



GOVERNMENT OF KERALA

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INSTRUCTIONS FOR THE FIELD STAFF  
ON SURVEYS UNDER THE SCHEME  
“ESTABLISHMENT OF  
AN AGENCY FOR REPORTING  
AGRICULTURAL STATISTICS  
IN KERALA”  
(EARAS)

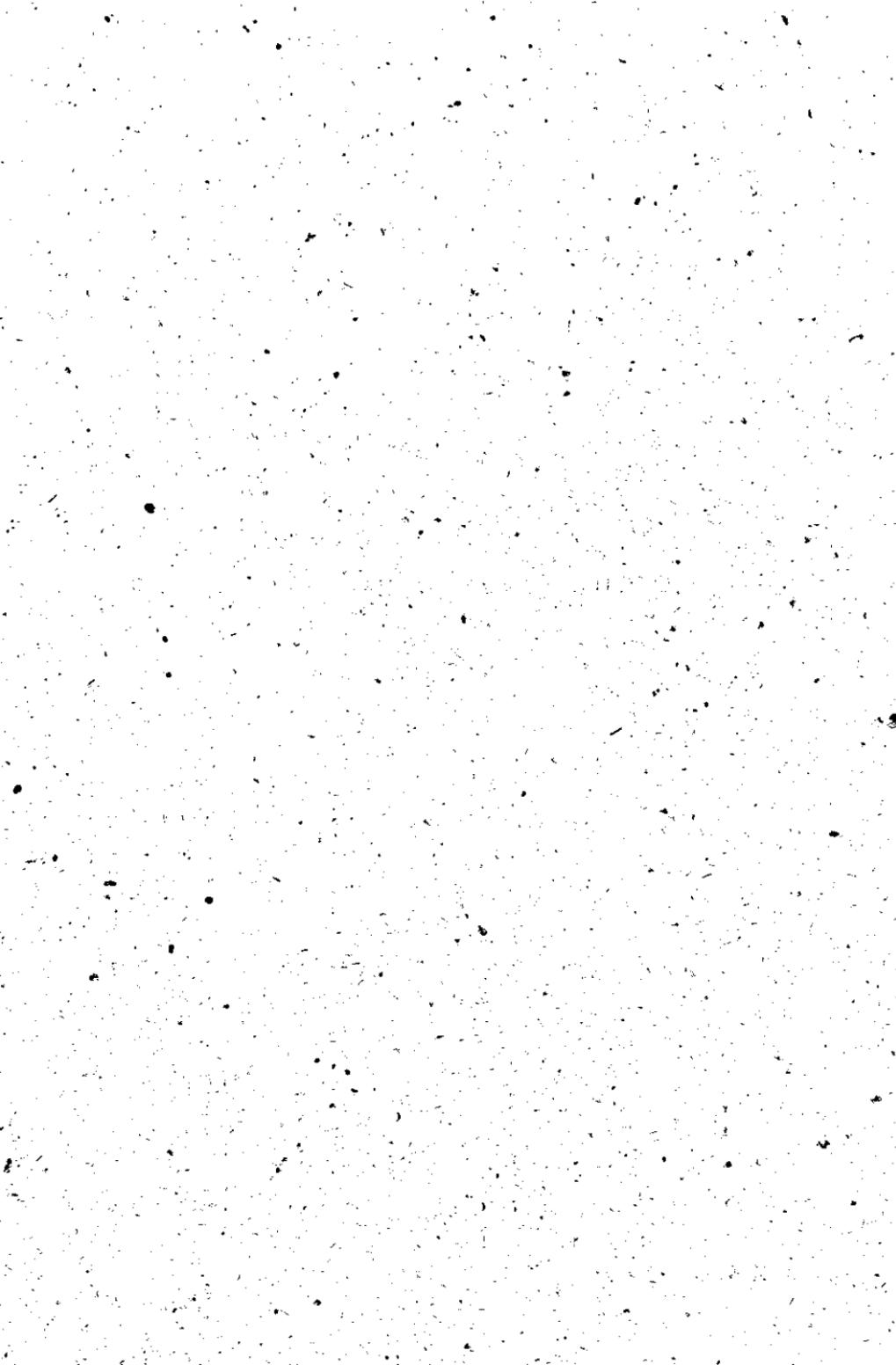
DEPARTMENT OF  
ECONOMICS AND STATISTICS, TRIVANDRUM  
1988

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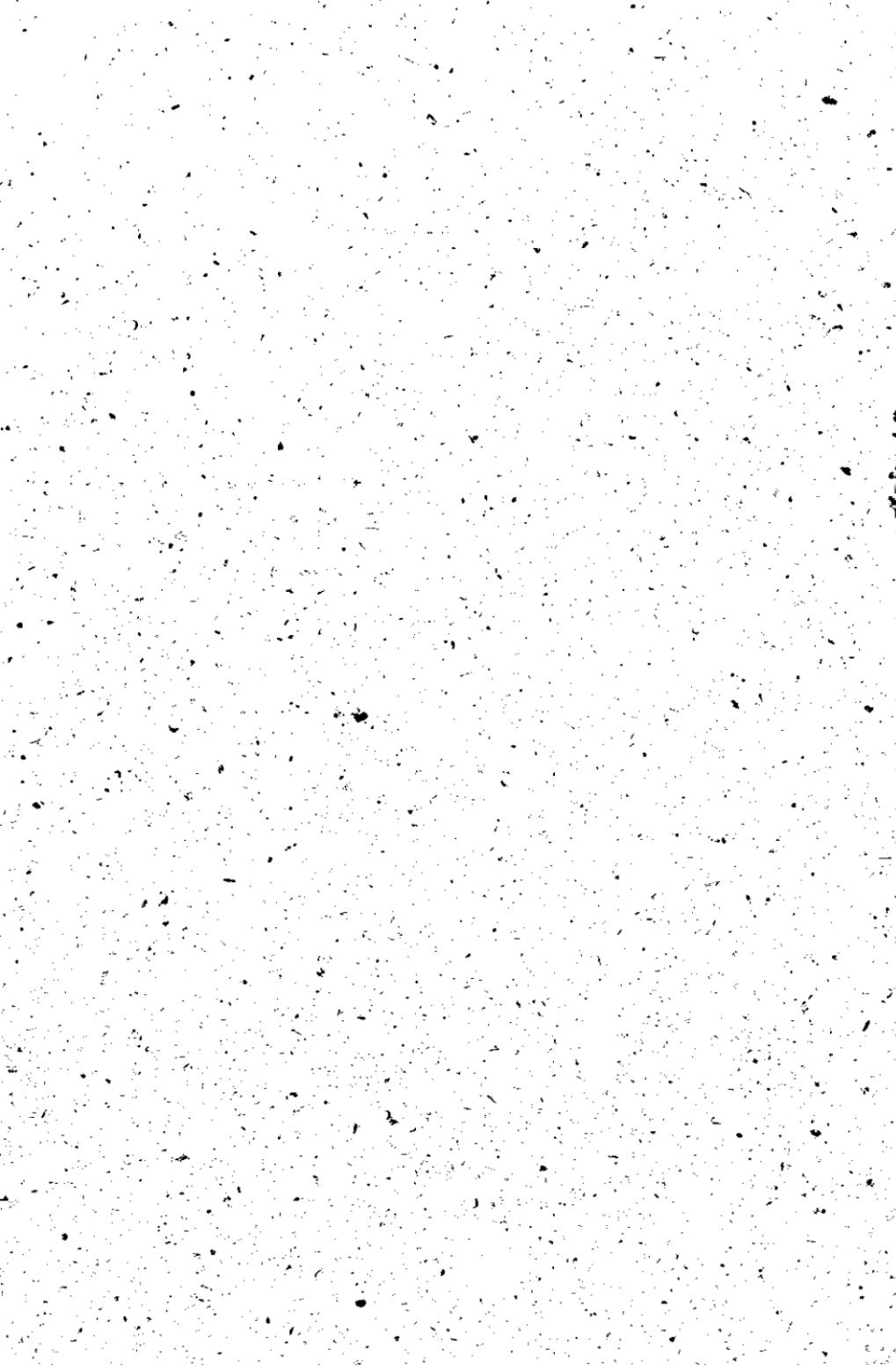
## PREFACE

When the scheme of an Agency for Reporting Agricultural Statistics was launched in the State during the Agricultural Year 1975-76 a printed booklet containing the instructions to field staff for the smooth conduct of the survey was issued by the department. The original scheme was designed by adopting the taluk as stratum and the survey was done by completely enumerating 20 per cent of the villages selected at random in the State in each year. The design of the survey has since been changed to suit the estimation of various parameters at Block level through cluster sampling. Thus it has become necessary to issue a revised booklet of instructions incorporating the changes contemplated in the revised design for the benefit of primary workers and hence this publication.

It is prepared in the Agricultural Statistics Division of the Department.

Trivandrum,  
31st October 1988.

K. BALAKRISHNAN NAIR,  
*Director of Economics and Statistics.*



# SCHEME FOR THE ESTABLISHMENT OF AN AGENCY FOR REPORTING AGRICULTURAL STATISTICS IN KERALA (EARAS)

## INSTRUCTIONS TO THE FIELD STAFF

The estimates on various parameters relating to Agricultural Statistics in the State prior to 1975-76 were framed on the basis of the data collected annually through land utilisation surveys organised by the Department. The estimates so obtained at Taluk or district level could not be assured of the desired precision due to the small sampling fraction adopted for these surveys. The quality and coverage of agricultural statistics thus available left much to be desired for. It is in this context the Government of India came up to finance a scheme for the Establishment of an Agency for Reporting Agricultural Statistics (EARAS) as part of Timely Reporting Survey implemented in the reporting states. In the non-reporting states of Kerala, West Bengal and Orissa a variant of the scheme T.R.S. to suit the collection of Agricultural Statistics was introduced in the name of E.A.R.A.S. (Scheme for Establishing an Agency for Reporting Agricultural Statistics).

The scheme envisaged collection of data for estimating area and yield statistics for each agricultural year by complete enumeration of the villages of the State in a phased manner covering 20 per cent of the selected villages in each year. The first cycle of the survey was completed within a period of six years i.e. 1975-76 to 1980-81 and the second cycle in 1985-86. The first year of the 3rd cycle was started in 1986-87. But here also estimates framed were confined to district and State level only. Generation of lower level estimates other than district and State was conspicuous by its absence.

The need for building up block level estimates of area and production was badly felt with the introduction of crop insurance scheme by the Government of India. In order to meet this increased demand for agricultural statistics at lower levels the sampling design hitherto followed in respect of land use and crop estimation surveys under the E.A.R.A.S. scheme was revised from 1987-88 with a view to build up block level estimates of area and production statistics. The object of the scheme is to prepare annual statistics of land use, area and production of crops at district level with break up for the block/municipality level. Under the scheme, blocks, city corporations and municipalities with an area of 10 sq. kilometers and above are treated as separate stratum. Municipalities with an area of less than 10 sq. km. were merged with the adjoining blocks and treated as a single stratum.

These blocks are divided into a number of investigator zones depending on the area of the block, nature of land etc. City Corporation area is divided into three Investigator zones. Each municipality with area more than 10 sq. km. is treated as a single investigator zone.

*Sample size.*—In each investigator zone, 100 clusters of five survey subdivisions as in the basic tax register will be selected for the survey. These 100 clusters will be allocated among the dry land and wet land in proportion to the area under these categories in the zone.

*Cluster formation.*—In each investigator zone, lists of wet land survey subdivisions and the dry land survey subdivisions as per basic tax register will be prepared separately in an orderly manner (one village after the other.) For getting the required number of clusters from each list, select equal number of survey subdivisions to the extend of clusters allotted from the list using circular systematic sampling method. These plots will be the key plots for cluster formation. The selection procedure is illustrated below.

Suppose the frame consists of 'N' subdivisions (either litho or basic tax register or F.M.B.) and 'n' subdivisions are to be selected from them, the interval (I) is to be calculated as  $N/n$  rounded to the nearest integer. Random start 'R' integer is taken from one to N using the random number table. Then the subdivisions with sampling serial numbers

$$\begin{aligned} R, \\ R+I \\ R+2I \\ \hline \end{aligned}$$

$R+(n-1)I$  will be the key plots selected. If any of these exceeds N, N will be subtracted from it to get the serial number of survey subdivision number to be selected.

*Example.*— Let  $N=85$   $n=7$

$$\text{Then Interval } I = \frac{85}{7} = 12$$

Let the random start be 60. The sampling serial numbers of the seven samples will be

1.  $60$  (random start)  $\rightarrow 60$
2.  $60+12 = 72$
3.  $72+12 = 84$
4.  $84+12 = 96 \rightarrow 85 = 11$
5.  $11+12 = 23$
6.  $23+12 = 35$
7.  $35+12 = 47$

These plots will be the key plots for forming clusters. Once these key plots are selected the investigator should visit the key plot and stand in the northern boundary facing it in south-north direction. Then the two plots each of the same category nearest to him in the same direction (horizontal) on his right side and left side together with the key plot will form the cluster. It may happen that there may not be two plots or any plot of the same category in any one of these sides. In such cases the deficiency may be made good from the remaining side. In exceptional cases where the plots of the same category do not exist either in the left or right side of the key plots, then the cluster may not have five plots. If both left and right side does not have any plot of the same category, the required No. may be selected from north or south of the key plot. The fact may be noted in the Form I diary and a figure of the key plot with side plots may be drawn in the right hand corner of the Form I diary itself.

In respect of key numbers repeating again due to circular systematic method, the repeated key numbers will have to be rejected and a fresh random start taken and selection continued. Merged plots will have to be treated as a single plot. Similarly minor circuit survey numbers are also to be treated as a single plot. For substituting key plots 101st key plot is to be selected and so on. The survey subdivisions forming road, river, thodu etc. forming the cluster should be cut according to the length of the key plot and enumeration conducted accordingly. Normally a cluster should have 5 acres of area.

*Programme of field work—Area enumeration.*—Wet and dry lands will be enumerated separately. If any of the selected survey subdivision exceeds two acres, an area of around one acre with identifiable boundaries (either natural or man made and not artificial) may be selected from the south-west corner. A rough sketch of the plot and the area enumerated is to be drawn in the form I diary.

*Wet land.*—Selected wet land clusters will be visited three times during a year corresponding to each of the following three seasons into which an agricultural year is divided:

Seasons	Months
1. Autumn	July to October
2. Winter	November to February
3. Summer	March to June

- |           |                      |
|-----------|----------------------|
| 1. Autumn | July to October      |
| 2. Winter | November to February |
| 3. Summer | March to June        |

During each visit to the wet lands the details of seasonal and annual crops cultivated in that season will be recorded in the prescribed form. The data on land utilisation, perennial crops and irrigation particulars will be collected only during the last visit.

The collection of data in each season from the wet land clusters will be completed according to the following time schedule:

<i>Season</i>	<i>Date of completion of field work</i>	<i>Date of receipt of zone/block abstract at the District Office</i>
Autumn	31st August	15th September
Winter	30th November	15th November
Summer	31st March	15th April

*Dry land.*—The dry land plots will be visited twice a year and enumeration done. In the first visit details on seasonal and annual crops cultivated during Autumn season will be collected. In the second visit the data on land utilisation, perennial crops and irrigation will be collected. Data on seasonal and annual crops falling under winter and summer seasons will also be collected during this visit. The first visit to the wet lands will be closely followed by the first visit to dry lands. The crop abstract report relating to dry lands following the first visit will be forwarded to the district office before 31st December.

The data on seasonal crops collected from both wet and dry lands for all the visits prescribed will relate to all crops harvested/will be harvested in the agricultural year in the corresponding seasons and entries will be made against the appropriate season in the spaces provided in the schedules. The standing crops which will be harvested only in the next year will be entered against the column for summer indicating the fact by marking the area with the letter 'C'.

It may be noted that the gross area concept will be followed with regard to the recording of area under crops. According to this concept the area under various crops in one acre of land can be more than one acre according to the intensity of crops. The following example will make this clear.

Let the crops grown in a particular survey number having a net area of 50 cents be as follows.—

1. Banana	..	400 Nos.
2. Pineapple	..	1000 Nos.
3. Tubers	..	10 cents
4. Tapioca	..	5 cents

Converting the crops given in numbers into area adopting the standard number of plants/trees/per acre the area under banana will be 50 cents (800 per acre) and pineapple 20 cents (5000 per acre). So the gross cropped area will be  $50+20+10+5=85$  cents.

There are six forms for collection and compilation of data on area enumeration. They are—

- (1) Form A—Basic details of the selected zones
- (2) Form I—Field diary of the Investigator.
- (3) Form II—Land utilisation and irrigation.
- (4) Form III A—Area under seasonal crops.
- (5) Form III B—Area under annual and perennial crops.
- (6) Form IV—Crop abstract report.

Details of the field work like method of filling up of the schedules, source of data and the time schedule to be followed are given below—

*I. Form A—Basic details of selected zones:*—The details required in this form are to be collected from the village office records and by local enquiry. These details should be collected by the Statistical Inspector by himself and the entries in the form will be completed by the end of the survey.

*Items 1 to 3*—Self explanatory.

*Item 4 (a) Natural region.*—The natural region (viz. low land/mid land high land) of the village as in the census or village records should be noted here.

*Item 4 (b) Soil type.*—The common type of soil found in the village should be noted here. The important soil types found in the State are given below:—

(1) *Sandy soil.*—Found as a strip in coastal areas which varies from sandy loam to pure sand in texture.

(2) *Alluvial soil.*—Found on river banks, mainly in parts of Devicolam, Vaikom, Alwaye, Kunnamthunadu and Chowghat, taluks.

(3) *Laterite soil.*—Found predominantly in the mid-land reg on and is covered by one third of the area of the State.

(4) *Forest soil.*—Found mainly in the hilly regions in Trivandrum, Quilon, Pathanamthitta and Kottayam Districts.

(5) *Peaty or kari soil.*—Mainly found in Kuttanad region including the surrounding areas of Vembanad lake.

(6) *Black soil.*—Confined to the Palghat district, especially Chittur taluk. Cotton is the main crop grown in these areas.

(7) *Red soil.*—Found mainly in Trivandrum and Neyyattinkara Taluks.

*Items 5 and 6.*—To be collected from the basic tax and other registers kept in the village offices. All the items are self explanatory.

*Item 7.*—The month (s) in which the major part of the sowing/planting and harvesting operations of important seasonal crops grown in the village, is carried out during a particular agricultural year will

be recorded in this block. The name of the crop, its code number (given in Appendix II) and the month (s) in which the operations are carried out will be noted. The months may be given code numbers as given below:—

January	01	July	07
February	02	August	08
March	03	September	09
April	04	October	10
May	05	November	11
June	06	December	12

Form A should be prepared in duplicate by the end of May. One copy should be attached as a facing sheet to Form II Register and one copy should be sent to the headquarters by the end of June.

*Form I—Field diary of the Investigator.*—This is the basic record for collection of data under area enumeration. (The details required in the remaining forms will have to be copied from this record). This will be supplied as registers containing 200 pages. Each page is intended for one cluster.

The following points should be strictly adhered to while filling up this form.

(a) The entries should be made in ink preferably with a ball point pen. This form may be completed after the field work in each plot is over. In any case the details of enumeration must be recorded at the end of each day's field work.

(b) The entries should be neat and legible. The register is to be kept as a record and therefore should be handled carefully.

(c) All Inspecting Officers should verify the entries made in this form during their regular inspection.

(d) The names of taluk, Block/corporation/municipality, village, Investigator zone number and the type of land (wet/dry) should be entered at first.

(e) When the Investigator is relieved of from field work in a zone, the Taluk Statistical Officer should see that the field diary is obtained from the Investigator before his relief. The periods during which each Investigator made entries in the diary should be noted on the last page of the register.

(f) One form is to be used for one cluster. A cluster will consist of 5 plots as described below. In the Travancore-Cochin area where the village litho maps are available identification is easier for a sub-division as shown in the map than for a sub-division in the basic tax register. In such cases the survey number (or) the sub-division

number as in the litho map may be considered as a unit of enumeration provided that the entire area of the survey (or sub-division) number in the lithomap is classified as wet or dry (not that the dry land includes puram poke and tharisu) as per the basic tax register. In other cases, viz. the litho sub-division includes dry and wet area, the sub-division number as in the basic tax reg ster should be considered as a unit of enumeration. The details of the key plot may be recorded in the middle (3<sup>rd</sup>) column of the form. The details in respect of 2 plots each of the left and right of the key plot may be recorded in column No. 1, 2, 4 and 5 respectively. If in any case the cluster is formed by taking remaining plots from one side only then the key plot should be ticked and details of the remaining plots to be written in that side of the key plot. In case no plot of the same category in any side of the key plots is available then the details of the key plot alone need be entered in the diary with an explanatory note.

