Government of Manipur

REPORT ON
CROP ESTIMATION SURVEY, MANIPUR
2006-07

DIRECTORATE OF ECONOMICS & STATISTICS
GOVERNMENT OF MANIPUR
IMPHAL

P R E F A C E

The report on Crop Estimation Survey, 2006-07 is the 15th issue of its kind. It presents the estimates of area under different cereal and non-cereal crops for agricultural year 2004-05 up to 2006-07. It also presents production of cereal crops.

The sampling design followed in the survey is a multistage stratified random sampling. Each administrative district is considered as independent stratum and the development blocks in each district are taken as sub-strata. In each sub-strata, two sets of villages are selected by applying inter-penetrating sub-sampling technique. In the valley areas the size of each sub-stratum for a sub-sample is 8(eight) and in the hill areas, the size of each sub-stratum for a sub-sample is taken as 6(six).

The valley areas of Manipur are cadastrally surveyed and village maps/list of the plots such as Dag Chithas are available and therefore the plots are selected by using maps and list of plots by following cluster sampling technique. At the first instance, 4 nucleus plots are selected and the cluster size of each nucleus plot is taken as 5. Therefore the total numbers of plots selected in a sample village is 20. On the other hand, the hill areas are not surveyed cadastrally and village maps/list of plots are not available and therefore plots are surveyed through households. At the first instance, the household of the sample village are listed systematically but at the time of assigning sampling serial numbers, those households which have possessed less than 0.005 acres of land are excluded and then 4 households are selected by following circular systematic sampling technique. All the land possessed/operated by the selected households are surveyed, if the plots are located within 8 kms. from the residence of the sample household. All the sample plots so selected are visited in each season during the proper time of visit and area under different crops are recorded. For the cereal crops the plots grown with the specified cereal crops during a particular season is used as the sampling frame for selection of plots/sub-plots for conducting Crop Cutting Experiments. In a sample village for a sub-sample, it is planned to conduct 3 Crop Cutting Experiments for that specified crop.

In a State like Manipur where topography is composed of different hill terrains and swampy lands and the surface area is also composed of cadastrally surveyed and unsurveyed areas, it is very difficult to conduct such crop estimation survey successfully. A number of departments have generously extended their active cooperation for making available the requisite survey kits such maps, Dag Chithas etc. The valuable helps extended are gratefully acknowledged. It is hoped that they will continue to extend their active cooperation as the survey is a regular programme and from which many useful results can be built up for future years.

Designing of schedules, preparation of instructions, tabulation of results and preparation of reports are dealt in the Agricultural Statistics Wing of the Directorate of Economics & Statistics. All the officers and staff members are always instrumental in carrying out the survey successfully. Moreover the District Statistical Officers and their field workers like Primary Investigators and Sub-Inspectors have taken arduous responsibility in carrying out the field activities. The services of all the staff members and officers associated in the survey and processing of data are acknowledged with a sense of deep appreciation.

Continuous efforts are made to make improvements in the scope and coverage of the report but full justification is yet to be established. Suggestions from the users are most welcome.

Imphal,
the 5th November, 2007

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CHAPTER - I

CROP ESTIMATION SURVEY IN MANIPUR
2005-06 to 2007-08

INTRODUCTION:

1.1 Agriculture occupies a dominant place in the economy of Manipur. It is not only the main source of livelihood of the majority of the population of the State, but also a traditional way of life, enjoying a place of pride in the socio-economic life of the State. About 52 percent of the total workers depend on Agriculture. In spite of the role-played by this important sector, the data base of this sector is very weak.

1.2 With a view to provide, at least the minimum–need data on crop statistics, the Directorate of Economics & Statistics, Government of Manipur started the survey on land utilisation and crop cutting experiments from the year 1963-64 by participating in the National Sample Survey Programme of the Government of India on full matching basis, the erstwhile Mao, Tamenglong and Ukhrul Sub-Divisions of Manipur were not covered by the all India programme of the National Sample Survey (NSS) upto 1969-70.

1.3 From 1970-71 onwards, the whole of Manipur was covered by the NSS programme. During the period from 1963-64 to 1979-90, the land utilisation survey (crop land survey) and the crop cutting experiments were conducted in the sample villages, selected for the socio-economic surveys of NSS programme.

1.4 The all-India programme of Land Utilisation Survey (cropped land survey) and crop cutting experiments were discontinued from 1980-81 but the Directorate of Economics and Statistics, Manipur continued the 2(two) surveys as a State programme in order to meet the needs of the State as there was no crop recording system in the State of Manipur. Again from the year 1985-86, collection of additional information on irrigation; variety of seed used and type of cultivation etc. was also started.

From 1980-81 to 1986-87 the selection of villages was made for each district separately. Since the hill areas were not cadastrally surveyed, double weightage were given in the determination of sample size. The sample villages were selected in the form of two independent sub-samples by following the technique of interpenetrating sampling.

1.5 From 1987-88 the survey is termed as Crop Estimation Survey (CES) and the selection of villages has been made by taking the development blocks of the valley districts as separate strata. In other words, villages are selected for each development block separately for conducting the Crop Estimation Survey. However, for the hill areas, the selection of villages is carried out at the district levels.

From 2000-01 onwards, the selection of villages for the hill areas is carried out at the Block level as separate strata. However, for 2005-06, 2006-07 and 2007-08, the selection of sampling units for both hills and valley areas are carried out at the sub-division level as separate strata.

1.6 Crop Cutting Experiments were conducted in two concentric circles of radii 2′3″(0.686m) and 4′ (1.219m) from 1963-64 to 1969-70. The demarcations of the experimental unit (plot) were carried out with the help of a metallic instrument, specially made for the purpose under the direction of the I.S.I. Calcutta.

1.7 From 1970-71 to 1983-84, the crop cutting experiments were carried out in three concentric circles of radii 2′ 3″ (0.686 m.), 4′ (1.219m) and 5′ 9″ (1.784m). The total area of the experimental unit was 10 sq. m. which constituted 1/1000 (one by one thousand) part of a hectare.

1.8 From 1984-85 onwards, the system of demarcating the experimental unit (plot) has been changed from the concentric circles to a square unit of 5m x 5m (i.e. 25 sq.m) which is 1/400(one by four hundred) part of a hectare.

1.9 OBJECTIVE OF CROP ESTIMATION SURVEY:

The main objectives of the crop estimation survey are:

i) to provide estimates of area under and production of principal food and non-food crops with a high degree of precision at the block/district/state levels.
ii) to provide estimates of productivity of different crops at sub-division/ district/state levels.
iii) to collect useful ancillary information on the existing cultivation practices in the State
iv) to throw lights on the cropping pattern of the State/Districts/Sub-divisions etc.

1.10 COVERAGE: Coverage of the Crop Estimation Survey conducted during the agricultural years are as follows:

1.10.1 AREA: The whole geographical area of the State of Manipur was covered by the Survey.

1.10.2 CROPS: Crop Estimation Survey (CES) covers all the cereal and non-cereal crops, grown in Manipur but only the cereal crops are covered in the crop-cutting experiments conducted for estimating yield rates.

1.10.3 SEASON: The months of harvesting in a normal year determined the season of the crop. The survey was conducted in all the four seasons' viz., Autumn (July to September), winter (October to December), Spring (January to March) and Summer (April to June) season. July was taken as Summer or Autumn depending on the crop. If harvesting spreads over two seasons that season which covers the larger part of the harvesting will be taken to be the appropriate season for that crop.

1.11 ORGANISATION OF FIELD WORK:

The Crop Estimation Survey was conducted by the staff of the Agricultural Statistics Section of the Directorate of Economics and Statistics, Manipur. All the technical works viz. designing of the sampling technique, fixation of sample sizes, allocation of samples to defined strata, selection of sample villages, table scrutiny, imparting of training to the field staff, monitoring of submission of filled-in-schedules, analysis of results etc. were controlled/managed by the Directorate of Economics & Statistics, Manipur.

The field works of the survey were conducted by the Primary Investigators of the Directorate of Economics and Statistics, Manipur posted in the District Statistical offices. The works of the Primary Investigators were supervised by the Sub-Inspectors/Inspectors under the overall guidance of the District Statistical Officer and Assistant Director concerned. The Primary Investigators and also the supervisors were centrally trained at the State Level every year during the month of June.

1.11.1 EQUIPMENTS:

All the essential equipments required for the field work viz. Measuring tape, ordinary balance, standard weight, spring balance, bag for driage etc. were provided to the field staff.

1.12 METHODOLOGY OF DATA COLLECTION :

The collection of data for Crop Estimation Survey was carried out by physical/spot visits in all the sample plots of the valley region. In the hill districts all the plots possessed by the selected households living within a radius of 8 kms. from the samples village were surveyed by physical/spot visits, plots falling outside the radius of 8 kms. from the sample village were listed in consultation with the heads of households but not by physical/spot visits.

1.13 PROCESSING OF DATA :

The data processing operations of the survey were carried out by the officials working in the Agricultural Statistics section at the State HQrs. Office of the Directorate of Economics and Statistics under the supervision of the Director, Additional Director ,Deputy Director and Assistant Director (Agri) concerned.

CHAPTER – II

SAMPLING DESIGN AND ESTIMATION PROCEDURE

2.1 SAMPLING DESIGN:

A stratified multi-stage random sampling was followed for the survey. The stages of the sampling plan were as enumerated below:

2.2 STRATIFICATION :

For the purpose of the survey, the total geographical area of Manipur State was grouped into 2(two) regions viz. Hill and valley. Prior to 2000-01 the districts in the hill region and the development blocks in the valley region were treated as separate independent strata. It was because of the fact that the hills were not cadastrally surveyed and neither the village revenue maps nor the village revenue records were available.

From the crop year, 2000-01 to 2004-05 the development blocks in both the hill and valley region were treated as separate independent strata and in the crop year 2005-06 & 2006-07 sub-divisions in both Hills and Plain were taken as separate independent strata

2.3 ALLOCATION OF VILLAGES:

2(two) different principles were followed in the allocation of villages, by taking into account, the factors such as strength of the existing field staff, time schedule, requisite size required for giving reliable estimates at the stratum levels, optimum sizes at the regional level were fixed and then allocation of villages to different strata was made in the following manner.

2.3.1 HILL REGION:

Prior to 2000-01, the allocation of villages to the strata in the hill areas was made with probability proportional to the average gross area under cereal crops during the last 5(five) years. From the crop year 2000-01, a sample of 12(twelve) villages in each stratum was taken for the Land Utilisation Survey (crop land survey) and for crop cutting experiments (C.C.E.), half of the LUS villages was allocated as sample sizes in each stratum.

2.3.2 VALLEY REGION:

The valley areas were cadastrally surveyed and therefore, a sample of 16(sixteen) villages in each stratum was taken for the Land Utilisation Survey (crop land survey) and half of the LUS villages were allocated for crop cutting experiments.

2.4 SUB-SAMPLES :

The sample villages were drawn in the form of two independent and inter-penetrating sub-samples which were surveyed by two different teams of Investigators. The scheme was planned in such a way that each sub-sample provide a reliable estimate of the characteristics under consideration. The use of the technique of interpenetrating sub-sampling enable us to analyse and control the Investigator biases i.e. non-sampling errors.

2.5 SELECTION OF VILLAGES :

Prior to 2005-06, the sampling frame used for selection of villages was the list of census villages of 1991 population census. But in 2005-06 & 2006-07 the selection of villages are based on 2001 Population census. For conducting the Crop Estimation Survey, the villages of each sub-sample were selected circular systematically with probability proportional to the cultivators population independently for each stratum except Mao-Maram, Paomata and Purul sub-division. Selection of villages in these three sub-divisions are based on the general population. Out of the villages, the villages growing specified cereal crop was ascertained and gross area under that crop was cumulated separately for each cereal crop and also separately for each season and then the required number of villages was selected for each cereal crop in each stratum for conducting the crop cutting experiments. Stratumwise and sub-samplewise, sample sizes for each region for Crop Estimation Survey for the year 2004-05, 2005-06 and 2006-07 are shown in the following Table No.1(A) & 1(B). Districtwise list of villages selected for crop estimation survey for the Crop year 2004-05,2005-06 and 2006-07 are presented in the Appendix .

Table No. 1(A)
Sample size for Crop estimation Survey and Crop cutting experiments of Paddy and Maize during 2004-05

	Name of Stratum	L.U.S	C.C.E

Sl. No.	(C.D.Block)	SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8
1.	Mao Maram	6	6	12	3	3	6
2.	Kangpokpi	6	6	12	3	3	6
3.	Saikul	6	6	12	3	3	6
4.	Paomata	6	6	12	3	3	6
5.	Tamei	6	6	12	3	3	6
6.	Tousem	6	6	12	3	3	6
7.	Tamenglong	6	6	12	3	3	6
8.	Nungba	6	6	12	3	3	6
9.	Parbung	6	6	12	3	3	6
10.	Thanlon	6	6	12	3	3	6
11.	Henglep	6	6	12	3	3	6
12.	Churachandpur	6	6	12	3	3	6
13.	Singngat	6	6	12	3	3	6
14.	Samulamlan	6	6	12	3	3	6
15.	Tengnoupal	6	6	12	3	3	6
16.	Chandel	6	6	12	3	3	6
17.	Chakpikarong	6	6	12	3	3	6
18.	Chingai	6	6	12	3	3	6
19.	Ukhrul	6	6	12	3	3	6
20.	Kamjong Chassad	6	6	12	3	3	6
21.	Phungyar Phaisat	6	6	12	3	3	6
22.	Kasom Khullen	6	6	12	3	3	6
	Hill Total	**132**	**132**	**264**	**66**	**66**	**132**
1.	Imphal East I	8	8	16	4	4	8
2.	Imphal East II	8	8	16	4	4	8
3.	Jiribam	8	8	16	4	4	8
4.	Imphal West I	8	8	16	4	4	8
5.	Imphal West II	8	8	16	4	4	8
6.	Bishnupur	8	8	16	4	4	8
7.	Moirang	8	8	16	4	4	8
8.	Thoubal	8	8	16	4	4	8
9.	Kakching	8	8	16	4	4	8
	Valley Total	**72**	**72**	**144**	**36**	**36**	**72**
	STATE	**204**	**204**	**408**	**102**	**102**	**204**

SS-I = Sub-sample-I
SS-II = Sub-sample-II

Table No. 1(B)
Sample size for Crop estimation Survey and Crop cutting experiments of Paddy and Maize during 2005-06 & 2006-07

Sl.	Name of Stratum	L.U.S	C.C.E

No.	(Sub-Division)	SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8
1.	Mao Maram	6	6	12	3	3	6
2.	Paomata	6	6	12	3	3	6
3.	Purul	6	6	12	3	3	6
4.	Sadar Hill West	6	6	12	3	3	6
5.	Saitu Gamphajol	6	6	12	3	3	6
6.	Sadar Hill East	6	6	12	3	3	6
7.	Tamenglong West	6	6	12	3	3	6
8.	Tamenglong North	6	6	12	3	3	6
9.	Tamenglong	6	6	12	3	3	6
10.	Nungba	6	6	12	3	3	6
11.	Tipaimukh	6	6	12	3	3	6
12.	Thanlon	6	6	12	3	3	6
13.	CCpur North	6	6	12	3	3	6
14.	CCpur	6	6	12	3	3	6
15.	Singngat	6	6	12	3	3	6
16.	Machi	6	6	12	3	3	6
17.	Tengnoupal	6	6	12	3	3	6
18.	Chandel	6	6	12	3	3	6
19.	Chakpikarong	6	6	12	3	3	6
20.	Ukhrul North	6	6	12	3	3	6
21.	Ukhrul Central	6	6	12	3	3	6
22.	Kamjong Chassad	6	6	12	3	3	6
23.	Phungyar Phaisat	6	6	12	3	3	6
24.	Ukhrul South	6	6	12	3	3	6
	Hill Total	**144**	**144**	**288**	**72**	**72**	**144**

Table No. 1(B) (Contd.)
Sample size for Crop estimation Survey and Crop cutting experiments of Paddy and Maize during 2005-06 & 2006-07

Sl. No.	Name of Stratum (Sub-Division)	L.U.S			C.C.E		
		SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8
1.	Jiribam	8	8	16	4	4	8
2.	Sawombung	8	8	16	4	4	8
3.	Porompat	8	8	16	4	4	8
4.	Keirao Bitra	8	8	16	4	4	8
5.	Lamsang	8	8	16	4	4	8
6.	Patsoi	8	8	16	4	4	8
7.	Lamphelpat	8	8	16	4	4	8
8.	Wangoi	8	8	16	4	4	8
9.	Nambol	8	8	16	4	4	8
10.	Bishnupur	8	8	16	4	4	8
11.	Moirang	8	8	16	4	4	8
12.	Lilong	8	8	16	4	4	8
13.	Thoubal	8	8	16	4	4	8
14.	Kakching	8	8	16	4	4	8
	Valley Total	**112**	**112**	**224**	**56**	**56**	**112**
	STATE	**256**	**256**	**512**	**128**	**128**	**256**

SS-I = Sub-sample-I
SS-II = Sub-sample-II

2.6 SELECTION OF PLOTS FOR CES:

For the purpose of selection of plots for conducting crop estimation survey, the villages were divided into three categories, viz.

