

Considering the jurisdiction of a taluk which on an average contains anything over 150 villages, scattered over 400 sq. miles even the present staff of one Demonstrator assisted by 2 or 3 fieldmen supervising and guiding the work of 3 or 4 maistries cannot be considered adequate. If the propaganda has to be effective, the cultivator has to be met constantly and guided in his day to day practices. This could be possible only if the jurisdiction of the staff is small. I feel, therefore, there is a strong case for increasing the existing staff employed on extension work. In a country like ours, where illiteracy is widespread, I feel the potential weapon for influencing the cultivator lies not through the spoken word or printed matter but through practical, ocular demonstration plot and visual education with the aid of cinema. Propaganda through cinema, has to be developed. There can, however, be no finality in the methods to be employed but past experience has confirmed that all other forms can only supplement but not supplant the ocular demonstration and visual education.



## Utilization of Fruits and Vegetables \*

By

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Modern researches have shown that fruits and vegetables are essential foods and contain highly protective factors such as vitamins and minerals which are indispensable for a proper diet. They are, however, seasonal and are not, therefore, available in plenty, throughout the year. During short periods of glut they are available in plenty, but at other times, they are scarce and beyond the reach of the average consumer. During these glut periods large quantities of these valuable foodstuffs often go to waste for lack of proper storage and transport and also preservation facilities. This is almost a criminal waste of Nature's bounty and a very important source of food. All the world over the importance of the fruit and vegetable preservation industry in the agricultural economy of the country has been fully realised. The industry is eminently suited for small scale or large scale working. In several of the advanced countries of the world there are many large fruit and vegetable canning factories. In addition to these, during the peak of the fruit season countless homes will be busy with the preparation of canned and bottled fruits, jams, jellies and marmalades. These little

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efforts on the part of the citizens go a long way in conserving the nation's food resources. In India, however only a small beginning has been made so far and that too only recently. It is, therefore, of the greatest importance that vigorous efforts should be made to rapidly develop fruit and vegetable preservation in this Province.

The Province of Madras is rich in horticultural resources. It is famous for its mangoes, bananas, oranges, and pineapples. We have also fairly large quantities of other important fruits, tropical as well temperate, such as papayas, guavas, jack fruit, etc. Very little effort has so far been made to preserve these on any large scale. The experiments conducted during the past six years at the Government Fruit Products Research Laboratory, Kodur, have shown that some of these important fruits can be preserved satisfactorily in several ways. Some of the products like citrus squashes, mango and pineapple jams, candied fruit and peel, etc., have been favourably received by the public. It is possible to work a small fruit preservation factory by a group of orchardists in different fruit growing localities as is being done in various other parts of the world, where fruit and vegetable preservation has come to stay as a stabilising force in the agricultural economy of the State.

By means of intensive propaganda and demonstration at their very doors and by providing all the necessary equipment at cheap rates, fruit preservation can be made popular throughout the country. To achieve this a small beginning has already been made by employing five trained lady fruit preservation demonstrators. These will demonstrate the preparation and preservation of simple products like fruit squashes, cordials, jams, jellies, marmalades, candied fruit, canned fruit dried fruits and vegetables etc., in girls' schools and colleges, ladies clubs and institutes, public fairs and exhibitions. In course of time, the idea is likely to catch on and create public interest in this vital subject which is indispensable for maintaining a balanced diet and also to improve gradually the standards of living.

The task, being of a pioneer nature, is naturally an uphill one. The results may be slow, but will be definite. Enormous quantities of valuable food that might otherwise go to waste would be saved for the Nation by thousands of small homes all over the country. To prevent waste in any form is as important as making two blades of grass grow where only one grew before.

The work at the Fruit Products Research Laboratory is so planned that it should one day result in fruit and vegetable preservation becoming a home routine in countless homes all over the country. The other aspect of making it a large-scale industry has also been not lost sight of. No effort is being spared in speeding up this work although the obstacles to be overcome are quite formidable.



Although a number of varieties of mangoes are grown in the Province, only Baneshan and Neelum have so far been found suitable for canning. Fortunately, these are commercial varieties and are therefore, suitable for canning on a large scale. The juicy 'Rasam' varieties can be made into mango squash. Mango jam can be prepared from many of the varieties. Pineapples, guavas, grape-fruit, plums, etc., can also be canned. Jack fruit, musk-melon and palm kernel are also suited for canning.

Jams, jellies and marmalades can be prepared easily from many of our fruits. Fruit juices, squashes and cordials, which are delicious and healthy drinks, and are in great demand in any tropical country, can be prepared by simple methods. Little known fruits like woodapple, cashew apple, custard apple etc., have been transformed into excellent products. Home-drying and dehydration of fruits and vegetables by modern scientific methods is fairly simple. Luxury articles like candied and crystallised fruits, candied citrus peels etc., can be prepared at home. Thus there are several ways in which fruits and vegetables can be prepared and preserved. To popularise fruit preservation in the country, a number of steps have been taken. A short course of three months training in fruit canning and preservation has been started at the Government Fruit Products Research Laboratory, Kodur. A number of simple and helpful articles have been published regarding fruit preservation. Radio talks have been given. Fruit products are exhibited in different Exhibitions and actual demonstration of preservation arranged. Five lady fruit preservation demonstrators have recently been employed to popularise fruit preservation in the Province. Simultaneously there is a vigilant inspection staff also to see that fruit products sold by manufacturers to the public keep upto certain well-defined standards of quality. It is felt that when the work is in full swing, the laboratory achievements will gradually become practical achievements also.

## Rice Culture in Other Countries and its

### Lesson for Madras\*

By

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It may appear presumptuous for me to attempt to deal with rice cultivation in foreign countries about which I have no personal knowledge but I may be allowed this indulgence as it may be of interest to some of us here who have no access to libraries. I may at once begin to deal

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