(g) If any selected survey sub-division exceeds two acres in area, an area around one acre with identifiable boundaries (either natural or manmade but not artificial) may be selected from the south-west corner of the plot. A rough sketch of the plot and the part enumerated with area is to be drawn in the right hand corner of the form I diary.

(h) In respect of minor circuits and plots with an area of 20 acres and more the cluster will be formed with identifiable plots (need not be Sy. sub-division) to the left and right of the key plot. While enumerating a plot the area actually enumerated is to be given in brackets in columns 1, 2, 3, 4 and 5 respectively.

(i) If the side plot selected happen to be a road, river, stream etc. a portion equal in length to the key plot may be marked and an area around one acre in the south-west corner is to be enumerated.

(j) Separate books need not be used for wet and dry clusters.

The various items on which data are collected in Form I diary are discussed below.

*General particulars.*—Items 1—8 are self explanatory.

*Block A:*—This block is meant for recording the classification of area and will be filled in only during the last visit.

*Item 1.*—The survey subdivision number of the unit as identified by the investigator should be entered here. It must be a survey sub-division number as in the litho map or as in the basic tax register. In the case of amalgamated plots all the survey numbers comprising the unit of identification should be entered. It should be noted that the sum of the entries in col. 2 recorded in brackets i.e. area enumerated should be equal to the sum of the entries in column 3 to 11.

**Item 2—Area (Cents).**—The area of the plot entered should be corrected to the nearest cent. The area as per the basic tax register should be entered here. In the case of units with more than two acres, the area actually enumerated should be entered in brackets. At the time of identification if it is found that there is a change in area due to sea erosion or change in actual possession the actual change in the area should also be noted in brackets with a (+) or (-) symbol. For example the survey subdivision No. 364/4 owned and possessed by 'A' has an area of 185 cents as per the basic tax register. At the time of identification suppose it is found that the actual area of the plot 364/4 is only 160 cents and the remaining area of 25 cents is found amalgamated with the plot bearing survey sub No. 364/5 which has an area of 210 cents according to the basic tax register and is owned and possessed by B. Then the entry against Sy. No. 364/4 will be 185 (-25) and that against Sy. No. 364/5 will be 210 (+25).

**Block B Area under seasonal crops.**—This block is meant for recording the area under seasonal crops cultivated in each plot during each season. During each visit the investigator will record the details of crops harvested or will be harvested during that season under the corresponding columns. The name of the crop and the area under the crop split into irrigated and un-irrigated should be entered in the respective columns. In the case of paddy, the variety of seed, whether high yielding variety or local should be noted with symbols (HY) for high yielding and (L) for Local varieties. The High Yielding varieties usually cultivated in the State are as follows.

#### List of High Yielding Varieties of paddy cultivated in Kerala

1. I.R. 8
2. Jaya
3. I.R. 20
4. Annapurna
5. Triveni
6. Aswathi
7. Bharathi
8. Jyothi
9. Sabari
10. Bhadra (M. 04)
11. Asha (M. 05)
12. Pavizham (M. 06)
13. Karthika (M. 07)
14. Lekshmi (Kayamkulam-1)
15. Bhagya (Kayamkulam-2)
16. Onam (Kayamkulam-3)
17. Swarnaprabha (P.T.B.-43)
18. Reshma (P.T.B.-44)

The list will be modified every year,

Paddy raised and harvested in Punja lands in Kuttanad region and Kole lands in Trichur region will be entered under winter season of the crop if harvested during the period from November to February due to early sowing. In order to identify these areas separately the letter 'S' may also be entered along with the name of the crop in this block for those areas where the crop is harvested during winter. These areas may be shown separately in Form III A also under winter season.

During the first visit it may happen that some of the standing crops in the field will be harvested during the Autumn season (July–October) itself while some others will be harvested only during winter season (November–February). The area under those crops which will be harvested during July–October will be entered under Autumn, those harvested during November–February under winter while those harvested during the rest of the year under summer. In the case of standing crops which will be harvested only after the agricultural year the area may be given under summer season along with the letter 'C' to indicate that the harvest will take place only in the subsequent agricultural year.

During the subsequent visits the Investigator need enumerate the details of those seasonal and annual crops which were not covered in the previous visit (s).

Since the interval between two visits in a plot is about three to four months it is likely that some of the short duration crops like pulses are missed by the investigator at the time of his visit. Therefore, it is suggested, that during each visit the details may be collected by observation as well as by enquiry wherever possible. Also seasonal green manure crops may also be enumerated under the respective seasons. In fact it is necessary to record details by enquiry method in the case of harvested crops.

During the first visit the investigator may come across the following situations in the case of seasonal crops.

1. There were crops in the field which were harvested during the same season prior to his visit, and there is no crop at present. This may happen rarely in the case of autumn paddy, ragi first crop, sweet potato first crop, pulses first crop and tapioca.
2. There is standing crop which will be harvested during the season (All the crops mentioned under item 1).
3. There is standing crop which will be harvested only during the next season or the season subsequent to the next season (ginger, turmeric, cotton and tapioca).
4. There is no seasonal crop at the time of visit and no crop was harvested during the season.

The area under the first and second categories will be entered under the same season in which he visits the plot with the name of the crop.

The area under the fourth category need not be accounted for in the case of dry lands during the first visit. But in the case of wet lands the area under the fourth category will be entered under the season of visit against any of the following classifications:—

1. Not under cultivation (including non-agricultural uses)
2. Fallow for the season
3. *Other crops.*—(In this case, area need not be entered but an 'X' mark may be given to indicate that there is perennial or annual crops).

The wet land plots in the selected villages are being visited three times during the year, to record the details of crops grown and harvested during each season. If there is no crop in the plot or its portion, such areas are to be entered against the appropriate classification shown above in Block A of Form I during the respective season. It may, sometimes, happen that in a plot, the same patch (or different patches with approximately equal in area) is left uncultivated during the different seasons. In order to identify the portions left as fallow during each season, it is instructed to draw a rough sketch of the plot on the top of Form I itself and mark the portion left as fallow during each season at the time of each visit.

In the case of tapioca, it is possible that the crops during a particular year will be harvested only during the next year and as such along with the name of crop, the letters, A, B or C may also be used to identify the period of sowing also. These letters indicate the following:—

- A. Sown during the previous year and harvested during this year.
- B. Sown and harvested during the same year.
- C. Sown during this year and harvested during next year.

During the subsequent visits, care should be taken:—(1) to record the seasonal crops which were raised and harvested during the previous season, if the same has been missed; and (2) to avoid duplication of the entries regarding crops which will be harvested during the next season entered in the previous visit.

During the second time the investigator will be visiting the plots along with the details entered in the field diary, during the first visit, If the crops which will be harvested during the second season have already been noted in the diary, the corresponding entries are to be ticked (✓) to indicate

that these details were noted during the previous visit. He will then record the details of other crops, if any cultivated in the plot after his first visit. The same procedure is to be followed during the third visit.

In the case of tapioca, since the harvest is spread over all the 12 months of the year, only the area under the plants which were or will be harvested during each season need be entered under the respective seasons.

*Recording Crops on Bunds.*—According to the present practice area of bunds is included under cropped areas. The number of trees grown on bunds will be recorded, but the entire area will be assigned to the crop raised in the plot. Even if seasonal crops are raised on the bunds this procedure till be followed.

*Block C—Annual Crops.*—Sugarcane, banana, plantain, pineapple and betal leaves are treated as annual crops since the period extended to two or more seasons. For these five crops the area (number in the case of plantain) under the standing crops at the time of the first visit and area already harvested during the year will have to be entered under this block. This is to avoid duplication of entries in successive visits since these crops will be harvested only once in a year, from the same plot.

Columns under sugarcane, banana and plantain are divided into two each with letter A for the first and letter C for the second. For sugarcane and banana, under A, area harvested or will be harvested during the current year will be recorded and the area that will be harvested during the next year will be noted under C.

In the case of plantain the number of plants harvested during the year will be entered under A and the number of pits of young plants be entered under C. The young plants in the pits of harvested plantains also should be counted as one under C. For banana, sugarcane and betal leaves the area irrigated and unirrigated may be given separately in the respective columns. For pineapple and banana the area under the plants corrected to the nearest cent should be noted. If there are only a few plants, the area under which is less than half a cent then put 'zero' under the corresponding columns indicating that there are a few plants, the area under which is negligible.

Care should be taken to see that these plants for which the area has been entered as zero are not omitted. The following procedure should be adopted for this. The number of plants in such plots should be pooled together till the area becomes at least one cent and entered against the last plot in the group. The average stand per cent may be taken as 50 for pineapple, 8 for banana and 100 for sugarcane.

The following example will make this procedure clear:-

*Example.*—Suppose the number of pineapples in five plots are as follows:-

Plot No.	No. of pineapples	Entry to be made (cent)
1	16	0
2	30	1
3	14	0
4	20	1
5	70	1

The entry against plot No. 4 is the area corresponding to the total number of plants in plot numbers 1, 3 and 4.

*Block D—Perennial Crops.*—Normally this block need be filled in only during the last visit to the plot.

Block D is for recording the number/area of perennial trees grown in the plot. List of those crops are given in Appendix II. The classification of the trees/standards to bearing and young is to be entered in the case of coconut, arecanut, cashew and pepper. In the case of coconut, arecanut, cashew and pepper columns are provided to record details of irrigation. The names of all important crops have been printed in Block D. Whenever a perennial crop other than those listed in Form I is cultivated over substantial areas it may be separately enumerated in a column left blank in Block 'D'. In the case of the following crops, viz; tea, coffee, rubber, cardamom, lemongrass green manure crops, fodder grass and other trees only the area need be entered. *The average stand per cent given below may be adopted for recording area in the case of stray plants; rubber 2, tea 30, coffee 6, cardamom 7.* In the case of Block B, C and D where the area of the number of trees is to be given, the gross area concept is to be followed. So it may not be necessary that the total area recorded will be equal to the geographical area.

*In Block B, C, and D, wherever columns are not provided to record separately area irrigated under a crop, the area may be circled to indicate the fact that it is irrigated.*

*Block E—Irrigation.*—In this block columns have been provided for noting (1) the source of irrigation (2) the number of units (this column is applicable only in respect of tanks and wells) (3) the net area irrigated and (4) the gross area irrigated. The source of irrigation will be entered using appropriate codes (serial number of the various sources listed below).

The different sources of irrigation:-

- 1. Government canals.
- 2. Private canals.

3. Government tanks.
4. Private tanks.
5. Government wells.
6. Private wells.
7. Other minor and lift irrigation schemes.
8. By pumps from rivers, lakes, rivulets etc.
9. By country wheels from rivers, lakes, rivulets and springs.
10. By other means from rivers, lakes, rivulets and springs.

In case the source of irrigation is tanks or wells (i. e. Codes 3, 4, 5 and 6) the number of wells or tanks situated in the plot and availed for irrigation purpose should be entered by providing the corresponding codes in brackets against the serial No. 80. This information is required for estimating the number of tanks and wells used for irrigation purposes. Care may be taken to see that early or late irrigation is not missed in enumeration.

*III. Form II—Land utilization and irrigation.*—This form will be supplied in registers of 200 pages. Each form covers two consecutive pages in the register. Totals of each cluster as given in the last column of Form I need be copied into this register, separately for dry and wet lands; the entries of wet land preceding that of dry land. Though we are not taking villages into consideration care should be taken to enter the totals of all clusters of a particular village on continuous order especially when an investigator zone covers more than one village.

There are 24 columns in this form. The first twelve columns relates to land utilisation and the rest relate to irrigation. As such the required entries are to be copied from blocks A and E of Form I. The entries are to be totalled for each investigator zone and for each block. Further the sum of column 4 to 12 should be equal to the total area of each cluster as entered in column 3 of Form I. This will be true in the case of zone totals and block totals as well. Forest area included in the revenue records will be excluded from the purview of the survey. However forest areas included in the revenue record and not enumerated may also be recorded in the registers and shown as forest not enumerated. If any forest areas included in the revenue records have been enumerated it should also be entered in the register separately with necessary remarks.

*IV. Form III A—Seasonal crops.*—The details required for this form are to be copied from block B of Form I. The details are to be entered for wet and dry clusters separately soon after the visits to the plots during each season. Thus there will be two sets of Form III A for each season; one for the clusters classified as wet in the basic tax register and the other for clusters classified as dry where seasonal crops are grown. Appropriate corrections in the printed words wet/dry on top right hand corner of the form may be made to make it clear

whether the form relates to either wet or dry clusters. One line is to be used for entries in respect of each cluster as entered in the last column of Form I. Separate sets of forms should be used for each investigator zone. In Form III A (wet) all selected clusters classified as wet and growing annual and perennial crops the remarks "see Form III B (W)" may be given. All seasonal crops grown in dry land clusters will be entered in Form III A (dry). Thus in Form IIIA all wet land clusters will come under IIIA (wet) and those dry land clusters growing atleast one seasonal crop will come under IIIA (dry). Separate sheets for Autumn, Winter and Summer are provided for recording the details of crops harvested or will be harvested during each season. Columns 1, 2 and 3 relate to the serial number of cluster, name of block and the area of each cluster respectively as entered in Form I.

*Columns 4 to 24.*—These columns relate to the area under crops harvested or will be harvested during each season as available in Block B of Form I. The order in which the names of crops after pulses may as far as possible be the same in all pages relating to each investigator zone. In the case of paddy details are to be given separately for high yielding and local varieties as well as for irrigated and unirrigated areas. The names of seasonal crops cultivated in each cluster during the season should be entered in these columns. The headings of last few columns are left blank. These columns may be used for entering additional crops, if any. In the case of wet land plots, record the details of area during the season, under the following classification in the last three columns:—

1. Not under cultivation—Non agricultural uses and fallow other than current fallow.
2. Fallow for the season.
3. Other crops indicated by 'x' mark.

*Page total.*—The total of each column (from 3 onwards) should be entered at the bottom of each page and grand total for each Investigator zone and block should be prepared. All these totals should be verified by the Taluk Statistical Officer/Statistical Inspector and attested accordingly. The extracts of zone and block totals are to be forwarded to the district office as per the time schedule.

*V. Form III B.—Area under annual and perennial crops.*—This form is to copy down the details of annual and perennial crops from Block C and D of Form I. The general instructions for filling up Form IIIA will be followed in the case of form IIIB also. In this case also the details are to be entered separately for wet and dry land clusters.

In Form IIIB (dry) all clusters of plots classified as dry in the basic tax register should be listed even if there were no annual or perennial crops. Against those clusters growing seasonal crops, the remarks "see Form IIIA (dry)" may be given. Annual and perennial crops grown in the wet lands may be entered in Form III B (wet). Thus in Form III.B all the dry land clusters will come under Form III B (dry) and those wet land clusters growing annual and perennial crops will come under Form III B (wet).

The columns in this form are discussed below:

*Columns 1 and 2.*—The serial number of the cluster and name of the zone and block in column 1 and area of each cluster in column 2 as recorded in Form I are to be entered.

*Columns 3 to 36.*—The number of trees/area of various perennial crops are to be entered in these columns. In the case of coconut, arecanut, cashew and pepper the number of trees/standards is to be given separately for bearing and young. In the former two cases the details are to be given separately for irrigated and unirrigated areas/trees. The details of other perennial crops grown in the selected clusters are to be entered against each crop listed in these columns. (See Appendix II). In the case of crops for which area figures are required according to instructions for filling up Form I, they may be so entered here also.

*Columns 37 to 46.*—These columns are meant for recording the details of annual crops.

As in the case of Form IIIA the page totals of entries in each page should be entered at the bottom of that page and is to be verified by the Taluk Statistical Officer/Statistical Inspector. Investigator zone-wise totals and block totals are also to be furnished and verified. Extract of zone and block totals are to be forwarded to the District Office as per time schedule.

**VI. Form IV.—Crop Abstract Report.**—This form is meant for preparing and forwarding the abstract of the crops harvested during each season. The details for this form are to be copied from the totals of Form IIIA. This should be prepared by the Taluk Statistical Officer/Statistical Inspector in duplicate. The abstract prepared from Form IIIA (wet and dry) separately for each zone/block should be sent to the District Office as per the time schedule.

The various columns of this schedule are discussed below:

*Column 1.*—Here the cluster number as given in Form IIIA is to be entered.

*Column 2.*—The total area of the cluster may be furnished instead of IIIA/IIIB page number printed in the schedules.

In Column 3.—The area of the cluster actually enumerated may be furnished.

*Columns 4 to 7.*—These four columns relate to the area under paddy during the season. The corresponding entries of Form IIIA are to be copied here.

*Column 8.*—This column is meant for recording the total area of paddy during the season.

*Column 9.*—Under this column the total area under tapioca harvested in the particular season may be recorded.

*Columns 10 to 24.*—Are for entering the details of other seasonal crops harvested during each season. The name of the crop should be entered in the column headings left blank and the relevant details should be entered under the respective columns.

*Columns 25 to 27.*—These columns are meant for recording the details of the land not under cultivation excluding current fallow, current fallow and the area under other crops respectively.

## B. CROP ESTIMATION SURVEYS

Crop estimation surveys are to be conducted on the following crops every year.

- |                  |                   |
|------------------|-------------------|
| 1. Paddy—Autumn, | Winter and Summer |
| 2. Coconut       | 7. Banana         |
| 3. Arecanut      | 8. Cocoa          |
| 4. Cashew        | 9. Plantain       |
| 5. Pepper        | 10. Sesamum       |
| 6. Tapioca       | 11. Jack          |

The number of crop cutting experiments to be conducted in each investigator zone is 6 per season for paddy, 3 each for coconut and banana and 2 each for tapioca, arecanut, cashew, pepper, plantain, sesamum and jack in an agricultural year. In municipal areas having separate investigator zones 10 crop cutting experiments will be conducted in respect of paddy per season and 5 for coconut per year. For city corporation areas 6 experiments for paddy per season and 5 for coconut in an investigator zone.

For paddy, post stratification of data in accordance with the four fold classification will be adopted to workout yield rates, within each investigator unit, the investigator will classify the wet land plots growing paddy in the wet land clusters during each of the crop season according to the following four categories namely:—

- (1) H.Y.V.—Irrigated
- (2) H.Y.V.—Un-irrigated
- (3) Local varieties—Irrigated
- (4) Local varieties—Un-irrigated

*Selection of plots.*—The required number of plots will be selected for each crop in the following manner. The selection should be made by the investigator under the guidance of the Taluk Statistical Officer.

The selection of plots for paddy crop cutting should be completed one month before the commencement of harvest. Coconut, arecanut and cocoa plots should be selected during July. Plots for other crops should be selected before October 15th.

The selection of plots will be made from the frame of survey sub-divisions prepared as below:

<i>Name of the Crop</i>	<i>Frame to be used</i>
1. Paddy (Autumn, Winter and Summer)	1. List of wet land plots growing paddy arranged serially Sy. No. wise of the wet land clusters of each zone during the season separately for HYV/I, HYV/U-I., Local/I, Local/U-I.
2. Tapioca-Banana	2. List of wet land and dry land plots.
3. Coconut, arecanut, cashew, pepper, cocoa, plaintain and jack	3. List of dry land plots. (For arecanut list of wet and dry plots for Hosdurg and Kasar-gode Taluks)
4. Sesamum	4. List of wet land plots.

The required number of *suitable* plots for a particular crop will be selected at random from the frame for that crop prepared as above. Suitable plot is defined as one which grow the crop and which is available for harvest during the season/year. It should also be able to accommodate the required experimental cuts/trees/standards.

In respect of dry land crops, the required number of plots may be selected from the key plots using simple random sampling method. If the key plot selected does not grow a particular perennial crop for which crop cutting experiments is to be conducted, the investigator should look for the crop in the first or second side plots on the left. If the particular crop does not exists in these plots also he may look for the crop in the first or second side plot selected from the right side of the key plot. If the crop is not grown in the entire cluster another key plot may be selected at random for completing the required number of cuts. The crop grown in the enumerated part of key plot alone need be considered for crop cutting in respect of the plot with an area of more than two acres.