1) villages having revenue maps, indicating the survey numbers of different plots possessed by different persons/institutions/local bodies.
2) villages for which revenue maps are not available but village/revenue records such as list of holdings/dag chithas are available.
3) villages for which neither revenue maps nor revenue records of holding was available.

Since the valley region (valley districts) was cadastrally surveyed, the revenue village maps as well as the dag chithas are available with the Settlement/Revenue Department/Offices and hence, the selection of plots was made either by using the village map or by using the dag chithas

of the selected village. In the case of the hill region (hill districts), neither the village maps nor the dag chithas (village records of land holding) are available and, therefore, the selection of plots were made through household selection. In other words, at least one of the following basic materials was required for selection of plots of a selected village.

1) village maps
2) village records of land holding (Dag chithas)
3) list of households

If the selection of plots is carried out by using all the existing plots identified with the help of village map, the technique is known as 'METHOD-I' . If the selection of plots is made from the list of all plots of the village on the basis of village records, then the technique is termed as "METHOD-2". If in a village due to non-availability of map and village records, the selection of plots is made through household selection, then the technique is termed as "METHOD-3". The method 1 and 2 were applied in the selection of plots of the valley region whereas the method 3 was used in the case of hill region for the crop estimation survey.

2.6.1 PLOT SELECTION :

In each sample village where Method 1 and 2 is followed, 4 basic plots were first selected circular systematically with equal probability by considering all the plots in the village and then a cluster of 5 plots for each basic plots were taken. For the purpose of formation of suitable clusters all the survey numbers/sampling serial numbers in the village were grouped into mutually exclusive clusters of 5 numbers each as follows: 1-5, 6-10, 11-15, 16-20 and so on. After selection of the basic plots, the clusters in which the four basic plots fall were selected for crop estimation survey. In the manner stated above, altogether 20 plots were selected normally from each sample village for crop estimation survey in the valley areas of Manipur. Stratum-wise number of plots selected for conducting crop estimation survey so as to ascertain the area under different crops/buildings/tanks etc. in different seasons of 2004-05 to 2006-07 agricultural year as shown below in table No.2(A) and 2(B).

Table No.2(A)
Number of plots selected in the valley region during 2004-2005 for land utilisation survey

Sl. No.	District	Stratum (C.D.Block)	Number of Village selected	Number of Plots selected
1	2	3	4	5

1.	**Imphal East**	1. Imphal East – I	16	320
		2. Imphal east – II	16	320
		3. Jiribam	16	320
		Total	**48**	**960**
2.	**Imphal West**	1. Imphal West – I	16	320
		2. Imphal West – II	16	320
		Total	**32**	**640**
3.	**Bishnupur**	1. Bishnupur	16	320
		2. Moirang	16	320
		Total	**32**	**640**
4.	**Thoubal**	1. Thoubal	16	320
		2. Kakching	16	320
		Total	**32**	**640**
	Valley Total		**144**	**2880**

Table No.2(B)
Number of plots selected in the valley region during 2005-2006and 2006-2007 for land utilisation survey

Sl. No.	District	Stratum (Sub-Division)	Number of Village selected	Number of Plots selected
1	2	3	4	5
1.	**Imphal East**	1. Jiribam	16	320
		2. Sawombung	16	320
		3. Porompat	16	320
		4. Keirao Bitra	16	320
		Total	**64**	**1280**
2.	**Imphal West**	1. Lamsang	16	320
		2. Patsoi	16	320
		3. Lamphelpat	16	320
		4. Wangoi	16	320
		Total	**64**	**1280**
3.	**Bishnupur**	1. Nambol	16	320
		2. Bishnupur	16	320
		3. Moirang	**16**	**320**
		Total	**48**	**960**
4.	**Thoubal**	1. Lilong	16	320
		2. Thoubal	16	320
		3. Kakching	16	320
		Total	**48**	**960**
	Valley Total		**224**	**4480**

2.6.2 PLOT SELECTION IN HILL REGION:

The hill region(districts) of Manipur are yet to be cadastrally surveyed and therefore village map and village records containing the list of land holdings are not available. Selection of plots for the survey were, therefore, made through the households. Four household were selected circular systematically with equal probability from all the households processing land measuring

0.005 acres and above for each sample village. All the plots, possessed by the 4-selected households living within a radius of 8 kms. were recorded by physical/spot visits. The plots falling outside the radius of 8 kms. from the sample village were listed in consultation with the head of households, but not by physical/spot visits during the proper time of visit of each season. The number of plots to be surveyed in a village depended on the number of plots, possessed by the four selected households.

To have check and cross-check of the area under different crops in the unsurveyed hill areas, the quantity of seed used in the specified plots was collected in kgs.(0.00) indicating the type of sowing of the specified crop as the village usually knew the area under the crop on the basis of quantity of seeds used.

2.7 SELECTION OF SUB-PLOT GROUPS/SUB-PLOTS FOR CROP CUTTING EXPERIMENTS:

During the survey, crop cutting experiments were conducted only for cereal crops. In each sample village, 3(three) experiments were planned for the cereal crops as a whole for each crop-season. The sub-plots growing particular crop purely or in mixture were grouped counting the number of sub-plots, listed only once. From the sample plots, select areas for survey of each season, all the sub-plot groups (or sub-plots) growing the specified cereal crop of the particular season were first listed in a specified order and then 3(three) sub-plot groups(or sub-plots) were selected with probability proportional to gross area by following the procedures of circular systematic selection.

In some cases, the selection may fall at a particular sub-plot, but in most of the cases, particularly in the valley region, selection may fall in a group of sub-plots. In such cases a particular sub-plot is to be selected for conducting the experiment.

2.8: SELECTION OF SUB-PLOTS FROM THE SUB-PLOT GROUP FOR CROP CUTTING EXPERIMENTS:

For selection of particular sub-plots from the selected sub-plot group for conducting crop cutting experiments, the area of each sub-plot was first expressed in percentages of the total gross area under all the sub-plots in the specified group and then, the percentages were cumulated. The cumulative total was always 100 and required number of sub-plots from the particular sub-plot group were selected circular systematically with probability proportional to gross area with replacement.

2.9 DEMARCATION OF THE EXPERIMENTAL PLOT(UNIT):

In each selected plot/sub-plot, one experimental plot of size 5m x 5m = 25 sq.m., 1/400 of a hectare was demarcated for conducting crop cutting experiment in the following manner:

2.9.1 ORIGIN AND AXES OF REFERENCE:

In the case of a four-sided plot/sub-plot, the origin of reference was taken at its South-west corner. If the angle between the two sides is less than or equal to 90°, the boundary line(ail) of the crop-area in the West-East direction was taken as X-axis and boundary line(ail) or imaginary line in the North-south direction perpendicular to X-axis at the origin was taken as Y-axis.

If the angle at the South-west corner is more than 90°**,** the origin of reference was shifted to a point further West or South in such a way that the two axis envelope the entire plot or sub-plot. In case, the origin cannot be fixed at the South-west corner due to inaccessibility, the South-east corner was taken as origin. If that also called for a shift the East-North and North-west corners were tried. However, in all the cases, the side towards the right of the Investigator, while standing at the origin and facing the sub-plot was taken as X-axis.

When the selected plot/sub-plot was very much irregular in shape, then imaginary rectangle/square was formed so that the rectangle/square covered the entire plot/sub-plot and the South-West corner of the rectangle/square so formed was taken as the origin of axis.

2.9.2 ACTUAL DEMARCATION :

After fixing the origin of axes, length of these two sides were measured in counts of regular steps(normal steps) and then 7(seven) steps were deducted from the length as well as the breadth of the rectangle/square and the remainders were obtained. The remainders of the length and the remainders of breadth together form a pair of number which indicate the number of digits to be consulted in the random number table. If the pair of random number of the specified digit found under the relevant column and row of the random number table was less than both the remainders, then the number was accepted, otherwise, it was rejected and the next number was tried. The first of the pair of the number indicated the steps to be measured along X-axis and the second, the required steps for Y-axis.

After knowing the random number, the Investigator measured the required number of steps along the x-axis from the origin. After measuring the required steps along the x-axis, the Investigator turned at right angle to the left and then, measured another required number of steps into the plot/sub-plot along the y-axis perpendicular to x-axis. The point so obtained was taken as the South-West corner of the experimental plot and a peg (No.1) was fixed. From the peg No.1, 5m were measured by using measuring tape parallel to x-axis and peg No.2 was fixed as the south-east corner of the experimental plot. Then Peg No.3 and peg No.4 were fixed at perpendicular direction to peg No.2 and peg No.1 at distance of 5m. each from peg No.2 and Peg No.1 respectively.

The experimental plot thus enclosed and demarcated by passing a string round the pegs. It was assured that the string was stretched tightly on all the sides. The inner portion of the experimental plot was harvested by leaving a border of about ½ meter from all the sides. The harvested crops were transferred to a place outside the experimental plot. Standing in the harvested area, the string were gradually brought to the ground level and then the distance of the pegs if necessary were adjusted to get a perfect square. The two diagonal distance i.e. from peg No.1 to peg No.3 and from peg No.2 to peg No.4 would be exactly 7.07 meter each. Thus, the experimental plots were demarcated and harvested.

2.10 HARVESTING OF BORDER PLANTS:

When the string falled across the plants along the border, the plants were harvested if more than half of the plants were inside the string and the plants were not harvested if more than half of the plants were outside the string. If the string passed through some plants in such a way that just half portion of the same plant falled within and other half outside then the alternate plants were harvested.

2.11 SPECIAL CASES:

In the hill districts, there are 3(three) types of cultivation viz. Wet, jhuming and terrace.

In the case of Terrace cultivation, the length and breadth of the selected sub-plot are to be measured in regular steps. If both the length and breadth of the sub-plot are more than 7(seven) steps then located the experimental plot of 5m x 5m in the manner described above.

If the sub-plot was irregular in shape than ascertained the highest possible rectangle inside the sub-plot and determined the South-West corner of the imaginary rectangle and considered it as the South-West corner of the square experimental plot of size 5m x 5m.

If the breadth of the sub-plot was less than 7(seven) steps then harvested the entire sub-plots but the length and the breadth of the sub-plot were measured accurately with the measuring tape and the same is to be recorded. If the sub-plot was not rectangular in shape, ascertained the largest possible rectangle, inside the sub-plot and fixed four pegs at the four corners of the imaginary rectangle and make sure that the length of the imaginary rectangle was more than 7(seven) steps, tied a string to peg No.1 (nearest to the south-west corner) and, taken it round the other pegs and finally tied it to peg No.1. See that the string was properly stretched. Lower the string to the ground level and then harvest the inside and the border plants in the manner suggested above. In this case too, the length and the breadth of the imaginary rectangle was measured accurately and recorded.

In case both the length and the breadth of the selected sub-plots were less than 7(seven) steps then the sub-plot is rejected and the next is selected.

If this too did not ful-fill the above condition, then the 3rd sub-plot was tried and so on until a sub-plot satisfying the above conditions was available i.e. at least one side of the sub-plot was more than 7(seven) steps.

2.12 NUMBER OF CROP CUTTING EXPERIMENTS CONDUCTED DURING 2004-05 , 2005-06 AND 2006-07.

In every crop season, 3(three) crop cutting experiments were planned for paddy/maize crops as a whole for each sample village. Altogether 612 crop cutting experiments were planned for the agricultural year 2004-05; 396 were in the hill region and 216 in the valley region (Table No.1(A)). But in the agricultural year 2005-06 & 2006-07 altogether 768 crop cutting experiments were planned; 432 were in the hill region and 336 in the valley region Table No. 1(B). However, the actual number of crop cutting experiments conducted were decided on the availability of the specified crops in the particular year.

2.13 THRESHING AND WEIGHING:

Threshing were carried out on the dates of harvesting. In all the experimental cases, the time-lag between harvesting and threshing was not more than 2(two) days. After threshing, winnowing and cleaning, the weight of the crop produced in the experimental plot was obtained by sensitive balance in gms.The actual number of crop cutting experiments (paddy/maize) on the stratumwise for the agricultural year 2004-05, 2005-06 and 2006-07 can be seen in table No. 3(A), 3(B) and 3(C).

Table No. 3(A)
Stratumwise number of crop cutting experiments conducted/analysed in 2004-05 by crop, season and sub-samples

Sl. No.	District/Block	Paddy								
		Autumn			Winter			Summer		
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	Mao Maram	-	-	-	9	9	18	-	-	-
(b)	Kangpokpi	-	-	-	9	9	18	-	-	-
(c)	Saikul	-	-	-	9	9	18	-	-	-
(d)	Paomata	-	-	-	9	9	18	-	-	-
1.	**Senapati**	**-**	**-**	**-**	**36**	**36**	**72**	**-**	**-**	**-**
(a)	Tamei	9	9	18	-	-	-	-	-	-
(b)	Tousem	9	9	18	-	-	-	-	-	-
(c)	Tamenglong	9	9	18	-	-	-	-	-	-
(d)	Nungba	9	9	18	-	-	-	-	-	-
2.	**Tamenglong**	**36**	**36**	**72**	**-**	**-**	**-**	**-**	**-**	**-**

Sl. No.	District/Block	Maize						Total		
		Autumn			Spring					
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	Mao Maram	6	2	8	-	-	-	15	11	26
(b)	Kangpokpi	6	12	18	-	-	-	15	21	36
(c)	Saikul	1	1	2	-	-	-	10	10	20
(d)	Paomata	1	1	2	-	-	-	10	10	20
1.	**Senapati**	**14**	**16**	**30**	**-**	**-**	**-**	**50**	**52**	**102**
(a)	Tamei	-	-	-	-	-	-	9	9	18
(b)	Tousem	-	-	-	-	-	-	9	9	18
(c)	Tamenglong	-	-	-	-	-	-	9	9	18
(d)	Nungba	-	-	-	-	-	-	9	9	18
2.	**Tamenglong**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**

Table No. 3(A)
Stratum-wise number of crop cutting experiments conducted/analysed in 2004-05 by crop, season and sub-samples

Sl. No.	District/Block	Paddy								
		Autumn			Winter			Summer		
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8	9	10	11

(a)	Parbung	6	7	13	7	5	12	-	-	-
(b)	Thanlon	7	7	14	7	7	14	-	-	-
(c)	Henglep	8	9	17	9	9	18	-	-	-
(d)	Churachandpur	8	5	13	7	9	16	-	-	-
(e)	Singngat	9	6	15	8	8	16	-	-	-
(f)	Samulamlan	7	5	12	7	8	15	-	-	-
3.	**Churachandpur**	**45**	**39**	**84**	**45**	**46**	**91**	**-**	**-**	**-**
(a)	Tengnoupal	-	-	-	9	9	18	-	-	-
(b)	Chandel	-	-	-	9	9	18	-	-	-
(c)	Chakpikarong	-	-	-	9	9	18	-	-	-
4.	**Chandel**	**-**	**-**	**-**	**27**	**27**	**54**	-	-	-
(a)	Chingai	9	9	18	5	3	8	-	-	-
(b)	Ukhrul	9	9	18	7	-	7	-	-	-
(c)	Kamjong Chassad	9	9	18	1	2	3	-	-	
(d)	Phungyar Phaisat	9	9	18	6	6	12	-	-	-
(e)	Kasom Khullen	9	9	18	5	5	10	-	-	
5.	**Ukhrul**	**45**	**45**	**90**	**24**	**16**	**40**	**-**	**-**	**-**
A	**: Hill Total**	**131**	**118**	**249**	**130**	**140**	**270**	**-**	**-**	**-**

Sl. No.	District/Block	Maize						Total		
		Autumn			Spring					
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	Parbung	-	-	-	-	-	-	13	12	25
(b)	Thanlon		-	-	-	-	-	-	14	28
(c)	Henglep	-	-	-	-	-	-	17	18	35
(d)	Churachandpur	-	3	3	-	-	-	15	17	32
(e)	Singngat	-	-	-	-	-	-	17	14	31
(f)	Samulamlan	1	1	2	-	-	-	15	14	29
3.	**Churachandpur**	**1**	**4**	**5**	**-**	**-**	**-**	**91**	**89**	**180**
(a)	Tengnoupal	5	6	11	-	-	-	14	15	29
(b)	Chandel	3	-	3	-	-	-	12	9	31
(c)	Chakpikarong	4	1	5	-	-	-	13	10	23
4.	**Chandel**	**12**	**7**	**19**	**-**	**-**	**-**	39	34	73
(a)	Chingai	7	6	13	-	-	-	21	18	39
(b)	Ukhrul	5	8	13	-	-	-	21	17	38
(c)	Kamjong Chassad	6	7	13				16	18	34
(d)	Phungyar Phaisat	8	5	13	-	-	-	23	20	43
(e)	Kasom Khullen	7	2	9	-	-	-	21	16	37
5.	**Ukhrul**	**33**	**28**	**61**	**-**	**-**		**- 102**	**89**	**191**
A :	**Hill Total**	**38**	**36**	**74**	**-**	**-**	**-**	**318**	**300**	**618**

Contd.

