

# THE COFFEE FARMING SYSTEMS RESEARCH PROJECT

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## INTRODUCTION

During 1982-83, the Department of Primary Industry will be conducting a research project into the management of village coffee. This is the Coffee Farming Systems Project. The project is funded under the National Public Expenditure Plan and is based at the D.P.I. Regional Office, Goroka.

## WHY IS THE RESEARCH BEING DONE?

A healthy coffee industry is essential because coffee is Papua New Guinea's main export crop. In the highlands, the regional economy depends heavily on coffee production. Throughout the country, local government councils, institutions and all 19 Provincial Governments receive income from coffee. For a healthy industry, all producers should be able to find out easily about useful research results, improvements in technology and management advice.

The most important producers in the industry are the smallholders or village producers, not the estates. Small scale farms produce nearly 75% of the crop. With their families, they number well over one million people.

However, the smallholders are too often ignored by research, extension and credit services

and are described as 'inefficient', 'lazy', 'impossible to teach', etc. Smallholders have independently developed management methods, such as single-stem cultivation, intercropping with food and no pruning, which are scorned by large producers and many scientific officers in Papua New Guinea. This is also the case in other tree crop industries, where the different approaches used by small farmers are wrongly assumed to be inefficient.

The research project will first look at coffee grown in a mainly subsistence system.

Smallholders have had to change their farming systems in order to grow coffee, though the crop occupies only about 30 days each year. Our job is to assess what further changes are possible and necessary to satisfy the increasing needs of the growers.

The population of Papua New Guinea is growing at 2% per year and coffee prices could well fall because of extra production in other countries. However, access to education and the desire to buy things with cash have lead to rising

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standards of living. What improvements are possible to enable most coffee farmers to at least keep their living standards the same?

The successful use of these improvements will ensure growth in many areas of Papua New Guinea.

## BASIC QUESTIONS

We wish to find out the importance of coffee now and in the future in the lives of growers and their families. Three basic questions need to be answered. These are listed below, with some of the information we intend to gather on each question.

### 1. What is happening in coffee growing now?

- . Areas under coffee, and yields
- . Management practices
- . How much labour used, and what type
- . Income level and distribution
- . New trends in production and marketing
- . How dependent is the farmer on his coffee income?
- . Proportions of available land under coffee and under food crops.

### 2. How far is it possible to change?

This section will look at the likely future patterns of production on the land resources we have today.

- . What income can be earned from existing coffee and is it enough to satisfy the farmers?

- . In future, how much land will be used for coffee and how much for food?  
Will this lead to more cash income but a smaller degree of self-sufficiency?

- . Will fewer people control more good land, and change social groups?

- . Are 5-20 ha blocks a realistic size for the future?

- . Will farmers stop growing cash crops to increase their subsistence production?

- . Will young people be happy to live as coffee growers?

### 3. What are the alternatives?

- . Migration to wage jobs in towns
- . Other cash crop and cash earning opportunities
- . Improved research and extension; is it possible and will it help to improve incomes?
- . Can management techniques be improved to give higher output from the same land?

## MAKING THE PROJECT WORK

The project will start off with two sample villages in Eastern Highlands. One practises normal mixed subsistence/cash crop production. The other is developing one of the new 5-20 ha blocks. These are taken as typical 'land poor' and 'land rich' situations.

The investigator will live in the villages, regularly moving from one to the other, for 6 months. Detailed studies of coffee management will be made. Also the best way to go on to a wider survey will be decided.



The first two sample villages will be two of the villages in Eastern Highlands Province being monitored by the P.N.G. Institute of Medical Research's Acute Respiratory Infection Unit. Data from the coffee project will be exchanged with data from the medical project.

The second, wider stage will run for 6-12 months up to June 1983, and will cover Simbu and Western Highlands Provinces, and possibly some Robusta growing areas.

Dr. D.S. Meredith, Coffee Specialist, will help on field trials in both parts of the survey. Villages being studied for subsistence practices at present by the Simbu Land Use Project (S.L.U.P.), will be covered in the second stage of this survey. Again, data can be exchanged.

It is hoped also to evaluate economically some of the coffee cultivation practices which have been recommended by the Highlands Agricultural Research Station, Aiyura.

#### WE NEED YOUR HELP

What we need most urgently is help in collecting data about smallholders.

If anyone has, or knows about, records kept on purchases of smallholder coffee, we would be pleased to know about them. More recent records are best, but if they were kept for a few

years, and all the grower's output was bought, then they could be very valuable information on output.

If you can think of an estate, mission or co-operative which kept, or still keeps records on purchases of village coffee, please let us know, at the address below.

Also, do you know of any Department of Primary Industry (or the old Department of Agriculture, Stock and Fisheries) records or surveys connected with smallholder coffee? We are especially interested in output and yield estimates, but information on, e.g. area of coffee, number of trees per grower, or any other feature of village coffee could be welcome.

Finally, do you know of any articles, books or reports which have some information about village coffee production, marketing or management in Papua New Guinea?

If you do, please let us know.

All information and correspondence should be sent to:

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