Paddy crop cutting need not be conducted in a block in a season if only one experiment could be conducted in the whole block.

If in an investigator zone paddy is grown in a particular season only in one cluster the number of experiments to be conducted is as follows:—

(1) If there are plots of more than one category (HY-I/HY-/U-L-I./L.U-I) one experiment from each category at random.

(2) If all the plots are of the same category two experiments are to be conducted at random.

For selecting the plots for conducting crop cutting experiments on cocoa, plots selected for coconut or arecanut crop cutting experiments may be considered, first, if they grow cocoa also. The remaining number, if any, required may be selected as already instructed.

In respect of crop cutting experiments on tapioca the required number of plots are to be selected from the list of wet and dry land plots. In the case of banana also the plots are to be selected from wet and dry lands.

The size of the plots will be 5x5 m for paddy and sesamum. For tapioca it will be 2x2m. For coconut, arecanut, cashew, pepper and cocoa 5 bearing trees and for banana 3 plants for plantain 3 pits have to be selected from a plot. In respect of jack 2 trees each have to be selected.

The random number columns allotted for each crop are noted below:

	Name of crop	Random Column Number
1.	Paddy-Autumn	1
	Winter	2
	Summer	3
2.	Tapioca	4
3.	Coconut	5
4.	Arecanut	6
5.	Cashew	7
6.	Pepper	8
7.	Banana	9
8.	Cocoa	10
9.	Plantain	11
10.	Sesamum	12
11.	Jack	1

The table of 4 digit random number is supplied as appendix IV. The investigator will have to refer to the table for selection of plots/trees etc. for crop cutting survey. When using random numbers,

the numbers should be read out column-wise vertically downwards. When one column is exhausted the first number on the next column will be taken up. If the whole table is exhausted then the first No. in the first column will be considered. If single digit random number is required the first digit of the four digit random number will be taken up. Similarly for two digit and three digit random numbers the required digit will be read out from the left hand side.

The experimental cuts/trees are selected from the plot selected for crop cutting experiment and the harvest conducted in the manner described below:

1. *Paddy:-*(a) Identification of Plot:—The first step in the field work is the identification of the selected plot with the help of the survey map and the address of the owner taken from the basic tax register or other records and by local enquiry: Note the boundaries of the plot after correct identification.

(b) *Selection of Kandom*:—If the selected plot has more than one kandom, all the kandoms in the selected plot growing the crop have to be serially numbered beginning from the south west corner and proceeding anti-clockwise. One kandom may be selected by simple random sampling method.

Meet the cultivator and ascertain the date of harvest, collect the pre-harvest details.

(c) *Location and marking an experimental cut*:—(i) *Fixing the starting point of the kandom*.—In each selected kandom, a square cut of size 5 metres is to be located at random. After fixing the starting point as described below, measure the length and breadth in uniform steps.

If the kandom is approximately rectangular in shape the south-west corner of the kandom is the starting point.

If the kandom is not rectangular enclose it in the least rectangle whose longer side is parallel to the longer side of the kandom meeting at the south-west corner. The south-west corner of the rectangle is the starting point.

(ii) *Locating the 5 meters square*.—Stand facing the kandom. Beginning from the starting point mentioned above, measure in uniform steps, the side x towards the right (east) and y towards the left (north) perpendicular to the first side.

Deduct seven from both x and y and obtain the remainders. Take random numbers 'a' and 'b' less than or equal to the remainders. If the random number obtained is zero, it need not be rejected.

Measure 'a' steps from the starting point towards east and then 'b' steps in the vertical direction inside the field. This point will fix the south-west corner of the experimental cut.

The experimental cut is marked with the help of the crop cutting frame. Construct the crop cutting frame with pegs and strings supplied. Tie the string to the pegs such that the distance between two adjacent pegs is 5 metres. At the second peg measure 150 cm. along the string tied to the first peg and mark the point. Similarly from the second peg measure 200 cm. along the string tied to the third peg and mark the point. Tie a string 250 cm. connecting the above two points. Similar arrangements may be made in the opposite corner also. This completes the frame.

Fix a peg at the south-west corner of the experimental cut determined already. Take another peg already tied to it and fix it so that the string is parallel to the side towards east. Fix the third peg already tied to the 2nd peg at a distance of 5 metres at right angles to the first string observing the right angles with the help of 250 cm. string connecting the two strings at points 150 cm. in one direction and 200 cm. in the other direction. Observe whether the angle at the fourth peg is a right angle. Check by measuring the diagonal of the experimental cut which should be 7.07 metres.

See that all the 4 pegs are vertical and firmly fixed to the ground and that the string is stretched tightly on all the four sides. Lower the string to the level of the ground separating the bunches of the plants which lie on the boundary of the cut thus marked. Include a bunch within the cut if half or more than half of its base falls inside the cut and reject the bunch if otherwise.

The cut should be rejected if the cut does not fall wholly in the selected kandom. In such cases take a fresh pair of random numbers to locate the cut afresh. The condition of the crop, viz., whether poor or good is not a criterian for rejecting the cut. If the yield is nil it should be recorded as zero.

(d) *Harvesting, threshing etc.*—Harvest the plants within the boundary of the 5 metre square located; the produce should be threshed, winnowed and cleaned properly. Particular care should be taken to see that there is no loss at any stage viz; harvesting, winnowing, cleaning and weighing. Weigh the cleaned grain and record the weight in kg. correct to two decimal places. All details required in the prescribed final schedules should be collected.

Three samples of 250 gms. are to be collected for driage experiment in a block. The Taluk Statistical Officer may fix the Investigator zones and plots from which these samples are to be collected and inform the investigator sufficiently early. The first sample should be collected at the beginning of the season, second towards the middle and third

towards the end of the harvesting season. The samples collected should be sent to the Taluk Statistical Officer within 24 hours. The Taluk Statistical Officer should weigh each sample immediately on receipt and again on alternate days after drying till two consecutive weights are the same. The details relating to driage experiments should be sent to the Head Office as well as the district office.

(e) *Submission of returns*.—The following returns relating to crop cutting experiments on paddy are to be submitted.

(i) *Pre-harvest schedule*.—Immediately after the final selection of the plot, the investigators will visit the plot and collect the required preliminary details in the pre-harvest schedule. The pre-harvest schedules are to be sent to the District Office as per the following time schedule:—

Autumn	.. 31st August
Winter	.. 30th November
Summer	.. 31st March

(ii) *Progress report*.—The monthly progress report relating to the survey should be sent by 5th of every succeeding month to the District Office by the Taluk Statistical Officer. The consolidated progress report in the prescribed pro forma should be sent by Deputy Director by 10th of every succeeding month to the Director.

(iii) *Inspection report*.—The inspection reports of Taluk Statistical Officer/Statistical Inspectors/District Officers/Additional District Officers/Deputy Directors should be sent to the Directorate. The due dates for each season are as follows:—

Autumn	.. 15th November
Winter	.. 15th March
Summer	.. 15th July

The rate of harvest stage inspection is fixed as follows:—

Taluk Statistical Officers/.. At least one in an Investigator  
Statistical Inspectors unit subject to a minimum  
of six or 50 per cent of the  
experiments in the Block.

District Level Officers .. At least one in each Block.

(iv) *First report on yield of experimental plots*.—The yield of the experimental cut may be reported to the headquarters on the date of harvest by the Investigator in a small form (post card size) provided. In the case of experiments supervised by the supervising officer he may also sign the return.

(v) *Results of driage experiments*.—The data on driage experiments may be sent by the Taluk Statistical Officers to the headquarters 15 days after the last experiment is over in the taluk.

(vi) *Special report from the District Officer.*—A report may be forwarded by District Officer to the headquarters within one week of the harvest during each season, describing the salient feature of the crop specially mentioning percentage of crop damage, if any, due to drought, pest and other diseases, flood etc. in each taluk.

(vii) *Final schedules.*—The crop cutting schedules may be forwarded to the District Office immediately after the survey in an investigator zone is over.

2. *Tapioca.*—(i) *Selection of plot.*—The required number of plots are selected from the list of wet and dry key plots during September—October. The Investigator should visit the plot to ascertain whether it is a suitable plot for the experiment. If the plot is not suitable for crop cutting, the next key plot in the list should be visited to find out its suitability for the experiment. The process should be continued until a suitable key plot is fixed up.

If the selected plot contains more than one patch under tapioca, then one patch should be selected by simple random sampling method for conducting the experiment. The patches should be numbered starting from south west corner and proceeding anti-clockwise.

(ii) *Location of cut in the selected plot/patch.*—Starting from south-west corner of the patch/plot measure the side 'x' towards the right (east) and 'y' perpendicular to 'x' towards the left (north) of the patch in steps. Take two random numbers one less than x and the other less than 'y'. Let the number be 'c' and 'd'. Measure 'c' steps towards east and 'd' steps from there towards north. This point determines the south-west corner of the experimental cut. Measure 2m square with this point as the south-west corner. If the  $2 \times 2$ m square thus located does not fall in the selected plot/patch, fresh random numbers may be chosen and the experimental cut located.

(iii) *Harvesting and recording of weight.*—All tapioca plants in the experimental cut should be harvested, cleaned of the soil sticking to the tuber and weighed. Weight should be recorded correct to the nearest half kg. The details required for the prescribed form should be collected.

(iv) *Submission of returns.*—The following returns should be submitted.

(a) *Progress report.*—The Taluk Statistical Officer should send monthly progress report to the District Office by 5th of every succeeding month. The consolidated progress report should be sent by the Deputy Director by 10th of every succeeding month to the Director.

(b) *Inspection report.*—Inspection report in the prescribed form should be sent by Taluk Statistical Officer/District Officer/Deputy Director to the headquarters within two weeks of last inspection. The

Taluk Statistical Officer/Statistical Inspector should inspect at least 5 or 50 per cent of the experiments in a block. The district level officers should inspect at least 3 experiments at harvest stage.

(c) *Final schedules.*—The final schedules in the prescribed form should be submitted to the headquarters within one week of the harvest in a zone.

3. *Coconut, arecanut, cashew, pepper.*—From the list of dry land key plots, the required number of plots for each crop is selected by simple random sampling. The selected plots are visited to ascertain the suitability of the plot for crop cutting experiment i.e. to verify whether there are the required number of bearing trees of the crop in the plot (5 each for coconut, arecanut, cashew, cocoa and pepper). If the key plot does not contain the required number of bearing trees it may be looked for in the 1st or second side plot on the left side. If the required number of trees of a particular crop is not grown in side plots on the left side, plots from the first or second side plot on the right side may be selected. If the required cut is not available in the entire cluster another key plot may be selected for the purpose until a suitable plot is obtained from the list.

*Selection of trees.*—For selecting trees/standards for crop cutting, the bearing trees/standards in the plot should be serially numbered starting from the south-west corner and proceeding in anti-clock-wise direction. The Investigator should draw a rough sketch of the survey/sub-division with the exact lay out of the trees in the plot in his rough note for facilitating correct identification of selected trees. Five trees/standards are selected by simple random sampling method for coconut, arecanut, cashew and pepper. The selected trees/standards should be given permanent identification mark (preferably the order of selection). The following example will make the method of selection of trees clear.

*Example.*—Let the total number of bearing trees/standards in the plot selected be 28. From the random column take five two digit random numbers less than or equal to 28. Let them be 27, 02, 09, 15 and 19 in order. Then the trees/standards selected for crop cutting are those with Serial numbers 27, 2, 9, 15 and 19. Tree number 27 may be given identification mark 1, for tree number 2, mark 2 and so on.

*Collection of details:*—The details of harvests during the agricultural year as well as other required details in the prescribed form should be collected. The investigator should be present at the time of each harvest of coconut, arecanut and pepper. In the case of cashew, periodical visits should be made to the plot and the details of all harvests from the selected trees should be collected. It should be ensured that no harvest during the agricultural year is missed.

*Submission of returns (a) Progress report.*—A monthly progress report in the prescribed form should be sent by Taluk Statistical Officer to the District Office by 5th of every month. A consolidated progress report may be sent by Deputy Director by 10th of every month to Director.

*(b) Monthly abstract of harvests.*—Monthly abstract of harvests conducted during the month may be sent for coconut and arecanut in Form B and Form C respectively to headquarters by the Taluk Statistical Officer not later than the 10th of every succeeding month.

*(c) Final schedules.*—Final schedules in the prescribed forms may be sent to headquarters within one week of the harvest in a zone for a particular crop.

*C. Forms for field work:*—The following 13 forms will be used for yield estimation surveys on the various crops mentioned earlier.

1. Form	V	List of plots selected for crop cutting
2. Form	VI	First report on crop yield of paddy
3. Form	VI A	Final schedule on crop cutting of paddy
4. Form	VI B	Tapioca
5. Form	VII A	Coconut
6. Form	VII B	Arecanut
7. Form	VII C	Cashew
8. Form	VII D	Pepper
9. Form	VII E	Cocoa
10. Form	VIII A	Banana
11. Form	VIII B	Plantain
12. Form	VIII C	Sesamum
13. Form	VIII D	Jack

In addition to these, pre-harvest schedules for paddy, progress report for various crops, inspection reports for paddy and tapioca and harvest reports of coconut and arecanut are also prescribed. They are self explanatory and hence not described here. Over and above an intimation letter to the owner of plot informing him of the selection of his plot for crop cutting experiment is also designed. The forms listed above are discussed below.

*(1) Form V—List of plots selected for crop cutting experiments:*—The details of plots selected for crop cutting for various crops in an Investigator unit are to be given in this form. This should be prepared and kept in the Taluk Statistical Office for inspection. All items in this schedule are self-explanatory.

*(2) Form VI—First report on crop yield of paddy:*—This is a simple form to report the yield of the experimental plot for paddy on the same day on which the harvest takes place. The items are self explanatory.

In the case of the experiment being supervised, the supervising officer will put his signature in the space provided for. The card should be posted on the same day of harvest.

(3) *Form VI A:—(Final schedules on paddy):*—This form is divided into four blocks. In the first block, the identification particulars of the selected plot will be given. There is space in the form to report details of two experiments. Each Investigator may use additional forms as required. Details of selection of kandom and cultivation practices adopted in the field are to be given in block II. The entries against items 4a, 7 and 8 will be given in codes. The code numbers to be used against each item are furnished below the block. The word which is not applicable against items 4b, 4c, 8, 10a, 10b and 10c may be scored off. The details of chemical fertilizers used in the kandom are to be given in block III. The trade name and the percentage of N.P.K. content in the chemical fertilizers are to be given in the lines provided for each. For eg. if 25 kg. of Ammonium Sulphate is applied to a kandom selected for the experiment, the name Ammonium Sulphate will be given in the second column of the first line, the 'N' content (20.5 per cent) in the 3rd column of the first line and 25 kg. in the fourth column and 5.125 kg. (i.e.  $25 \times 20.5$  per cent) in the 5th column.

The other manures applied to the kandom will be given in block III, item 2. The weight of winnowed paddy corrected to two decimal places will be given against item 4. Against item 5, record 'o' if the crop is normal and if the crop is poor or damaged the reason for this will be given in the appropriate codes given at the foot of the form.

(4) *Form VI B.—Crop cutting on tapioca:*—One form should be used for an Investigator zone. Against item 8 the number of plants in a 2 metre square may be counted and recorded. If a 2 metre square is not available in the selected patch/plot, the length and breadth of the patch/plot may be measured and the number of plants and area in square metres may be recorded.

(5) *Form VII A.—Crop cutting on coconut:*—The details of harvest conducted on all the five selected trees in a plot are to be entered in one form. The number of harvest will vary from plot to plot and the details of each harvest are to be noted separately in the form. During each harvest, the details of nuts plucked may be entered separately as tender, ripe, over ripe, barren and the number of nuts fallen down after various harvest. At the time of harvest the number of nuts in three bunches to be harvested subsequently may be noted in the space provided for in the form. This is to check the number of nuts at the time of harvest. The details of all the harvests conducted during the agricultural year should be collected and recorded. Extract of the details of harvest should be sent before 10th of every month to the Directorate.

(6) *Form VII B—Crop cutting on arecanut.*—The number and weight of the nuts plucked as tender and ripe may be entered separately in this form. The details of all harvests in the year may be entered in one form. Extract of details of harvests should be sent to the Directorate by 10th of every month.

(7) *Form VII C.—Crop cutting on cashew.*—The harvest details of trees in a plot are recorded in one form. During the peak period of the harvest, cashewnuts are plucked from the trees at an interval of two or three days. Care should be taken to see that no harvest of the selected trees is missed and that complete details are collected and entered in this form.

(8) *Form VII D.—Crop cutting on pepper.*—The produce from pepper standards will be harvested once or twice. The weight of berries with spikes and without spikes are recorded separately for each standard.

(9) *Form VII E. Crop cutting experiments on Cocoa.*—This form contains 3 blocks and all the details are to be filled up.

(10) *Form VIII A.—Crop cutting experiments on Banana.*—All the columns in the form are to be filled up.

(11). *Form VIII B. Crop cutting experiments on other plantain.*—It is a very simple form and all the details are to be filled up.

(12) *Form VIII C. Crop cutting on Sesamum.*—The details as per this form are to be filled up. The measurement of the cut is 5 metre square.

(13) *Form VIII D. Crop cutting on Jack.*—The details of fruits plucked from the selected 2 trees are to be entered in this form.

*D. Allotment of Investigators.*—The number of investigators now available for field work (area enumeration and crop estimation surveys) is 902. Among them 91 will be retained as reserves at State, District and Taluk headquarters to attend the urgent extra work relating to crop cutting experiments and other items of work in cases where regular hands are not able to cope up with the workload. This is to ensure that no experiment is missed.

The number of investigator zones for each Block/Municipality/Corporation is given in the Appendix III.

The number of crop cutting experiments to be conducted for each crop in a zone is given in the Appendix IV.

## Returns relating to EARAS

Sl. No.	Name of return	From whom due	To whom due	Due date
(1)	(2)	(3)	(4)	(5)
1.	Work allocation statement	T.S.O.	D.D.	15th July
2.	Consolidated work allocation statement	D.D.	Director	31st July
3.	Monthly progress report on area enumeration	T.S.O.	D.D.	5th of every month
4.	Consolidated monthly progress report on area enumeration	D.D.	Director	10th of every month
5.	Consolidated monthly expenditure on Earas	"	"	"
6.	Quarterly progress report	"	"	10th of July, October, January and April
7.	Form IV Abstract of wet lands	T.S.O.	D.D.	30th September
(1)	Autumn	"	"	5th January
(2)	Winter	"	"	15th May
(3)	Summer	"	"	5th January
8.	Form IV—Abstract of dry lands	"	"	A—31st October
9.	Form IV—Consolidated Statement for taluks (Wet)	D.D.	Director	W—15th January S—15th June 5th February
10.	Form IV—Consolidated statement for taluks (dry)	"	"	31st July
11.	Form II Abstract	T.S.O.	D.D.	"
12.	Form III A	"	"	"
13.	Form III B	"	"	30th June
14.	Form A	"	Director	30th September
15.	Consolidated statements on Form II, III A+III B	D.D.	"	"
16.	Progress report on crop cutting experiments			
(a)	Paddy			
(b)	Tapioca			
(c)	Cashew, pepper, coconut and arecanut	T.S.O.	D.D.	5th of every month
(d)	Other crops			
17.	Consolidated progress report on item 16	D.D.	Director	10th of every month
18.	Monthly abstract of harvests			
(1)	Coconut	T.S.O.	"	"
(2)	Arecanut	"	"	"
19.	Pre-harvest schedule of paddy	T.S.O.	D.D.	15th August 15th December 15th March
(1)	Autumn	"	"	
(2)	Winter	"	"	
(3)	Summer	"	"	

<i>Sl. No.</i>	<i>Name of return</i>	<i>From whom due</i>	<i>To whom due</i>	<i>Due Date</i>
(1)	(2)	(3)	(4)	(5)
20.	Consolidated statement on pre-harvest schedules for taluks			
1.	Autumn	D.D.	Director	31st August
2.	Winter	"	"	31st December
3.	Summer	"	"	31st March
21.	First report on yield of paddy	Investiga- tor	"	On the day of har- vest
22.	Inspection report on crop cutting of paddy			
1.	Autumn	T.S.O./ D.D.	"	15th November
2.	Winter	"	"	15th March
3.	Summer	"	"	15th July
23.	Driage results on paddy	T.S.O.	Director	Within 15 days after each season
24.	Sepecial report of D.D.			
1.	Autumn	D.D.	"	15th November
2.	Winter	"	"	15th March
3.	Summer	"	"	15th July
25.	Inspection report on crop cutting on tapioca	T.S.O./ D.D.	Director	Within 15 days after the survey is over
26.	Final schedules on crop cutting on paddy	"	D.D.	Immediately after harvest in a taluk
27.	Compilation sheets of crop cutting on paddy			
1.	Autumn	D.D.	Director	15th November
2.	Winter	"	"	15th March
3.	Summer	"	"	15th July
28.	Final schedules on crop cutting on crops other than paddy	T.S.O.	"	Within a week after harvest in the taluk is over
29.	Schedules of sample check (3 copies)	A.D.O.	D.D.	Within 3 days of inspection
30.	Schedules of sample check (original/duplicate)	D.D.	Director/ N.S.S.O.	Within 2 days of receipt of schedules

## APPENDIX I

## Concepts and Definitions

1. *Agricultural year.*—Is defined as the period of 12 months from 1st July to 30th June.

