

CROP INSURANCE IN RUBBER PLANTATIONS

By

A. RAMAKRISHNAN

DISSERTATION

Submitted in Partial fulfilment of the requirements for the Post Graduate
Diploma Course in Natural Rubber Production, Faculty of Agriculture,
Kerala Agricultural University

DEPARTMENT OF PLANTATION CROPS
COLLEGE OF HORTICULTURE, KERALA AGRICULTURAL UNIVERSITY,
VELLANIKKARA, TRICHUR
1 9 9 1

DECLARATION

I hereby declare that the dissertation entitled 'Crop Insurance In Rubber Plantation' is a bonafide record of research work done by me and that the dissertation has not previously formed the basis for the award to me of any degree or diploma or other similar title of any other university or society.

Vellanikkara,

Date: June 25, 1991

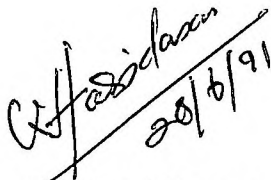
A handwritten signature in black ink, appearing to read 'A. Ramakrishnan', with a long horizontal stroke extending to the right.


A. RAMAKRISHNAN

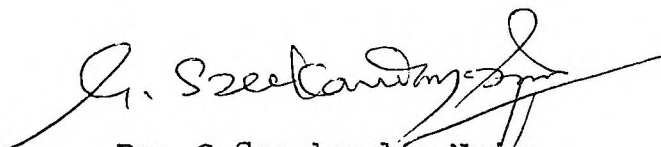
C E R T I F I C A T E

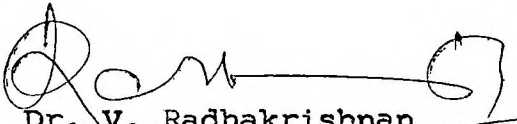
Certified that this dissertation entitled 'Crop Insurance in Rubber Plantations' is a record of research work done independently by Sri. A. Ramakrishnan under our guidance and supervision and that it has not previously formed the basis for the award of any degree or diploma to him.

We, the undersigned members of the Advisory Committee of Sri. A. Ramakrishnan, a candidate for the Post Graduate Diploma in Natural Rubber Production agree that the dissertation entitled "Crop Insurance in Rubber Plantations" may be submitted by Sri. A. Ramakrishnan in partial fulfilment of the requirement of the diploma.


Dr. V. Haridasan,
Deputy Director,
(Economic Research)
RRII, Kottayam.
(Co-Chairman)


Dr. P.A. Nazeem,
Associate Professor,
Dept. of Plantation
Crops and Spices,
College of Horticulture,
Vellanikkara.
(Major Adviser)


Dr. G. Sreekandan Nair
Prof. and Head,
Dept. of Plantation Crops
and Spices,
College of Horticulture,
Vellanikkara
(Member)


Dr. V. Radhakrishnan
Prof. and Head,
Dept. of Agricultural
Economics,
College of Horticulture,
Vellanikkara
(Member)

ACKNOWLEDGEMENT

I wish to express my deep sense of gratitude and indebtedness to Dr.P.A. Nazeem, Associate Professor, Plantation Crops and Spices and Chairman of my Advisory Committee for her inspiring guidance and encouragement for preparing this dissertation.

I also express my heart-felt gratitude to Dr.V.Haridasan, Deputy Director, Economic Research, RRII for the inestimable help and guidance rendered by him during every stage of this study and manuscript preparation.

Grateful acknowledgement are also due to Dr.G.Sreekandan Nair, Professor & Head, Department of Plantation Crops and Spices, College of Horticulture and Dr.V.Radhakrishnan, Prof. & Head, Department of Agricultural Economics, College of Horticulture, Vellanikkara for their guidance and constructive suggestions given during the preparation of this dissertation.

My thanks are also due to Dr.C.C.Abraham, Associate Dean, College of Horticulture, Vellanikkara for the sustained interest shown by him in the study.

I am extremely grateful to Sri.S.S.Mohamed Abdul Kader, Development Officer and other officers and staff of Rubber Board, Regional Office, Ernakulam for the valuable suggestions

and help rendered in conducting the study and preparing the manuscript.

Let me place on record my thanks to Sri. Joseph John, National Insurance Company Ltd., Divisional Office, Kottayam for the co-operation and help extended by him.

I also extend my thanks to the authorities of the Rubber Board and Kerala Agricultural University for having given me an opportunity to undergo the Post Graduate Diploma Course in Natural Rubber Production.

Vellanikkara,

June 25, 1991

sd/—

(A. RAMAKRISHNAN)

C O N T E N T S

		<u>Page</u>
INTRODUCTION	..	1
REVIEW OF LITERATURE	..	3
MATERIALS AND METHODS	..	16
RESULTS AND DISCUSSION	..	18
SUMMARY AND CONCLUSION	..	26
REFERENCES	..	29

LIST OF TABLES

Sl.No.

Tables

1. Details of holdings selected for the study.
2. Planting materials and their areas
3. Planting density in the selected units
4. Area under tapping, tapping system and yield.
5. Total insurance coverage in Rubber plantation in India till 31-3-1991.
6. Number of trees lost and compensation received.

