

A Survey on Organic Farming in Kaluwanchikudy Village in the Batticaloa District

271

By

Miss.Yasanthini Siththiravel



FAG271
Project Report
Library - EUSL

**Faculty of Agriculture
Eastern University :
SriLanka
2009**

PROCESSED
Main Library, EUSL

ABSTRACT

Farming without use of synthetic chemicals is commonly referred as organic farming. It is increasingly popular well over the world even in Sri Lanka. Kaluwanchikudy village is one of the predominant agricultural productive villages in Batticaloa district and area more than 10% of farmers was involved in organic cultivation more than two years. Each farmer was grown different crops in more than 0.25 acre land.

The survey was conducted to study the feasibility of organic farming in Kaluwanchikudy village in the Batticaloa district. The survey covered 40 farmers from Kaluwanchikudy South GN division, which is located in Kaluwanchikudy village in the Batticaloa district. A pre tested questionnaire was used to collected data from organic farmers and collected data was analyzed using descriptive statistics.

Socio economic aspects of organic farmers, management practices, investment and cost of production returns from the production, problems faced by the farmers during management were studied. All the farmers used family members for their cultivation. Most of the farmers (68%) in area got subsidies as a source of investment for the organic farming.

Management practices such as selection of planting material, soil and fertility management, water management, weed management, pest and disease management, spraying equipment use were carried out by most of the farmers to a great extent. They didn't use any special practices for storage, transportation and marketing. 67% of them used vermiwash as liquid manure. 62.5% of respondents used glyricidia for wind breaks and used as physical barrier to control wind transported disease. They prepared neem extract and oil extracted from botanicals used to control pest and also used as repellent.

The average yield varied with the type of crop and extends of land cultivated. Each farmer cultivated different crops. Initial costs of production become high and then it was reduced. Average cost of production is Rs.19,550/=.

High initial cost of production and awareness of farmers has become a barrier in the development of the organic farming. Availability of cowdung, seasonal changes in market price, lack of extension service, awareness of consumers was also noted in this survey.

TABLE OF CONTENTS

	Page No.
ABSTRACT	i
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	x
 CHAPTER 1	
1.0 Introduction.....	01
1.1 Objective of the study.....	05
 CHAPTER 2	
2.0 Review of literature.....	06
2.1 Organic farming	06
2.2 Distribution of organic farming.....	08
2.2.1 World distribution.....	08
2.2.2 Distribution in Sri Lanka.....	11
2.3 Elements of organic farming.....	13
2.3.1 Crop.....	13
2.3.1.1 Crop Diversification.....	13
2.3.2 Organic manure.....	14
2.3.2.1 Farm yard manure.....	14
2.3.2.2 Green manure.....	15
2.3.2.3 Compost.....	15
2.3.2.4 Other sources of organic manure.....	16

2.3.3 Human health.....	17
2.3.4 Soil and soil health.....	17
2.3.5 Socio economic acceptability.....	18
2.4 Practices in organic farming.....	19
2.4.1 Nutrient management.....	19
2.4.1.1 Animal manure.....	19
2.4.1.2 Bio fertilizer.....	20
2.4.1.3 Crop residue.....	20
2.4.1.4 Vermicompost.....	20
2.4.1.5 Vermiwash – A Liquid manure.....	21
2.4.2 Water management.....	22
2.4.3 Tillage.....	23
2.4.4 Crop rotation.....	23
2.4.5 Mulching.....	24
2.4.6 Inter cropping.....	25
2.4.7 Cover cropping.....	25
2.4.8 Crop and their varieties.....	26
2.4.9 Weed control.....	26
2.4.10 Insect pest control.....	27
2.4.11 Disease control.....	29
2.4.12 Post harvest handling.....	29
2.5 Impact of organic farming.....	30
2.5.1 Advantages of organic farming.....	30
2.5.1.1 Consumer point of view.....	30
2.5.1.2 Grower benefits.....	31

2.5.2 Disadvantages of organic farming.....	33
---	----

CHAPTER 3

3.0 Methodology.....	34
3.1 Selection of the study area.....	34
3.2 Kaluwanchikudy area.....	34
3.3 Sample size.....	35
3.4 Data collection.....	35
3.5 Data collection.....	35
3.6 Data analysis.....	36

CHAPTER 4

4.0 Results and discussion.....	38
4.1 Socio economic status of respondents.....	38
4.1.1 Age of the respondents.....	38
4.1.2 Sex of the respondents.....	39
4.1.3 Family size.....	39
4.1.4 Educational level of farmers.....	40
4.1.5 Occupational pattern.....	41
4.1.6 Type of farming.....	41
4.1.7 Capital use.....	42
4.1.8 Crop information.....	42
4.2 Cultivation practices.....	44
4.2.1 Planting materials.....	44
4.2.1.1 Type of planting materials.....	44

4.2.1.2 Type of seed/ Seedling.....	45
4.2.1.3 Source of materials.....	45
4.2.2 Type of farming.....	46
4.2.3 Soil and fertility management.....	46
4.2.3.1 General soil type.....	46
4.2.3.2 Components of soil and crop fertility management.....	46
4.2.3.3 Crop residue.....	47
4.2.3.4 Compost.....	48
4.2.3.5 Manures.....	49
4.2.3.6 Vermiwash.....	50
4.2.3.7 Soil conservation practices.....	51
4.2.4 Water use	52
4.2.4.1 Water use pattern.....	52
4.2.4.2 Water source.....	52
4.2.4.3 Water conservation practices.....	53
4.2.5 Weed management.....	54
4.2.5.1 Management practices used to control weed.....	54
4.2.5.2 Effectiveness of weed management.....	55
4.2.5.3 Monitoring of weed management	55
4.2.6 Pest and disease management	56
4.2.6.1 Types of pest and diseases.....	56
4.2.6.2 Methods used to control pest and disease.....	56
4.2.6.3 Effectiveness of pest and disease management	57
4.2.7 Equipments.....	58
4.2.8 Harvest.....	58

4.2.9 Post harvest handling.....	59
4.2.10 Stroage.....	59
4.2.11 Transportation.....	59
4.2.12 Marketing.....	60
4.2.13 Economy of the product.....	60
4.2.13.1 Cost of production.....	60
4.2.13.2 Yield and price.....	61
4.2.13.3 Profit.....	63
4.2.14 Problems faced by organic farmers.....	64

CHAPTER 5

5.0 Conclusion and recommendation	65
5.1 Recommendation.....	66
Reference.....	67
Annexure.....	77