

**PINEAPPLE**

**PRODUCTION PROGRAMME  
FOR  
PINEAPPLE (1998-2005)**

**Ministry of Agriculture & Lands – 1997**

# **PRODUCTION PROGRAMME FOR PINEAPPLE**

by

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## **Production Programme for Pineapple : 1998 – 2005**

### **1.0 Introduction**

Pineapple can be grown in a wide range of soil and climatic conditions. The fruit is a good source of vitamins A and B1 and sugar (14%). Ripe fruits soon deteriorate and must be marketed and consumed within 4–5 days.

Present extent under pineapple cultivation is about 3400 ha (1996). During the past two decades, the extent and production have been increased significantly (Table 1). The share (quantity and volume) of pineapple export is the highest among other fresh fruits (Table 2). In 1996, 1221 mt of fresh fruits were exported mainly to the United Arab Emirates and Maldives and the foreign exchange earning was 29.63 mn Rs. Therefore, this crop has immense potential to develop for export market.

Low yield, scarcity of planting materials, low fruit quality for export, lack of processing facilities are the major constraints of pineapple production in Sri Lanka.

Promotion of quality planting material production, increase extent, and farmer education on quality fruit production are some of the major aspects in this production programme.

### **2.0 Demand and Supply**

The per capita availability of pineapple is anticipated to increase 2.5 kg/yr (1996) to 3.4 kg (in year 2005). Increasing extent and productivity are the two main criteria for achieving these objectives. Local consumption, export demand and post-harvest losses were based for the estimate. The extent under pineapple is anticipated to increase by 1000 ha during the period concerned. The details of target extent, production, yield and planting material requirement is presented in table 3.

### **3.0 Planned Strategies to Increase Production**

#### **3.1 Increase in Productivity**

The yield level of pineapple is expected to increase from 12.4 mt/ha to 14 mt/ha. This is to be achieved through provision of quality planting materials and farmer education through an extension programme.

Most of the producers do not practice the recommendations that have been developed by DOA. They usually adopt a low plant density than recommended level, the main reason being the lack of planting material.

#### **3.2 Increasing Extent of Cultivation**

The fruit quality depends on the diurnal variation of temperature and therefore, can not be recommended for all agro-ecological regions. At present, Kurunegala and Gampaha districts are the leading districts of pineapple cultivation. Badulla, Moneragala, Puttalm, Colombo and Galle districts are identified as potential districts for promotion of this crop. Pineapple cultivation of these suitable districts is not expanding due to scarcity of planting materials. The details of targeted extent under each district is presented in table 4. These targets are estimated based on the Agricultural Implementation programme for 1996 and information from Task Force on Fruits.

#### **3.3 Promotion of Improved Agronomic Practices**

The size of fruit is one of the major criterion in determining export and local market. Fruit size can be regulated to suit the local as well as export markets by changing the spacing. This would reduce rejection and wastage of pineapple. Pineapple wilt and mealy bug attack are two major causes of affecting the yield. Control measures for major pests and diseases have been developed and cultivators are expected to educate through an extension programme (Table 5).

When pineapple is producing for export market, in order to gain a higher price, high standards of quality have to be maintained. Fruit size, shape and colour can be improved through agronomic practices. The following steps will be taken to improve the quality of the fruits.

- 1) Establishment of field demonstration in major growing areas.
- 2) Implementation of an extension package on pre- and post-harvest practices using information available at CISIR and HORDI.

#### **4.0 Planting Material Production**

Scarcity of quality planting material production is a major constraint in increasing the extent under pineapple cultivation. It is difficult to satisfy the total demand on planting material by DOA. Therefore, private sector or growers are encouraged to produce quality planting materials with the assistance of DOA. A scheme of rapid multiplication is recommended in selected DOA farms using mechanical detopping or gauging techniques which are adopted in other countries in large scale. In addition, the following steps will be adopted.

- 1) Encourage farmers to establish their own nurseries
- 2) Promote DOA to supply certified planting materials to private sector
- 3) Maintain nurseries at DOA farms (Walpita & Bibile)
- 4) Identify and maintain the best cultivars of Smoothcanes
- 5) Educate the farmers on nursery techniques

Details of planting material production programme are presented in table 6.

## **5.0 Export Market and Processing**

At present pineapple is mainly used in jam, cordial/squash industry. Processing factories for pineapple are located mainly in and around Colombo. Under the proposed programme, processing of pineapple in growing area will be encouraged.

Pineapple is mainly exported to Middle East countries and Maldives by air freight due to its short economic life. The cost of export could be reduced if it is possible to export by sea by extending the shelf-life up to 22 days. Therefore, emphasize will be made on the following measures.

- a) To develop low cost storage/ transport system to extend the shelf-life of pineapple, so that it can be exported by sea.
- b) To develop an extension package on pre- and post-harvest practices to improve fruit quality.

## **6.0 Estimated Budget**

The additional funds required for the implementation of the proposed research, extension and planting material production are presented in table 7.