Table No. 3(A)

Stratum-wise number of crop cutting experiments conducted/analysed in 2004-2005 by crop, season and sub-samples

Sl. No.	District/Block	Paddy								
		Autumn			Winter			Summer		
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	Imphal East - I	-	-	-	12	12	24	-	-	-

(b)	Imphal East - II	-	-	-	12	12	24	-	-	-
(c)	Jiribam	-	-	-	12	12	24	-	-	-
6.	**Imphal East**	-	-	-	**36**	**36**	**72**	-	-	-
(a)	Imphal West-I	-	-	-	9	12	21	-	-	-
(b)	Imphal West - II	6	-	6	12	12	24	-	-	-
7.	**Imphal West**	**6**	**-**	**6**	**21**	**24**	**45**	**-**	**-**	**-**
(a)	Bishnupur	-	-	-	12	12	24	-	-	-
(b)	Moirang	-	-	-	12	12	24	-	-	-
8.	**Bishnupur**	**-**	**-**	**-**	**24**	**24**	**48**	**-**	**-**	**-**
(a)	Thoubal	-	-	-	12	12	24	-	-	-
(b)	Kakching	-	-	-	12	12	24	-	-	-
9.	**Thoubal**	**-**	**-**	**-**	**24**	**24**	**48**	**-**	**-**	**-**
	B : Valley Total	**12**	**-**	**12**	**102**	**100**	**202**	**3**	**3**	**6**
	A+B STATE	**146**	**127**	**273**	**232**	**240**	**472**	**3**	**3**	**6**

Sl. No.	District/Block	Maize						Total		
		Autumn			Spring					
		SS I	SS II	Total	SS I	SS II	Total	SS I	SS II	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	Imphal East - I	-	-	-	-	-	-	12	12	24
(b)	Imphal East - II	-	-	-	-	-	-	12	12	24
(c)	Jiribam	-	-	-	-	-	-	12	12	24
6.	**Imphal East**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Imphal West - I	-	-	-	-	-	-	9	12	21
(b)	Imphal West - II	-	-	-	-	-	-	18	12	30
7	**Imphal West**	**-**	**-**	**-**	**-**	**-**	**-**	**27**	**24**	**51**
(a)	Bishnupur	-	-	-	-	-	-	12	12	24
(b)	Moirang	-	-	-	-	-	-	12	12	24
8.	**Bishnupur**	**-**	**-**	**-**	**-**	**-**	**-**	**24**	**24**	**48**
(a)	Thoubal	-	-	-	-	-	-	12	12	24
(b)	Kakching	-	-	-	-	-	-	12	12	24
9.	**Thoubal**	**-**	**-**	**-**	**-**	**-**	**-**	**24**	**24**	**48**
	B : Valley Total	**-**	**-**	**-**	**-**	**-**	**-**	**111**	**108**	**219**
	A+B STATE	**38**	**36**	**74**	**-**	**-**	**-**	**429**	**408**	**837**

Contd.

Table No. 3(B)
Sub-division-wise number of crop cutting experiments conducted/analysed in 2005-06 by crop season and sub-samples

Sl. No.	Sub-division/ District	PADDY									Paddy Total		
		AUTUMN			WINTER			SUMMER					
		SS-I	SS-II	Total	SS-I	SS-II	Total	SS-I	SS-II	Total	SS- I	SS-II	Total
1	2	3	4	5	6	7	8	9	10	`11	12	13	14
(a)	Mao Maram	-	-	-	9	9	18	-	-	-	9	9	18

(b)	Paomata	-	-	-	9	9	18	-	-	-	9	9	18
(c)	Purul	-	-	-	9	9	18	-	-	-	9	9	18
(d)	Sadar Hill West	-	-	-	9	9	18	-	-	-	9	9	18
(e)	Saitu Gamphazol	-	-	-	9	9	18	-	-	-	9	9	18
(f)	Sadar Hill East	-	-	-	9	9	18	-	-	-	9	9	18
1.	**Senapati**	**-**	**-**	**-**	**54**	**54**	**108**	**-**	**-**	**-**	**54**	**54**	**108**
(a)	Tamenglong West	9	9	18	-	-	-	-	-	-	9	9	18
(b)	Tamenglong North	9	9	18	-	-	-	-	-	-	9	9	18
(c)	Tamenglong	9	9	18	-	-	-	-	-	-	9	9	18
(d)	Nungba	9	9	18	-	-	-	-	-	-	9	9	18
2.	**Tamenglong**	**36**	**36**	**72**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Tipaimukh	6	6	12	8	6	14	-	-	-	14	12	26
(b)	Thanlon	9	9	18	7	8	15	-	-	-	16	17	33
(c)	Churachandpur North	8	9	17	9	5	14	-	-	-	17	14	31
(d)	Churachandpur	9	9	18	4	6	10	-	-	-	13	15	28
(e)	Singngat	9	8	17	9	8	17	-	-	-	18	16	34
(f)	Samulamlan	-	-	-	-	-	-	-	-	-	-	-	-
3.	**Churachandpur**	**41**	**41**	**82**	**37**	**33**	**70**	**-**	**-**	**-**	**78**	**74**	**152**
(a)	Machi	-	-	-	9	9	18	-	-	-	9	9	18
(b)	Tengnoupal	-	-	-	9	9	18	-	-	-	9	9	18
(c)	Chandel	-	-	-	9	9	18	-	-	-	9	9	18
(d)	Chakpikarong	-	-	-	6	9	15	-	-	-	6	9	15
4.	Chandel	-	-	-	33	36	69	-	-	-	33	36	69
(a)	Ukhrul North	9	9	18	4	-	4	-	-	-	13	9	22
(b)	Ukhrul Central	9	9	18	4	-	4	-	-	-	13	9	22
(c)	Kamjong Chassad	9	9	18	-	3	3	-	-	-	9	12	21
(d)	Phungyar Phaisat	9	9	18	-	3	3	-	-	-	9	12	21
(e)	Ukhrul South	9	9	18	4	-	4	-	-	-	13	9	22
5.	**Ukhrul**	**45**	**45**	**90**	**12**	**6**	**18**	**-**	**-**	**-**	**57**	**51**	**108**
A.	**Hill Total**	**122**	**122**	**244**	**136**	**129**	**265**	**-**	**-**	**-**	**258**	**251**	**509**
(a)	Jiribam	-	-	-	12	12	24	-	-	-	12	12	24
(b)	Sawombung	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Porompat	-	-	-	12	12	24	-	-	-	12	12	24
(d)	Keirao Bitra	-	-	-	12	12	24	-	-	-	12	12	24
6.	Imphal East	-	-	-	48	48	96	-	-	-	48	48	96
(a)	Lamsang		-	-	12	12	24	-	-	-	12	12	24
(b)	Patsoi	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Lamphelpat	-	-	-	6	9	15	-	-	-	6	9	15
(d)	Wangoi	-	-	-	12	12	24	-	-	-	12	12	24
7.	**Imphal West**	**-**	**-**	**-**	**42**	**45**	**87**	**-**	**-**	**-**	**42**	**45**	**87**
(a)	Nambol	-	-	-	12	12	24	-	-	-	12	12	24
(b)	Bishnupur	-	-	-	12	12	24	-	-	-	12	12	24

(d)	Sadar Hill West	9	3	12	-	-	-	18	12	30
(e)	Saitu Gamphazol	8	6	14	-	-	-	17	15	32
(f)	Sadar Hill East	2	-	2	-	-	-	11	9	20
1.	**Senapati**	**33**	**14**	**47**	**-**	**-**	**-**	**87**	**68**	**155**
(a)	Tamenglong West	-	-	-	-	-	-	9	9	18
(b)	Tamenglong North	-	-	-	-	-	-	9	9	18
(c)	Tamenglong	-	-	-	-	-	-	9	9	18
(d)	Nungba	-	-	-	-	-	-	9	9	18
2.	**Tamenglong**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Tiopaimukh	-	-	-	-	-	-	14	12	26
(b)	Thanlon	2	-	2	-	-	-	18	17	35
(c)	Churachandpur North	-	-	-	-	-	-	17	14	31
(d)	Churachandpur	-	-	-	-	-	-	16	18	34
(e)	Singngat	3	3	6	-	-	-	18	16	34
(f)	Samulamlan	-	-	-	-	-	-	-	-	-
3.	**Churachandpur**	**5**	**3**	**8**	**-**	**-**	**-**	**83**	**77**	**160**
(a)	Machi	4	1	5	-	-	-	13	10	23
(b)	Tengnoupal	3	6	9	-	-	-	12	15	27
(c)	Chandel	1	1	2	-	-	-	10	10	20
(d)	Chakpikarong	6	4	10	-	-	-	12	13	25
4.	**Chandel**	**14**	**12**	**26**	**-**	**-**	**-**	**47**	**48**	**95**
(a)	Ukhrul North	7	3	10	-	-	-	20	12	32
(b)	Ukhrul Central	7	2	9	-	-	-	20	11	31
(c)	Kamjong Chassad	5	3	8	-	-	-	14	15	29
(d)	Phungyar Phaisat	6	8	14	-	-	-	15	20	35
(e)	Ukhrul South	3	9	12	-	-	-	16	18	34
5.	**Ukhrul**	**28**	**25**	**53**	**-**	**-**	**-**	**85**	**76**	**161**
A.	**Hill Total**	**80**	**54**	**134**	**-**	**-**	**-**	**338**	**305**	**643**
(a)	Jiribam	-	-	-	-	-	-	12	12	24
(b)	Sawombung	-	-	-	-	-	-	12	12	24
(c)	Porompat	-	-	-	-	-	-	12	12	24
(d)	Keirao Bitra	-	-	-	-	-	-	12	12	24
6.	**Imphal East**	**-**	**-**	**-**	**-**	**-**	**-**	**48**	**48**	**96**
(a)	Lamsang		-	-		-	-	12	12	24
(b)	Patsoi	-	-	-		-	-	12	12	24
(c)	Lamphelpat	-	-	-		-	-	6	9	15
(d)	Wangoi	-	-	-		-	-	12	12	24
7.	**Imphal West**	**-**	**-**	**-**		**-**	**-**	**42**	**45**	**87**
(a)	Nambol	-	-	-		-	-	12	12	24
(b)	Bishnupur	-	-	-	-	-	-	12	12	24
(c)	Moirang	-	-	-	-	-	-	12	12	24
8.	**Bishnupur**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Lilong	-	-	-	-	-	-	12	12	24
(b)	Thoubal	-	-	-	-	-	-	12	12	24
(c)	Kakching	-	-	-	-	-	-	12	12	24
9.	**Thoubal**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
B.	**Valley Total**	**-**	**-**	**-**	**-**	**-**	**-**	**162**	**165**	**327**
	State (A+B)	**80**	**54**	**134**	**-**	**-**	**-**	**500**	**470**	**970**

Table No. 3(C)
Sub-division-wise number of crop cutting experiments conducted/analysed in 2006-07 by crop season and sub-samples

Sl. No.	Sub-division/ District	PADDY									Total		
		AUTUMN			WINTER			SUMMER					
		S.S.- I	S.S-II	Total	S.S. - I	S.S -II	Total	S.S- I	S.S- II	Total	S.S- I	S.S-II	Total
1	2	3	4	5	6	7	8	9	10	`11	12	13	14
(a)	Mao Maram	-	-	-	9	9	18	-	-	-	9	9	18
(b)	Paomata	-	-	-	9	9	18	-	-	-	9	9	18
(c)	Purul	-	-	-	9	9	18	-	-	-	9	9	18
(d)	Sadar Hill West	-	-	-	9	9	18	-	-	-	9	9	18
(e)	Saitu Gamphazol	-	-	-	9	9	18	-	-	-	9	9	18
(f)	Sadar Hill East	-	-	-	9	9	18	-	-	-	9	9	18

1.	**Senapati**	**-**	**-**	**-**	**54**	**54**	**108**	**-**	**-**	**-**	**54**	**54**	**108**
(a)	Tamenglong West	9	9	18	-	-	-	-	-	-	9	9	18
(b)	Tamenglong North	9	9	18	-	-	-	-	-	-	9	9	18
(c)	Tamenglong	9	9	18	-	-	-	-	-	-	9	9	18
(d)	Nungba	9	9	18	-	-	-	-	-	-	9	9	18
2.	**Tamenglong**	**36**	**36**	**72**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Tipaimukh	5	4	9	7	9	16	-	-	-	12	13	25
(b)	Thanlon	6	5	11	8	8	16	-	-	-	14	13	27
(c)	Churachandpur North	4	6	10	9	9	18	-	-	-	13	15	28
(d)	Churachandpur	4	6	10	6	6	12	-	-	-	10	12	22
(e)	Singngat	6	7	13	7	6	13	-	-	-	13	13	26
(f)	Samulamlan	-	-	-	-	-	-	-	-	-	-	-	-
3.	**Churachandpur**	**25**	**28**	**53**	**37**	**38**	**75**	**-**	**-**	**-**	**62**	**66**	**128**
(a)	Machi	-	-	-	9	9	18	-	-	-	9	9	18
(b)	Tengnoupal	-	-	-	9	9	18	-	-	-	9	9	18
(c)	Chandel	-	-	-	9	9	18	-	-	-	9	9	18
(d)	Chakpikarong	-	-	-	9	9	18	-	-	-	9	9	18
4.	**Chandel**	**-**	**-**	**-**	**36**	**36**	**72**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Ukhrul North	9	9	18	7	5	12	-	-	-	16	14	30
(b)	Ukhrul Central	9	9	18	7	6	13	-	-	-	16	15	31
(c)	Kamjong Chassad	9	9	18	6	5	11	-	-	-	15	14	29
(d)	Phungyar Phaisat	9	9	18	5	5	10	-	-	-	14	14	28
(e)	Ukhrul South	9	9	18	8	7	15	-	-	-	17	16	33
5.	**Ukhrul**	**45**	**45**	**90**	**33**	**28**	**61**	**-**	**-**	**-**	**78**	**73**	**151**
A.	**Hill Total**	**106**	**109**	**215**	**160**	**156**	**316**	**-**	**-**	**-**	**266**	**265**	**531**
(a)	Jiribam	-	-	-	12	12	24	-	-	-	12	12	24
(b)	Sawombung	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Porompat	-	-	-	12	12	24	-	-	-	12	12	24
(d)	Keirao Bitra	-	-	-	12	12	24	-	-	-	12	12	24
6.	**Imphal East**	**-**	**-**	**-**	**48**	**48**	**96**	**-**	**-**	**-**	**48**	**48**	**96**
(a)	Lamsang		-	-	12	12	24	-	-	-	12	12	24
(b)	Patsoi	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Lamphelpat	-	-	-	-	12	12	-	-	-	-	12	12
(d)	Wangoi	-	-	-	12	12	24	-	-	-	12	12	24
7.	**Imphal West**	**-**	**-**	**-**	**36**	**48**	**84**	**-**	**-**	**-**	**36**	**48**	**84**
(a)	Nambol	-	-	-	12	12	24	-	-	-	12	12	24
(b)	Bishnupur	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Moirang	-	-	-	12	12	24	-	-	-	12	12	24
8.	**Bishnupur**	**-**	**-**	**-**	**36**	**36**	**72**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Lilong	-	-	-	12	12	24	-	-	-	12	12	24
(b)	Thoubal	-	-	-	12	12	24	-	-	-	12	12	24
(c)	Kakching	-	-	-	12	12	24	-	-	-	12	12	24
9.	**Thoubal**	**-**	**-**	**-**	**36**	**36**	**72**	**-**	**-**	**-**	**36**	**36**	**72**
B.	**Valley Total**	**-**	**-**	**-**	**156**	**168**	**324**	**-**	**-**	**-**	**156**	**168**	**324**
	State (A+B)	**106**	**109**	**215**	**316**	**324**	**640**	**-**	**-**	**-**	**422**	**433**	**855**

Table No. 3(C)
Sub-division-wise number of crop cutting experiments conducted/analysed in 2006-07 by crop season and sub-samples(Concld.)