I N T R O D U C T I O N

I N T R O D U C T I O N

Crop Insurance is widely popular in developed countries like the U.S.A. Canada and Japan. "All risks" Crop Insurance was offered as early as 1891 in U.S.A by a private company. Later on the Federal Government of U.S.A initiated insurance for crops under Federal Crop Insurance Act - 1938. Likewise "All risks" insurance was also introduced in Canada, Brazil, Sri Lanka and Mexico on a limited scale. "Specific risk" type of crop insurance was introduced in Germany providing cover against frost and hail storm. In Jamaica, insurance cover for crops is restricted today to the damage due to wind, storm and hurricane, while in Mauritius, crop insurance is limited to cover damage due to cyclone and drought only. (Shah and Maharaja 1981) In India during the time of inception, the insurance coverage was given to annual crops like wheat, corn, rice and other cereals. The scheme was devised to help the farmers from the unexpected crop failure due to hail storm, diseases, drought etc.

Plantation crops have been brought under insurance coverage in various countries. Plantation crops are generally perennial in nature and involve heavy investment with long gestation period and a reasonable steady income to the planter every year. This has been an important factor in extending

crop insurance to the plantation sector.

A study conducted by the Rubber Board has revealed that the total loss to the estates during the five years covered by the study has been about Rs. 21.35 lakhs due to fire, wind and flood. In other words, during the economical life span of the rubber plantation (30 years) about 7½ per cent of the total investment will be lost by natural calamities (Haridasan and Unny - 1970). Even though the planters are taking precautionary measures, estates are found to be still affected by fire. The planter's ability to take precautions against damage due to wind and flood is very limited. Hence the planter has to be protected against losses resulting from the occurrence of these natural hazards. In this connection the scope of introducing crop insurance in rubber plantation is worth considering.

Rubber has been given the protection of insurance in most of the countries when it is raised systematically as a plantation crop in estates. Thus insurance has been available to rubber plantation in Malasia, Indonesia and Srilanka since the II world War. The Madras Motor and General Insurance Company was the first to initiate a scheme for insurance coverage to the rubber plantations in India. Subsequently the insurance schemes have been revised in 1979 and 1988. The present study attempts to evaluate the progress, coverage and the problems of the scheme.

REVIEW OF LITERATURE

REVIEW OF LITERATURE

The earlier record available shows that the government of India offered relief from famine to the farmers in the year 1879. Some co-operative organisations in Punjab are also reported to have provided a relief in the event of crop failure (Shah and Maharaja - 1981). They have reported that an erstwhile princely state in Madhya Pradesh introduced crop insurance scheme as early as 1943 (Shah and Maharaja - 1981). The question of introduction of crop insurance in the country as a whole has been under the consideration of government of India since independence. A systematic crop insurance scheme was brought into vogue in the 1970's and it was made popular in Gujarat, Maharashtra, Karnataka, Tamil Nadu and West Bengal (Dandekar, 1981).

In 1970 the Rubber Board undertook a research study on the various losses that occur in the rubber plantation owing to natural calamities (Haridas & Unni, 1970). The study covered a period of five years from 1964 - 1968 and an area of around 30,000 hectares. The total area affected by fire during the period 1964-68 was 568 hectares. The area affected was the highest in 1967 and the number of estates affected was highest in 1966 and 1968. The loss varied from 0.74 lakhs to 3.18 lakhs during this period and the total loss was to the

to the tune of 9.53 lakhs during the five year period.

To prevent the spread of fire, 70 per cent of estates had maintained fire belts and 63 per cent had adopted other precautions against fire. In spite of these precautions, 40 per cent were found to have been affected by fire during the above period. This indicates that insurance coverage against fire damage is very much necessary for the protection of rubber plantations.

The report by Haridas and Unni, 1970 also indicates that the loss of trees due to wind was on the increase. The estimated loss due to wind varied from Rs.1.22 lakhs to Rs.3.15 lakhs during the five year period from 1964 to 1968.

Flood was found to be not a serious threat to the rubber plantation industry. This may be due to the fact that plantations are usually established in hilly areas and slopes of the hill. Water-logged areas are not suitable for rubber cultivation. However, in the survey conducted by the Rubber Board, it was found that 4.5 per cent of the estates were affected by flood during the period under survey. The estimated damage was Rs.31,700/-. Landslide also caused damage to the trees, to the tune of Rs. 50,000/-.

The study indicates that maximum damage to the rubber plantation is due to wind followed by fire and flood. Out of 156 estates covered, 64 were affected by wind and 42 were affected by fire during the five year period where as only 7 estates were affected by flood. The study also indicates that there are certain estates repeatedly affected by fire, wind and flood and that in the case of 16 estates frequent damage was caused by wind during the period.