2. *Season.*—The agricultural year is divided into three non-overlapping seasons of four months duration each. They are:—

(a) Autumn	July to October
(b) Winter	November to February
(c) Summer	March to June

3. *Seasonal crops.*—Crops which are harvested during the period of four months in the season are defined as the seasonal crops of the respective season. Thus paddy, pulses, tapioca etc. which are harvested during different periods of the year will be classified as Autumn paddy, Autumn pulses etc., according to the period of harvest. The seasonal crops for which the major period of harvest in that village falls within July to October will be autumn crops, November to February winter crops and March to June summer crops.

4. *Annual crops.*—Banana, sugarcane, plantain, pineapple and betel leaves are to be considered as annual crops for the purpose of this survey.

5. *Perennial crops.*—Crops which are standing for more than a year will be treated as perennial crops. Most of the perennial crops are tree crops. In the case of sugarcane cultivated in Devicolam taluk even though the period exceeds 12 months it will be treated as annual crops and not as perennial.

6. *Bearing trees.*—In the case of crops which are to be recorded as bearing and young, bearing is defined as those which have flowered at least once.

7. *Plot.*—A plot is defined as a patch or piece of land which has separate survey sub-division number, in the basic tax register.

8. *Unit of observation.*—A unit of observation is defined as the area identified separately for area enumeration. It shall be a plot or a group of plots (in case of a survey sub-division number as in litho map) or the land in possession of one cultivator.

9. *Investigator zone.*—The area allotted to one Investigator will be treated as an Investigator zone. It shall be a village/s or a portion of a village/s.

10. *Irrigation.*—Irrigation is here defined as the process of letting water inside the plot, for the benefit of the crops grown which involves some artificial, either mechanical or manual effort. Thus rainfed

areas will not be considered as irrigated. So also letting of water out of the field from water logged areas like Kuttanad to facilitate cultivation will not be treated as irrigation for the purpose of this survey.

11. *Sources of irrigation.*—Codes 1 and 2—Canal irrigation—When a canal is given as source it should be an artificially built one for conveying water from a river, lake or reservoir. If the canal is owned by 'Government', it is Government canal and if owned by private individuals, it is private canal.

*Codes 3 and 4.*—If the source of water is from tank, it is termed as tank irrigation. Irrigation from tanks may be through small canals (field bothies) or pumpsets or other means. Water obtained from tanks through small canals (field bothies) will be considered as tank irrigation and not as canal irrigation. But if the source of water in the tank itself is from 'Canal' then the source will be canal irrigation and not tank irrigation. Tank will be classified under Government tank if it is owned by Government or public bodies and private tank if owned by private individuals.

*Codes 5 and 6—Wells.*—If the water obtained for irrigation is from wells either through pumpsets or lifting by other means, it is termed as well irrigation. It is again classified into Government or Private according to ownership.

*Code 7.—Other minor and lift irrigation schemes.*—This will include Government minor irrigation schemes such as lift irrigations diversion channels, deepening of thodu, construction of crossbars etc.

*Codes 8 to 10.—Self explanatory.*

12. *Irrigated area (Net).*—Irrigated area is defined as the area which receives irrigation at least once during the agricultural year.

13. *Area under irrigated crops.*—The area under a crop will be treated as irrigated if irrigation facilities are available and used for cultivating the crop.

14. *Building and Courtyard.*—The area exclusively used for building and courtyard will come under this category.

15. *Other non-agricultural uses.*—This stands for all lands occupied by roads/railways or under water, rivers and canals and other lands put to uses other than agricultural.

16. *Barren and uncultivable land.*—This covers all barren and uncultivable lands like mountains, deserts etc. Land which cannot be brought under cultivation unless at a high cost shall be classified as uncultivable, whether such land is in isolated blocks or within cultivated holdings.

17. *Miscellaneous tree crops and groves not included in the net area sown.*—Area occupied by casurina trees, thatching grass, bamboo bushes and other groves for fuel, etc., will come under this category. It may be noted that the above trees and groves do not come under the category of crops and hence they are not included under net area sown.

18. *Permanent pastures and other grazing lands.*—These cover all grazing lands, whether they are permanent pastures and meadows or not.

19. *Culturable waste.*—These include lands available for cultivation whether not taken up for cultivation or abandoned after a few years for one reason or the other. Such lands may be either fallow or covered with shrubs and jungles which are not put to any use. They may be assessed or unassessed and may lie in isolated blocks or within cultivated holdings. Land once cultivated but remaining uncultivated for five years or more in succession shall also be included in this category.

20. *Current fallows.*—This class comprises cropped areas which are kept fallow during the current year. If any seedling area is not cropped again in the same year it may be treated as current fallow.

21. *Other fallows.*—All lands which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years are included under this category. The reasons for keeping such lands as fallow may be one of the following.

- (1) Poverty of cultivators
- (2) Inadequate supply of water
- (3) Malarial climate
- (4) Silting of canals and rivers; and
- (5) Unremunerative nature of farming.

22. *Net area sown.*—In calculating the net area sown, area sown more than once will be counted only once. Area cultivated during any part of the agricultural year should come under net area sown. Hence, the net area sown will not exceed the geographical area.

## APPENDIX II

## Crops to be covered by T.R.S. in Kerala

Sl. No.	Crop	Code	Period
(1)	(2)	(3)	(4)

## A. SEASONAL CROPS:

1.	Autumn paddy	01	July—October
2.	Winter paddy	02	November—February
3.	Summer paddy	03	March—June
4.	Autumn pulses	04	July—October
5.	Winter pulses	05	November—February
6.	Summer pulses	06	March—June
7.	Horsegram	07	November—February
8.	Autumn tapioca	08	July—October
9.	Winter tapioca	09	November—February
10.	Summer tapioca	10	March—June
11.	Autumn sweet potato	11	July—October
12.	Winter sweet potato	12	November—February
13.	Summer sweet potato	13	March—June
14.	Tubers*	19	July—December
15.	Other vegetables	20	July—December
16.	Autumn sesamum	25	July—October
17.	Winter sesamum	14	November—February
18.	Summer sesamum	15	March—June
19.	Jowar	16	July—October
20.	Ragi	17	July—October
21.	Other cereals and millets	18	July—October
22.	Groundnut	21	July—October
23.	Ginger	22	November—February
24.	Turmeric	23	November—February
25.	Cotton	24	November—February
26.	Tobacco	26	July—October
27.	Chillies	27	July—October
28.	Onion	28	
29.	Tur	29	
30.	Other seasonal crops†	30	

## B. ANNUAL CROPS:

31.	Betal leaves	31	July—October
32.	Banana	32	July—October
33.	Plantain	33	November—February
34.	Sugarcane	34	November—February
35.	Pineapple	35	November—February

\* Includes arrow root, koorka and potato.

† Includes kolinchchi, chittaratha, katcholam etc.

## APPENDIX II—(cont.)

<i>Sl. No.</i>	<i>Crop</i>	<i>Code</i>	<i>Period</i>
(1)	(2)	(3)	(4)

## C. PERENNIAL CROPS:

36.	Coconut	36	
37.	Arecanut	37	
38.	Palmyra	38	
39.	Cashew	39	
40.	Mango	40	
41.	Jack	41	
42.	Tamarind	42	
43.	Pepper	43	
44.	Rubber	44	
45.	Tea	45	
46.	Coffee	46	
47.	Cardamom	47	
48.	Cloves	48	
49.	Nutmeg	49	
50.	Cinnamon	50	
51.	Cocoa	51	
52.	Pappaya	52	
53.	Drumstick	53	
54.	Lemongrass	54	
55.	Fodder grass	55	
56.	Green manure crops	56	
57.	Other oil seed trees	57	
58.	Other fruit trees	58	
59.	Other trees included under net area sown	59	

NOTE:—1. Area under kudappana and vazhana will be enumerated under other trees.

2. Area under neem, oil palm and castor will be enumerated under 'other oil seed trees'.

3. Area under kudampuli will be enumerated under other fruit trees.

## APPENDIX III

## Block-wise list of investigator zones

Block (1)	Zone (2)	Village (3)
<b>TRIVANDRUM</b>		
I. Athiyanur Block	1	Karumkulam
	2	Kotukal
	3	Athiyanur Chenkai (P) Köllayil (P)
	4	Neyattinkara (P) Thiruvallam
II. Parassala Block	1	Kulathur (P)
	2	Thirupuram
	3	Kulathur (P) Chengal
	4	Parassala
III. Perumkadavila Block	1	Kollayil (P)
	2	Kunnathukal A
	3	Kunnathukal B
	4	Perumkadavila B
	5	Perumkadavila A Neyattinkara (P)
	6	Kulathummel
	7	Ottasekharamangalam A
	8	Ottasekharamangalam
IV. Nemom Block	1	Nemom
	2	Vilappil (P)
	3	Naranallur
	4	Pallichal
	5	Marukil
	6	Vilappil (P)
V. Trivandrum Rural Block	1	Kadakampally (P)
	2	Ulloor (P)
	3	Cheittivilakom (P) Cheittivilakom (P) Randamada P) Anchamada (P)
VI. Kazhakkuttam Block	1	Attipra
	2	Cheruvakkal (P) Uliyazhathura Pangappa

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
	3	Ayirooppara Andoorkonam
	4	Melthonnakkal Keezhthonnakkal
	5	Veiloor Kadinamkulam
	6	Kazhakkuttom Pallippuram
VII. Nedumangad Block	1	Veppayam
	2	Karakulam (P)
	3	Karakulam (P) Nedumangad (P)
	4	Anad A (P) Vembayam
	5	Anad A (P) Anad B (P)
VIII. Vellanad Block	1	Aryanad B Uzhamalakkel—A
	2	Uzhamalakkel—A Uzhamalakkel—B
	3	Perimkulam Veeranakayu
	4	Vellanad Aryanad—A Mannoorkara
IX. Vamanapuram Block	1	Vamanapuram
	2	Vamanapuram—B Vamanapuram—B
	3	Palode—A
	4	Palode—B Pullampra
	5	Nellanad Nellanad Manikkal
X. Chirayinkil Block	1	Azhoor Keezhuvalam-Koon-thallor (P)
	2	Mudakkal, Edakkodu (P) Elamba Avanavancherry (P)

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XI. Kilimannor Block	3	Sarkara-Chirayinkil Kadakkavoor Keezhattingal (P)
	1	Pallickal
		Madavoor
	2	Kilimanoor
		Vellalloor
	3	Navaikulam
		Karavaram (P)
	4	Karavaram (P)
		Nagaroor
	5	Alamicode (P)
		Pazhayakunnummel
	6	Koduvaizhannur
		Pulimath
XII. Varkala Block	1	Edava
	2	Ayiroor
	3	Vettur-Chernniyoor
		Manampoor (P)
	4	Ottoor
		Chemmaruthy
I. <i>Municipality</i>		
1. Varkala	1	Varkala
2. Attingal	1	Attingal
		Edakode (P)
		Alamcodu (P)
		Manampur (P)
		Avanavancherry (P)
		Keezhuvalam-Koonthallur (P)
		Keezhattingal (P)
3. Nedumangad	1	Nedumangad
Corporation		
Trivandrum	1	Cheruvakkal (P)
		Kadakampally (P)
		Ulloor (P)
		Chettivilakom (P)
		Randamada (P)
		Madathuvilakom (P)

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
	2	Palkulangara Vanchiyoor Chergahasserry Anchamada (P)
	3	Muttathara Ayiranimuttom Aramada

**QUILON**

I.	Anchalummoodu Block	1	Sakthikulangara Kilikollur Mangad Thrikkadavoor Thikkaruva
II.	Chittumala Block	1	East Kallada Mundro Island
		2	Mulavana
		3	Perinad Panayam
III.	Ithikkara Block	1	Kalluvathukkal Parippally Meenad Chirakkara Poothakulam Paravoor Kottapuram Adichanalloor Neduruppana Pallimon
IV.	Mukhathala Block	1	Erapuram Mundakkal Mayyanad Thrikkovilvattom Thazhuthala Vadakkevila Kottarakkara
V.	Karunagappally Block	1	Karunagappally Ayinivelikulangara Alappad

## APPENDIX III—(contd.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
	2	Thodiyoor Kallelibhagom
	3	Thazhava Pavumba
VI. Chavara Block	1	Thekkumbhagom Neendakara
	2	Thevalakkara Chavara
	3	Ponmanai Vadukkumthala
VII. Ochira Block	1	Kulasekharapuram Adinad
	2	Ochira Clappana
VIII. Sasthamkotta Block	1	Sasthamcottah West Kallada
	2	Poruvazhy Kunnathur
	3	Sooranad South Mynagappally
	4	Sooranad North Pallickal
IX. Kottarakkara Block	1	Kottarakkara
	2	Ezhukone
	3	Kareepara
	4	Pooyappally Neduvathoor
	5	Puthoor Odanavattom Veliyam
X. Vettikavala Block	1	Melila
	2	Ommannoor
	3	Valakom Kulakkada
	4	Pavithreswaram Vettikavala Chakkavarakal
	5	Kalayapuram Mylom

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)

XI. Chadayamangalam Block	1	Elanadu Velinalloor Chadayamangalam Nilamel Ittiva Kottakkal Kadakkal Kummil Chithara Mangode
	2	
	3	
	4	
	5	

XII. Anchal Block	1	Arackal Edamulackal Alayamon Chennapetta Kulathupuzha Trikkalkarikkom Ariyankavu Edamon Thenmala Anchal Karavaloor Yeroor
	2	
	3	
	4	
	5	

XIII. Pathanapuram Block	1	Piravanthoor Punnala Pathanapuram Pidavoor Pattazhy Maloor Thalavoor Vilakkudy
	2	
	3	
	4	

*Municipalities*

1. Quilon Municipality	1	Quilon
2. Punalur	1	Punalur

*PATHANAMTHITTA:*

I. Kulanada Block	1	Aranmula Kidanganoor Mezhuveli Kulanada
	2	
	3	

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)

**II. Elanthoor Block**

1	Naranganam Elanthoor
2	Omalloor Chencerkara
3	Mallappuzhassery Kozhencherry
4	Cherukole

**III. Ranni Block**

1	Vadaserikkara Chittar-Seethathode
2	Perunad Athikayam
3	Angadi Pazhavangadi
4	Ranni Chethackal
5	Kollamula Chittar Seethathode

**IV. Pandalam Block**

1	Pandalam Thekkekkara
2	Pandalam Kurampala

**V. Konny Block**

1	Malayalapuzha Konny Thazham Pathanamthitta (P) Mylapra
2	Konny, Aravupalam
3	Iravan
4	Thannithode, Pramadam Pramadam V. Kottayam Vallicode

**VI. Parakode Block**

1	Koodal Kalanjoor
2	Kodumon Angadickal Ezhankulam
3	Adoor Enathu
4	Karuvattakara Enadimangalam Enathu

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
VII. Kaipuram Block	1 2 3 4	Ayroor Puramattom Ezumattoor Thelliyoor Eraviperoor Koipuram (P) Thettapuzhasserry Koipuram (P)
VIII. Pulikeezhu Block	1 2 3 4	Niranam Kadapra (P) Kadapra (P) Nedumpuram Peringara Kavumbhagom (P) Kuttoor
IX. Mallappally Block	1 2 3 4	Kaviyoor Kottangal Vellavoni Perumpetty Anicad Mallappally (P) Mallappally (P) Kalloopara, Kunnathanam
X. Sasthamcottah Block	1	Kadampanad Peringinad

*Municipalities:*

1. Thiruvalla
- 1  
2. Pathanamthitta

Kuttapuzha  
Thiruvalla  
Kavimbhagom

Pathanamthitta (P)  
Konithazhan  
Mylapra

**ALLEPPEY:**

## I. Thycattusserry

- 1  
2  
3

Mattathilbhagom  
Panavally  
Thycattusserry  
Pallippuram

## APPENDIX III—(cont.)

II.	Pattanakad	1	Aroor
		2	Thuravoor North
			Thuravoor South
		3.	Vayalar East
			Vayalar West
III.	Kanjikuzhi	1	Shertallai N. Rural
			Shertallai S. Rural
			Mararikulam North
		2	Kanjikuzhi
			Thanneermukkam South
		3	Thanneermukkam North
			Kokattumangalam Rural
IV.	Aryad	1	Aryad South
		2	Aryad North
		3	Mararikulam South
V.	Ambalapuzha	1	Punnapra
			Alleppey (P)
		2	Ambalapuzha
		3	Purakkad
VI.	Veliyanad	1	Kavalam
		2	Pulikunnam
		3	Neelamperoor
			Veliyanad
			Muttar
			Ramankari
			Edathua (P)
VII.	Champakulam	1	Kainakari
			Nedumudy
		2	Champakulam
			Thakazhy
		3	Ambalapuzha (P)
			Edathua (P)
			Thalavady
VIII.	Chengannur	1	Kurattiserry
			Mannar
		2	Chengannur
			Puliyoor
		3	Cheriyanad
			Ala
			Pandanad
			Thiruvanvandoor
			Vadakkckara (Rural)

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
IX. Mavelikara	1	Thazhakara (P)
	2	Chennithala
	3	Kunnamangalam Thriperunthura Peringala Thekkekara (P)
X. Bharanikavu	1	Chunakkara
	2	Thamarakulam Vallikkunnam Bharanikavu
XI. Haripad	1	Haripad
	2	Vecypuram Cheruthana Karuvatta Thrikkunnappuzha Kumarapuram
	3	Pallipad Karthigappally Chingoli
XII. Muthukulam	1	Arattupuzha
	2	Muthukulam Cheppad Pathiyoor (P)
	3	Kandalloor Keerikad (P)

*Municipalities.—*

1. Shertallai	1	Sherhallai North Urban Sherhallai South Urban Kothamangalam Urban
2. Alleppey	1	Alleppey Aryad South (P)
3. Chengannur		Vadakkekara (Urban)
4. Mavelikara	1	Mavelikara Kunnamangalam (P) Thekkekara (P) Thazhakara (P)
5. Kayamkulam	1	Kayamkulam (P) Keerikad (P) Pathiyoor (P) Puthuppally

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
Kulanad Block (Pathanamthitta)	1	Venmony Mulakuzha
Pandalam Block (Pathanamthitta)	1	Neornad Palmel
Ochira Block (Quilon District)	1	Puthupally (P) Kayamkulam

## KOTTAYAM :

I. Pampady Block	1	Anicadu
	2	Pampady (P)
	3	Akalakunnam
	4	Pampady
	5	Kooroppada
II. Ettumanoor Block	1	Elikulam
	2	Kaipuzha
	3	Onamthuruthu
	4	Perumbaikad
	5	Athirampuzha
III. Pallom Block	1	Ettumanoor
	2	Aymanam
	3	Ayarkunnam
	4	Mannarcaud
	5	Vijayapuram
IV. Vaikom Block	1	Puthuppally
	2	Kumarakom
	3	Kottayam (P)
	4	Nattakom
	5	Panachikad
		Thiruvarppu
V. Kaduthuruthy Block	1	Vechoor
	2	Thalayazham
	3	Neduvila (P)
	4	Vaikom
	5	Vadakkemuri
		K. S. Mangalam
		Chembu
		Vadayar
	2	Mylakkulam
	3	Njeezhoor
	4	Kaduthuruthy (P)
	5	Kallara (P)
		Maniyoor