Sl. No.	Sub-division/ District	MAIZE						PADDY & MAIZE		
		AUTUMN			SPRING					
		S.S.- I	S.S- II	Total	S.S. - I	S.S - II	Total	S.S- I	S.S- II	Total
1	**2**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**
(a)	Mao Maram	6	-	6	-	-	-	15	9	24
(b)	Paomata	6	-	6	-	-	-	15	9	24
(c)	Purul	3	9	12	-	-	-	12	18	30

(d)	Sadar Hill West	9	5	14	-	-	-	18	14	32
(e)	Saitu Gamphazol	3	-	3	-	-	-	12	9	21
(f)	Sadar Hill East	5	-	5	-	-	-	14	9	23
1.	**Senapati**	**32**	**14**	**46**	**-**	**-**	**-**	**86**	**68**	**154**
(a)	Tamenglong West	-	-	-	-	-	-	9	9	18
(b)	Tamenglong North	-	-	-	-	-	-	9	9	18
(c)	Tamenglong	-	-	-	-	-	-	9	9	18
(d)	Nungba	-	-	-	-	-	-	9	9	18
2.	**Tamenglong**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Tipaimukh	-	-	-	-	-	-	15	13	28
(b)	Thanlon	3	-	3	-	-	-	14	13	27
(c)	Churachandpur North	-	-	-	-	-	-	13	15	28
(d)	Churachandpur	-	-	-	-	-	-	10	14	24
(e)	Singngat	-	2	2	-	-	-	13	13	26
(f)	Samulamlan	-	-	-	-	-	-	-	-	-
3.	**Churachandpur**	**3**	**2**	**5**	**-**	**-**	**-**	**65**	**68**	**133**
(a)	Machi	6	4	10	-	-	-	15	13	28
(b)	Tengnoupal	4	9	13	-	-	-	13	18	31
(c)	Chandel	1	1	2	-	-	-	10	10	20
(d)	Chakpikarong	4	6	10	-	-	-	13	15	28
4.	**Chandel**	**15**	**20**	**35**	**-**	**-**	**-**	**51**	**56**	**107**
(a)	Ukhrul North	7	4	11	-	-	-	23	18	41
(b)	Ukhrul Central	5	6	11	-	-	-	21	21	42
(c)	Kamjong Chassad	4	3	7	-	-	-	19	17	36
(d)	Phungyar Phaisat	6	5	11	-	-	-	20	19	39
(e)	Ukhrul South	6	4	10	-	-	-	23	20	43
5.	**Ukhrul**	**28**	**22**	**50**	**-**	**-**	**-**	**106**	**95**	**201**
A.	**Hill Total**	**78**	**58**	**136**	**-**	**-**	**-**	**344**	**323**	**667**
(a)	Jiribam	-	-	-	-	-	-	12	12	24
(b)	Sawombung	-	-	-	-	-	-	12	12	24
(c)	Porompat	-	-	-	-	-	-	12	12	24
(d)	Keirao Bitra	-	-	-	-	-	-	12	12	24
6.	**Imphal East**	**-**	**-**	**-**	**-**	**-**	**-**	**48**	**48**	**96**
(a)	Lamsang		-	-	-	-	-	12	12	24
(b)	Patsoi	-	-	-	-	-	-	12	12	24
(c)	Lamphelpat	-	-	-	-	-	-	-	12	12
(d)	Wangoi	-	-	-	-	-	-	12	12	24
7.	**Imphal West**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**48**	**84**
(a)	Nambol	-	-	-	-	-	-	12	12	24
(b)	Bishnupur	-	-	-	-	-	-	12	12	24
(c)	Moirang	-	-	-	-	-	-	12	12	24
8.	**Bishnupur**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
(a)	Lilong	-	-	-	-	-	-	12	12	24
(b)	Thoubal	-	-	-	-	-	-	12	12	24
(c)	Kakching	-	-	-	-	-	-	12	12	24
9.	**Thoubal**	**-**	**-**	**-**	**-**	**-**	**-**	**36**	**36**	**72**
B.	**Valley Total**	**-**	**-**	**-**	**-**	**-**	**-**	**156**	**168**	**324**
	State (A+B)	**78**	**58**	**136**	**-**	**-**	**-**	**500**	**491**	**991**

2.14:ESTIMATION PROCEDURES:

The procedures of estimation of area under crops and yield rates of cereal crops are indicated below:

2.14.1: AREA UNDER CROPS:

The estimators of the acreage at the state, district and stratum levels for any particular crop in a particular season for a sub-sample are given by:

$$A = \sum_{d=1}^{R} A_d \quad \text{..... (I)} \qquad A_d = \sum_{s=1}^{k} A_s \quad \text{..... (II)}$$

..... (III)

and where,

A = Estimates of acreage at the state level.

A_d = Estimates of acreage at the district level.

A_s = Estimates of acreage for the sth stratum.

R = Number of districts in the state.

K = Number of strata in the district.

s = Subscript for s^{th} stratum.

d = Subscript for d^{th} district.

Z_s = Total number of cultivators in the sth stratum(district/c.d. block).In case of Mao Maram, Paomata and Purul Sub-divisions, Z_s is the total population in s^{th} stratum

z_{si} = Number of cultivators in the ith sample village of the sth stratum(In case of Mao Maram, Paomata and Purul Sub-divisions z_{si} is population in i^{th} sample village of the sth stratum which is to be approximately equated to $H_{is}.P_{si}$.

n_s = Number of sample villages actually surveyed in the sth stratum.

D_{si} = Number of hamlet/hamlet groups formed in the ith sample village of the sth stratum.

f_{si} = Adjustment factor for the ith revenue village in the sth stratum.

P_{si} = Total number of plots (method 1&2) or households (method 3) in the ith sample village of sth stratum.

p_{si} = Number of plots (method 1&2) or households (method 3) actually surveyed in the ith sample village of sth stratum.

$a_{si\,j}$ = Area under the specified crop for the jth sample plot in the ith village of sth stratum.

i = Subscript for the ith sample village.

j = Subscript for the jth sample plot.

2.14.2: <u>YEILD RATE OF CROPS:</u>

The estimators of yield rates at village, stratum and state levels, for any particular crop in a particular season for a sub-sample were as given below:

$$\overline{Y}_i = \frac{\sum_{c=1}^{m} Y_{ic}}{m} \qquad (c = 1, 2, 3, 4, 5, 6 \text{ and } m \leq 6) \ldots \ldots \ldots \text{(iv)}$$

$$\overline{Y}_s = \frac{\sum_{c=1}^{n_s} m_i \overline{Y}_i}{\sum_{i=1}^{n_s} m_i} \qquad \text{……..(v)}$$

$$\overline{Y}_d = \frac{\sum_{c=1}^{k} A_s \overline{Y}_s}{\sum_{s=1}^{k} A_s} \qquad \text{……..(vi)}$$

$$\overline{Y} = \frac{\sum_{d=1}^{R} A_d \overline{Y}_d}{\sum_{d=1}^{R} A_d} \qquad \text{……..(vii)}$$

where,

Y_{ic}	=	Yield of ith village in the cth experiment (cut).
m	=	Total number of experiment for a crop in a sample village.
i	=	Subscript for the ith Village.
c	=	Subscript for the cth experiment.
s	=	Subscript for the sth stratum.
d	=	Subscript for the dth district.
A_s	=	Area under particular crop in the sth stratum.
A_d	=	Area under particular crop in the dth district.
k	=	Number of stratum in the district.

R	=	Number of districts in the state.
$\bar{Y}_i$	=	Average yield rate in the ith village.
$\bar{Y}_s$	=	Average yield rate in the sth stratum.
$\bar{Y}_d$	=	Estimated weighted average yield rate in the dth district.
$\hat{Y}$	=	Estimated weighted average yield rate at the state level.

2.15: ESTIMATES OF PRODUCTION:

The production of a crop for a particular season was estimated as a derivative of the estimates of two parameters viz. estimated area under that crop in that season and the estimated weighted average yield of the crop of the season. The production of a crop for a season was obtained by multiplying the estimated area by the estimated weighted average yield of that crop for that season.

2.16: CONVERSION OF RICE FROM PADDY:

Yield rate and production of paddy presented in the report was not paddy as such, but in the form of "CLEAN RICE". To convert the green paddy to clean rice the first step is to convert to dry paddy which was free from moisture. For the purpose, an experiment which was known as DRIAGE EXPERIMENT was carried out by collecting one Kg. of the crop from all the sample villages. After converting the green paddy to dry paddy by multiplying by the conversion factor derived from the driage experiment, the dry paddy is to be converted to clean rice by using official conversion factor 0.667 in each season viz. Autumn, Winter and Summer.

The conversion factors derived from the driage experiments used in the estimates, presented in this report are as follows:

Table No. 3(d): Conversion of Clean Rice from Green Paddy

Sl. No.	Season	Unit	Weight of green paddy	Weight of dry paddy	Weight of clean rice (Column 5x0.667)
1	2	3	4	5	6
1.	Autumn	gm.	1000	868	579
2.	Winter	gm.	1000	885	590
3.	Summer	gm.	1000	827	552

2.16.1: DRIAGE EXPERIMENT:

For carrying out driage experiment a sample of 1 (one) kg. of green paddy was collected from the experimental plot/sub-plot having order of selection of 1 and 3 for sub-sample I where for sub-sample II, the green crop was collected from the plot having order of selection of 2 in each season. 306 experiments were planned for carrying out to the central driage experiments.

2.17: LIMITATION:

The main limitation of the results of the Crop Estimation Survey was that both area data and yield data were based on sample surveys. However, non-sampling errors were minimized to a great extent by deploying well-trained and qualified investigators and by carrying out extensive supervisions/inspections by the senior and experienced officials including the District Statistical Officers at all the stages of the survey.

CHAPTER - III

IMPORTANT CONCEPTS AND DEFINITIONS

3.1 SAMPLE VILLAGE:

For the purpose of the Crop Estimation Survey, a revenue village which was more or less identical with the census village was taken as sample village in the valley region. Generally, revenue villages and census villages were identical. In exceptional cases, a revenue village consisted of several census villages or the selected census village was only a part of a revenue village. In such case, the entire revenue village was surveyed. If, on the other hand, a selected

census village consists of several revenue villages, then one of the revenue villages was selected and the survey was confined to the selected revenue village.

In the hill region where no land record is available, the census village was taken as the sample village for the purpose of the survey.

3.2 PLOT:

Generally, in a village, patches of land were clearly demarcated with boundaries and each of such distinct patches of land was taken as a plot. In the cadastrally surveyed villages, each and every plots has borne a survey number. In the unsurveyed villages of the hill region, the plots were demarcated and identified in consultation with the head of the household.

3.3 SUB-PLOT:

A plot was further sub-divided in more less permanent nature by constructing ails or bunds inside the plot. Each and every sub-division of a plot which was distinct and demarcated by proper ails was taken as a sub-plot.

3.4 AIL OR BUND:

A plot was generally demarcated by a strip of raised land, such strips of raised land was termed as ails or bunds, there were sometimes a number of ails or bunds inside the plots as needed for retaining water and other purposes.

3.5 PROPER TIME OF VISITS:

The proper time of visit for recording land utilisation particulars is taken as the time when the standing crops could be unmistakably identifiable. The period between the completion of sowing and the commencement of harvesting of the specified crop were generally taken as the Proper Time of Visit. The proper time of visit in a normal year for each season is given below:

Sl. No.	Season	Proper Time
1	2	3

1.	Autumn	July to August
2.	Winter	October to November
3.	Spring	January to February
4.	Summer	March to May

3.6 AREA UNDER CROP:

When a pure or mixed crop was grown covering the whole of a plot, the entire area which extended upto the inside border of the boundary ails formed the area under the crop. If the width of the uncultivated ails running along the boundary or inside the plot were 9 inches or more, then the area under the uncultivated ails were excluded but if the width of such ails were less than 9 inches then the areas were also considered to be under the crop.

3.7 GROSS AREA UNDER A CROP:

If a plot/sub-plot is grown with 2 (two) or more crops in mixture then, the total area under the mixed crop was defined to be the gross area under each of the component crops of the mixture. Thus for a sub-plot growing wheat and barley in mixture in an area of 10.00 acres, the gross area under wheat was 10.00 acres and the gross area under barley was also 10.00 acres. When a crop was grown pure (i.e. singly) in a sub-plot, the gross area under the crop was the same as the area under the crop in the sub-plot.

3.8 CROP IRRIGATED:

Irrigation was considered to denote the practice of purposively providing land with water other than rain, by artificial means for crop production. A crop area was considered to be irrigated if it gets at least one flush of irrigation during the whole of its growing period. Even if a particular crop is irrigated more than once, the area irrigated for that crop was counted only once. If a crop was received irrigation from more than one source, the particulars of all the sources were collected. Irrigations in the seed beds were not considered to be crops irrigated.

3.9 PERMANENT CULTIVATION:

Permanent cultivation was the settled cultivation which included wet cultivation (WC) on the flat lands and terrace cultivation (TC) on the hill slopes by making intermediate flat plots/sub-plots.

3.10 TERRACE CULTIVATION:

Terrace cultivation was a method practised on the hill slopes by leveling the area of the slopping ground. One or more of such areas were usually separated by slopping bank/banks to retain the water.

3.11 JHUM CULTIVATION:

Jhum cultivation which was also known as shifting cultivation was a method of cultivation practiced on the hill slopes. In this method of cultivation, a hill slope was cleared off by cuttings its natural vegetation and the materials so collected were burnt. The ashes produced were used as manures. Seeds were broadcasted or sometimes sown in the areas so cleared off and prepared for cultivation.

CHAPTER-IV

IMPORTANT FACTORS OF PRODUCTION

4.1 The cropping pattern and productivity of crops depend primarily on soils, climatic factors and inputs. Some of the important factors prevalent during the agricultural year,2004-2005, 2005-2006 and 2006-2007 are given below.

4.2 SOILS:

The soils of Manipur are broadly classified as ferruginous red soil and mountain/hill soils. Ferruginous red soil is poor in lime, potash and iron oxide and is also comparatively low in phosphorous content. This type of soil is suitable for cultivation of paddy and a large variety of crops can be grown with irrigation. The mountain and hill soils have about 1 to 3 percent of organic carbon and are suitable for cultivation of paddy and plantation crops.

4.3 CLIMATIC FACTORS:

A major factor influencing growth, the extent of cultivation and yield of crop is weather. In fact, weather is significant in nearly every phase of agricultural activity from the preparatory tillage to harvesting and storage. The climatic factors which are important to agricultural activities are rainfall, temperature, wind, dew, hailstorm, sunshine and radiation.