**Table 1: Extent and Production: Pineapple**

Year	Extent(ha)	Production(000 Fruits)
1985	3570	30715
1986	3808	28807
1987	3766	28021
1988	3942	26170
1989	4108	30507
1990	4267	28595
1991	4406	30500
1992	4404	37579
1993	4411	31110
1994	4386	33274
1995	4343	40660
1996	4766	41063

Source: Department of Census & Statistics

**Table 2: Export of Pineapple**

Year	Export	
	Quantity(mt)	Value(mn Rs.)
1991	823	21.89
1992	925	22.26
1993	727	19.63
1994	939	25.34
1995	715	26.45
1996	1221	29.63

Source: Sri Lanka Customs

**Table 3. Projected targets of Extent, Production, Yield and Planting Material Requirements**

Item	1998	1999	2000	2001	2002	2003	2004	2005
Total extent (ha)	3846	3959	4190	4432	4774	4987	4954	4921
Annual production (mt)	49999	52264	56143	59830	64921	68327	68361	68397
Expected yield (mt/ha)	13.0	13.2	13.4	13.5	13.6	13.7	13.8	13.9
Planting material requirement (000)	21220	17466	19829	20954	23558	22867	19714	19587

**Identified districts:** Kurunegala, Gampaha, Puttalam, Badulla, Monaragala.

**Potential districts:** Colombo, Galle.

Table 4: Proposed Targets of Area (ha): Pineapple

Province	District	Present Extent	Proposed Targets							
		1995/96	1998	1999	2000	2001	2002	2003	2004	2005
Western	Colombo	62	70	72	77	81	87	91	91	90
	Gampaha	1312	1490	1534	1623	1717	1849	1932	1919	1906
	Kalutara									
Southern	Galle	43	49	50	53	56	61	63	63	62
	Matara	78	89	91	96	102	110	115	114	113
	Hambantota	22	25	26	27	29	31	32	32	32
Uva	Badulla	121	137	141	150	158	171	178	177	176
	Monaragala	143	162	167	177	187	202	211	209	208
Sabaragamuwa	Ratnapura	10	11	12	12	13	14	15	15	15
	Kegalle	56	64	65	69	73	79	82	82	81
NWP	Kurumegala	1180	1340	1379	1460	1544	1663	1737	1726	1714
	Puttalam	285	324	333	353	373	402	420	417	414
Central	Kandy	11	12	13	14	14	16	16	16	16
	Nuwara Eliya									
	Matale									
NCP	Amuradhapura									
	Polonnaruwa	1	1	1	1	1	1	1	1	1
Nothern	Jaffna									
	Kilinochchi									
	Mannar									
	Vavuniya									
	Mulativu									
Eastern	Ampara	39	44	46	48	51	55	57	57	57
	Trincomalee									
	Batticaloa									
Mahaweli	Udawalawe									
	System H									
	System B	10	11	12	12	13	14	15	15	15
	System C	10	11	12	12	13	14	15	15	15
	System G	4	5	5	5	5	6	6	6	6
	System L									
Total		3387	3846	3959	4190	4432	4774	4987	4954	4921

**Table 5: STRATEGY FOR DEVELOPMENT OF FRUIT SECTOR - ACTION PLAN FOR 1997/98**  
**BUDGET Crop:Pineapple**

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a.	Planting Material Production	Amt (Rs)
	1. Introduce rapid multiplication method	5000x18 90000
	2. Encourage growers to establish their own nurseries	10000x18 180000
	3. Encourage private sector for commercial production	5000x18 90000
b.	Increase yield & Fruit Quality	
	1. Demonstration DOA recommendation on improved cultural practices	5000x18 90000
c.	Improve processing facilities & Post Harvest Handling	
		5000x07 35000
		 485000
		=====
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**Table 6: Production Program of the Planting Material for Pineapple (suckers)**

	1998	1999	2000	2001	2002	2003	2004	2005		
<b>Total requirement (in '000)</b>			21220	17466	19829	20954	23558	22867	19714	19587
<b><u>AGENCY</u></b>										
<b>DOA (Nuclear Materials)</b>			25	50	75	75	75	75	75	100
<b>Selected Orchardmen (Basic Material)</b>			25	50	100	150	200	300	400	500
<b>Private Nurserymen (Planting Material)</b>			100	150	200	300	400	500	700	800
<b>Individual Farmers (Self)</b>			21070	17266	19454	20429	22883	21992	18539	18187
<b>Imports</b>	-	-	-	-	-	-	-	-	-	-
<b>% of formal supply out of (additional + replacement) requirement</b>			0.71	1.14	1.89	2.50	2.86	3.86	5.96	7.15

**Table 7: Additional Funds Requirement('000 Rs): Pineapple 1998-2005**

<b>Year</b>	<b>Research</b>	<b>Extension</b>	<b>Planting Material</b>	<b>Total</b>
1998	100	485	205	890
1999	100	509	370	979
2000	100	535	560	1195
2001	100	561	690	1351
2002	100	590	820	1510
2003	100	619	1000	1719
2004	100	650	1260	2010
2005	100	682	1540	2222