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
<b>VI. Madappally Block</b>		
	1	Kurichi
	2	Wahappally West
	2	Chaganacherry Rural
		Chettipuzha
	3	Paipad
	3	Thrikodithanam
	4	Madappally
	4	Vakathanam
	5	Thottakad
	5	Karukachal
<b>VII. Vazhoor Block</b>		
	1	Nedumkunnam
	2	Kangazha
	3	Vellavoor
	4	Vazhoor
	5	Chirakadavu
		Cheruvally
<b>VIII. Kanjirappally Block</b>		
	1	Erumeli (P)
	2	Kanjirappally
	3	Kottickal
	4	Manimala
	5	Erumeli (P)
		Mundakayam
<b>IX. Lalam Block</b>		
	1	Bharananganam
	2	Kadanad
	3	Lalam
	4	Vellichira
	5	Puliyannoor
		Poovarany
		Meenachil
<b>X. Uzhavoor Block</b>		
	1	Elakkadu
		Kidangoor
	2	Kuravilangady
		Kanakkari
	3	Kurichithanam
		Uzhavoor
	4	Ramapuram
	5	Vallilappally
		Veliyannoor

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XI. Erattupetta Block	1	Kondoor
	2	Melukavu
	3	Nadubhagam
	4	Poonjar Thekkekara
	5	Poonjar Vadakkekara

*Municipalities :*

1. Kottayam	1	Kottayam
		Vijayapuram
2. Changannacherry	1	Vazhappally East
		Vazhappally West (P)
3. Palai	1	Palai, Lalam (P)
		Meenachil (P)
		Puliyannoor (P)

*IDUKKI :*

I. Adimaly	1	Kallampuzha
		Mannamkandom
	2	Pallivasal
		Anaviratty
	3	Vellathooval
		Kunjithamny
	4	Konnathady
		Bisonvalley

II. Arudai	1	Kumily
		Periyar
	2	Mlappara
		Peermade
	3	Manjumala
		Elappara
	4	Vagamon
		Peruvathanam
		Kokkayar

III. Devicolam	1	K. D. Hills
	2	Mankulam
		Vattavada
	3	Kottakamboor
		Kanthalloor
	4	Marayoor
		Keezhanthoor
		Chinnakanal
		Pooppara
		Santhanpara

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
IV. Elamdesom	1	Kodikulam
		Vannapuram
	2	Karimannoor
		Neyyasseri
	3	Udumbannoor
	4	Velliyanattom
	5	Alakodu
		Kudayathoor
V. Idukki	1	Thankamony
	2	Vathikudy
	3	Idukki
		Kanjikuzhi
	4	Arakulam
		Elappally
VI. Nedumkandam	1	Rajakumary
		Rajakad
	2	Parathode
	3	Udumbanchola
		Kanthippara
	4	Karunapuram
		Chatturangappa
	5	Kalkoothal
		Pampadumpara
VII. Kattappana	1	Kattappana
	2	Anavilasom
		Chekkupallam
	3	Vandanmedu
		Anakkara
	4	Ayyappancoil (P)
	5	Ayyappancoil
	6	Upputhara
VIII. Thodupuzha	1	Thodupuzha
		Karikodu
	2	Manakkadu
	3	Kumaramangalam
	4	Muttom
		Karimkunnu
	5	Purappuzha
		Kariinkunnam

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
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*Municipality:*

Thodupuzha	1	Thodupuzha Manakkad Kumaramangalam Karikodu Karimkunnam (P)
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**ERNAKULAM**

I. Pampakuda	1	Maneed Piravam (P) Piravam (P) Ramamangalam Elenji Koothattukulam (P) Palakuzha Koothattukulam (P) Thirumarady Onakkoor Memury (P)
II. Moovattupuzha	1	Arakuizha Marady (P) Manjalloor Kalloorkad (P) Eranelloor Kalloorkadu (P) Mulavoor Velloorkunnam (P) Valakom Memury (P) Moovattupuzha
III. Mulanthuruthy	1	Mulanthuruthy Amballoor Manakunnam Keecherry Kulayathikara Edakkatuvayal Kaipattoor Kureekadu Kayannur Thiruvankulam

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
IV. Edappally	1 2	Cheranelloor (P) Thrikkakara South Thrikkakara North Kadamakudy
V. Vytila	1 2	Kumbalam Maradu
VI. Parur (Parur Municipality to Parur Block)	1 2 3	Parur (P) Vadakkekara (P) Kottuvally (P) Chennamangalam Vadakkekara (P) Moothakunnam (P) Parur (P) Ezhikkara Kottuvally (P)
VII. Alengad	1 2	Airoor (P) Alengad Karumalloor Alwaye (P) Kadungalloor Eloor Varapuzha
VIII. Parakkadavu	1 2 3	Parakkadavu Chengamanadu Puthenvelikara Airoor (P) Karumalloor (P)
IX. Vazhakulam (Alwaye Municipality to Vazhakulam Block)	1 2 3 4 5	Kizhakkumbhagom Vazhakulam Vengala Alwaye (P) Alwaye (P)
X. Koovapady	1 2 3 4 5	Asamannur Vengoore East Vengoore West Perumbavoor (P) Rayamangalam Cheranallur

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XI. Vadavukode		
	1	Aikaranadu South Vadavukodu
	2	Aikkaranādu North
	3	Mazhuvannur
	4	Kunnathunad
	5	Chemmanadu
XII. Kothamangalam		
	1	Varapetty Pothanicadu (P) Eranallur
	2	Kadavoor Pothanicadu (P)
	3	Kothamangalam
	4	Keerampara
	5	Kottapady Pindimana (P)
	6	Eramalloor Pindimana (P)
XIII. Angamaly		
	1	Kothakulangara North (P) Kothakulangara South (P)
	2	Manjapra (P)
	3	Manjapra (P)
	4	Malayattoor Manickamangalam
	5	Kizhakkumbhagom Vadakkumbhagom Thekkumbhagom Chowara
XIV. Vypin		
	1	Pallippuram Kužhupilly Edavanacadu
	2	Nayarambalam Njarakal Elamkunnapuzha
	3	Mulavukodū
XV. Palluruthy		
	1	Kumbalangy
	2	Chellanum Palluruthy (P)
<i>Municipality:</i>		
1. Moovattupuzha	1	Moovattupuzha Marady (P) Velloorkunnam (P)

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
2. Trippunithura	1	Nadamel Thekkumbhagom
3. Perumbavoor	1	Perumbavoor
4. Kothamangalam	1	Kothamangalam Eramalloor (P)
5. Angamaly	1	Kothakulangara South(P)
<i>Corporation:</i>		
Cochin	1	Elamkulam Ernakulam Cheranelloor (P)
	2	Poonithura Edappally South Edappally North
	3	Mattancherry Rameswaram Fort Cochin Palluruthy (P)
<i>TRICHUR:</i>		
I. Kodakara Block	1	Amballur Varandarappilly
	2	Mupliyam Nandipulam Kodakara Theravu
	3	Chengalloor Thrikkur Kallur
	4	Nemmenikkara Mattathur Velikulangara
II. Irinjalakuda (Zone No. 2 Irinjalakuda Municipality)	1	Muriyad Anandapuram
	3	Pullur Kattoor Karalam
	4	Porathisserry Thottipal Parappukkara Nellayi

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
III. Vellangallur		
	1.	Poomangalam
		Padiyoor
		Edathirinji
	2	Kaduppassery
		Kottanellur
		Velookara
	3	Puthenchira
		Karamathra
	4	Thekkumkara
		Vadakkumkara
		Vallivallom
IV. Mala		
	1	Alathur
		Kallur Thekkummury
	2	Alur
		Kallettumkara
		Thazhakkad
	3	Vadama
		Vadakkumbhagom
		Annallur
	4	Thirumukulam
		Kakkulissery
		Kuruvilassery
	5	Pooya
		Pallippuram
		Madathumpadi
V. Cherpu		
	1	Arattupuzha
		Vallachira
		Avinissery
	2	Elakanni
		Cherpu
		Oorakam
		Chevoor
	3	Ollur
		Chiyaram
		Kanimangalam
	4	Koorkanchery
		Pallipuram
		Paralam
		Kodannur
		Venginissery
		Pallissery

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
<b>VI. Anthikkad</b>		
	1	Alappad Inchamudi Kurumpilavu Pullu
	2	Anthikkad Padiyam Chazhoor
	3	Manalur Karamukku
	4	Thannyam Vadakkummuri Kizakkumkumuri Kizhupullikara
<b>VII. Ollukara</b>		
	1	Kainoor Puthur Mannamangalam Marathakkara
	2	Kolazhi Viyur Pottur Kuttur
	3	Nelliserry Ollukkara Nadathara Mulayam Kozhukkully
	4	Peringavu Vilvattom Kurichikara Vellanikkara Madakkathara
	5	Panancherry
	6	Killannur Valappaya
<b>VIII. Puzhakkal</b> (Zone No. 3 Trichur Municipality)	1	Chalakkal Adat Peramangalam Chittilappilly Puzhakkal Puranattukara

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
	2	Thangallur Avanthur Anjoor Kaipparamba Choolissery
	4	Erau Ayyathol Pullazhi Parakkad Veluthur
	5	Elakulathur Tholur Paramangalam Kaipparamba
IX. Thalikulam	1	Valappad
	2	Nattika
	3	Thalikulam Vadanappilly Engandiyur
X. Mullassery	1	Venkitangu Irimbranallur Kundazhiyoor
	2	Mullassery, Anakkara
	3	Pavaratty Veramanad Bharmmkulam Elavally
XI. Chowghat (Zone No. 2 Chowghat Municipality)	1	Chavakkad Kadappuram Orumanayoor
	3	Thaikkad Perakom Pookode
	4	Vadakkakkad Vyathur Punnayurkulam Kadikkad

## APPENDIX III—(cont.).

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XII. Chowannur Kunnamkulam Municipality to Chowannur Block	1	Kattukampal Mangad Porkulam Agathiyur Anjoor
	2	Cheranellur Eranellur Choondal Kandinissery Alloör
	3	Kunnamkulam Chowannur Arthat Kanippayur Chemmenthitta
	4	Kadavallur Perumpilavu Karikkad Pazhanji
XIII. Wadakkancherry Block	1	Attoor Mulloorkara Varavoor
	2	Desamangalam Fallur Arangattukara Thalassery Trichur (P) Polakkad
	3	Chittenda Kanjirakkode Kumaranellur Eukakkad Wadakkancherry Parlikkad
	4	Puthuruthy Mundathicode Thayyoor Velur Kirahur Vellattanjur Eyyal

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
XIV. Pazhayannur	5	Viruppakka Manalithra Karumathra Thekkumkara Minalur Peringandoor
	6	Kottappuram Nelluvaya Kadaigode Kariyannur Vellarakkad Chiramanagad
	1	Cheruthuruthy Nedumpura Paintkulam Panjal Killimangalam
	2	Chelakkara Venganelur Thonoorkara Kumimala Chelakode
	3	Pangarappilly Elanad Pulakode Vennure
	4	Thiruvilwamala Kanjirkode Vadakkethara Pampady
	5	Pazhayannur Kondazhi Mayannur
XV. Kodungallur	1	Methala Azhicode
	2	Eriyat Elavilangu
XVI. Mathilakam Block	1	Chenthirappinji Edathiruthy
	2	Perinjanam Kaipamangalam
	3	Sreenarayananapuram Pappinivattom

## APPENDIX III—(cont.).

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
<b>XVII.</b> Chalakkudy Block (Zone No. 1 Chalakkudy Municipality)	2	Elanji para
		Pariyaram
	3	Kallur Vadakkummuri
	4	Muringoor Thekkummuri
	5	Muringoor Kizhakkummenuri
	6	Kodassery
		Kuttichira
		Muringoor Vadakkummuri
		Melur

*Municipalities:*

1. Irrinjalakuda	2	Irinjalakuda
		Manavallassery
		Madayikonam
2. Chalakkudy	1	East Chalakkudy
		West Chalakkudy
3. Trichur	3	Trichur
		Chembukavu (P)
		Aranattukara (P)
		Koorkancherry (P)
		Chiyyaram (P)
		Ollukara (P)
		Peringavu (P)
		Nadathara (P)
		Ayyanthole (P)
		Manakodi (P)
4. Chowghat	2	Irringappuram
		Manathala
		Puthnayoor
		Guruvayur Township
		Edakkazhiyoor
5. Kodungallur	3	Pullut
		Iokamallaswaram

*PALGHAT:*

I. Chittur Block	1	Kunnamkattupathy
	2	Moolathara
		Perumathy

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
	3	Thekkedesom Kuttippallam Kozhinjampara Nellappilly
	4	Kozhipathy Valiyavallampathy
	5	Erutheyampathy Manchikkunnampathy Ozhalapathy Attayampathy
	6	Eravattapparapathy Vadakkrapathy Thenampathy Pattancherry
II. Kollemgode	1	Kodumbu Polpully
	2	Elappully I Elappully II
	3	Pallassana Koduvayur II
	4	Vadavannur Koduyayur I
	5	Kollengode I Kollengode II
	6	Elevancherry
	7	Muthalamada I
	8	Muthalamada II
III. Nenmara	1	Ayiloor Thiruvažhiyad
	2	Požundy Nenmara
	3	Kayaradi Vallanghi
IV. Alathur	1	Kizhakkencherry I
	2	Kizhakkencherry II
	3	Vandazhi I
	4	Vadakkancherry I Vadakkancherry II
	5	Vandazhi II Kannambra I Kannambra II Puducode

## APPENDIX. III—(cont.)

Block (1)	Zone (2)	Village (3)
V. Kozhalmannam	6	Therur I Therur II
	7	Kavassery II Erimayur I Alathur
	8	Kavassery I Melarcode Erimayur II
	1	Peringottukurissi I Peringottukurissi II
	2	Kottayi I Kottayi II
	3	Mathur I Mathur II Kozhalmannam II
	4	Thenkurissi I Kozhalmannam I Thenkurissi II
	5	Kuthannur I Kuthannur II
	6	Peruvembu Pudussery West
	7	Pudussery East
	8	Pudussery Centre
VI. Palghat	1	Mannur Keralassery
	2	Mankara Parali I Parali II
	3	Pirayiri Kannadi I Kannadi II
	4	Malampuzha II Akathethara
	5	Marutharode Malampuzha I
	6	Pudupparyaram I Pudupparyaram II
	7	Mundur I Mundur II Kongad I Kongad II

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
VII. Ottappalam		
1	Ambalapara	I
2	Chalavara	
3	Ambalapara	II
4	Lakkidi-Perur	I
5	Ananganady	
	Vaniyamkulam	I
6	Vaniyamkulam	II
	Ottappalam	I
	Lakkidi-Perur	II
	Ottappalam	II
VIII. Sreekrishnapuram		
1	Vellinezhi	
2	Cheppulassery	
3	Karimpuzha	I
4	Kadampazhipuram	I
5	Sreekrishnapuram	I
	Sreekrishnapuram	II
6	Thrikkaderi	I
	Thrikkaderi	II
7	Karimpuzha	II
	Kadampazhipuram	II
IX. Pattambi		
1	Koppam	
2	Kulukkallur	
3	Muthuthala	
4	Pattambi	
5	Nellaya	
6	Ongallur	I
	Ongallur	II
7	Parathur	
	Thiruvengapura	
8	Vilayur	
	Vallapuzha	
X. Thrithala		
1	Anakkara	
2	Chaliserry	
3	Kappur	
4	Nagalassery	
5	Pattithara	
6	Thrithala	
	Thirumittacode	I
	Thirumittacode	II

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XI. Mannarghat		
	1	Alanallur II
		Alanallur III
	2	Alanallur I
		Kottoppadom III
	3	Kottopadom I
	4	Thachanattukara I
		Thachanattukara II
	5	Kottopadom II
	6	Kumaramputhur
		Mannarghat I
		Pottasseri II
	7	Mannarghat II
		Pottasseri I.
	8	Karakurisal
	9	Karimba I
		Karimba II
XII. Attappadi		
	1	Sholayar
	2	Kottathara
	3	Padur
	4	Padavayal
	5	Agali
	6	Kattamala
	7	Palakkayam

*Municipalities:*

1. Chittur Thathamangalam	1	Chittur Thathamangalam
2. Palghat	1	Palghat I
		Palghat II
		Palghat III
3. Shoranur	1	Shoranur I
		Shoranur II

*MALAPPURAM:*

I. Tirur	1	Triparamgode
	2	Ananthavoor
		Thirunavaya
	3	Purathur
	4	Mangalam
		Vettom
	5	Thalakkad

## APPENDIX III-(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
<b>II. Tanur</b>	1	Tanalur
	2	Valavannur
	3	Kalpakancherry
	4	Cheriyanundam
	5	Perumundam
		Ozhur
<b>III. Thirurangadi</b>	1	Tanur
	2	Vallikkunnu
	3	Ariyallur
	4	Thirurangadi
	5	Parappanangadi
		Moontiyoor
<b>IV. Vengara</b>	1	Nannambra
	2	Thennippalam
	3	Othukkungal
	4	Parappur
	5	Vengara
	6	Perumanna
<b>V. Kuttippuram</b>	1	Thennala
	2	A. R. Nagar
	3	Peruvallur
	4	Kunnamangalam
	5	
	6	
<b>VI. Malappuram</b>	1	Edayoor
	2	Neduvattom
	3	Kuttippuram
	4	Kattipparuthy
	5	Umbiliyam
	6	Karumbathur
	1	Athavanad
	2	Marakkara
	3	Melmuri
	4	
	5	
	6	
	1	Kottakkal
	2	Ponmala
	3	Urakom
	4	Nediyiruppu
	5	Anakkayam
	6	Pookkotur
	1	Morayoor
	2	Pandallur
	3	
	4	
	5	
	6	

## APPENDIX III--(cont.).

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
VII. Manjeri	1	Arrecode
		Kavannur
	2	Pulpatta
	3	Elamkoor
	4	Thrikkalangode
	5	Karakunnu
		Edavanna
		Perakamamu
VIII. Kondotty	1	Kondotty
		Pallikkal
	2	Pulickal
		Vazhayoor
	3	Cherukavu
		Chelambra
	4	Urangaitiri
	5	Keezhuparamba
		Cheekode
	6	Kuzhimanna
		Muthuvallur
	7	Vazhakkad
IX. Wandoor	1	Mampad
	2	Thiruvally
		Porur
	3	Wandoor
	4	Vettikkattiri
		Pandikkad
	5	Chembrasseri
		Vellayoor
	6	Thuvoor
	7	Kalkavu
	8	Karuyarakundu
X. Nilambur	1	Chungathara
	2	Nilambur
	3	Amarambalam
	4	Edakkara
XI. Ponnani	1	Ponnani
		Ezhuvathiruthy
	2	Vallankulam
	3	Thavannur
	4	Edappal
	5	Kalady

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
XII. Andathode	1	Perumpadappa
	2	Velliyangode
	3	Marancheri
	4	Alanicode
	5	Nannamukku
XIII. Perinthalmanna	1	Perinthalmanna
	2	Alipparamba
		Anamangad
	3	Thazhkode
		Arakkuparamba
	4	Vattathur
		Kariavattom
	5	Edapatta
		Melattur
	6	Keezhattur
		Nemmini
	7	Elamkulam
		Pathaikara
XIV. Mankada	1	Pulamanthole
		Kutuvambalam
	2	Angadippuram
		Puzhakkattiri
	3	Moorkkanad
		Kuruva
	4	Kodur
		Koothilangadi
	5	Mankada
		Vadakkangara
		Valamboor

*Municipalities:*

- |               |               |
|---------------|---------------|
| 1. Malappuram | 1. Malappuram |
|               | Melmuri       |
| 2. Manjeri    | 1. Manjeri    |
|               | Narukara      |
|               | Payyanad      |
| 3. Tirur      | 1. Tirur      |