4.3.1 RAINFALL:

Though Manipur is a small state, the rainfall of the State is highly variable due to its topography. The actual rainfalls as recorded at some of the important centers of Manipur are shown below. Two years or two places might have experienced the same or nearly the same average rainfalls but the impact of degree of utility to crops would be different due to difference in the distribution of rainfalls over months of the year or the places. The distribution of rainfalls over months during the year 2003-04, 2004-05, 2005-06 and 2006-07 which had a direct bearing in the kharif crops of the agricultural year 2003-04,2004-05 , 2005-06 and 2006-07 respectively are shown in the following table no.4(I), 4(II) , 4(III) and 4(IV).

Table No. 4(I)

Monthly Rainfalls at some Selected Centres of Manipur during the Agricultural Year 2003-04

(Rainfall in cm.)

Sl. No.	District and Name of Centre	July	August	September	October	November	December	January
1	2	3	4	5	6	7	8	9
1.	Senapati (Kangpokpi)	29 (20.71)	11 (7.86)	12 (8.58)	18 (12.86)	Nil	6 (4.29)	1 (0.71)
2.	Senapati (Saikul)	19 (20.21)	6 (6.38)	11 (11.70)	9 (9.58)	Nil	3 (3.20)	Nil
3.	Churachandpur (Soil Conservation Geljang)	34 (24.99)	31 (22.80)	17 (12.50)	13 (9.55)	3 (2.21)	4 (2.94)	4 (2.95)
4.	Churachandpur (Progenery Orchard Tinsuong)	67 (26.27)	62 (24.32)	67 (26.28)	25 (9.81)	Nil	4 (1.57)	4 (1.56)

5.	Ukhrul (Litan)	19 (18.27)	15 (14.42)	14 13.46)	15 (14.43)	Nil	6 (5.77)	Nil
6.	Imphal (Raj Bhavan)	20 (17.39)	10 (8.70)	12 (10.43)	7 (6.09)	0.00	2 (1.74)	1 (0.87)
7.	Imphal (I.F.C.D.Lamphel)	22 (19.13)	10 (8.70)	20 (17.39)	8 (6.96)	0.00	3 (2.61)	1 (0.87)
8.	Thoubal (Wangbal)	24 (24.24)	17 (17.17)	8 (8.08)	6 (6.06)	0.00	2 (2.02)	1 (1.01)

(Rainfall in cm.)

Sl. No.	District and Name of Centre	February	March	April	May	June	Total
1	2	10	11	12	13	14	15
1.	Senapati (Kangpokpi) *	Nil	1 (0.71)	43 (30.71)	19 (13.57)	-	140 (100)
2.	Senapati (Saikul) *	Nil	1 (1.06)	21 (22.34)	24 (25.53)	-	94 (100)
3.	Churachandpur (Soil Conservation Geljang) **	4 (2.94)	5 (3.68)	21 (15.44)	-	-	136 (100)
4.	Churachandpur (Progenery Orchard Tinsuong) **	4 (1.56)	5 (1.96)	21 (8.23)	-	-	255 (100)
5.	Ukhrul (Litan) *	Nil	Nil	22 (21.15)	13 (12.50)	-	104 (100)
6.	Imphal (Raj Bhavan)	0.00	18 (15.65)	23 (20.00)	12 (10.43)	10 (8.70)	115 (100)
7.	Imphal (I.F.C.D.Lamphel)	0.00	2 (1.74)	25 (21.74)	13 (11.30)	11 (9.56)	1.15 (100)
8.	Thoubal (Wangbal) *	Nil	1 (1.01)	35 (35.36)	5 (5.05)	-	99 (100)

Source: 1. IFCD No.I, Government of Manipur.
2. Rice Research Station, Wangbal.
3. IFCD No.II, Government of Manipur.
4. Soil Conservation Research Centre, Geljang
5. Office of the Farm Manager, Churachandpur(Tuibong)
6. * July to May
7. ** July to April

Table No. 4(II)

Monthly Rainfalls at some Selected Centres of Manipur during the Agrilcultural Year 2004-05

(Rainfall in cm.)

Sl. No.	District and Name of Centre	July	August	September	October	November	December	January
1	2	3	4	5	6	7	8	9
1.	Senapati	-	-	-	-	-	-	-
2.	Churachandpur	-	-	-	-	-	-	-
3.	Ukhrul	-	-	-	-	-	-	-
4.	Tamenglong,Farm Manager Progency Orchard cum Nursery (TML)	-	-	-	-	-	-	-
5.	Imphal (Raj Bhavan)	14 (17.07)	5 (6.10)	11 (13.42)	13 (15.86)	1 (1.21)	1 (1.21)	1 (1.21)

6.	Imphal (IFCD),Lamphel	15 (17.71)	8 (9.44)	13 (15.35)	13 (15.35)	0.5 (0.59)	0.2 (0.24)	1 (1.18)
7.	Thoubal	-	-	-	-	-	-	-
8.	Bishnupur	-	-	-	-	-	-	-
9.	Tulihal Airport	19.09 (17.05)	15.48 (13.83)	15.92 (14.22)	15.37 (13.73)	0.68 (0.61)	0.28 (0.25)	Trace

(Rainfall in cm.)

Sl. No.	District and Name of Centre	February	March	April	May	June	Total
1	2	10	11	12	13	14	15
1.	Senapati	-	-	-	-	-	-
2.	Churachandpur	-	-	-	-	-	-
3.	Ukhrul	-	-	-	-	-	-
4.	Tamenglong,Farm Manager Progency Orchard cum Nursery (TML)	-	-	-	41 (34.16)	79 (65.84)	- -
5.	Imphal (Raj Bhavan)	3 (3.66)	7 (8.54)	5 (6.10)	9 (10.98)	12 (14.64)	82 (100)
6.	Imphal (IFCD),Lamphel	3 (3.54)	6 (7.08)	5 (5.90)	8 (9.45)	12 (14.17)	84.70 (100)
7.	Thoubal	-	-	-	-	-	-
8.	Bishnupur	-	-	-	-	-	-
9.	Tulihal Airport	3.68 (3.29)	11.59 (10.35)	7.71 (6.89)	10.93 (9.76)	11.22 (10.02)	111.95 (100)

Source: 1. Office of the Farm Manager, Progency Orchard cum Nussery,Tamenglong.
2. Irrigation and Flood Control Department, Divn.No.II, Govt.of Manipur.
3. Tulihal Airport.

Table No. 4(III)

Monthly Rainfalls at some Selected Centres of Manipur during the Agricultural Year 2005-06

(Rainfall in cm.)

Sl. No.	District and Name of Centre	July	August	September	October	November	December	January
1	2	3	4	5	6	7	8	9
1.	Senapati	-	-	-	-	-	-	-
2.	Churachandpur	-	-	-	-	-	-	-
3.	Ukhrul	-	-	-	-	-	-	-
4.	Tamenglong,Farm Manager Progency Orchard cum Nursery (TML)	79 (26.33)	91 (30.34)	29 (9.67)	99 (33.00)	1 (0.33)	1 (0.33)	-
5.	Imphal (Raj Bhavan)	14 (17.07)	11 (44.00)	-	-	-	-	-

6.	Imphal (IFCD),Lamphel	13 (52.00)	13 (48.00)	-	-	-	-	-
7.	Bishnupur	-	-	-	-	-	-	-
8.	Thoubal	-	-	-	-	-	-	-
9.	Tulihal Airport	23.68 (16.14)	21.35 (14.56)	25.20 (17.18)	19.47 (13.27)	1.62 (1.10)	3.18 (2.17)	Nil

(Rainfall in cm.)

Sl. No.	District and Name of Centre	February	March	April	May	June	Total
1	2	10	11	12	13	14	15
1.	Senapati	-	-	-	-	-	-
2.	Churachandpur	-	-	-	-	-	-
3.	Ukhrul	-	-	-	-	-	-
4.	Tamenglong,Farm Manager Progency Orchard cum Nursery (TML)	-	-	-	-	-	-
5.	Imphal (Raj Bhavan)	-	-	-	-	-	-
6.	Imphal (IFCD),Lamphel	-	-	-	-	-	-
7.	Bishnupur	-	-	-	-	32 (100)	-
8.	Thoubal	-	-	-	-	16 (100)	-
9.	Tulihal Airport	3.72 (2.54)	0.02 (0.01)	8.40 (5.73)	21.56 (14.70)	18.48 (12.60)	146.68 (100)

Source : 1) Progeny Orchard cum Nursery, Tamenglong
2) IFCD, Division No.II, Govt. of Manipur
3) Tulihal Airport.

Table No. 4(IV)

Monthly Rainfalls at some Selected Centers of Manipur during the Agricultural Year 2006-07

(Rainfall in cm.)

Sl. No.	District and Name of Centre	July	August	September	October	November	December	January
1	2	3	4	5	6	7	8	9
1.	Senapati	20 (18.69)	12 (11.22)	12 (11.21)	4 (3.74)	3 (2.80)	Nil	2 (1.87)
2.	Ukhrul	29 (21.64)	20 (14.93)	13 (9.70)	2 (1.49)	3 (2.24)	Trace	2 (1.49)
3.	Tamenglong *	-	-	31 (25.62)	23 (19.01)	9 (7.44)	3 (2.48)	2 (1.65)

4.	Bishnupur	53 (28.49)	10 (5.38)	14 (7.53)	12 (6.45)	4 (2.15)	Trace	6 (3.22)
5.	Thoubal	18 (17.82)	11 (10.89)	2 (1.98)	1 (0.99)	1 (0.99)	Nil	1 (0.99)
6.	Tulihal Airport	18.93 (16.82)	7.09 (6.30)	0.09 (0.08)	0.39 (0.35)	3.18 (2.83)	0.37 (0.33)	Nil

(Rainfall in cm.)

Sl. No.	District and Name of Centre	February	March	April	May	June	Total
1	2	10	11	12	13	14	15
1.	Senapati	12 (11.22)	1 (0.93)	14 (13.08)	14 (13.09)	13 (12.15)	107 (100)
2.	Ukhrul	8 (5.97)	1 (0.75)	16 (11.94)	21 (15.67)	19 (14.18)	134 (100)
3.	Tamenglong *	10 (8.27)	3 (2.48)	10 (8.26)	16 (13.22)	14 (11.57)	121 (100)
4.	Bishnupur	10 (5.38)	1 (0.54)	30 (16.13)	25 (13.44)	21 (11.29)	186 (100)
5.	Thoubal	9 (8.91)	1 (0.99)	18 (17.82)	19 (18.82)	20 (19.80)	101 (100)
6.	Tulihal Airport	18.46 (16.40)	0.75 (0.67)	19.83 (17.62)	23.34 (20.74)	20.10 (17.86)	112.53 (100)

Source : 1) District Statistical Offices, Directorate of Econ. & Statistics, Manipur.
2) * Tamenglong from Septermber 2006 to June, 2007
3) Sl. No.6:- Tulihal Airport

4.4 INPUTS:

The important inputs for raising the productivity of agricultural crop are (i) Seeds, (ii) Fertilizers and manures and (iii) Plant-protection chemicals. Though the above stated three groups of inputs are equally important, an attempt is made to highlight the features of the applications of chemical fertilizers only due to paucity of data for other inputs.

4.4.1 APPLICATION OF FERTILIZERS:

From year to year the land-man ratio has become lesser and it is further expected to get still narrower ratio in the coming years. Therefore, addition of plant nutrients in the form of fertilizers constituted an essential step in augmenting agricultural production. To give a picture of the consumption of fertilizers, the district-wise distribution of fertilizers for the year 2004-2005 and 2005-2006 as furnished by the Agriculture Department are given below .

Table No.5

District-wise Distribution of Fertilizers for the Year 2004-05 and 2005-06.

(in tonnes)

Sl. No.	Name of District	2004-05						2005-06					
		Urea	DAP	MOP	SSP	M/ Phos	Total	Urea	DAP	MOP	SSP	M/ Phos	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Senapati	830	117	53	45	-	1045	448	71	46	85	-	650
2.	Tamenglong	435	43	23	15	-	516	208	18	10		-	236
3.	Churachandpur	750	112	82	65	-	1009	516	54	47	75	-	690
4.	Chandel	460	60	24	25	-	569	183	26	10	-	-	219
5.	Ukhrul	367	43	23	35	-	468	194	26	10	-	-	230
6.	Imphal East	7270	755	240	640	-	8905	4580	436	220	304	-	5540
7.	Imphal West	8075	925	285	615	-	9900	5950	505	248	350	-	7053
8.	Bishnupur	6020	745	370	550	-	7685	3620	335	241	298	-	4494
9.	Thoubal	11225	1390	490	935	-	14040	9650	960	376	494	-	11480
	Manipur	35432	4190	1590	2925	-	44137	25349	2431	1208	1604	-	30592

The fertilizer doses are based on field experiments, considering the crop variety, water availability, soil characteristics and management practices. However, consumption of fertilizers in 2005-06 are decreasing trend as evident shown in the table given below .

Table No. 6

Yearwise Total Consumption of Chemical Fertilizers in Manipur State for the Kharif and Rabi Seasons.

(in '000 tonnes)

Sl.No.	Year	Urea	DAP	MOP	M/ Phos	SSP	Total
1	2	3	4	5	6	7	8
1.	1992-93	12.27	3.58	0.50	0.16	0.73	17.24
2.	1993-94	15.72	1.15	0.08	0.05	1.07	18.07
3.	1994-95	15.75	1.50	0.23	-	1.30	18.78
4.	1995-96	22.28	1.58	0.39	-	2.04	26.29
5.	1996-97	24.04	1.88	0.89	0.12	2.23	29.16

6.	1997-98	23.79	2.30	0.86	0.03	1.55	28.53
7.	1998-99	32.30	2.90	0.52	0.50	1.80	38.02
8.	1999-00	30.68	4.66	2.06	0.15	2.07	39.62
9.	2000-01	38.32	4.35	2.22	1.86	-	46.75
10.	2001-02	38.71	4.55	1.88	-	1.34	46.48
11.	2002-03	45.68	5.00	2.86	-	3.16	56.70
12.	2003-04	47.25	5.37	2.33	3.42	0.69	59.05
13.	2004-05	34.53	4.19	1.59	-	2.93	43.24
14.	2005-06	25.35	2.43	1.21	-	1.60	30.59

Source: Agriculture Department, Government of Manipur.

CHAPTER - V

RESULTS OF THE SURVEY

5.1 ESTIMATES OF CEREAL CROPS:

The production of crops was obtained as product of two parameters viz. area under the crops and yield rates. The estimates of area under crop and yield rates were built up from the schedules of Crops Estimation Survey. The main cereal crops of Manipur were Paddy, Maize and Wheat, but the wheat crops were grown only in very small pockets. The production of paddy crop

was expressed in terms of clean rice after making necessary conversions. The estimates of area, yield and production of rice and maize for the year 2004-05, 2005-06 and 2006-07 at the stratum/district/region/state levels are shown in the following table no. 7(a), 7(b) and 7(c) respectively.

