439
	Matara	14370	14398	28	1.4	0	14402
	Hambantota	20430	20733	303	15.2	4	20778
	Sub total	48044	47675	-369	-18.5	-4	47620
NCP	Annuradapura	5727	14134	8407	420.4	100	15395
	Polonnaruwa	3002	6640	3638	181.9	43	7186
	Sub total	8729	20774	12045	602.3	143	22581
UP	Badulla	885	2715	1830	91.5	22	2990
	Moneragala	4172	10701	6529	326.5	77	11680
	Sub total	5057	13416	8359	418.0	99	14670
SAP	Ratnapura	12429	15969	3540	177.0	42	16500
	Kegalle	20420	15410	-5010	-250.5	-59	14659
	Sub total	32849	31379	-1470	-73.5	-17	31159
CP	Kandy	8306	7888	-418	-20.9	-5	7825
	Matale	9296	10299	1003	50.2	12	10449
	Nuwaraeliya	834	1043	209	10.5	2	1074
	Sub total	18436	19230	794	39.7	9	19349
NP	Jaffna*	10026	5928	-4098	-204.9	-49	5313
	Mannar	1181	910	-271	-13.6	-3	869
	Vavuniya	425	777	352	17.6	4	830
	Mullativu	2204	2656	452	22.6	5	2724
	Sub total	13836	10271	-3565	-178.3	-42	9736
EP	Batticaloa	4090	3537	-553	-27.7	-7	3454
	Ampara	3886	5087	1201	60.1	14	5267
	Trincomalee	1807	2108	301	15.1	4	2153
	Sub total	9783	10732	949	47.5	11	10874
Total	416253	394836	-21417	-1070.9	-254	391623	

(* Including present Kilinochchi district; ⁺ Estimated extent)

The rate of decline of coconut lands in Sri Lanka is highest in the North Western Province (NWP) followed by Western Province (WP). Of the district within those two provinces, the highest rate of decline has occurred in Kurunegala (NWP) followed by Gampaha (WP). The third highest rate of decline was in Puttalm district which is also in NWP.

On the basis 35 palms per acre (irrespective of districts) the number of palms lost was computed on district level and accordingly the estimated coconut extent in 2005 was also estimated (Table 2). The figure 2 shows the spatial variability of the lost of palms.

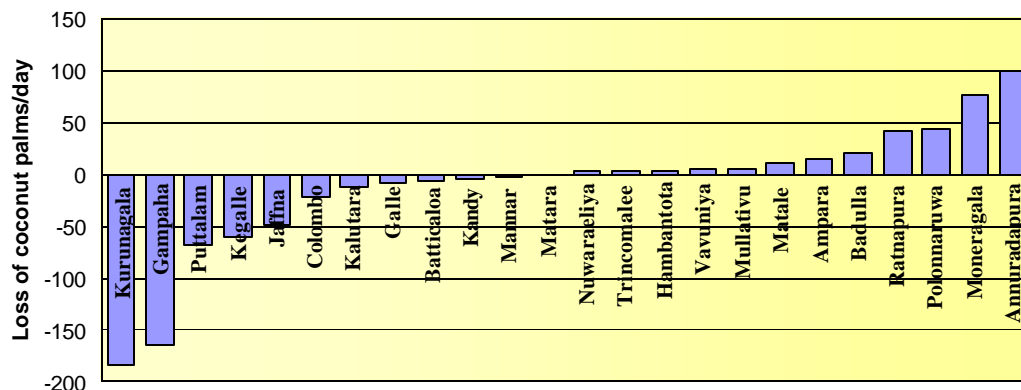


Figure 2. Spatial variability of the loss of coconut palms by districts in Sri Lanka

The extent of coconut land lost in these three main coconut growing districts: Kurunegala, Gampaha and Puttalam are 38391, 34402 and 14068 acres respectively. That is, the rate of decrease of coconut lands in those three districts are 1920, 1720 and 703 ha/year. Majority of the best land suitability classes of coconut in Sri Lanka are in those three districts. However, the disaggregated values of fragmentation of lands by land suitability classes of coconut are not available.

The main reasons to fragmentation of such traditional coconut lands are industrialization and urbanization. Most of the coconut palms in the above three districts are either second or third generation. Further, soils of such lands have more degraded due to not use of fertilizer and poor maintenance of soil moisture conservation practices and consequently it would be difficult to obtain the potential output of such lands according to land suitability classes of coconut determined by the CRI.

In spite of utilization prime coconut lands in the traditional coconut triangle at an alarming rate, it has been recovered to a certain extent in outside the traditional coconut triangle. The coconut extent in the North Central Province (NCP) (Anuradhapura and Pollonnaruwa districts), the Uva Province (UP) (Badulla and Monaragela districts) and Subaragamuwa Province (SP) (Ratnapura district) has increased by 29763, 20654 and 8750 ha respectively. This could be due to the increase of home gardens as well establishment of new lands in small scales (<1 ha).

The rates of increasing coconut lands in these areas are lower than the rate of decreasing coconut lands in the coconut triangle. The majority of lands in the NCP, UP and SP has either first or second generation palms and soils has not been degraded as in the coconut triangle and there is a better change to improve the soil and obtain the potential outputs from those lands.

Therefore, one could argue that more emphasis should be given to identify the potential coconut growing areas based detailed analysis of soils and climate in the districts of Badulla, Moneragla, Ratnapura, Anuradhapura and Pollonnaruwa to increase both the national coconut production.