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
<b>KOZHIKODE:</b>		
I. Kozhikode Block		
1	Karuvathuruthy Kadalundy	
2	Ramanattukara Feroke (P)	
3	Cheruvannur Beypore	
4	Olavanna Pantheramkavu	
II. Koduvally		
1	Naminda Kakkur	
2	Narikunni (P) Kizhakkoth Madavoor	
3	Kidavoor Earoth	
4	Puduppady Iringapuzha	
5	Koodathai Puthur vad Koduvally	
III. Kunnamangalam		
1	Kodiyathoor Kumaranallur Kakkad	
2	Kodinchery Thiruvambady (Koöderantu) Neeleswaram	
3	Perumana Kuttikattur Peruvayal Mavoor	
4	Thazhekode Poolacode Chethamangalam	
5	Kunnamangalam Kuruvalloor	

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(I)	(2)	(3)
IV. Chelannur (Chavayur)	1 2 3 4	Kakkodi Elathur Thalakkulathur (P) Thalakulathur (P) Chelannur Chelannur (P)
V. Thodannur	1 2 3 4	Ayanchery Puramery Kettappally Thiruvallur Villiappally Maniyur Palayad Maniyur
VI. Badagara	1 2 3	Azhiyur Onchiyam Cherode Eramala Eramala
VII. Maladi	1 2 3 4	Payyoli Thikkodi Pullokara, Palur Purakkad Thokkodi Moodadi Keezhariyur Keezhariyur Arikulam Kezhukkallur Thurayur
VIII. Balluserry	1 2	Kanthalode Sivapuram Uunikulan Kinatir

## APPENDIX III—(cont.)

<i>Block.</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
	3	Baluserry Panangad Kinalur Avithanallur
	4	Naduvannur Kottur Avithanallur I Avithanallur II Nelliyeri
	5	Ulliyeri Atholi
IX. Kunnummel	1	Nadapuram Kunnummel Puramery Arur
	2	Velam Kuttiady
	3	Kayakkody Maruthonkara
	4	Narippetta
	5	Kavilampara
X. Thunery	1	Edachery Puramery
	2	Thunery Puramery
	3	Chekkiad
	4	Valayam
	5	Vanimel
XI. Perambra	1	Perumanna
	2	Pannikottur
	3	Palari Perambra Koothali Chemgaroth Memhaniam
	4	Noohad Kayanna
	5	Eравattur Meppayur Cheruvannur

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	
<b>XII. Panthalayani</b>	1	Viyyor Panthalayani
	2	Changottukavu
	3	Chemancherry
<i>Corporation:</i>		
1. Kozhikode	1	Nellicode Chelavoor Panniankara, Volayanad
	2	Panniankara (P) Kasaba Puthiyangadi (Katcheri) Nagaram
	3	Vengeri Chevayoor Katcheri (P)
<i>Municipality:</i>		
Badagara	1	Badagara Nadakkuthazha
<i>WAYANAD:</i>		
I. Kalpetta Block	1	Achoonam
	2	Kalpetta
	3	Kottappadi (P)
	4	Kottappadi (P)
	5	Kottathara
	6	Kunnathidavaka
	7	Kuppadithara
	8	Padinjarathara (P)
	9	Muppinad (P)
	10	Muppinad (P)
	11	Padinjarathara (P)
	12	Thariode
	13	Vengappally
	14	Kaniyambetta Muttil
II. Sulthan Bathery	1	Ambalavayal I
	2	Ambalavayal II
	3	Kidanganad Poothadi (P)

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
	4	Nenmeni I
	5	Nenmeni II
	6	Poothadi I (P)
	7	Poothadi II (P)
	8	Pulpalli
	9	Purakkadi
	10	Sulthan Batheri
III. Mananthavadi	1	Anjukunnu
	2	Edavaka
	3	Kuppathonde
	4	Nalloornad
	5	Periya
	6	Perunnannur
	7	Thavinjal
	8	Thirunelli
	9	Thondarnad (P)
	10	Thondarnad (P)
	11	Vellamunda
	12	Vemom

## CANNANORE:

I. Kuthuparamba Block	1	Triprangottur
	2	Mokeri
		Pattiam
		Puthur
	3	Panoor
		Kolavalur
		Panniyannur
	4	Paduvilayi
		Pathiriyad
	5	Manentheri
		Kannavam
	6	Kandamkunnu Desoms of Kuthuparamba
		Mooriyad
		Trikkannapuram
	7	Mangatidam Desoms of Kuthuparamba
		Naravoor
		Ambilad

## APPENDIX III—(cont.)

<i>Block</i>	<i>Zone</i>	<i>Village</i>
(1)	(2)	(3)
<b>II. Peravoor Block</b>	1	Kuttiyoor
	2	Kelakom
	3	Kanichar
	4	Tholambra
	5	Vellamvally
	6	Muzhakunnu
	7	Sivapuram
	8	Cheruvanchery
	9	Kolayad
<b>III. Irity Block</b>	1	Manathan
	2	Vekkalam
	3	Aralam
	4	Keezhallur
	5	Thillankeri
	6	Koodali
	7	Pattannur
	8	Kolari
	9	Pazhassi
<b>IV. Tellicherry</b>	1	Keezhur
	2	Chavassery
	3	Payam
	4	Vilamana
	5	Chockli
	6	Kodiyeri
	7	Erenholi
	8	Kadirur
	9	Kottayam
<b>V. Cannanore</b>	1	Peringathur
	2	Pinarayi
	3	Eruvatty
	4	Dharmadam
	5	Azhikode
	6	Pallikunnu
	7	Puzhathi
	8	Chirakkal
	9	Valappattanam

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
<b>VI. Edakkad</b>	1	Anjarakandy Iriveri
	2	Chelora Valiyannur Elayavoor
	3	Chembilode Kadambur
	4	Edakkad Muzhappilangad
	5	Mavilayi Mokeri
	6	Munderi Kanhirode
<b>VII. Taliparamba</b>	1	Narath Kannadipparamba Kallisseri
	2	Pappinissery Cherukunnu Kannapuram
	3	Andoor Morazha
	4	Chengalai Kurumathur
	5	Chuzhalil
	6	Naduvil Vellad
	7	Alakode Thimiri
	8	Kooveri
	9	Pariyaram
	10	Taliparamba Pattuvam
	11	Panniyoor Kuttiyeri

## APPENDIX III—(cont.).

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
<b>VIII. Payyannur</b>	1	Ramanthali
	2	Payyannur Vellur
	3	Korome Kankole
	4	Eramam Perinthatta
	5	Kuttur Vellora
	6	Peringome
	7	Vayakkara Pulingome Thirumeni
	8	Alapadamba
	9	Karivellur Peralam
	10	Cheruthazham
	11	Kunhimangalam Kadannappally
	12	Mattul Madai Ezhome
<b>IX. Irirkur</b>	13	Panapuzha
	1	Cheleri Kolanchery
	2	Kuttiyattur Maniyoor
	3	Malappattam Irirkur
	4	Kalliad Nuchiyad
	5	Padiyoor Vayathur
	6	Eruvetty Payyavoor

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
	7	Nediyenga
	8	Mayyil Kayaralam
	9	Sreekandapuram

*Municipalities:*—

I. Tellicherry	1	Tellicherry Thiruvangad
I. Cannanore	1	Cannanore I Cannanore II

*KASARGODU:*

I. Manjeswar Block	1	Kunjathur Kadambar Hosbettu
	2	Vorkadi Kodalamoguru Meencha
	3	Uppala Paivelika
	4	Kayyar Bayar
	5	Bombrana Ichilangod
	6	Koipady Edanad
	7	Badur Maire
	8	Bela Madhur
	9	Nettanige Kumbadaji

## APPENDIX III—(cont.)

Block (1)	Zone (2)	Village (3)
	10	Perdala
	11	Padu
	12	Enmakaje
12. Kasargode	1	Adhur
	2	Padi
	3	Chengala
	4	Kalanad
	5	Thekkil
	6	Muliyar
	7	Kolathur
	8	Bedadukka
	9	Kuttikolc
	10	Bandadukka
	11	Adoor
	12	Delampady
III. Kannangad	1	Uduma
	2	Panayal
	3	Pallikkara
	4	Chithari
	5	Periya
	6	Pulloor
	7	Ajanoor
	8	Madikkat
	9	Belur
	10	Panathady (P)
	11	Panathady (P)
	12	Meloth
IV. Neleswar	1	East Elery
	2	East Elery
	3	Kinanoor
	4	Karinthalam
	5	Cheemeni
	6	Neleswar
	7	Cheruvathur
	8	Kayyoor
	9	Kodakkad
	10	Pilicode
	11	Padne
	12	Thrikkaripur North Thrikkaripur South

## APPENDIX III—(cont.)

<i>Block</i> (1)	<i>Zone</i> (2)	<i>Village</i> (3)
<i>Municipalities.</i>		
I. Kasargode	1	Kasargode Kuddlu
II. Kanhangad	1	Hosdurg Kanhangad

## APPENDIX IV

**Statement showing the distribution of number of crop cutting experiments allotted to different Blocks, Municipalities and Corporations**



## APPENDIX IV—(cont.)



APPENDIX IV—(cont.)

Serial number	Name of Block/ Corporation/ Municipality	Paddy		Winterr Summer	Coconut	Cassava	Pepper	Coca	Jack	Banana	Plumaria			
		1	2											
5	Kothamangalam	6	36	36	36	12	18	12	12	12	12	18	12	12
6	Mujamthuruthy	4	24	24	24	8	12	8	8	8	8	12	8	8
7	Muvattupuzha	5	30	30	30	10	15	10	10	10	10	15	10	10
8	Palluruthy	2	12	12	12	4	6	4	4	4	4	6	4	4
9	Pampakuda	6	36	36	36	12	18	12	12	12	12	18	12	12
10	Parakkadavu	3	18	18	18	6	9	6	6	6	6	9	6	6
11	Papur	3	18	18	18	6	9	6	6	6	6	9	6	6
12	Vadavukode	5	30	30	30	10	15	10	10	10	10	15	10	10
13	Vazhakkulam	5	30	30	30	10	15	10	10	10	10	15	10	10
14	Vypeen	3	18	18	18	6	9	6	6	6	6	9	6	6
15	Vytilla	2	12	12	12	4	6	4	4	4	4	6	4	4
16	Cochin (Corporation)	3	18	18	18	..	15	..	..	..	..	..	..	..
17	Angamaly (M)	1	10	10	10	..	5	..	..	..	..	..	..	..
18	Kothamangalam (M)	1	10	10	10	..	5	..	..	..	..	..	..	..
19	Muvattupuzha (M)	1	10	10	10	..	5	..	..	..	..	..	..	..
20	Perumbavoor (M)	1	10	10	10	..	5	..	..	..	..	..	..	..
21	Trippunithura (M)	1	10	10	10	..	5	..	..	..	..	..	..	..
66		416	416	416	416	116	214	116	116	116	116	116	116	116

ERNAKULAM DISTRICT

1	Anthicad	3	8	10	10	10	10	10	10	10	10	10	10	10	10	10
2	Chalakudy	3	8	18	6	9	6	6	6	6	6	6	6	6	6	6
3	Chavakkad	4	24	24	8	12	8	8	8	8	8	8	8	8	8	8
4	Cherpu	4	24	24	8	12	8	8	8	8	8	8	8	8	8	8
5	Choyannur	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
6	Irinjalakuda	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
7	Kodakkara	4	24	24	8	12	8	4	4	4	4	4	4	4	4	4
8	Kodungalloor	2	12	12	4	6	4	4	4	4	4	4	4	4	4	4
9	Mala	5	30	30	10	15	10	10	10	10	10	10	10	10	10	10
10	Mathilakom	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
11	Mullaserry	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
12	Ollukkara	5	30	30	30	30	10	15	10	10	10	10	10	10	10	10
13	Pazhayamoor	5	30	30	30	10	15	10	10	10	10	10	10	10	10	10
14	Puzhakkal	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
15	Thalikkulam	4	24	24	8	12	8	8	8	8	8	8	8	8	8	8
16	Vellangalloor	6	36	36	12	18	12	12	12	12	12	12	12	12	12	12
17	Wadakkancherry	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
18	Chalakudy (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
19	Chowghat (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
20	Irinjalakuda (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
21	Kodungalloor (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
22	Trichur (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10
TRICHUR DISTRICT		73	458	458	136	229	136	136	136	136	136	136	136	136	136	136
1	Alathur	8	48	48	16	24	16	16	16	16	16	16	16	16	16	16
2	Attappadi	7	42	42	14	21	14	14	14	14	14	14	14	14	14	14
3	Chittur	7	42	42	14	21	14	14	14	14	14	14	14	14	14	14
4	Kollengode	8	48	48	16	24	16	16	16	16	16	16	16	16	16	16
5	Kuzhalmaanam	8	48	48	16	24	16	16	16	16	16	16	16	16	16	16
6	Mammarghat	9	54	54	18	27	18	18	18	18	18	18	18	18	18	18
7	Nenmara	3	18	18	6	9	6	6	6	6	6	6	6	6	6	6
8	Ottappalam	6	36	36	12	18	12	12	12	12	12	12	12	12	12	12
9	Palghat	7	42	42	14	21	14	14	14	14	14	14	14	14	14	14
10	Pattambi	8	48	48	16	24	16	16	16	16	16	16	16	16	16	16

APPENDIX IV—(cont.)

Serial number	Name of Block/ Corporation/ Municipality	Number of Investigator Units	Autumn					Winter					Summer					Platinum				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
11	Srekrishnapuram	7	42	42	42	42	42	14	21	14	14	14	14	14	14	14	14	21	21	14	14	
12	Thirthala	6	36	36	36	36	36	12	18	12	12	12	12	12	12	12	12	18	18	12	12	
13	Chittar-Thatha-mangalam (M)	1	10	10	10	10	10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
14	Palghat (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
15	Shornur (M)	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
PALGHAT District			87	534	534	534	534	168	267	168	168	168	168	168	168	168	168	232	232	168	168	
1	Andathode	5	30	30	30	30	30	10	15	10	10	10	10	10	10	10	10	10	10	10	10	
2	Kondotty	7	42	42	42	42	42	14	21	14	14	14	14	14	14	14	14	14	14	21	14	
3	Kuttipuram	5	30	30	30	30	30	10	15	10	10	10	10	10	10	10	10	10	10	10	10	
4	Malappuram	6	36	36	36	36	36	12	18	12	12	12	12	12	12	12	12	12	12	12	12	
5	Manjeri	5	30	30	30	30	30	10	15	10	10	10	10	10	10	10	10	10	10	10	10	
6	Mankada-	5	30	30	30	30	30	10	15	10	10	10	10	10	10	10	10	10	10	10	10	
7	Nilambur	4	24	24	24	24	24	8	12	8	8	8	8	8	8	8	8	8	8	8	8	
8	Perinthalmanna	7	42	42	42	42	42	14	21	14	14	14	14	14	14	14	14	14	14	14	14	



APPENDIX IV—(cont.)



## APPENDIX V

DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT  
OF KERALA

## FORM A

## Basic details of the zone\*

1. District
2. Taluk
3. Block/Corporation/Municipality
4. Village/G. P/F
5. Natural Region
6. Soil type
7. Zone particulars

	Number of plots		Area (Acres)	
	Village (Full)	Village (Part)	Village (Full)	Village (Part)
Total				
Wet				
Dry				
Purampoke				
Tarisu				
Forest				

7. Area under forest in the zone (not included) under item 6 (acres)
8. Details of major seasonal crops cultivated in the village

Serial number	Crop name	Code	Month of		Serial number	Crop Name	Code	Month of	
			Sowing	Harvesting				Sowing	Harvesting
1	2	3	4	5	6	7	8	9	10

Place:

Date:

Taluk Statistical Officer.

\*To be attached as facing sheet to Form II

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT  
OF KERALA**

**FORM I**

**Field Diary of Investigator Survey of Agricultural Land Utilisation**

1. District	2. Thaluk	Year
3. Block/Corporation/Municipality	4. Village	Wet/Dry
5. Total number of clusters	6. Investigator zone	I/II/III/IV/V
7. Cluster number	8. Date of visit I.....II.....III.....	

Details	Unit	Sl. No.	1	2	3	4	5	Total
Survey number		1						
Area		2						
Building and courtyard		3						
Other non-Agricultural uses		4						
Barren and Uncultivable land		5						
Miscellaneous tree crops		6						
Pastures and grazing land		7						
Cultivable waste		8						
Other fallow		9						
Current fallow		10						
Net area under cultivation		11						
A land utilisation		I	12					
		UI	13					
		I	14					
		UI	15					
			16					
			17					
			18					
		I	19					
		UI	20					
		I	21					
B. Seasonal crops	Autumn	UI	22					
			23					
			24					
			25					
B. Seasonal crops	Winter	HYV						
		Paddy						
		Local						

## FORM I—(cont.)

		Details		Unit	Sl. No.					
		Paddy				1	2	3	4	5
B. Seasonal crops		Summer	HYV	I						
			Local	UI						
					26					
				I	27					
				UI	28					
					29					
					30					
					31					
					32					
C. Annual crops	Banana	A	I		33					
			UI		34					
	Sugarcane	A	I		35					
			UI		36					
	Betal leaves				37					
D. Perennial crops	Pine-apple				38					
	Plantain				39					
					40					
					41					
	Coconut	B	I		42					
			UI		43					
		Y	I		44					
			UI		45					
	Arecanut	B	I		46					
			UI		47					
		Y	I		48					
			UI		49					
	Cashew	B			50					
			Y		51					
	Pepper	B			52					
			Y		53					

## FORM I—(cont.)

Details	Unit	Sl. No.	1	2	3	4	5	Total
Jack		54						
Mango		55						
Palmyrah		56						
Tamarind		57						
Rubber		58						
Tea		59						
Coffee		60						
Cardamom		61						
Cinnamon		62						
Nutmeg		63						
Clove		64						
Cocoa		65						
Pappaya		66						
Drum stick		67						
Lemon grass		68						
Fodder grass		69						
Green manure		70						
Other oil seeds		71						
Other fruits		72						
Other trees		73						
		74						
		75						
		76						
		77						
		78						
Source of Irrigation	Code	79						
Number		80						
Net Area	Cent	81						
Gross Area	Cent	82						

Name:  
Signature.Name.  
Signature:

TSO/SI

Investigator

Note:—Draw a sketch of the selected Survey Sub-division and mark the enumerated portion in the right hand corner of the Form I Diary.

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

**FORM II**

**Land utilisation and irrigation—Wet/dry.**

1. District.....
2. Taluk.....
3. Block/Municipality/Corporation.....
4. Village.....
5. Investigator zone.....
6. Year.....

Serial Number	Cluster No.	Area in cents (Bammaracted)	Classification of area (Cents)																					
			Building and court-	Barren and uncul- turable lands	Other non- agri. uses	Misc. Tree crops	Pastures and Grazing	Cultivable waste	Other fallow	Current fallow	Acre under cultivation	1	2	3	4	5	6	7	8	9	10	11	12	

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA—(Cont.)**

**Area Irrigated by different sources (Cents)**

Serial number	Cluster No.	Other lift and minor irrigation						Pump	Country wheels	From rivers and lakes	Number of wells
		Govt.	Private	Govt.	Private	Tanks	Wells				
13	14	15	16	17	18	19	20	21	22	23	24

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

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**FORM III-A**

**Area under seasonal crops—(Wet/dry)**

1. District.....
  2. Taluk.....
  3. Block/Corporation/Municipality.....
  4. Village.....
  5. Zone.....
  6. Year.....
- Autumn (July—October)

Cluster No.	Name of the Block	Area enumerated (in cents)	Paddy			Tapioca-A			Tapioca-B		
			H.Y.V.		Others	P.S.		Tapioca-A	H.Y.V.		Tapioca-B
			I	U.I.	I	I	U.I.	I	I	U.I.	I
1	2	3	4	5	6	7	8	9	10	11	

Cluster No.	Name of the Block	Autumn (July—October)			Winter (November—February)		
		H.Y.V.		Others	H.Y.V.		Others
		I	U.I.	I	U.I.	I	U.I.
12	13	14	15	16	17	18	19

## Form III-A—(Contd.)

Winter (November—February)

Summer (March—June)

Cluster No.	Name of the Block	Pulses	N. U. C.			E. F. S.			O. C.			H. Y. V.			Others			Paddy		
			I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
			22	23	24	25	26	27	28	29	30	31								

Cluster No.	Name of the Block	Tapioca-A	Tapioca-B			Tapioca-C			Pulses			C.			S.			O. C.		
			I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
			32	33	34	35	36	37	38	39	40									

Place.....