Table No.7(a)

Estimated Area, Yield and Production of Cereal Crops (Rice and Maize) for the Year 2004-05

Area in '000 Hectares, Yield in Kgs./Hectare, Production in '000 tonnes

Sl.No.	Dev. Block /District	Rice			Maize		
		A	Y	P	A	Y	P
1	2	3	4	5	6	7	8
(a)	Mao Maram	5.17	2365.57	12.23	0.17	2941.18	0.50
(b)	Kangpokpi	9.68	2162.19	20.93	1.19	2930.23	3.52
(c)	Saikul	4.38	2328.77	10.20	0.07	3285.71	0.23
(d)	Paomata	4.88	2153.69	10.51	0.01	3000.00	0.03
1.	**Senapati**	**24.11**	**2234.34**	**53.87**	**1.44**	**2972.22**	**4.28**
(a)	Tamei	2.24	1089.29	2.44	-	-	-
(b)	Tousem	2.24	1133.93	2.54	-	-	-
(c)	Tamenglong	2.45	1110.20	2.72	-	-	-

(d)	Nungba	1.59	886.79	1.41	-	-	-
2.	**Tamenglong**	**8.52**	**1069.25**	**9.11**	**-**	**-**	**-**
(a)	Parbung	3.45	1881.16	6.49	-	-	-
(b)	Thanlon	2.46	1853.66	4.56	-	-	-
(c)	Henglep	3.63	2060.61	7.48	-	-	-
(d)	Churachandpur	7.89	1953.10	15.41	0.13	1384.62	0.18
(e)	Singngat	2.82	1765.96	4.98	-	-	-
(f)	Samulamlan	0.79	1848.10	1.46	0.03	1333.33	0.04
3.	**Churachandpur**	**21.04**	**1919.20**	**40.38**	**0.16**	**1375.00**	**0.22**
(a)	Tengnoupal	2.87	2108.01	6.05	0.09	3111.11	0.28
(b)	Chandel	2.08	2322.12	4.83	0.06	3000.00	0.18
(c)	Chakpikarong	3.28	2396.34	7.86	0.13	3153.85	0.41
4.	**Chandel**	**8.23**	**2277.04**	**18.74**	**0.28**	**3107.14**	**0.87**
(a)	Chingai	2.27	2118.94	4.81	0.19	2263.16	0.43
(b)	Ukhrul	7.40	2143.24	15.86	0.88	2693.18	2.37
(c)	Kamjong-Chassad	1.54	2162.34	3.33	0.11	2818.18	0.31
(d)	Phungyar Phaisat	1.27	2141.73	2.72	0.12	2666.67	0.32
(e)	Kasom Khullen	1.10	2163.64	2.38	0.04	2500.00	0.10
5.	**Ukhrul**	**13.58**	**2142.86**	**29.10**	**1.34**	**2634.33**	**3.53**
A. Hill Total		**75.48**	**2003.18**	**151.20**	**3.22**	**2763.98**	**8.90**
(a)	Imphal East-I	8.22	3345.50	27.50	-	-	-
(b)	Imphal-East-II	19.44	2848.77	55.38	-	-	-
(c)	Jiribam	2.55	2670.59	6.81	**-**	**-**	**-**
6.	**Imphal-East**	**30.21**	**2968.88**	**89.69**	**-**	**-**	**-**
(a)	Imphal West-I	18.63	3030.06	56.45	-	-	-
(b)	Imphal West-II	4.50	3353.33	15.09	-	-	-
7.	**Imphal West**	**23.13**	**3092.95**	**71.54**	-	-	-
(a)	Bishnupur	5.66	3079.51	17.43	-	-	-
(b)	Moirang	16.08	2858.83	45.96	-	-	-
8.	**Bishnupur**	**21.74**	**2915.82**	**63.39**	**-**	**-**	**-**
(a)	Thoubal	10.75	2325.58	25.00	-	-	-
(b)	Kakching	15.00	2340.67	35.11	-	-	-
9.	**Thoubal**	**25.75**	**2334.37**	**60.11**	**-**	**-**	**-**
B.	**Valley Total**	**100.83**	**2823.86**	**284.73**	**-**	**-**	
State (A+B)		**176.31**	**2472.52**	**435.93**	**3.22**	**2763.98**	**8.90**

A : Area Y : Yield P : Production

Table No. 7(b)

Estimated Area, Yield and Production of Cereal Crops, (Rice and Maize) for the Year 2005-06

Area in '000 Hectares, Yield in Kg./Hectare, Production in '000 tonnes

Sl.No.	Sub-Division /District	Rice			Maize		
		A	Y	P	A	Y	P
1	2	3	4	5	6	7	8
(a)	Mao-Maram	9.10	2150.00	19.56	0.08	2596.44	0.21
(b)	Paomata	2.83	1944.05	5.50	0.22	3164.24	0.70
(c)	Purul	4.45	1818.12	8.09	0.02	2894.12	0.06
(d)	Sadar Hill West	4.44	1975.54	8.77	0.55	3147.52	1.73
(e)	Saitu Gamphazol	2.98	2085.73	6.22	0.15	2662.60	0.40
(f)	Sadar Hill East	6.01	1996.52	12.00	0.56	2701.18	1.51
1.	**Senapati**	**29.81**	**2017.44**	**60.14**	**1.58**	**2917.72**	**4.61**
(a)	Tamenglong West	1.63	1404.91	2.30	-	-	-
(b)	Tamenglong North	2.71	1147.60	3.11	-	-	-

(c)	Tamenglong	2.55	1094.75	2.62	-	-	-
(d)	Nungba	2.69	933.33	2.52	-	-	-
2.	**Tamenglong**	**9.58**	**1101.25**	**10.55**	**-**	**-**	**-**
(a)	Tipaimukh	4.02	1937.81	7.79	-	-	-
(b)	Thanlon	2.04	1848.04	3.77	0.02	1423.92	0.03
(c)	Churachandpur North	2.93	1863.48	5.46	-	-	-
(d)	Churachandpur	7.74	1740.31	13.47	-	-	-
(e)	Singngat	3.64	1925.82	7.01	0.24	1427.77	0.34
3.	**Churachandpur**	**20.37**	**1840.94**	**37.50**	**0.26**	**1423.08**	**0.37**
(a)	Machi	1.59	1744.16	2.77	0.05	2792.00	0.14
(b)	Tengnoupal	1.20	1843.05	2.21	0.06	3045.14	0.18
(c)	Chandel	1.28	1508.54	1.93	0.04	2680.32	0.11
(d)	Chakpikarong	3.47	1777.46	6.17	0.25	3108.43	0.78
4.	**Chandel**	**7.54**	**1734.75**	**13.08**	**0.40**	**3025.00**	**1.21**
(a)	Ukhrul North	2.36	2489.08	5.87	0.11	3066.41	0.34
(b)	Ukhrul Central	7.93	2321.58	18.76	0.36	2814.34	1.01
(c)	Kamjong Chassad	2.01	1747.13	3.51	0.02	2412.29	0.05
(d)	Pungyar Phaisat	1.92	2367.44	4.55	0.09	2926.02	0.26
(e)	Ukhrul South	1.15	2314.10	2.66	0.03	3037.70	0.09
5.	**Ukhrul**	**15.37**	**2299.93**	**35.35**	**0.61**	**2868.85**	**1.75**
A	**Hill Total**	**82.67**	**1894.52**	**156.62**	**2.85**	**2785.96**	**7.94**
(a)	Jiribam	3.14	2783.44	8.74	-	-	-
(b)	Sawombung	12.86	2527.99	32.51	-	-	-
(c)	Porompat	4.48	3024.00	13.55	-	-	-
(d)	Keirao Bitra	5.27	2463.00	12.98	-	-	-
6.	**Imphal East**	**25.75**	**2632.23**	**67.78**	-	-	-
(a)	Lamsang	8.02	3049.88	24.46	-	-	-
(b)	Patsoi	6.64	3326.81	22.09	-	-	-
(c)	Lamphelpat	0.10	3552.29	0.36	-	-	-
(d)	Wangoi	4.41	3560.09	15.70	-	-	-

A : Area Y : Yield P : Production

Table No. 7(b)(Contd.)

Estimated Area, Yield and Production of Cereal Crops (Rice and Maize) for the Year 2005-06

Area in '000 Hectares, Yield in Kg./Hectare, Production in '000 tonnes

Sl.No.	Sub-Division /District	Rice			Maize		
		A	Y	P	A	Y	P.
1	2	3	4	5	6	7	8
7.	**Imphal West**	**19.17**	**3266.04**	**62.61**	**-**	-	-
(a)	Nambol	3.86	3129.53	12.08	-	-	-
(b)	Bishnupur	4.11	3530.41	14.51	-	-	-
(c)	Moirang	8.06	2678.66	21.59	-	-	-

8.	**Bishnupur**	**16.03**	**3005.61**	**48.18**	-	-	-
(a)	Lilong	2.78	2227.40	6.19	-	-	-
(b)	Thoubal	9.10	2174.67	19.79	-	-	-
(c)	Kakching	10.76	2314.22	24.90	-	-	-
9.	**Thoubal**	**22.64**	**2247.35**	**50.88**	-	-	-
B.	**Valley Total**	**83.59**	**2744.95**	**229.45**	-	-	-
	State (A+B)	**166.26**	**2322.09**	**386.07**	**2.85**	**2785.96**	**7.94**

A : Area Y : Yield P : Production

Table No. 7(c)
Estimated Area Yield and Production of Cereal Crops (Rice and Maize)
for the year 2006-07

Area in Hectares , Yield in Kg/Hectare Production in '000 tonnes

Sl. No.	Sub-division/ District	Rice			Maize		
		A	Y	P	A	Y	P
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Mao-Maram	6.47	2165.38	14.01	0.06	2333.33	0.14
(b)	Paomata	3.68	2076.09	7.64	0.07	2428.57	0.17
(c)	Purul	4.35	2181.69	9.49	0.35	2628.57	0.92
(d)	Sadar Hill West	3.29	2221.88	7.31	0.49	2653.06	1.34
(e)	Saitu Gamphazol	3.02	2119.21	6.40	0.08	2500.00	0.20
(f)	Sadar Hill East	4.39	2013.67	8.84	0.16	2750.00	0.44
1.	**Senapati**	**25.20**	**2130.56**	**53.69**	**1.21**	**2652.89**	**3.21**
(a)	Tamenglong West	2.33	1414.23	3.30	-	-	-
(b)	Tamenglong North	2.41	1041.49	2.51	-	-	-

(c)	Tamenglong	1.99	1447.24	2.88	-	-	-
(d)	Nungba	2.79	1388.28	3.87	-	-	-
2.	**Tamenglong**	**9.52**	**1319.33**	**12.56**	**-**	**-**	**-**
(a)	Tipaimukh	3.79	1796.83	6.81	-	-	-
(b)	Thanlon	3.42	1897.66	6.49	0.12	2166.67	0.26
(c)	Churachandpur North	5.34	1883.90	10.06	-	-	-
(d)	Churachandpur	8.15	1927.61	15.71	-	-	-
(e)	Singngat	2.49	1875.50	4.67	0.22	3000.00	0.66
3.	**Churachandpur**	**23.19**	**1886.16**	**43.74**	**0.34**	**2705.88**	**0.92**
(a)	Machi	2.76	1905.80	5.26	0.18	2000.00	0.36
(b)	Tengnoupal	1.04	2038.46	2.12	0.06	2166.67	0.13
(c)	Chandel	1.66	1921.69	3.19	0.06	2000.00	0.12
(d)	Chakpikarong	3.06	1735.29	5.31	0.18	2500.00	0.45
4.	**Chandel**	**8.52**	**1886.16**	**15.88**	**0.48**	**2208.33**	**1.06**
(a)	Ukhrul North	2.59	2312.74	5.99	0.20	2400.00	0.48
(b)	Ukhrul Central	6.16	2290.58	14.11	0.55	2327.27	1.28
(c)	Kamjong Chassad	1.60	2368.75	3.79	0.15	2333.33	0.35
(d)	Pungyar Phaisat	1.36	2330.88	3.17	0.25	2440.00	0.61
(e)	Ukhrul South	1.69	2349.11	3.97	0.16	2250.00	0.36
5.	**Ukhrul**	**13.40**	**2315.67**	**31.03**	**1.31**	**2354.04**	**3.08**
A	**Hill Total**	**79.83**	**1965.43**	**156.90**	**3.34**	**2476.05**	**8.27**
(a)	Jiribam	2.88	2878.47	8.29	-	-	-
(b)	Sawombung	12.04	29.02.82	34.95	-	-	-
(c)	Porompat	4.22	2985.78	12.60	-	-	-
(d)	Keirao Bitra	5.15	2906.80	14.97	-	-	-
6.	**Imphal East**	**24.29**	**2915.19**	**70.81**	**-**	**-**	**-**
(a)	Lamsang	9.36	3110.04	29.11	-	-	-
(b)	Patsoi	6.08	2883.22	17.53	-	-	-
(c)	Llamphelpat	0.15	3066.67	0.46	-	-	-
(d)	Wangoi	3.30	3163.64	10.44	-	-	-
7.	**Imphal west**	**18.89**	**3045.53**	**57.53**	**-**	**-**	**-**

A : Area Y : Yield P : Prodction

Table No. 7(c) (conld.)

Estimated Area, Yield and Production of Cereal Crops (Rice and Maize) for the Year 2006-07

Area in '000 Hectares, Yield in Kgs./Hectare, Production in '000 tonnes

Sl.No.	Sub-Division /District	Rice			Maize		
		A	Y	P	A	Y	P
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Nambol	2.46	3073.17	7.56	-	-	-
(b)	Bishnupur	3.18	2949.69	9.38	-	-	-
(c)	Moirang	9.57	2495.30	23.88	-	-	-
8.	**Bishnupur**	**15.21**	**2683.76**	**40.82**	-	-	-
(a)	Lilong	4.10	2317.07	9.50	-	-	-
(b)	Thoubal	11.00	2220.00	24.42	-	-	-
(c)	Kakching	12.05	2422.41	29.19	-	-	-
9.	**Thoubal**	**27.15**	**2324.49**	**63.11**	-	-	-
B.	**Valley Total**	**85.54**	**2715.34**	**232.27**	-	-	-
	State (A+B)	**165.37**	**2353.33**	**389.17**	**3.34**	**2476.05**	**8.27**

A : Area Y : Yield P : Production

p

5.1.1 Although paddy was grown in large scale in all the districts the largest area under the cro was found to be in Imphal East District during the year 2004-05. During the year 2005-06, the largest area under the crop was found to be in Senapati District.

In the agricultural year 2006-07, the largest area under paddy crop was found in Thoubal District which estimated for 16.42% of the total area under crop and lowest area in Chandel District which accounted for 5.15% of the total crop area. The total agriculture area of the crop in this year was 165.37 thousand hectares which accounted for 7.41 % of the total geographical area of the State as aginst 7.9% and 7.45% in 2004-05 and 2005-06 respectively.The districtwise distribution of Area under Paddy for the agricusltural year 2004-05 to 2006-07 is shown at Table No.8. The per capita gross area under paddy during 2006-2007 was worked out to be nearly 0.16 acre only.

Table No. 8

Districtwise Distribution of Area Under Paddy for the Agricultural Year 2004-05 to 2006-07

Sl. No.	Name of District	2004-05		
		Area ('000 hect.)	P.C.	Rank
(1)	(2)	(3)	(4)	(5)
1.	Senapati	24.11	13.68	3
2.	Tamenglong	8.52	4.83	8
3.	Churachandpur	21.04	11.93	6
4.	Chandel	8.23	4.67	9
5.	Ukhrul	13.58	7.70	7
6.	Imphal East	30.21	17.13	1
7.	Imphal West	23.13	13.12	4
8.	Bishnupur	21.74	12.33	5

9.	Thoubal	25.75	14.61	2
	State	**176.31**	**100.00**	

Table No. 8

Districtwise Distribution of Area Under Paddy for the Agricultural Year 2004-05 to 2006-07

Sl. No.	Name of District	2005-06		
		Area ('000 hect.)	P.C.	Rank
(1)	(2)	(6)	(7)	(8)
1.	Senapati	29.81	17.93	1
2.	Tamenglong	9.58	5.76	8
3.	Churachandpur	20.37	12.25	4
4.	Chandel	7.54	4.54	9
5.	Ukhrul	15.37	9.24	7
6.	Imphal East	25.75	15.49	2
7.	Imphal West	19.17	11.53	5
8.	Bishnupur	16.03	9.64	6
9.	Thoubal	22.64	13.62	3
	State	**166.26**	**100.00**	

Table No. 8

Districtwise Distribution of Area Under Paddy for the Agricultural Year 2004-05 to2006-07

Sl. No.	Name of District	2006-2007	Area	(.000 hect) P.C
(1)	(2)	(9)	(10)	(11)
1.	Senapati	25.20	25.24	2
2.	Tamenglong	9.52	5.76	8
3.	Churachandpur	23.19	14.02	4
4.	Chandel	8.52	5.15	9
5.	Ukhrul	13.40	8.10	7
6.	Imphal East	24.29	14.69	3
7.	Imphal West	18.89	11.42	5
8.	Bishnupur	15.21	9.20	6
9.	Thoubal	27.15	16.42	1

State	**165.37**	**100.00**

5.1.2 The estimated average yield of rice for the State was 2472.52 kgs. per hectare for the year 2004-05. The estimated average yield varied from 886.79 kgs. per hectare in Nungba Block of Tamenglong District to 3353.33 kgs. per hectare in Imphal West-II Block of Imphal West District.

