Annex 2.

Brief summary of pineapple production.

History:

The most likely origin of the pineapple (*Ananas* spp) is thought to be the Parana-Paraguay River basin in Southern Brazil and Paraguay, where the origin seed species survives in the wild today. An alternative centre of origin may be along the river banks of southern Guyana.

It is believed that the Tupi-Guarani Indians were the first people to select and cultivate pineapples. Native people spread the pineapples throughout South America and it eventually reached the Caribbean. Columbus discovered pineapples in 1493 and from then on early European explorers widely distributed pineapples throughout the world.

Preparation:

The soil is usually prepared into a fine tilthe and polythene laid down in rows ready for the suckers to be planted through the polythene. Polythene helps reduce weed competition and reduces water loss.

Pineapples grow best on fertile well drained soils with Ph. of 5.5 to 6.2. The best temperature range for successful production is a daytime temperature of 25-30^{0}C with a night time temperature of 15-17^{0}C.

Photo i: Preparation of the soil ready for planting

Pineapples produce suckers that are suitable planting material from a number of parts of the mature plant. These suckers arise at soil level around the base of the plant, at leaf axils and below the mature fruit.

All these suckers can be used but the basal suckers are most productive and will produce fruit within 12 to 14 months of planting. The other suckers generally take longer to produce fruit.

Photo ii: Selection of basal suckers ready for planting.

Planting:

Suckers are usually planted through the polythene sheet in rows of two or four. Depending on growing conditions up to 4 rows will increase yield.

Photo iii: Planting of suckers through polythene in a two row system.

Photo iv: Planting of suckers through polythene in a four row system.

During the growing period care should be taken to control pests and disease. In particular insects such as mealy bug and the *Thecla* butterfly. Also fungal and bacterial diseases such as Anthracnose, Phytophthora, Gummosis, Pythium, etc. A wide range of other pests and fungal diseases can affect pineapple production depending on the area of production. Appropriate methods of control of these pests and diseases will need to be considered in order to achieve satisfactory yield.

Flower induction:

After approximately 6 months of vegetative growth flower production is usually induced by spraying the plants with an ethylene solution. This encourages the plants to flower and start fruit development leading to all plants producing marketable fruit within a short time period so aiding the costs of harvesting and packaging.

Photo v: Pineapple flower.

Photo vi: Pineapple field at flowering stage.

De-greening

In order to further encourage the production of mature fruit within as short a time as possible, within a field, a further spray of ethylene solution is given when most fruit are close to mature size.

Photo vii: Green fruit ready to be de-greened.

Harvesting:

Once fruit has reached the required colour and sugar levels it is harvested. Most fruit is harvested by hand. Once harvested the fruit should be graded and packed as soon as possible.

Fruit for export should be stored at 8 - 10^0C once packed and graded and whilst in transportation to the destination market.

Photo viii: Pineapple harvesting.