The Present Insurance Scheme

M/s. Madras Motor and General Insurance Company Ltd. started crop insurance in the 1970's. Rubber Board had persuaded the above company to take up crop insurance in the case of rubber. M/s. Plantation Corporation of Kerala, the biggest public sector undertaking in the plantation industry took up insurance for rubber from M/s. Madras Motor and General Insurance Company in the early seventies. The scheme formulated by the company was not very popular due to various operational reasons. The Rubber Board took up the issue in 1988 and the lacuna in the scheme was rectified and another comprehensive scheme was launched. This is the one currently in operation. The scheme was implemented during December 1988 by National Insurance Company Ltd. which is a subsidiary of the General Insurance Company of India. The Rubber Board has also

actively collaborated with insurance firm for implementing the scheme. The salient features of the scheme are as follows:

Risks Covered:

The risks covered under the insurance scheme are fire, fire resulting from explosion, lightning, bush fire, forest fire, wind, storm, tempest, hurricane, cyclone, flood, land slide, hail storm, rock slide and subsidence. (National Insurance Company Ltd. 1988).

Risks not covered: According to Rubber Board, 1989.

The insurance will not cover other perils which inter-alia include

- 1) loss by theft during or after the perils covered under the policy.
- 2) Intentional felling or destruction
- 3) loss/damage contributed by neuclear weapons/ material or radio activities.
- 4) Earthquake, Volcanic erruptions and soil erosion of any kind
- 5) war or war like operations

- 6) Mutiny, riot, civil commotion, malicious acts of any kind by anybody, military acts, insurrection, rebellion, revolution, events consequent to the imposition of martial law, terrorism etc.
- 7) Theft, disease, drought, scorching heat other than by accidental fire, wild animals, impacts of any kind of insects and pests, wrong and improper application of fertilisers, insecticide and the like, improper maintenance and up keep.

The insurance once brought in force remains attached to the plants/trees even in the case of transfer of ownership by will or operation of law.

Operational Details

To start with, the scheme had covered only the rubber plantation raised during 1988 under the Rubber Board's "Rubber Plantation Development Scheme". From June 1989 onwards all immature plantations under the above scheme as well as all mature plantations upto 22 years of age are brought under coverage of the scheme. Thus there are two schemes in operation namely,

- 1) to cover immature areas from the age of 1 year from the date of planting but not exceeding 8 years of age and

- 2) to cover mature areas between 8 years and 22 years of age (Rubber Board - 1989)

Insurance for immature rubber

This insurance scheme covers rubber plantations from the first year of planting till completion of 8 years of age. The scheme introduced during December 1988 was only for plantations raised in 1988 under the Board's "Rubber Plantation Development Scheme". The risk cover for plantations in the first year of planting will become effective only 12 months from the date of planting. The date of planting for this purpose is taken as the last day of the month during which planting has been carried out. For example, if planting had been carried out on 8th July 1988, the date of planting will be reckoned as 31st July 1988 and any loss that occurs due to specified perils from 1st August 1989 will be eligible for compensation. With the introduction of the new scheme, the rubber plantations in their second year of planting to completion of 8 years in age can also be insured, provided those had also been covered under Rubber Board's "Rubber Plantation Development Scheme I or II". In such cases the insurance cover will take effect from the date commencing 30 days of payment of the premium and shall continue after the close of 8 years of age of the rubber plants.

Rates of Premium

The rates of premium charged are fixed as follows depending upon the age of the immature plants :

<u>Period</u>		<u>Rate of Premium Per Hectare.</u>
1. Within 1 year from the date of planting	-	Rs. 500.00
2. Between 1 and 2 years	-	Rs. 440.00
3. Between 2 and 3 years	-	Rs. 380.00
4. Between 3 and 4 years	-	Rs. 330.00
5. Between 4 and 5 years	-	Rs. 270.00
6. Between 5 and 6 years	-	Rs. 200.00
7. Between 6 and 7 years	-	Rs. 150.00
8. Between 7 and 8 years	-	Rs. 90.00

Compensation

Compensation payable in the case of losses resulting from the specified hazards as laid down will continue. The rate of compensation are as follows:

After 1 year	-	Rs. 41 per plant
After 2 years	-	Rs. 74/- per plant
After 3 years	-	Rs.100/- per plant
After 4 years	-	Rs.123/- per plant
After 5 years	-	Rs.133/- per plant
After 6 years	-	Rs.144/- per plant
After 7 years	-	Rs.166/- per plant

The first 10% of the total loss in any case should be borne by the insured grower and the insurance company will pay only the balance 90%. The maximum liability of the company will not exceed Rs. 45,000/- per hectare, so far as plantations upto the close of the 8th year are concerned.

The insurance scheme for immature rubber (1 to 8 years) will not cover planting raised by growers on their own and those for which rubber plantation subsidy permits issued by the Rubber Board have been cancelled or due to be cancelled because of poor maintenance and growth performance. (Rubber Board, 1989).

Insurance for Mature Rubber

The scheme for insuring mature rubber in the age group of 8 to 22 years is also under operation by M/s.National Insurance Company Ltd.

The Insurance Company will issue long term policies for three years to enable the growers to obtain reduction in per year incidence of premium amounts. Thus the amount payable in advance as premium will be Rs.473/- per hectare. The scheme was in operation with effect from 1-6-1989. Risk coverage commences 30 days after the payment of the premium amount at the Rubber Board's Regional Office. In the case of large growers insurance of mature rubber plantation is also done on an annual basis at a premium of Rs.210/- per hectare instead of Rs.473/- per hectare for three years approved under the existing scheme.