For the year 2005-06, the estimated average yield of rice for the State was found to be 2322.09 kgs.per hectare. The estimated average yield varied from 933.33 kgs. per hectare in Nungba Sub-division of Tamenglong District to 3560.09 kgs. per hectare in Wangoi Sub-division of Imphal West District.

5.1.3 The estimated production of rice for the State was 386.07 thousand tonnes during the agricultural year, 2005-06 as against 435.93 thousand tonnes during the agricultural year, 2004-05. The per capita production of rice during 2005-06 was worked out to be 153.25 kgs as against the estimated requirements of 289.93 kgs. per capita per annum.

The estimated production of rice during the agricultural year 2006-2007 was 389.17 thousands tonne against 386.07 thousand tonnes in 2005-06. The per capita production of rice during 2006-07 was worked out to 151.48 kgs as against 153.25 kgs in 05-06.

5.1.4 For the agricultural year 2004-05, 44.72. % of the estimated area under maize crop of the State was found in Senapati District. The estimated area under the crop was 3.22 thousand hectares during the year where the estimated average yield for the State was 2763.98 kgs. per hectare. The estimated average yield varied from 1333.33 kgs. per hectare in Samulamlan of Churachandpur District to 3285.71 kgs. per hectare in Paomata Block of Senapati District. The estimated production of maize for the agricultural year 2004-2005 was 8.90 thousand tonnes.

For the agricultural year 2005-06, for maize crops 55.44% of the estimated area of the State was found in Senapati District. The estimated area under the crop was 2.85 thousand hectare during the agricultural year where the estimated average yield for the State was 2785.96 kgs. per hectare. The estimated average yield varied from 1423.92 kgs. per hectare in Thanlon Sub-division of Churachandpur District to 3164.24 kgs. per hectare in Paomata of Senapati District. The estimated production of maize for the agricultural year 2005-06 was 7.94 thousand tonnes.

The estimated area of maize crops during the year 2006-07 was 3.34 thousands hectare. Highest area of cultivating the crop was in Ukhrul District. It shared 39.22% of the total estimated area . The average yield rate varied from 2000 Kgs per hectare in Machi & Chandel sub-divisions of Chandel District to 2750.00 Kgs per hectare in Sadar Hill East of Senapati District.

Table No. 9
Surplus/Shortage of Rice in Manipur as compared to local production (State's own Production)

Sl. No.	Year	Projected Population of Manipur (As on Ist Oct.)	Estimated Annual requirement of rice ('000 tonnes) @ 193.38 kgs. per capita per annum	Production of rice('000 tonnes)	Surplus (+) Shortage(-) (in'000 tonnes)
(1)	(2)	(3)	(4)	(5)	(6)
1.	2001-02	2323800	449.38	387.26	-62.12
2.	2002-03	2371185	458.54	335.67	-122.87
3.	2003-04	2420219	468.02	381.24	-86.78
4.	2004-05	2469569	477.57	435.93	-41.64
5.	2005-06	2519220	487.17	386.07	-101.10
6.	2006-07	2569176	496.83	389.17	-107.66

From the table no. 9 and 10, it is clear that the area and production of the rice were 176.31 thousand hectares and 435.93 thousand tonnes respectively for the year 2004-05. For the year 2005-06, the area and production of the rice were 166.26 thousand hectares and 386.07 thousand tonnes respectively. In 2006-07 the area and production of rice were 165.37 thousands hectares and 389.17 thousands tonnes. The production of paddy was below the level of marginal need for the last five years.

5.1.5 The trend of the last 10 (ten) years for the estimated area under production of paddy and maize crops at the State Level could be seen from the Table No.10 given below:

Table No. 10
Estimated Area under Productin of Rice and Maize giving the last 10 years of Manipur State

Sl. No.	Year	RICE		MAIZE	
		Area ('000 hects.)	Production ('000 tonnes)	Area ('000 hects.)	Production ('000 tonnes)
1	2	3	4	5	6
1.	1997-98	157.90	351.67	3.67	13.09
2.	1998-99	166.89	382.19	2.96	10.09
3.	1999-00	157.05	364.98	4.34	10.71
4.	2000-01	156.99	381.73	4.67	10.86
5.	2001-02	162.57	387.26	5.06	10.09
6.	2002-03	153.11	335.67	3.54	8.27
7.	2003-04	157.83	381.24	2.34	7.53
8.	2004-05	176.31	435.93	3.22	8.90
9.	2005-06	166.26	386.07	2.85	7.94
10.	2006-07	165.37	389.17	3.34	8.27

5.2 ESTIMATES OF NON-CEREAL CROPS:

Information on area under non-cereal crops were also collected in the Crop Estimation Survey, 2002-03 but crop cutting experiments were not conducted due to shortage of financial and man power resources. The non-cereal crops were available only in some pockets of the sample crops and hence, the estimates were not up to the expected level. However, it will give an idea of the cropping pattern of the State in absence of other reliable estimates. The estimates of non-cereal crops so derived for the period from 1996-97 to 2005-2006 were shown in Annexure – I

5.3 TYPES OF CULTIVATION:

Data on the types of cultivation such as area under wet cultivation, terrace cultivation and jhum cultivation were collected since the agricultural year 1985-86 onwards.

The wet cultivation (WC) on the flat lands and terrace cultivation (TC) on the hill slopes together constituted the total permanent cultivation. The terrace and jhum cultivations were practiced in the hill areas of Manipur. Area under cereal crops during the year 2004-05, 2005-06 and 2006-07 according to the types of cultivations are presented in the Annexure – II(a) , II(b) and II(c) respectively. It would be observed from Annexure –II(a) that 74.28% of the total area under paddy during 2004-05 was under permanent cultivation where the remaining 25.72% was under jhum cultivation of paddy. Whereas, from Annexure –II(b), 72.57% of the total area under paddy during 2005-06 was under permanent cultivation where the remaining 27.43% was under jhum cultivation of paddy.But in the agriculture year 2006-07, 79.05% of the total area under paddy was under permanent cultivation and remaining 20.95% was under jhum cultivation. It would be interesting to note that the extent of area under jhum cultivation was highest in the Churachandpur District in terms of percentage of the total area under paddy cultivation during 2004-05, 2005-06 and 2006-07. The detail picture of the jhum cultivation during 2004-05, 2005-06 and 2006-07 would be seen from the Table No. 11.

Table No. 11
Distribution of Area Under Jhum Cultivation of Paddy in 2004-05, 2005-06 & 2006-07 of Manipur

Sl. No.	Name of District	Area under Paddy ('000 hects.)								
		2004-05			2005-06			2006-07		
		Jhum Cultiva-tion	Total	P.C. of Area under Jhum Cultivation to Dist. Total	Jhum Cultiva-tion	Total	P.C. of Area under Jhum Cultivation to Dist. Total	Jhum Cultiva-tion	Total	P.C. of Area under Jhum Cultivation to Dist. Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Senapati	-	24.11 (13.68)	0.00	-	29.81 (17.93)	0.00	-	25.20 (15.24)	-
2.	Tamenglong	8.06(17.78)	8.52 (4.83)	94.60	5.94 (13.03)	9.58 (05.76)	62.00	6.79 (19.60)	9.52 (5.76)	71.32
3.	Churachandpur	17.54 (38.69)	21.04 (11.93)	83.37	18.79 (41.21)	20.37 (12.25)	92.24	23.19 (66.93)	23.19 (14.02)	0.01
4.	Chandel	6.63 (14.62)	8.23 (4.67)	80.57	5.50 (12.06)	7.54 (04.54)	72.95	4.67 (13.47)	8.52 (5.15)	34.81
5.	Ukhrul	12.47 (27.50)	13.58 (7.70)	91.83	15.37 (33.70)	15.37 (09.25)	0.01	-	13.40 (8.10)	-

6.	Valley Total	0.64 **(1.41)**	100.83 (57.19)	0.63	-	83.59 (50.27)	0.00	-	85.54 (51.73)	-
	STATE	**45.34 (100.00)**	**176.31 (100.00)**	**25.72 (100.00)**	**45.60 (100.00)**	**166.26 (100.00)**	**27.43**	**34.63 (100.00)**	**165.37 (100.00)**	**20.95**

Note: Bracket figures are percentage to total.

Out of the total area under jhum cultivation of paddy in the State, the highest percentage was found in the Churachandpur District with 38.69% in 2004-05, 41.21% in 2005-06 and 66.93% in 2006-07. Churachandpur District occupies in the 6th position in term of area under paddy cultivation in the State in 2004-05, 2005-06 and 2006-07 as shown in the table No. 7(a).

As for Maize crop, the major share of area was found to be in the hill districts. The Maize crop was grown in the permanent as well as jhum crops. Senapati District had the highest area under Maize crop during 2004-05, 2005-06 and 2006-07. In 2005-06, 29.47% and 70.53% of the total area under Maize was under permanent and jhum cultivation respectively.In agricultural year 2006-07, 45.71% and 54.29% of total area under maize was under permanent and jhum cultivation respectively. Senapati district had the highest area under Maize Crop during 2006-07, Annexure-II(c).

5.3.2 STRUCTURAL CHANGES IN TYPES OF CULTIVATION:

The extent of land put to permanent and jhum cultivation of paddy during the last three years in the State could be seen Annexure – III(a) and III(b). The structural changes in the types of cultivation in each hill district could be visualised from the Table No.12 given below :

Table No.12
Districtwise Distribution of Area under Paddy by Types of Cultivation during 2004-05 to 2006-07 in the Hill Districts of Manipur

Area ('000 hects.)

Sl. No.	Name of District	Type of Cultivation	2004-2005	2005-2006	2006-2007	Triennium ending Average
1	2	3	4	5	6	7
1	Senapati	P.M.T.	7.22 (100.00)	17.55 (100.00)	25.20 (100.00)	16.66 (100.00)
		Jhum	-	-	-	
		Total	**7.22 (100.00)**	**17.55 (100.00)**	**25.20 (100.00)**	**16.66 (100.00)**
2.	Tamenglong	P.M.T	-	3.64 (38.00)	2.73 (28.68)	2.12 (23.43)
		Jhum	8.06 (100.00)	5.94 (62.00)	6.79 (71.32)	6.93 (76.57)
		Total	**8.06 (100.00)**	**9.58 (100.00)**	**9.52 (100.00)**	**9.05 (100.00)**
3.	Churachandpur	P.M.T	2.84 (13.94)	1.58 (7.76)	-	1.47 (6.90)
		Jhum	17.54 (86.06)	18.79 (92.24)	23.19 (100.00)	19.84 (93.10)

		Total	**20.38**	**20.37**	**23.19**	**21.31**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
		P.M.T	1.60	2.04	3.85	2.50
			(19.44)	(27.06)	(45.19)	(30.86)
4.	Chandel	Jhum	6.63	5.50	4.67	5.60
			(80.56)	(72.94)	(54.81)	(69.14)
		Total	**8.23**	**7.54**	**8.52**	**8.10**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
		P.M.T	-	-	13.40	4.47
					(100.00)	(32.51)
5.	Ukhrul	Jhum	12.47	15.37	-	9.28
			(100.00)	(100.00)		(67.49)
		Total	**12.47**	**15.37**	**13.40**	**13.75**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
		P.M.T.	**11.66**	**24.81**	**45.18**	**27.22**
			(20.69)	**(35.24)**	**(56.60)**	**(29.52)**
	Hill Total	**Jhum**	**44.70**	**45.60**	**34.65**	**41.65**
			(79.31)	**(29.52)**	**(43.40)**	**(60.48)**
		Total	**56.36**	**70.41**	**79.83**	**68.87**
			(100.00)	**(64.76)**	**(100.00)**	**(100.00)**

Note: 1. P.M.T. = Permanent
2. Figures within bracket are the percentage to total area under paddy in each.district.

As revealed from the results of the last three years, it could be well concluded that the percentage of area under jhum cultivation to total area under paddy cultivation was highest in Churachandpur district. The percentage of jhum cultivation of paddy was worked out to be 93.10% according to the triennium ending average area under paddy in Churachandpur District. The percentages of area under jhum in Tamenglong and Ukhrul districts were worked out to be 76.57 and 67.49 respectively which were also comparatively higher. It would be, therefore, better if the efforts to bring about the **TERRACE CULTIVATION** are accelerated particularly in the three districts viz. Tamenglong, Churachandpur and Ukhrul.

5.4 Information on seeds used has been collected in the Crop Estimation Survey since 1985-86. The seeds were grouped into three categories viz. High yielding varieties (HYV), improved varieties and others. Area under three groups of varieties of paddy and maize during the year 2004-05, 2005-06 and 2006-07 were tabulated and given in the Annexture – IV (a), IV (b) and IV(c).

In the agricultural year 2004-05, HYV seeds were mainly used in valley districts of the State. Area under HYV paddy was 22.61 thousands hectares, in which 95.67% of the total areas was in the valley districts. The area of HYV (Paddy) was only 12.82% of the total area under paddy (Annexure IV(a).

During the year 2005-06, area under HYV paddy was found to be 27.94 thousand hectares in the valley areas which was 96.85% of the total area under HYV paddy in the State and the remaining 3.15% was found in the hill areas. The proposition of area under HYV paddy to the total area under paddy in 2005-06 was found to be only 17.35 %(Annexure – IV (b).

During 2006-07, the area under HYV paddy was only 14.28 thousands hectares constituting 88.09% area in valley and 11.91% in hilly regions.The area of HYV paddy out of the total area under paddy was only 8.64% (Annexure – IV(c)

5.4.2 PROPOSITION OF AREA UNDER LOCAL VARIETY:

This high yielding varieties (HYVs) programme had been introduced in the country since 1985-86. The spread of HYV and improved varieties of paddy was very slow in the State particularly in the hill areas. However, since the recent past, the preference of HYV and improved varieties of paddy to local varieties was evident particularly in the valley areas. The proportion of area under local varieties of paddy to the area under HYV+improved varieties for the 2005-06 and 2006-07 are shown in Annexure V. A consolidated picture at the triennium ending average during 2005-06 and 2006-07 are also shown in the Table No. 12(a) & 12(b) respectively.

Table No. 12(A)

Proportion of Area of Paddy under Local Varieties to HYV and Improved Varieties of the Regional/State Level

Area in '000 hects.

Sl. No.	Name of Region	Varieties of Seed used	2003-04	2004-05	2005-06	Triennium Ending Average
1	2	3	4	5	6	7
1.	Hill	HYV+IV	13.86	12.70	9.71	12.09
			(17.99)	(16.82)	(11.75)	(15.42)
		Others	63.19	62.78	72.96	66.31
			(82.01)	(83.18)	(88.25)	(84.58)
		Total	**77.05**	**75.48**	**82.67**	**78.40**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
2.	Valley	HYV+IV	46.42	88.62	62.39	65.81
			(57.46)	(87.89)	(74.64)	(74.45)
		Others	34.36	12.21	21.20	22.59
			(42.54)	(12.11)	(25.36)	(25.55)
		Total	**80.78**	**100.83**	**83.59**	**88.40**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
3.	Manipur State	HYV+IV	60.28	101.32	72.10	77.90
			(38.19)	(57.47)	(43.37)	(46.70)

	Others	97.55	74.99	94.16	88.90
		(61.81)	(42.53)	(56.63)	(53.30)
	Total	**157.83**	**176.31**	**166.26**	**166.80**
		(100.00)	**(100.00)**	**(100.00)**	**(100.00)**

Note: 1. HYV = High Yielding Varieties.
2. IV = Improved varieties.

Table No. 12(B)

Proportion of Area of Paddy under Other Varieties to HYV and Improved Varieties of the Regional/State Level

Area in '000 hects.