Date.....

Signature of T.S.O.

DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA

Form VII B

**Area under annual and perennial crops**

1. District.....	2. Taluk.....	3. Block/Corporation/Municipality.....	Wet/Dry
4. Village.....	5. Zone.....	6. Year.....	

Cluster No.	Name of the Block	Area (cents)	Coconut		Areca nut		A (i)		A (ii)		A (iii)	
			B (i)	A (ii)	B (ii)	A (iii)	B (iii)	A (ii)	B (ii)	A (iii)		
1	2	3	4	5	6	7	8	9	10	11		

Form III B—(cont.)

Cluster No.	Name of the block	Perennial Crops (number)										Drumstick
		Cashew	Berries	Young	Bearings	Pepper	Young	Bearings	Jack	Mango	Palmryah	
12	13	14	15	16	17	18	19	20	21			

FORM III B—(cont.)

Cluster No.	Name of the block	Perennial Crops (number)					
		Coffee	Rubber	No. Area (cents)	No. Area (cents)	No. Area (cents)	No. Area (cents)
1	22	23	24	25	26	27	28
2							
3							
4							

FORM III B—(cont.)

Cluster No.	Name of the block	Annual Crops (cents)					
		Banana	Sugarcane	Betel leaves	Pineapple	Plantain	Coconut
A (1)	A (2)	A (3)	A (4)	A (5)	A (6)	A (7)	A (8)
1	31	32	33	34	35	36	37
2							
3							
4							

DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT KERALA

Form IV

**Group Abstract Report**

1. District:  
2. Taluk:

3. Block/Municipality/Corporation  
4. Village

5. Zone  
6. Season  
7. Year  
Wet/Dry

Area (in cents) under cultivation of seasonal crops

Cluster No.	Total area of the clusters											Total area enumerated (cents)				Tapica	Other	H.Y.V.	Paddy	Not under cultivation				Other crops
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				Fallow for the season				
Total																								

Taluk Statistical Officer.

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA

FORM, V

**List of plots selected for crop cutting experiments**

- |             |                      |                                   |
|-------------|----------------------|-----------------------------------|
| 1. District | 2. Taluk             | 3. Block/Municipality/Corporation |
| 4. Village  | 5. Investigator Zone | 6. Name of Investigator           |
| 7. Year     |                      |                                   |

Sl. No.	Name of crop	No. of plots in the frame	Order of selection	Random number chosen	Survey Sub-division No.	Area (cents)	Name and address of owner/cultivator	Remarks
1	2	3	4	5	6	7	8	9
1	Autumn Paddy (6)	1 2 3						
2	Winter Paddy (6)	1 2 3						
3	Summer Paddy (6)	1 2 3						
4	Tapioca (2)	1 2						
5	Banana (3)	3						
6	Coconut (3)	3						
7	Arecanut (2)	2						
8	Cashew (2)	2						
9	Pepper (2)	2						
10	Cocoa (2)	2						
11	Plantain (2)	2						
12	Sesamum (2)	2						
13	Jack (2)	2						

Place:  
Date:

Investigator:  
Inspector  
TSO

**DEPARTMENT OF ECONOMICS AND STATISTICS  
GOVERNMENT OF KERALA**

**FORM VI**

**First report on crop yield of paddy**

Year	Crop-Paddy		
District	Season	Autumn	Winter
Village:	Taluk:	Block	Municipality
			Corporation Investigator Zone No.

Survey and Subdivision number      }

Name and address of Cultivator      }

Date of harvest

Whether irrigated or not: Yes/No

Seed used: HYV/Improved/Local

Weight of Produce:

kgs. (0.000)

Weight of straw  
(kg.)

**On I.G.S.**

Name of Investigator: To

Signature with date:

The Director  
Directorate of Economics and Statistics,  
Vikas Bhavan,  
Trivandrum 695033.

Signature and Designation  
of supervising officer

To  
The Senior Divisional Manager,  
The General Insurance Corporation  
of India,  
Crop Insurance Cell,  
Kodar Lane,  
P.B. No. 94,  
M. G. Road,  
Trivandrum,  
695001.

**DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA**

**FORM VI A**

**Results of crop cutting experiments on paddy**

**BLOCK I—IDENTIFICATION PARTICULARS**

- |                                   |                              |
|-----------------------------------|------------------------------|
| 1. District                       | 2. Taluk                     |
| 3. Block/Corporation/Municipality | 4. Village/Investigator Zone |
| 5. Name of Investigator:          | 6. Season and Year:          |
| 7. Details of plots selected:     |                              |

Sl. No.	Item	Experiment 1	Experiment 2
(a)	Survey subdivision No. of the selected plot		
(b)	Area of selected Plot (Cents)		
(c)	Name and address of cultivator		

- 8 Dates of Inspection by Statistical Inspector

(a)	Pre harvest stage		
(b)	Harvest stage		
(c)	Post harvest stage		
9	Signature of Investigator		
10	Date of despatch of form to the headquarters		

DEPARTMENT OF ECONOMICS AND STATISTICS  
GOVERNMENT OF KERALA

FORM VI A

BLOCK II—DETAILS OF SELECTION OF KANDOM (SUB-PLOT) AND CULTIVATION  
PRACTICES IN THE SELECTED KANDOM

Sl.No.	Item	Experiment 1	Experiment 2
1	2	3	4
1	No. of Kandoms in the selected plot		
2	Sl. No. of Kandom selected		
3	Area (cents) of the Kandom		
4(a)	Whether irrigated, if so source (Code)		
(b)	Whether irrigation is adequate	Yes/No	Yes/No
(c)	Whether drainage for excess water exists	Yes/No	Yes/No
5	Variety of seed (HYV or Local)	HYV/Local	HYV/Local
6	If HYV name of variety		
7	If HYV source of seed (Code)		
8	Method of sowing (Code)		
9	Seed rate (kg./acre)		
10 (a)	Whether insecticides used	Yes/No	Yes/No
(b)	If so whether for prevention or control	Prevention/control	Prevention/control
(c)	If used whether controlled	Yes/No	Yes/No

*Code.—Irrigation Source—Government Canal—1, Private Canal—2, Government Tank—3, Private Tank—4, Government well—5, Private well—6, Other well—7, Pumpset—8, Country wheel—9, Other means—10, Not irrigated—11.*

*Source of seed.—Home produced procured from block or Agricultural Department—2, Other Cultivators—3, Other Sources—4.*

*Method of sowing.—Broad Cast—1, Dibbing—2, Transplanting—3, Others—4.*

## FORM VI A-(cont.)

BLOCK (III)—DETAILS OF CHEMICAL FERTILIZERS AND OTHER MANURES  
USED IN THE SELECTED KANDOM

## I. Chemical Fertilizers

Item	Experiment 1				Experiment 2			
	Trade name	Content (Percentage)	Total quantity applied kg.	Quantity of nutrient kg.	Trade name	Content (Percentage)	Total quantity applied kg.	Quantity of nutrient kg.
1	2	3	4	5 (3×4)	6	7	8	9 (7×8)
N								
P								
K								
NP		N= P=			N= P=			
NK		N= K=			N= K=			
PK		P= K=			P= K=			
NPK		N= P= K=			N= P= K=			

	Experiment 1		Experiment 2	
	Code quantity (kg.)	Code quantity (kg.)	Code quantity (kg.)	Code quantity (kg.)
2. Other manures used and quantity	1.  2.  3.			

## FORM VI. A—(cont.)

## BLOCK IV—RESULTS OF CROP CUTTING EXPERIMENTS

		Experiment 1	Experiment 2
1	Length of sides (in steps) of the selected kandom	x  y	
2	Random number Chosen	x  y	
3	Date of harvest		
4	Weight of winnowed paddy (kg)		
5	Cause for crop damage or poor yield (code)		
6	Weight of straw (kg./acre)		
7	Remarks (date of despatch of first report in Form VI)		

Place:

Date:

Signature of Investigator/Inspector

Codes.—Other Manures: Improved green manure—1, Oil cake—2, Bone meal—3, Compost Scientifically Prepared—4, Cowdung—5, Others—6, Not manured—7.

Damage:—Normal—0, Flood—1, Drought—2, Pest attack—3, No irrigation—4, Lack of manure—5, Others—6.

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVT. OF KERALA

FORM VI B

**Results of crop cutting experiments on tapioca**

- |                                    |                      |
|------------------------------------|----------------------|
| 1. District                        | 4. Investigator Zone |
| 2. Taluk                           | 5. Year              |
| 3. Block, Corporation/Municipality | 6. Village           |

Sl. No.	Item	Experiment I	Experiment II
1	Survey Subdivision No.		
2	Area (Cents)		
3	Chemical fertilisers used*		
4	Irrigation Source*		
5	Variety of tapioca		
6	Month of planting		
7	Area of patch		
8	No. of plants in the patch		
9	Length of sides	x y	
10	Random number	x y	
11	Date of harvest		
12	No. of plants in the square plot $2 \times 2$ m.		
13	Weight of raw tapioca (kg)		
14	Whether the expt. inspected by the Statistical Inspector at harvest stage		
	Remarks (Reasons if the yield is abnormal)		

Station:

Date:

\*give the relevant Code.

Name and Signature of the Investigator

Name and Signature of the Statistical Inspector.

Code number to be used:—(a) Chemical fertiliser—Ammonium Sulphate 1, Muriate of potash 2, Superphosphate 3, Urea 4, Tapioca mixture 5, Other Chemical manure 6, Not Chemically manured 7.

(b) Irrigation Source—Govt. Canal 1, Private Canal 2, Tank 3, Tube well 4, Other well 5, Pumpset 6, Others 7, Not irrigated 8.

**DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVT. OF KERALA**

FORM A

**Results of Crop Cutting Survey on Coconut**

**BLOCK I IDENTIFICATION PARTICULARS**

- |                       |                                       |                             |
|-----------------------|---------------------------------------|-----------------------------|
| 1. District           | 2. Block/Corporation/<br>Municipality | 3. Taluk                    |
| 4. Village            | 5. Name of Investigator               | 6. Area of the plot (cents) |
| 7. No. of trees B. Y. | 8. Investigator unit                  | 9. Survey No. of plot       |
| 10. Pure/mixed plot   | 11. Year                              | 12. Total                   |

**BLOCK II—DETAILS OF SELECTION OF TREES**

	Serial number of trees selected	Order of Selection					
		1	2	3	4	5	6
1	Age of the tree in years						
2	Variety						
3	Irrigation source*						
4	Chemical fertilisers used*						
5	Other manures used*						
6	Whether affected by disease						

\*Code numbers to be used

(a) *Irrigation Source*:—Government Canal-1, Private Canal-2, Tank-3, Tube well-4, Other well-5, Pumpsets-6, Others-7, Not irrigated-8.

(b) *Chemical fertiliser*:—Ammonium Sulphate-1, Muriate of potash-2, Super phosphate-3, Urea-4, Coconut Mixture-5, Other Chemical manure-6, Not Chemically manured-7.

(c) *Other manures*:—Improved green manure-1, Oil Cake-2, Bone meal-3, Compost scientifically prepared-4, Cow dung-5, Others-6, Not manured-7.

**FORM VII A—(cont.)**

### BLOCK III-DETAILS of HARVEST.

**FORM VII A—(contd.)**

FORM VII A—(cont.)

FORM VII A—(cont.)

	Tender	Ripe	Barren	Over ripe	Before ripe	Total
VIII						
Ell down						

FORM VII A—(cont.)

FORM VII A—(cont.)

Serial No. of harvest	Date of harvest	Type of nuts	Order of Selection of trees						Tree number and number of nuts in bunches (for future harvest)			
			1	2	3	4	5	6	7	8	9	10
IX	Tender										1	
	Ripe										2	
	Barren										3	
	Over ripe										4	
	Before ripe										5	
	Total											
X	Tender										1	
	Ripe										2	
	Barren										3	
	Over ripe										4	
	Before ripe										5	
	Total											
XI	Tender										1	
	Ripe										2	
	Barren										3	
	Over ripe										4	
	Before ripe										5	
	Total											

Signature of Investigator:

Signature of Statistical Inspector:

Station.....

Date.....

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA

FORM VII B

**Results of crop cutting survey on arecanut**

**BLOCK I IDENTIFICATION PARTICULARS**

1. District	7. Survey number	B      Y
2. Taluk	8. Area (cents)	
3. Block/Municipality/Corporation	9. Pure/mixed plot	
4. Revenue village	10. Number of trees	
5. Investigator zone	11. Year	
6. Name of Investigator (s)	Total	

**BLOCK II—DETAILS OF SELECTED TREES**

Number	Item	Order of selection				
		1	2	3	4	5
1	Serial number of trees selected ..					
2	Age of the tree in years ..					
3	Variety ..					
4	Irrigation source*					
5	Chemical fertiliser used*					
6	Other manures used*					
7	Whether affected by disease ..					

\*Code numbers to be used.

(a) Irrigation source.—Government canal 1, Private canal 2, Tanks 3, Tube well 4, Other well 5, Pump sets 6, Others 7, Not irrigated 8.

(b) Chemical fertiliser.—Ammonium sulphate-1, Muriate of potash-2, Super phosphate-3, Urea-4, Arecaanut mixture-5, Other chemical manure-6, Not chemically manured-7,

(c) Other manures.—Improved green manure-1, Oil cake-2, Bone meal-3, Compost scientifically prepared-4, Cow dung-4, Others-6, Not manured-7.

B—Bearing      Y—Young

FORM VII B—(cont.)

### **Block III--Details of harvest**

FORM VII B—(cont.)

Sl. No. of harvest	Date of harvest	Type of nuts plucked	Palm I			Palm II			Palm III			Palm IV			Palm V		
			Number	Weight	Number	Weight	Number	Weight	Number	Weight	Number	Weight	Number	Weight	Number	Weight	
1	2	3	4	5	6	7	8	9	10	11	12	13					
VI		Ripe															
		Tender															
VII		Ripe															
		Tender															
VIII		Ripe															
		Tender															
		Total															
		Tender															

Station:

Date:

Signature of Investigator

Signature of the Statistical Inspector

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

Form VII C

**Results of crop cutting experiments on cashew**

1. District
2. Revenue village
3. Name of Investigator
4. Area
5. Taluk
6. Block/Municipality/Corporation
7. Investigator zone
8. Survey No.
9. No. of trees
10. Year

Fruit colour	Tree I			Tree II			Tree III			Tree IV			Tree V		
	No. of nuts	Weight in kg.	No. of nuts	No. of nuts	Weight in kg.	No. of nuts	No. of nuts	Weight in kg.	No. of nuts						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(b)															
I	(a)														
	(c)														
II	(a)														
	(c)														
III	(a)														
	(c)														
IV	(a)														
	(c)														
V	(a)														
	(c)														

Form VII C—(cont.)

Fruit colour	Tree I			Tree II			Tree III			Tree IV			Tree V		
	No. of nuts	Weight in kg.	No. of nuts	No. of nuts	Weight in kg.	No. of nuts	No. of nuts	Weight in kg.	No. of nuts	No. of nuts	Weight in kg.	No. of nuts	Weight in kg.	No. of nuts	Weight in kg.
Harvest number with date	1	2	3	4	5	6	7	8	9	10	11				
(a)															
VI	(c)														
(a)															
VII	(c)														
(a)															
VIII	(c)														
(a)															
IX	(c)														
(a)															
X	(c)														
(a)															
Total															

(a) Yield on the date of each visit  
 (b) Yield collected till the date of visit  
 (c) Yield collected in the interval between the two visits

B—Bearing

Y—Young

Station:  
Date:

Signature of Investigator

Signature of Statistical Inspector

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA

FORM VII D

**Results of crop cutting experiments on pepper**

**BLOCK I—IDENTIFICATION PARTICULARS**

- |                             |                                   |
|-----------------------------|-----------------------------------|
| 1. District:                | 6. Block/Corporation/Municipality |
| 2. Revenue village          | 7. Investigator unit              |
| 3. Name of Investigator (s) | 8. Survey subdivision No.         |
| 4. Area (in cents)          | 9. Number of pepper standards     |
| 5. Taluk                    | 10. Year                          |

B: V: Total

**BLOCK II—DETAILS OF SELECTION OF STANDARDS**

	Order of selection				
	1	2	3	4	5
1. Serial number of standards selected *					
2. Age of the standards in years					
3. Variety					
4. Irrigation source *					
5. Chemical fertilizer used *					
6. Other manures used *					
7. Whether affected by disease					

\* Code numbers to be used:

- (a) Irrigation source: Government canal-1, Private canal-2, Tank-3, Tube well-4, Other well-5, Pumpsets-6, Others-7, Not Irrigated-8
- (b) Chemical fertilizers: Ammonium Sulphate-1, Muriate of potash-2, Super Phosphate-3, Urea-4, Pepper mixture-5, Other chemical manures-6, Not Chemically manured-7
- (c) Other manures: improved green manure-1, Oil Cake-2, Bone meal-3, Compost scientifically prepared-4, Cowdung-5, Others-2-6, Not manured-7

B—Bearing

Y—Young

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

FORM VII D—(cont.)

BLOCK III—DETAILS OF HARVEST

Date:

1. Harvest No. 1	Weight of berries with spikes (kg.)				
	Weight without spikes (kg.)				
2. Harvest No. 2	Weight of berries with spikes (kg.)				
	Weight without spikes (kg.)				
3. Total weight of berries (kg.)	With spikes				
	without spikes				

Station:

Date:

Signature of Investigator

Signature of Statistical Inspector

## DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA

Pao Form A

**Crop cutting Experiments on coconuts—Details of harvest—Details of the month of.....**

District	Taluk	Block/Municipality/Corporation/Zone	Investigator	Investigator unit	S.Y. No. of the selected Plot	Date of harvest	Total number of nuts obtained from the selected trees					Remarks
							1	2	3	4	5	
1	2	3	4	5	6	7	8	9	10	11		

Station:

Date:

Signature of Taluk Statistical Officer.

## DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA

PRO FORMA C

Crop cutting Experiments on Arecanuts—Details of harvests conducted during the month of.....

District/Block	Serial number	Taluk				Yield obtained from the selected trees			
		Investor-Block	Investor-unit	Survey No.	Date of harvest	Number	Weight (kg.)	Number	Weight (kg.)
1	2	3	4	5	6	7	8	9	
PRO FORMA C—(cont.)									
District/Block	Serial number								Remarks
		No.	Weight (kg.)	No.	Weight (kg.)	No.	Weight (kg.)	No.	Weight (kg.)
		10	11	12	13	14	15	16	17
									18

Station:  
Date:

Signature of Investigator

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

**Extent of spread of High yielding varieties of Paddy (variety-use)**

Taluk: \_\_\_\_\_ Number of Investigator Zone \_\_\_\_\_

Season and Year \_\_\_\_\_

Block/Municipality/Corporation \_\_\_\_\_

Name of Investigator \_\_\_\_\_

Serial number	Survey Number selected for crop cutting experiments	Total area cultivated for paddy by the selected cultivator in the taluk (cents)	Area brought under different H.Y.V. by the selected cultivator in the Taluks (cents)										Remarks
			1	2	3	4	5	6	7	8	9	10	11
1	2	3	4	5	6	7	8	9	10	11	12	13	

Signature of Investigator with date \_\_\_\_\_

1. Column (3) Total area cultivated with paddy by the selected cultivator in the taluk during the season should be given in cents.
2. Column (4) to (11) Give the area in cents brought under different HYV of paddy by the selected cultivator in the taluks during the season separately after noting its name in the space provided in the heading to these columns.
3. Column (12) Give total of columns (4) to (11)
4. Total of each column may be given in the last line.

DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA

Inspection report on crop cutting survey on Paddy

Taluk:

Block/Municipality/Corporation:

Name and designation of the }  
Inspecting officer

Name of Season and year

Block I.—IDENTIFICATION PARTICULARS OF PLOT INSPECTED

Name of Block/Zone inspected at	Name of Surveyor sub-division No.			I.P.D. unit area or not	Remarks
	(a)	(b)	(c)		
	Pre-harvest Stage	Harvest Stage	Post harvest Stage		

120

## BLOCK II—DETAILS OF PRE-HARVEST STAGE INSPECTION

	Zone 1	Zone 2	Zone 3	
	1	2	3	4
1. Name of Block				
2. Survey number				
3. Mistakes noted in				
(a) Selection of Survey number				
(b) Identification of survey number				
(c) Selection of Kandom				
4. Probable date of harvest				
(a) As recorded by the investigator				
(b) As observed at the time of inspection				
5. Estimated yield				
(a) As recorded by the Inspector				
(b) As observed at the time of Inspection				
6. Whether the investigator has contacted the cultivator and arranged for the crop cutting experiment				
7. Remarks				
8. Date of Inspection				

## BLOCK III—DETAILS OF HARVEST STAGE INSPECTION

	Zone 1	Zone 2	Zone 3
1	2	3	4
1. Name of Block			
2. Survey No. originally selected for harvest stage inspection			
3. Survey No. actually inspected			
4. Reasons for substitution, if any			
5. Whether the plot is:			
(a) Irrigated			
(b) Using H.Y.V. seed			
6. Chemical fertiliser used			
7. Manures used			
8. Date of harvest			
9. Date of threshing and Weighing			
10. Weight of produce (kgs.)			
11. Whether standardized equipments supplied and whether the same has been actually used			
12. General opinion of the Inspecting Officer regarding the conduct of the experiment			
13. Reason if yield is abnormal			

## BLOCK IV—POST HARVEST STAGE INSPECTION

	Zone 1	Zone 2	Zone 3
1. Name of block			
2. Survey number selected			
3. Mistakes noted in:			
(a) Selection of survey number			
(b) Identification of survey number			
(c) Identification of Kandom			
4. Details of selected Kandom			
(a) X co-ordinate			
(1) as entered by investigator			
(2) as measured in the presence of inspecting officer			
(b) Y co-ordinate			
(1) as entered by investigator			
(2) as measured in the presence of the inspecting officer			
5. Random No.—Chosen			
(a) X-7-(1) as entered by investigator			
(2) as observed at the time of inspection			
(b) Y-7-(1) as entered by investigator			
(2) as observed at the time of inspection			
6. Remarks			
7. Date of inspection			

Place:

Date:

Signature of Inspecting Officer

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA

FORM VII E

**Crop cutting experiments on Cocoa**

**BLOCK I—IDENTIFICATION PARTICULARS**

Year:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. District                       | 6. Area (cents)                  |
| 2. Taluk                          | 7. Cocoa only/other cropped area |
| 3. Block/Corporation/Municipality | 8. Number of trees Bearing:      |
| 4. Investigator zone              | Young:                           |
| 5. Survey No.                     | Total:                           |

**BLOCK II—DETAILS OF SELECTED TREES**

		Order of selection				
		1	2	3	4	5
1	Sl. No. of trees selected					
2	Age of the tree (in years)					
3	Variety					
4	Irrigation source (A)					
5	Chemical fertiliser used (B)					
6	Other manures used (C)					
7	Whether affected by disease					

*Code numbers to be used.—*

- (a) Irrigation source.—Government canal-1, Private canal-2, Tank-3, Tube well-4, Other well-5, Pumpset-6, Others-7, Not irrigated-8.
- (b) Chemical fertiliser.—Ammonium sulphate-1, Muriate of potash-2, Super phosphate-3, Urea-4, Mixture-5, Other chemical manure-6, Not chemically manured-7.
- (c) Other fertiliser.—Improved green manure-1, Oil cake-2, Bone meal-3, Compost scientifically prepared-4, Cowdung-5, Others-6, Not manured-7.

## Block. III.—DETAILS OF HARVEST

The number and weights of nuts

Sl. No. of harvest	Date of harvest	Tree 1			Tree 2			Tree 3			Tree 4			Tree 5		
		Type of nuts	No.	Weight	No.	Weight	No.	Weight	No.	Weight	No.	Weight	No.	Weight	No.	Weight
I		Ripe														
II		Ripe														
III		Ripe														
IV		Ripe														
V		Ripe														
VI		Ripe														
VII		Ripe														
VIII		Ripe														
Total		Ripe														

Station:

Date:

Name of Investigator:

Signature:

Name of Tahuk Statistical Officer:

Signature:

DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA

FORM VIII (A)

**Crop cutting experiments on Banana 198.....**

**BLOCK I—IDENTIFICATION PARTICULARS**

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| 1. District                           | 5. Survey No.                     |
| 2. Taluk                              | 6. Area of Kandom                 |
| 3. Block/Corporation/<br>Municipality | 7. No. of stands in the<br>Kandom |
| 4. Investigator Zone                  |                                   |

**BLOCK II—PARTICULARS OF KANDOM AND RESULTS OF EXPERIMENTS**

		No. of plants		
		1	2	3
1	Sl. No. of plants selected			
2	Variety			
3	Date of Harvest			
4	No. of Nuts			
5	Weight of the bunches of Banana fruit (raw) with stalk (in kg.)			
6	Weight of the stalk (in kg.)			
7	Chemical fertiliser used (a) Name (b) Quantity (kg.)			
8	Other fertiliser used (kg.)			

Station :

Signature and Name of Investigator.

Date :

Signature and Name of Taluk  
Statistics Officer.

**DEPARTMENT OF ECONOMICS AND STATISTICS,  
GOVERNMENT OF KERALA**

**FORM VIII B**

**Crop cutting experiments on other plantains**

**BLOCK I—IDENTIFICATION PARTICULARS**

- |                                       |  |
|---------------------------------------|--|
| 1. District                           | 6. Name of Investigator                                |
| 2. Taluk                              | 7. Survey number                                       |
| 3. Block/Corporation/<br>Municipality | 8. Area of Kandom                                      |
| 4. Village/Zone                       | 9. No. of plantain pits in the<br>Kandom               |
| 5. Investigator unit                  | 10. Total number of plantains<br>harvested in the year |

**BLOCK II—PARTICULARS OF KANDOM AND RESULTS OF EXPERIMENTS**

		No. of plantains		
		1	2	3
1	Sl. No. of selected plantains			
2	Variety			
3	Date of Harvest			
4	No. of raw Fruits			
5.	Weight of the bunches of raw fruits with stalk (in kg.)			
6	Weight of stalk (in kg.)			
7	Chemical fertiliser used (a) Name (b) Quantity (kg.)			
8	Other fertiliser used quantity (in kg.)			

Station:

Signature of Investigator.

Date :

Signature of Statistical Inspector.

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## FORM VIII (E)

## Crop cutting experiments on Sesamum

## BLOCK I—IDENTIFICATION PARTICULARS.

Year :

District :

Village :

Taluk :

Investigator Unit

## BLOCK II—DETAILS OF SELECTED KANDOM

No. Sl.	Particulars	Experiments		
		1	2	3
1	Survey Sub-division No.			
2	Area of selected Kandom (Cents)			
3	Variety			
4	Fertiliser used Chemical/ Others			
5	Month Sowing			
6	Area of raw			
7	Length of Sides	X Y		
8	Random number	X Y		
9	Irrigated/Not			
10	Insecticides used/Not			
11	Date of harvest			
12	Weight of harvest (kg.)			

Station : Signature and Name of Investigator

Date : Signature and Name of Statistical Inspector.

**DEPARTMENT OF ECONOMICS AND STATISTICS  
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FORM VIII (D)

**Crop Cutting Experiments on Jack 19....**

District : Taluk:

Block/Corporation/Municipality :

Investigator zone :

Survey Sub division number :

Area :

No. of trees :

Bearing

Young

Total

	Tree I	Tree II
Sl. No. of selected trees		
Date of visit of enumerations to the plot		
Total nuts (Nos.)		

Station :

Date :

Signature and Name of Investigator.

Signature and Name of Taluk Statistical Inspector.

**DEPARTMENT OF ECONOMICS AND STATISTICS  
GOVERNMENT OF KERALA**

PRO FORMA I

**Inspection report on Crop Cutting Survey on Tapioca**

Name of Taluk :

Block/Municipality/Corporation

Name and designation of the Inspecting

Officer

**BLOCK I—IDENTIFICATION PARTICULARS OF PLOT INSPECTED**

Name of Block/Zone inspected at		1	2	3
(a) Harvest stage	(b) Post harvest stage	Survey sub-division number	Development area or not	Remarks

## PRO FORMA I—(contd.)

**Block II—Details of Harvest Stage Inspection**

	Zone 1	Zone 2	Zone 3
1. Name of block			
2. Survey number originally selected for harvest stage inspection			
3. Survey number actually inspected			
4. Reasons for substitution if any			
5. Whether the plot is using improved variety (Yes/No)			
6. Chemical fertilizer used (Code)			
7. Date of harvest			
8. Date of weighing			
9. Weight of the produce (in kg.)			
10. Whether standardised equipments supplied and whether the same has been actually used			
11. General opinion of the Inspecting Officer regarding the conduct of the experiment			
12. Reasons if the yield is abnormal			

## PRO FORMA I—(contd.)

**Block III—Post Harvest Stage Inspection**

1. Name of block .....
2. Survey number selected .....
3. Mistakes noted in
  - (a) Selection of survey number .....
  - (b) Identification of survey number .....
  - (c) Identification of plot .....
4. Details of selected plot
  - (a) X Co-ordinate
    - (1) As entered by investigator .....
    - (2) As measured in the presence of inspecting officer .....
  - (b) Y Co-ordinate
    - (1) As entered by investigator .....
    - (2) As measured in the presence of Inspecting Officer .....
5. Random number chosen .....
6. Remarks .....
7. Date of inspection .....

Place:

Date:

*Signature of Inspecting Officer*

**DEPARTMENT OF ECONOMICS AND STATISTICS, GOVERNMENT OF KERALA**

**PRO FORMA .II**

**Taluk:**  
**Block/Municipality/Corporation**

**Forecast Report**

Name of Crop		No. of the forecast report	Condition factor of area	Yield in current year	Kg./Acre previous year	Remarks	Due date.....
1	2	3	4	5	6		
	First						
	Second						
	Third						
	Fourth						
	Final						

In column (2) delete whichever is inapplicable. In the remarks columns specify the nature of the produce viz., dry paddy, black pepper, dry ginger, cured turmeric etc. as the case may be.

Signature of Taluk Statistical Officer  
Station.....  
Date.....

## കേരള സർക്കാർ

സ്ഥിരമണ്ഡലമികുന്നു അനുഭവം സൗംഗിരാറിസൗംഗികുന്നു  
യിപ്പംർട്ടുമെൻറു

സോഡീസ്

നമ്പർ....

സൗംഗിരാറിസൗംഗികൾ ആഫീസ്

തീയതി.....

വിഭ്യജിൽ	താല്പുകൾ	വീഴ്ച
ശ്രീ/ശ്രീമതി	അറിയിക്കുന്നത്.	

താക്കര കൃഷി പെയ്തിരിക്കുന്ന  
വിഭ്യജിൽപ്പു സർവ്വേ ..... 0. നമ്പർന്റിലും/പുരയിട്ടു  
ഈ പൊവയ്ക്കുന്നതു. കൃഷിയുടെ വിളവെടുപ്പ്  
പരീക്ഷണം നടത്തി വിളവ് തിട്ടപ്പെടുത്തുവാൻ തിരഞ്ഞെടുത്തിരിക്കുന്നതി  
നാൽ ടി നിലവന്തിലെ/പുരയിടന്തിലെ ഏതൊന്തും. ഓഗ്രത്തുള്ള കൃഷിയുടെ/  
പുരക്ഷണങ്ങളിലെ വിളവെടുപ്പ് ശാസ്ത്രീയമായി പരിശോധിക്കേണ്ടിയിരി  
ക്കുന്നു. പരിശോധന കഴിഞ്ഞ് വിളവ് താക്കരെ ഫീൽപ്പിക്കുന്നതാകുന്നു.  
ടി സൗമ്യലഭന്ത വിളവെടുപ്പുതിയതി രഹിച്ചുകൊണ്ട് മുൻപ് ഈ ആഫീസിൽ  
അറിയിച്ചിരിക്കണമെന്നും. ഈ ആഫീസിൽനിന്നും നിയോഗിക്കുന്ന ഉദ്യോഗ  
സൗമ്യമേഖല സാമ്പിഡ്യത്തിൽ നാലു. വിളവെടുപ്പ്. നടത്തണമെന്നും  
അഭ്യർത്ഥിക്കുന്നു.

താല്പുക് സൗംഗിരാറിസൗംഗികൾ ആഫീസർ

അറിയിപ്പ് കൈപ്പാറിയിരിക്കുന്നു.

(പ്പു")

## APPENDIX VI.

**Estimation procedure under revised sample  
design of 'EARAS' in Kerala—1987-88**

A. The following estimates are prepared from the data collection in area enumeration.

1. Area under different land use.
2. Area under different crops.
3. Source-wise area irrigated.

Estimates will be prepared for each investigator zone (sub-stratum) in each Block/Municipality (stratum).

*Notations used:*

$N_1$  = No. of wet land clusters in the zone

$n_1$  = No. of wet land clusters in the sample

$N_2$  = No. of dry land clusters in the zone

$n_2$  = No. of dry land clusters in the sample

$W$  = Wet land area in the zone

$D$  = Dry land area in the zone

$w_j$  = Area of  $j^{\text{th}}$  wet land cluster ( $j = 1, \dots, n_1$ )

$d_j$  = Area of  $j^{\text{th}}$  dry land cluster ( $j = 1, \dots, n_2$ )

$y_{ij}$  = Area of  $i^{\text{th}}$  land use/crop area in  $j^{\text{th}}$  wet land cluster

$x_{ij}$  = Area of  $i^{\text{th}}$  land use/crop area in  $j^{\text{th}}$  dry land cluster

$Y_i$  = Estimate of area of  $i^{\text{th}}$  land use/crop area in wet land in the zone.

$X_i$  = Estimate of area of  $i^{\text{th}}$  land use/crop area in dry land in the zone.

$Z_i = X_i + Y_i$  = Total area of  $i^{\text{th}}$  land use/crop area in the zone.

$$Y_i = \frac{\sum_{j=1}^{n_1} y_{ij}}{\sum_{j=1}^{n_1} w_j} \times W \quad \& \quad X_i = \frac{\sum_{j=i}^{n_2} x_{ij}}{\sum_{j=i}^{n_2} d_j} \times D$$

**APPENDIX VII**  
**Random numbers**

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
8617	9862	4462	6718	0215	7936	9021	6025	1917	5050	4626	9262	4127
3417	1017	4368	4709	6606	9696	1897	0254	6141	4191	8883	3032	7559
2383	2522	3125	0932	5752	8805	9682	5697	5071	3565	6715	4573	0917
6442	0746	1956	2748	2287	4190	4781	7496	1727	3582	8077	2896	1126
2801	5252	2490	6859	7066	7313	2550	7021	4884	4972	9348	6675	8236
7327	4930	7193	4523	8640	5313	3309	7985	1209	3672	8106	7304	0203
6896	8212	7061	5703	2755	7237	8782	4749	5740	5464	8897	6903	1294
4927	3017	9244	9675	0625	1097	5241	8507	4379	3760	9675	3946	3342
8191	8640	1760	7659	9638	9650	3560	9080	0751	1559	5524	8049	1261
7011	9078	5431	7514	3849	9176	1439	0040	7181	9303	0360	0242	5338
7660	3552	4778	4974	5995	1400	9870	6650	2444	8414	0213	9571	1746
3204	4057	0572	1619	5478	6103	9831	0815	3608	0299	6546	5184	5120
2804	3297	3225	4751	2149	5426	1795	1562	8128	5690	8119	9558	4150
8723	3482	0205	6510	6708	6272	3316	6683	3885	6591	6883	1785	7715
1641	5873	7651	3753	2255	4189	5621	5224	0575	4693	0564	3909	2073
0113	3072	0334	3008	2967	5800	6594	0028	4031	4553	9636	8457	6099
0466	4907	8083	5328	7726	7561	1920	8821	2347	3868	5319	5006	5428
6372	2344	9197	5405	8816	4544	1117	8709	7878	5153	7274	9079	0363
0581	8156	0493	9192	9429	4960	1373	1466	9671	7061	0598	6467	4135
1880	7451	5388	5390	8697	5559	5801	7546	2417	9211	0492	1717	8952
2264	4610	2205	3798	7778	8369	3173	9055	6947	1910	3647	6323	3515
5248	3116	6939	7694	2169	9025	9640	5075	1781	2131	8498	9977	9671
5885	0634	9982	1868	6529	9078	2964	8334	0466	6483	3475	1840	5865
8704	0458	0078	0982	5719	4305	4599	2105	8368	5563	7235	5351	5826
8596	6147	2603	4329	1172	7348	0829	4145	4817	4846	2144	1899	4151
1370	4369	3881	8742	1220	4115	7696	8527	8121	7539	4377	8081	7255
2699	8278	9905	2299	5232	8091	3851	0917	4185	1320	6659	2220	9315

7253	9581	0798	1474	4258	7310	4091	9051	7423	5488	8412	1677	0189
2208	0868	3716	3662	2002	3598	4453	2387	9153	8697	4280	3337	3197
2161	9053	8572	8694	8718	5011	3125	2230	1617	3234	0007	2552	7977
4738	5566	5096	9678	3445	5278	3435	2092	8112	1528	4298	6752	3830
9668	1307	3129	7009	1666	8109	3612	1703	8393	4864	5032	5794	6487
4592	9344	8772	2675	8231	7269	2551	4074	8516	8609	2262	0638	1674
7885	7145	3216	5791	5205	9320	7238	3397	3658	9091	2391	1904	1631
5199	5088	6254	9051	0139	1870	1720	7503	8553	0641	2978	5115	4901
6762	3002	8817	3725	4286	0032	7557	3777	6760	7044	5691	0319	6619
0808	8977	1241	1525	5230	9311	1247	3537	1517	9624	9508	3955	1533
4510	0466	9470	3374	9223	4097	7367	5564	1638	5874	2971	4962	1329
6248	4697	0436	3127	2984	8535	1602	2914	1678	4449	3405	4696	8874
5959	3363	5343	6030	1581	6759	4898	1329	1971	9871	1951	8682	9583
7253	6717	2455	6832	2480	1392	7365	4209	3992	5668	3654	5546	1358
4628	1570	2898	5336	0389	8374	2296	0641	5575	0862	5519	1575	7774
2103	0916	3148	0510	9862	1415	5726	1128	9816	8539	6749	0230	4755
8482	5339	9214	0784	0401	6617	4776	6092	2279	7066	7813	9742	8154
7568	4090	3995	4610	9468	3910	3180	3086	0854	3988	3846	7421	1374
4277	2980	7338	9211	9172	5088	9155	4836	2640	1770	3994	0576	1298
0635	0984	6656	9213	9714	3727	8370	1091	2064	1233	1559	4328	7588
5429	7014	8595	7972	7787	5792	2835	5314	3057	0734	0556	2681	4114
4297	5061	1955	3855	8557	8508	8691	6294	8396	9617	0210	8971	7653
5230	4773	2654	1805	7592	9508	2486	8652	6759	6322	2867	4345	9787

$$V(Y_i) = \frac{N_1 (N_1 - n_1)}{n_1 (n_1 - 1)} \left[ \sum_{j=1}^{n_1} Y_{ij} - R_{i1} w_j \right]^2$$

$$V(X_i) = \frac{N_2 (N_2 - n_2)}{n_2 (n_2 - 1)} \left[ \sum_{j=1}^{n_2} X_{ij} - R_{i2} d_j \right]^2$$

Where  $R_{i1} = \frac{\sum_{j=1}^{n_1} Y_{ij}}{n_1}$  and  $R_{i2} = \frac{\sum_{j=1}^{n_2} X_{ij}}{n_2}$

$$\sum_{j=1}^{n_1} w_j = \sum_{j=1}^{n_2} d_j$$

$$V(Z_i) = V(X_i) + V(Y_i)$$

- B. Stratum (Block/Municipality) estimate of  $i^{\text{th}}$  land use/crop area are obtained by adding together the zone wise estimates therein.
- C. Stratum wise variance of the estimate is also obtained by adding together the zone variance of a particular land use/crop area.
- D. Estimates of average yield per hectare of paddy in a stratum is obtained as the weighted average of the yield obtained for H.Y.V. (irrigated), H.Y.V. (unirrigated), local variety (irrigated) and local variety (unirrigated) separated in experiments. In the case of other crops simple average of the yield obtained from crop cutting experiments.

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