Compensation

Under the scheme, the maximum compensation proposed per tree destroyed or damaged in various age groups, due to

specified natural calamities is as shown below:

<u>Age Group</u>		<u>Limit of compensation per tree</u>
1.	From 8 to 10 years (from the date of planting)	Rs. 200.00
2.	From 11 to 13 years	Rs. 210.00
3.	From 14 to 16 years	Rs. 225.00
4.	From 17 to 22 years	Rs. 250.00

The maximum liability of the insurance company, in the case of any claim is limited to Rs.60,000 per hectare. The insured grower will have to bear 10 per cent of the admitted claim amount or Rs. 1,000/-, whichever is more in regard to each claim (Rubber Board, 1989).

Procedure for applying

Intending growers will have to obtain a proposal form and fill up the same. The forms are being distributed to the growers from the local rubber producers' society. Details like name and address, register number of the estate allotted from the Rubber Board, extent under rubber, year/date of planting etc. are to be furnished in the form. The Rubber Producer's Society, on receipt of the filled up proposal form will forward the same to the concerned Regional Office of the Rubber Board along with the premium amount collected. In the case of those growers who are getting financial assistance from the Rubber Board under the Rubber Plantation

RECEIVED
12 OCT 1989

Development Scheme, there is a provision to deduct the premium from the subsidy payable against the written consent of the grower in this regard. On receipt of the proposals from the Rubber Producer's Society, a certificate form will be prepared by the Development Officer of the concerned Regional Office in quadruplicate after verification of office records relating to the estate and forward to the insurance company. The proposal form received from the growers through the Rubber Producer's Society will be retained at the Regional Office. The Rubber Producer's Society is permitted to collect Rs.10/- from the growers along with each proposal. Out of this, an amount of Rs.5/- will be credited to the Society's account and the balance amount of Rs.5/- will be disbursed to the collection agent who is canvassing the insurance, as a sort of commission. (Rubber Board, 1989)

Issue of Policy

The Rubber Board takes a master Policy from the insurance company covering the entire area estimated to be brought under the scheme and the premium for the master policy will be paid by the Board in advance. The individual policies are issued from the Rubber Board Regional Office on receipt of proposal form and premium amount from the growers and after verifying the relevant record available at the office (Rubber Board, 1988).

Settlement of Claims

Settlement of claims by the insures, namely, the National Insurance Company Ltd. would be in the following manner:

- a) Against actual number of rubber plants/trees totally lost owing to the risks covered.
- b) Against area in which the rubber plants/trees have been totally or near totally perished as a result of risks covered (Rubber Board - 1989)
- c) In the former case, the claim would be admitted on the basis of plants/trees found lost multiplied by the rates of compensation applicable for those subject to the maximum scale admissible per hectare and payment would be effected after deduction of due excess fixed. In the case of losses occurring repeatedly during the period of validity of the insurance, corresponding repeated claims would be entertained, subject to the overall limit of maximum liability of the insurer on hectare basis reduced by such excess as applicable. As for the latter case, the maximum liability fixed for the insurer for the particular area reduced by the excess applicable would be the net amount of compensation. For example, if trees of a mature plantation

of one hectare is completely lost, the net compensation would be the maximum liability at the rate of Rs. 60,000 less excess Rs. 6,000 at the rate of 10 per cent that is Rs.54,000/-. On the other hand, if only hundred trees are lost in the first instance, another hundred and twenty trees in the second instance and yet another hundred and fifty trees in the third instance, the insured could get Rs.22,500/- (Rs.25,000 - Rs.2500/-), Rs.27,000/- (Rupees 30,000 - Rs. 3,000/-) and Rs. 4,500/- (Rs.5000 - Rs.500) respectively in corresponding three stages. The insurance cover for a mature area would cease to be effective once the maximum liability for the insurers under it is discharged by them in full or on expiry of the period of certificate, whichever is earlier. While the insurers' maximum liability per hectare in the case of mature area insurance is Rs.60,000/-. It is Rs. 16,400/- for one to two year old plantations, Rs. 29,600/- for two to three year old plantations, Rs.40,000/- for three to four year old plantations and Rs.45,000/- for four to eight year old plantations under insurance cover available for immature plantations.

Claims would be entertained only in respect of those cases wherein the waiting-in period is over. The grower should report the losses sustained to the trees/plantations due to specific perils stipulated in the scheme, to the Development

Officer of the concerned Regional Office immediately after the occurrence. The Development Officer may himself conduct the investigation or he may authorise a competent officer from his office for the purpose. The investigation report should contain the reference number/register number of the estate, insurance certificate number, name and address of the owner of the estate etc. The report should also specify the area affected, perils by which the loss has incurred, number of plants/trees lost partially or totally, date on which the loss has incurred etc. In cases where the loss incurred is excessive, photographs would also be taken and forwarded to the insurance company in which case the company will meet the expenses at Rs.5/- per copy. Detailed report will be forwarded to the insurance company along with the claim with a copy to the Rubber Board's head office. The insurance company, on receipt of the report, would depute their surveyors for further investigation if found necessary.

The amount of admitted claim would be paid by the insurers to the Rubber Board who are the insured under master policy. The Board's Regional Office concerned would be thereupon authorised to pay the amount to the insured grower.

MATERIALS AND METHODS

MATERIALS AND METHODS

The present study was undertaken to evaluate the progress of the new insurance scheme introduced in rubber plantations to bring out the various salient features and to suggest modifications for the smooth running. The study was undertaken in Pattimattom, Kizhakkambalam and Chemmanad villages of Kunnathunadu Taluk of Ernakulam district. The geographic locations is given in (Annex-I). Six small rubber growers who had opted for insurance were selected at random and the relevant data from them were collected in a questionnaire, after personally interviewing the growers. The questionnaire covered details such as the name and address of the holder, location, register number and other reference number of the holding, registered area under rubber, actual area under rubber etc. The details of the questionnaire is reproduced as Annexure II. The study covered a total extent of 10.13 hectares comprising both mature and immature area. The areawise details of the individual holding selected are given in Table I.

In addition to the above study, the executives of the insurance company and Rubber Board were also interviewed with a view to find out the progress and problems of the insurance scheme. The data collected were analysed to draw conclusions regarding the efficiency of the present crop insurance scheme in rubber plantation.

Since Crop Insurance in Rubber is a specialised subject of recent importance not many studies have been undertaken except those referred to in this chapter.

Table I - Details of holdings selected for the study

Sl. No.	Name of the holder	Ref.No.	Details of area (Extent in hectares)	
			Mature area	Immature area
1.	Mr. C.P.George and Mrs.Sosamma Paulose	KND 2454	2.98	0.47
2.	Mr.N.K.Parameswaran	KND 2504	2.04	-
3.	Mr. C.P. George	KND 3667	0.88	-
4.	Mr. C.K.Ravindran Nair	KND 6332	-	1.16
5.	Mr.N.N.Parameswaran Pillai	PDEK 182 - 83A	1.10	-
6.	Mr.Kuruvilla Chacko	KND 862	0.50	1.00
Total Area			7.50	2.63

RESULTS AND DISCUSSIONS

RESULTS AND DISCUSSION

The results obtained from the study are described and discussed in this chapter.

4.1 - INSURANCE COVERAGE FOR RUBBER IN INDIA

Table 5 indicates the general coverage of the insurance scheme in India from the inception till 31-3-1991.

It could be seen from the table that only 1.3 per cent of the total area under rubber in the country alone has been brought under insurance coverage so far. According to the officials of the insurance company, more area could be brought under the scheme by intensive propaganda and by making insurance compulsory at least in the case of those holdings which are financed by the rubber Board and banks. The claim ratio, that is, the amount disbursed against claims in relation to the total amount of premium collected, is stated to be very high. It is informed that within two years 18.07 per cent of the premium collected has been paid as compensation, that is on an average, 9 per cent per year. At this rate, by the end of the 8th year 70 per cent of the total premium collected will have to be paid as

compensation in which case the scheme will not be financially viable. Hence to make it viable, more area should be brought under insurance cover.

4.2 - DETAILS OF THE HOLDINGS SELECTED

4.2-1 - Type of Planting Material

Planting material used in all the holdings selected were bud grafts. Different clones were used, the majority being the clone RRII - 105. Table 2 indicates the various types of planting material used and the extent under each variety.

4.2.2 - Planting Density

The planting density was different in all the units. One small holder had adopted two different distances and consequently the stand of trees was also different in the same holding. The details regarding the planting density in the holdings selected are reproduced in Table 3.

The stand of the trees was very high in most of the cases, though the recommended stand per hectare is around 420 for immature area and 350 for mature area. Most of the

small growers preferred to adopt a higher stand and continued to maintain the same throughout.

4.2-3 - Tapping System adopted and Yield

All the mature areas were under tapping and the tapping system adopted was half spiral, alternate daily (s/2 d/2) in all the cases except in a portion of 0.71 hectares where half spiral daily (s/2 d/1) system of tapping was adopted. Since the holdings were planted with high yielding materials, the yield obtained in all the cases was reasonably high. The details are presented in Table 4.

4.2.-4 - Motivation to Take up Insurance

The owners of the small holdings selected for the study approached the insurance company with different motivations. Two of the growers had suffered losses due to wind in the previous years and the remaining four growers were aware of the losses sustained by other growers in the locality. Besides, they were also influenced by the campaign conducted by the Rubber Board. As a result of this, they have adopted insurance. The six small holders have taken up insurance covering a total area of 10.13 hectares.

4.2 - 5 - Intensity of Damage and Compensation Received

Three holdings out of the six selected for study suffered losses due to wind. The Rubber Board officials investigated the damage and bonafides of the loss were certified. Subsequently, the surveyers of the insurance company also visited the holdings and ascertained the loss. A total amount of Rs.15321/- had been paid to the growers as compensation.

4.2-6 - Response of Rubber Growers to Insurance Scheme

The growers interviewed were satisfied with the performance of the insurance company as the response of the company to the damage was reasonable prompt. The company has also taken by and large a positive approach in the settlement of claims. This has generated a good will in the locality towards crop insurance and as a result one of the small growers affected by loss persuaded at least twenty small rubber growers to take up insurance. Others also influenced a good number of small rubber growers to take up insurance. The concept of crop insurance is therefore spreading far and wide in the locality.

4.3 - Suggestions of Growers and Officials

The small growers interviewed offered some suggestions with a view to popularise the insurance scheme further. They

suggested that the current 'Waiting in' period of one month for mature plantation and one year for immature plantation for claiming compensation should be abolished. They also want the insurance company to give compensation for the breaking of branches which may perhaps recoup itself in course of time. But definitely it would adversely affect the growth and yield of the trees temporarily. They also want the company to give coverage for some common maladies like brownbast, trunk snap, branch snap, drying etc.

According to the Development Officer, Rubber Board, Ernakulam, Crop Insurance should be made compulsory for those who avail financial assistance from Rubber Board. At present, joining the insurance scheme is only optional to the rubber growers, even though they may be availing substantial financial assistance from commercial banks, Rubber Board and other institutions. In the case of a loss to the plantation, these institutions may also suffer loss. According to the Development Officer, Rubber Board, Ernakulam, this should be prevented. Moreover, only if the plantation is insured, the rubber grower would get better interest and incentive in maintaining his plantation throughout the economic life in a more efficient manner. This suggestion of the Development Officer, appears to be a sound one which deserves active consideration of the policy makers.

He has also suggested that the current 'Waiting in' period for immature plantation after insuring should be reduced to three months from one year. The reason adduced by him is that around 30 per cent of the investment of the planter is incurred during the first year. The cost of planting material (Poly bagged bud grafts) has grown up very substantially in the recent past and if the rubber grower is not going to get any compensation, he will be dissuaded to take up planting again after the loss. In the current scheme of insurance, there is no provision for compensation for the loss resulting from drought, excessive rain, landslide etc. The scheme therefore is to be modified to accommodate the above suggestion. This also appears to be a reasonable suggestion to be considered by the policy makers. The development Officer also suggested that the coverage should be enlarged so as to include losses resulting from malicious damage, damage due to common diseases, destruction by cattle and wild animals, losses due to strike, civil commotion etc. Eventhough these are genuine problems, there are some practical hurdles in the implementation of these suggestions.

During the discussion with the executive of the insurance company, the following suggestions emerged. He is of the opinion that the crop insurance should be made compulsory

at least for those who avail financial assistance from various institutions including Rubber Board. If the scheme is to be sustainable, wider coverage is necessary. According to the officer, during the first two year period of operation of the scheme around 20 per cent of the premium has to be disbursed as claim ratio. This, according to him is one the high side. In the normal case only about 15 per cent should be the claim ratio during the two years. The remedy to the situation is wider coverage of the scheme in the coming years. He observed that at present mainly people in risk prone areas (where natural damage is more) are taking up insurance. The people in the other areas should also be persuaded to take up insurance so that the claim ratio could be brought down to a reasonable level.

The company representative suggested that a little more expeditious disposal of the claim at the Board's level would speed up the disbursement of the amount to the growers. This is also necessary to detect spurious claims in time before the evidences are destroyed. He also suggested that at the Board's level more publicity should be given to the scheme as they are forbidden from undertaking publicity campaign. Some of the suggestions of the Development Officer, Rubber Board, Ernakulam regarding the widening of the risk

coverage of the scheme were brought to his notice. But he stated that there are some practical difficulties in the implementation of the suggestions which is to be overcome for the benefit of the farmer.

Table 2 - Details of Planting Materials and their
area under each unit

Sl. No.	Ref. No.	Name of Clone used	Extent in hectare	Remarks
1.	KND 2454	RRIM 600	2.98	Mature
	"	RRII - 105	0.47	Immature
2	KND 2504	RR II 105	2.04	Mature
3.	KND 3667	GT 1, RRIM 600 PB 5/51, RR II - 105 Mixed	0.88	Mature
4.	KND 6332	RRII - 105	1.16	Immature
5.	PDEK 182 - 83 (A)	RRII - 105	1.10	Mature
6.	KND 862	PB - 235	0.50	Mature
	" "	RRII - 105	1.00	Immature

Table 3 - Planting Density in the Selected Units

Sl. No.	Ref. No.	Planting Density (per hectare)	Remarks
1.	KND 2452	425	-
2.	KND 2504	700 (in 1.33 ha) and 400 (in 0.71 ha)	Adopted two planting distances and hence two types of planting density.
3.	KND 3667	505	-
4.	KND 6332	525	-
5.	PDEK 182 - 83 (A)	400	-
6.	KND 862	515	-

Table 4. Details regarding area under tapping,
tapping system and yield

Sl. No.	Ref. No.	Area under tapping (in hectares)	Tapping system	Yield/ha/ annum (in Kg)
1.	KND 2454	2.98	S/2 d/2	1000
2.	KND 2504	1.33 0.71	S/2 d/2 S/2 d/1	2625
3.	KND 3667	0.88	S/2 d/2	1150
4.	PDEK 182-83 (A)	1.10	S/2 d/2	1200
5.	KND 862	0.50	S/2 d/2	1200

Table - 5. Total Insurance Coverage in Rubber
Plantation in India Till 31-3-91

Total area under rubber (in '000 ha)	No.of Poli- cies issued	Area covered (in ha)	Amount of premi- um coll- ected Rs.	No.of claims rece- ived & settled	Amount disbu- rsed as compen- sation Rs.	Claim Ratio
450	5565	5845	2873650	101	519445	18.07%

Table- 6. Details of number of trees lost and
Compensation received

Sl No.	Ref.No.	No. of trees lost	Amount paid as compen- sation. Rs.	Time taken for payment (months)
1.	KND 2454	42	7895	3
2.	KND 3667	35	6000	4
3.	PDEK 182 - 83 (A)	11	1426	9
Total		88	15321	

SUMMARY AND CONCLUSIONS

SUMMARY AND CONCLUSIONS

Crop Insurance Scheme was initiated in the case of Rubber Plantations in the year 1979 as a result of the study undertaken by Rubber Board in early 1970's. The scheme has undergone changes in 1979 and 1988. The current scheme is launched after a thorough modification of the previous scheme. At the end of March 1991 a total area of 5845 hectares has been insured and an amount of Rs.5,19,445/- has been disbursed as compensation.

The present field study was undertaken in three stages. Six sample holdings were selected from Kizhakkambalam, Pattimattom and Chemmanad Villages of Kunnathunadu Taluk of Ernakulam district and data were collected. Out of the six growers, three have sustained loss and got compensation from the insurance company. As a result, these growers persuaded a good number of relatives and friends to take up crop insurance. According to them the scheme is useful and is working reasonably well. The development officer of the Rubber Board Regional Office, Ernakulam who was interviewed gave a number of suggestions for the improvement of the current scheme. He stated that the 'Waiting in' period of immature rubber should be reduced from one year to three months. The insurance officer who was contacted gave certain points to be incorporated for improving the scheme.

He suggested that crop insurance should be made compulsory. At present, insurance is not compulsory. Hence those who own plantations in the highly risk prone areas come forward and opt for insurance. The Board is not insisting fire belt maintenance. It should be made compulsory in the case of subsidised areas. At present the claim percentage is stated to be very high. Within two years of operation of the scheme it has reached about 20 per cent. The policy covers eight years and at the present rate the claim percentage may go upto 80 per cent against the permissible maximum of 60 per cent. To make the scheme financially viable a wider coverage is required by making the scheme compulsory at least in the case of subsidised areas.

The present scheme is a fairly comprehensive one covering almost all the major risks affecting the rubber plantations such as fire, wind, storm, cyclone etc. However, the study reveals that the scheme has not become very much popular. It has covered hardly 1.3 per cent of the total area under rubber in the country. In order to make the scheme more popular the officers involved in the implementations of the scheme have suggested to make it compulsory at least in the case of those holdings which are financed by the Rubber Board, banks and other institutions.

Besides, a wider coverage of the scheme would make it financially viable and sustainable. To achieve this goal an organised campaign is necessary so that a better awareness about the scheme is created among the rubber growers.

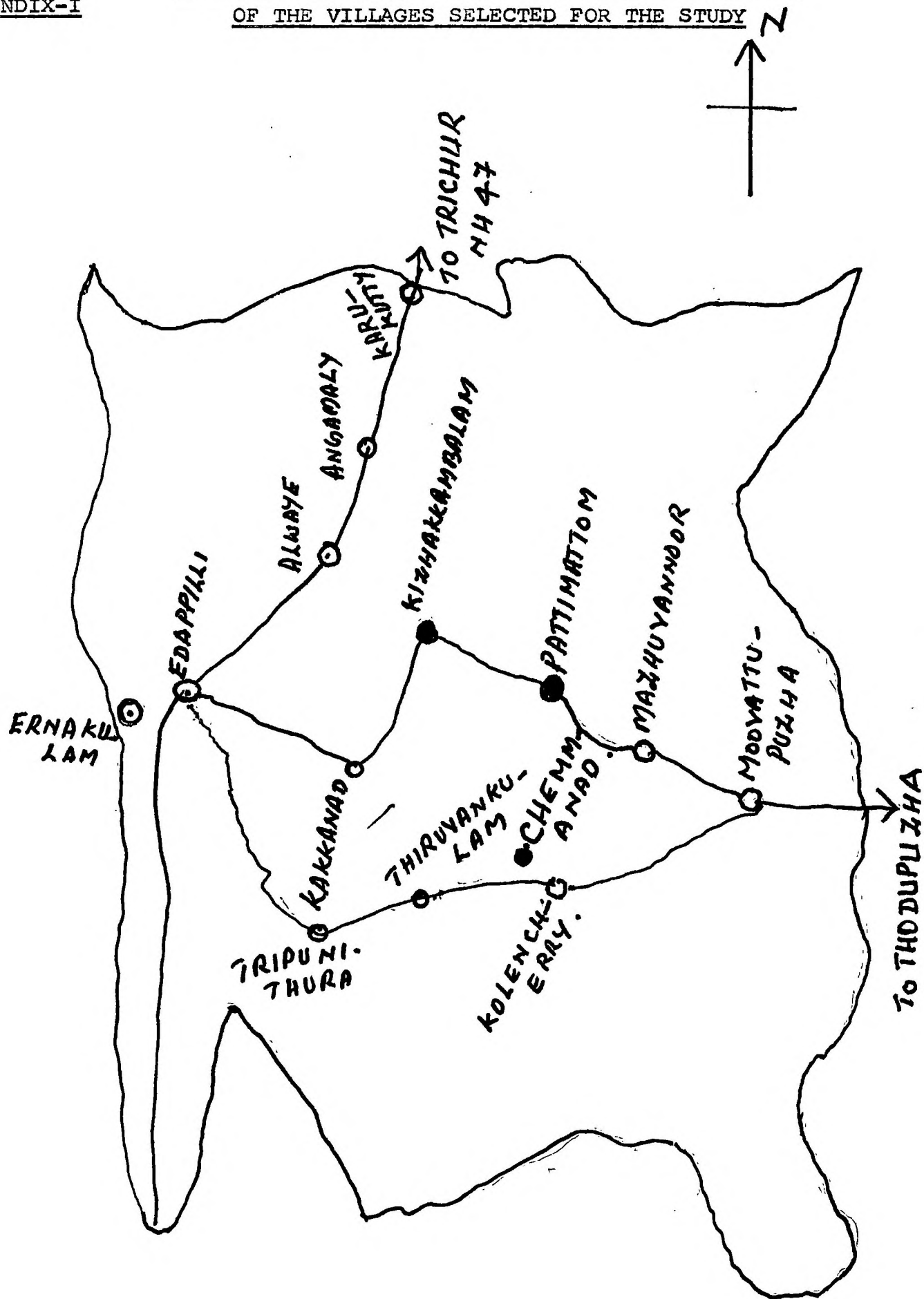
REFERENCES

R E F E R E N C E S

1. Dandekar V.M. 1981 - Crop Insurance in India:
Dept.of Economic, Sardar Patel
University, Vallabh Vidya Nagar:
73.
2. Haridasan.V and Unni R.G 1970 - "Natural Damage to Rubber
Plantations in India" - Rubber
Board bull.(1970) II(1); 1-8.
3. National Insurance
Company 1988 - Brochure on "Insurance of Rubber
Plantations" + 1 - 4
4. Rubber Board 1988 - Office Circular - 38/88/RPD
dated 6-12-1988 of Rubber
Production Commissioner.
5. Rubber Board 1989 - Office Circular - 39/89/RPD
dated 29-5-1989 of Rubber
Production Commissioner.
6. Rubber Board 1989 - Office Circular on Insurance of
Rubber Plantations - Investiga-
tion of Claims or Compensation
of losses, 39/89/RPD dated
28-7-1989 or Rubber Production
Commissioner.
7. Rubber Board, 1989 - Memo on Insurance of Rubber
Plantations - forwarding of
proposal forms for distribution
to RPS - instruction issue of,
39/89/RPD dated 24-8-1989 of
Rubber Production Commissioner.
8. Rubber Board, 1989 - Memo on Insurance of Rubber
Plantations - Information/Clari-
fication - issued - 39/89/RPD
dated 23-8-89 of Rubber Production
Commissioner.

9. Shah V.B. and Maharaja M
1981 - Crop Insurance Scheme in
Gujarat - Seminar Series
XV - Crop Insurance in
India - Dept.of Economics,
Sardar Patel University,
Vallabh Vidyanagar: 127.

MAP OF ERNAKULAM DISTRICT SHOWING THE LOCATION
OF THE VILLAGES SELECTED FOR THE STUDY



ANNEXURE - 2

Questionnaire for the study 'Crop Insurance In Rubber'

(Date as on 1-4-'91)

1. Name and address of the Small holder :
2. Location of the holding - Village, Taluk and route to the plot :
3. Register number/other reference number of the holding :
4. Registered area under rubber (in ha) :
5. Actual area under rubber (in ha) ;
6. Details of actual area :

Nature of the area	Planting material and extent (in ha)		Total Extent (A + B)
	A- Bud Graft	B-Seedling	
Mature			
Immature			

7. Stand per hectare :
8. Details of mature area
 - a) Area under tapping :
 - b) Tapping system followed :
 - c) Average yield/ha/annum :
9. Maintenance of the holding : Very good, good, average, poor
10. When was the holding insured (year/month) :
11. Area covered by the insurance scheme :
12. Name of the Insurance firm :

13. Whether coverage is for-
- a) Fire only :
 - b) Wind only :
 - c) Flood only :
 - d) a combination of the above :
14. Rate of premium and amount paid :
15. Has any claim for loss been preferred during the period of insurance and if so, the amount of loss claimed : Rs.
16. Amount of compensation received :
17. What prompted the holder to take up insurance
- a) His own loss due to fire, wind, flood etc. in the past :
 - b) Experience of his neighbours/relatives due to loss sustained by fire, wind, flood etc. :
 - c) Awareness created by the publicity propaganda of the Rubber Board. :
 - d) Persuasion of Board's Officials :
 - e) Any other reason (specify) :
18. Comments on the usefulness of the insurance scheme :
19. Whether persuaded any neighbours/friends or relatives to take up insurance - if so furnish details:
20. Any suggestion for improvement of the existing system :
21. Remarks :