Sl. No.	Name of Region	Varieties of Seed used	2004-05	2005-06	2006-07	Triennium Ending Average
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Hill	HYV+IV	12.70	9.71	12.56	11.66
			(16.82)	(11.75)	(15.73)	(14.70)
		Others	62.78	72.96	67.27	67.67
			(83.18)	(88.25)	(84.27)	(85.30)
		Total	**75.48**	**82.67**	**79.83**	**79.33**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
2.	Valley	HYV+IV	88.62	62.39	54.10	68.37
			(87.89)	(74.64)	(63.25)	(75.98)
		Others	12.21	21.20	31.44	21.62
			(12.11)	(25.36)	(36.75)	(24.02)
		Total	**100.83**	**83.59**	**85.54**	**89.99**
			(100.00)	**(100.00)**	**(100.00)**	**(100.00)**
3.	**Manipur State**	HYV+IV	101.32	72.10	66.66	80.03
			(57.47)	(43.37)	(40.31)	(47.27)
		Others	74.99	94.16	78.71	89.29
			(42. 53)	(56.63)	(59.69)	(52.73)

	Total	**176.31 (100.00)**	**166.26 (100.00)**	**165.37 (100.00)**	**169.32 (100.00)**

Note: **1. HYV = High Yielding Varieties.**
2. IV = Improved varieties.

On the whole, the proportion of area under other varieties of seeds used in respect of area under paddy to the total area under paddy crop was 59.69% in 2006-07 as against 56.63% and 42.53% in the agricultural year 2005-06 and 2004-05 respectively; whereas the area under (HYV + improved) varieties of paddy were only 40.31%, 43.37% and 57.47% in the agricultural year 2006-07, 2005-06 and 2004-05 respectively. From the triennium average, it was evident that the proportion of land put to other varieties of paddy crops was 52.73% of the total area under paddy. Proportion of land put to other varieties of paddy in the hilly areas was 85.30% of the total areas under paddy of the region. But in the case of valley areas only 24.02% of the total area of the region under paddy was for other varieties.

5.4.3 TREND OF ADOPTION OF HYV/IV:

The trend of adoption of high yielding varieties, improved varieties and also of the other varieties of paddy during the years 2005-06 and 2006-07 at the stratum/district/regional/state level are shown in the Annexure – VI .

5.4.4 IRRIGATION:

Attempts were made to collect data on the crops irrigated. The codes used for irrigation during the survey were as follows:

Not irrigated	-	0
Irrigated from canal	-	1
Irrigated from tank	-	2
Irrigated from river	-	3
Irrigated from others	-	4

Stratum/District/Regional/State Level estimates of irrigated area under paddy and maize crop during the year 2004-05 to 2006-07 are shown in the Annexure – VII(a), VII(b) & VII(c) respectively. During the year 2004-05, out of the estimated area of 176.31 thousand hectares, 54.21 thousand hectares were found to be irrigated which accounted for 30.20% of the total area under cereal. In the year 2005-06, out of the estimated area of 169.11 thousand hectares, 39.30 thousand hectares were found to be irrigated which accounted 23.24% of the total area under cereal. In the agricultural year 2006-07, out of 168.63 thousand hectares estimated area under paddy, 32.92 thousand hectares were found to be irrigated, which accounted 19.52% of the total area under

cereal crops. The details of the paddy crop irrigated during the years 2005-06 and 2006-07 according to the estimates of the crop estimation survey are shown in the Annexure – VIII

ANNEXURE - I

Comparative Picture of Area under Non-cereal Crops from the Year 1996-97 to 2005-06 in Manipur

Area in '000 hectares.

Sl. No.	Crops	1996-97	1997-98	1998-99	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
1	2	3	4	5	6	7	8	9	10	11	12
1.	Arhar	-	-	-	-	-	-	-	0.04	-	-
2.	Pea	1.91	4.45	1.79	2.28	2.34	2.43	1.82	1.23	2.14	1.87
3.	Bean	1.32	0.60	1.25	1.72	1.72	1.66	2.29	2.75	3.29	3.62
4.	Black Pea	-	-	-	-	-	-	-	1.26	1.27	1.15
5.	Kalandri	-	-	-	-	-	-	-	-	0.10	0.01
6.	Hawai Ashangbi	-	-	-	-	-	-	-	-	0.06	0.12
7.	Rajma	-	-	-	-	-	-	-	-	0.05	0.01
8.	Pong-hawai	-	-	-	-	-	-	-	-	-	0.01
9.	Tangkhul Hawai	-	-	-	-	-	-	-	-	-	0.001
10.	Koli Hawai	-	-	-	-	-	-	-	-	0.11	0.11
11.	Chak-hawai	-	-	-	-	-	-	-	-	0.59	0.41
12.	Soyabean	0.79	0.49	0.35	0.47	0.48	0.66	0.28	0.32	0.42	0.17
13.	Other pulses	1.90	1.34	2.42	2.33	2.13	1.87	3.68	1.08	0.04	1.28
14.	Cotton	0.06	0.06	0.07	0.05	0.06	0.09	-	-	-	-
15.	Jute	0.23	0.01	0.02	0.02	-	-	-	-	-	-
16.	Seasamum	1.18	0.99	0.78	1.21	1.26	0.41	0.03	0.81	1.93	1.15

17.	Rape & Mustard	1.94	1.02	1.43	1.41	1.49	0.59	2.26	0.02	0.20	0.25
18.	Groundnut	-	-	-	0.27	0.01	-	-	-	-	-
19.	Other Oil-Seeds	-	-	-	-	-	-	-	-	-	-
20.	Mustard leaf	-	-	-	-	-	-	-	4.44	2.31	2.59
21.	Potato	3.23	3.23	2.17	2.47	2.59	3.04	4.22	4.98	2.96	4.87
22.	Arum	5.39	4.99	5.39	6.22	5.93	6.28	7.22	9.18	9.33	9.94
23.	Cabbage	3.03	3.87	2.23	2.28	2.39	2.71	3.22	6.63	2.42	3.20
24.	Cauliflower	0.78	0.76	0.43	0.44	0.38	0.40	0.59	0.76	0.60	1.46
25.	Brinjal	-	-	-	-	-	-	-	2.30	4.51	1.13
26.	Yendem	-	-	-	-	-	-	-	-	0.50	0.36
27.	Onion	0.40	0.21	0.20	0.30	0.35	0.64	0.24	0.97	0.50	1.76
28.	Tomato	-	-	-	-	-	-	-	0.03	0.09	0.06
29.	Pumkin	-	-	-	-	-	-	-	-	0.28	0.30
30.	Gourd	-	-	-	-	-	-	-	-	0.17	0.03
31.	Sebot	-	-	-	-	-	-	-	-	0.19	0.001
32.	Lady Finger	-	-	-	-	-	-	-	1.37	0.36	0.13
33.	Tree-bean	-	-	-	-	-	-	-	-	1.16	0.50
34.	Squash	-	-	-	-	-	-	-	-	0.23	1.26
35.	Radish	-	-	-	-	-	-	-	0.07	0.04	0.03
36.	Carrot	-	-	-	-	-	-	-	0.04	0.03	0.04
37.	Sweet Potato	0.03	-	0.08	0.05	0.05	0.01	0.01	-	0.13	-
38.	Jam		-	-	-	-	-	-	-	0.15	-
39.	Kitchen										
40.	Garden	-	-	-	-	-	-	-	-	0.03	-

ANNEXURE – I

Comparative Picture of Area under Non-cereal Crops from the Year 1996-97 to 2005-06 in Manipur

(Contd.)Area in '000 hectares.

Sl. No.	Crops	1996-97	1997-98	1998-99	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
1	2	3	4	5	6	7	8	9	10	11	12
40.	Others Vegetables	7.69	7.12	8.38	8.47	8.45	8.47	9.70	6.54	1.83	8.29
41.	Pine Apple	0.63	0.46	0.24	0.30	0.55	0.45	1.03	0.73	1.45	0.04
42.	Jack Fruit	-	-	-	-	-	-	-	0.20	0.06	0.14
43.	Apple	-	-	-	-	-	-	-	0.01	-	0.00
44.	Orange	1.07	0.99	1.65	1.66	1.66	2.11	1.13	1.71	1.74	1.69
45.	Lemon	0.84	0.67	0.93	0.82	0.86	0.92	0.07	0.37	0.31	0.34
46.	Cucumber	-	-	-	-	-	-	-	-	0.10	0.13
47.	Passion Fruit	-	-	-	-	-	-	-	0.37	0.38	1.77
48.	Banana	3.30	4.41	2.90	3.51	3.42	4.42	3.88	4.14	0.87	4.42
49.	Papaya	0.04	0.06	0.07	0.09	0.12	0.02	0.15	0.07	0.17	0.00
50.	Mango	-	-	-	-	-	-	-	0.01	-	0.00
51.	Plum	-	-	-	-	-	-	-	-	0.23	0.00
52.	Nabab	-	-	-	-	-	-	-	-	0.001	0.00
53.	Other Fruits	-	1.02	1.00	0.66	0.61	0.51	0.35	0.17	0.36	0.35
54.	Chillies	7.23	7.68	8.83	6.92	7.17	7.45	10.14	13.39	11.92	6.49

55.	Ginger	0.74	0.50	0.59	0.59	1.14	2.14	1.27	1.45	2.48	2.24
56.	Turmeric	0.31	0.18	0.14	0.22	0.25	0.31	0.33	0.55	0.47	0.20
57.	Garlic	-	-	-	-	-	-	-	0.87	0.06	0.22
58.	Coriander	-	-	-	-	-	-	-	0.36	0.15	0.01
59.	Other Spices	-	0.31	0.37	0.81	0.48	0.25	0.36	0.51	0.04	0.32
60.	Betel Nut	-	-	-	-	-	-	0.03	0.02	0.02	0.07
61.	Betel Leaf	-	-	-	-	-	-	-	-	-	0.00
62.	Tobacco	0.07	0.01	-	-	-	-	-	-	-	-
63.	Other Drugs	-	-	-	-	-	-	-	-	-	0.00
64.	Coconut	-	-	-	-	-	-	-	0.09	-	0.00
65.	Rubber	-	-	1.81	-	0.20	-	-	0.05	-	0.02
66.	Sugarcane	1.31	0.47	0.70	0.65	0.74	0.65	0.32	0.33	0.30	0.07
67.	Tea	-	0.02	0.04	-	-	-	-	-	-	-
68.	Tapioca	0.03	-	0.03	0.03	0.01	0.04	0.16	-	-	-
Total		**45.45**	**45.92**	**46.29**	**46.25**	**46.84**	**48.53**	**54.78**	**69.71**	**62.13**	**64.63**

ANNEXURE – II(A)

Districtwise Area under Cereal Crops (Paddy & Maize) by different types of Cultivations for the Agricultural Year 2004-05 in Manipur

Sl. No.	District/Block	Area Under Cereal Crops (Paddy & Maize) by different types of Cultivation								
		Permanent including Terrace			Jhum			Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	Mao-Maram	5.17	-	5.17	-	0.17	0.17	5.17	0.17	5.34
(b)	Kangpokpi	9.68	0.79	10.47	-	0.40	0.40	9.68	1.19	10.87
(c)	Saikul	4.38	0.07	4.45	-	-	-	4.38	0.07	4.45
(d)	Paomata	4.88	-	4.88	-	0.01	0.01	4.88	0.01	4.89
1.	**Senapati**	**24.11**	**0.86**	**24.97**	**-**	**0.58**	**0.58**	**24.11**	**1.44**	**25.55**
(a)	Tamei	0.18	-	0.18	2.06	-	2.06	2.24	-	2.24
(b)	Tousem	-	-	-	2.24	-	2.24	2.24	-	2.24
(c)	Tamenglong	0.28	-	0.28	2.17	-	2.17	2.45	-	2.45
(d)	Nungba	-	-	-	1.59	-	1.59	1.59	-	1.59
2.	**Tamenglong**	**0.46**	**-**	**0.46**	**8.06**	**-**	**8.06**	**8.52**	**-**	**8.52**
(a)	Parbung	-	-	-	3.45	-	3.45	3.45	-	3.45
(b)	Thanlon	-	-	-	2.46	-	2.46	2.46	-	2.46
(c)	Henglep	-	-	-	3.63	-	3.63	3.63	-	3.63
(d)	Churachandpur	3.14	0.05	3.19	4.75	0.08	4.83	7.89	0.13	8.02
(e)	Singngat	-	-	-	2.82	-	2.82	2.82	-	2.82
(f)	Samulamlan	0.36	-	0.36	0.43	0.03	0.46	0.79	0.03	0.82
3.	**Churachandpur**	**3.50**	**0.05**	**3.55**	**17.54**	**0.11**	**17.65**	**21.04**	**0.16**	**21.20**
(a)	Tengnoupal	-	-	-	2.87	0.09	2.96	2.87	0.09	2.96

(b)	Chandel	0.98	-	0.98	1.10	0.06	1.16	2.08	0.06	2.14
(c)	Chakpikarong	0.62	-	0.62	2.66	0.13	2.79	3.28	0.13	3.41
4.	**Chandel**	**1.60**	**-**	**1.60**	**6.63**	**0.28**	**6.91**	**8.23**	**0.28**	**8.51**
(a)	Chingai	0.65	-	0.65	1.62	0.19	1.81	2.27	0.19	2.46
(b)	Ukhrul	-	-	-	7.40	0.88	8.28	7.40	0.88	8.28
(d)	Kamjong Chassad	-	-	-	1.54	0.11	1.65	1.54	0.11	1.65
(c)	Phungyar Phaisat	0.46	-	0.46	0.81	0.12	0.93	1.27	0.12	1.39
(e)	Kasom Khullen	-	-	-	1.10	0.04	1.14	1.10	0.04	1.14
5.	**Ukhrul**	**1.11**	**-**	**1.11**	**12.47**	**1.34**	**13.81**	**13.58**	**1.34**	**14.92**
	A – Hill Total	**30.78**	**0.91**	**31.69**	**44.70**	**2.31**	**47.01**	**75.48**	**3.22**	**78.70**
(a)	Imphal East-I	8.22	-	8.22	-	-	-	8.22	-	8.22
(b)	Imphal East-II	18.80	-	18.80	0.64	-	0.64	19.44	-	19.44
(c)	Jiribam	2.55	-	2.55	-	-	-	2.55	-	2.55
6.	**Imphal East**	**29.57**	**-**	**29.57**	**0.64**	**-**	**0.64**	**30.21**	**-**	**30.21**
(a)	Imphal West-I	18.63	-	18.63	-	-	-	18.63	-	18.63
(b)	Imphal West-II	4.50	-	4.50	-	-	-	4.50	-	4.50
7.	**Imphal West**	**23.13**	**-**	**23.13**	**-**	**-**	**-**	**23.13**	**-**	**23.13**
(a)	Bishnupur	5.66	-	5.66	-	-	-	5.66	-	5.66
(b)	Moirang	16.08	-	16.08	-	-	-	16.08	-	16.08
8.	**Bishnupur**	**21.74**	**-**	**21.74**	**-**	**-**	**-**	**21.74**	**-**	**21.74**
(a)	Thoubal	10.75	-	10.75	-	-	-	10.75	-	10.75
(b)	Kakching	15.00	-	15.00	-	-	-	15.00	-	15.00
9.	**Thoubal**	**25.75**	**-**	**25.75**	**-**	**-**	**-**	**25.75**	**-**	**25.75**
	B – Valley Total	**100.19**	**-**	**100.19**	**0.64**	**-**	**0.64**	**100.83**	**-**	**100.83**
	A+B State	**130.97**	**0.91**	**131.88**	**45.34**	**2.31**	**47.65**	**176.31**	**3.22**	**179.53**

ANNEXTURE – II(B)

Districtwise Area under Cereal Crops (Paddy & Maize) by different types of Cultivations for the Agricultural Year 2005-06 in Manipu

Area in '000 hects.

Sl. No.	Sub-Division /District	Area under Cereal Crops (Paddy & Maize) by different types of Cultivation								
		Permanent including Terrace			Jhum			Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	Mao Maram	9.10	0.03	9.13	-	0.05	0.05	9.10	0.08	9.18
(d)	Paomata	2.83	-	2.83	-	0.22	0.22	2.83	0.22	3.05
(b)	Purul	4.45	-	4.45	-	0.02	0.02	4.45	0.02	4.47
(c)	Sadar Hill West	4.44	-	4.44	-	0.55	0.55	4.44	0.55	4.99
(d)	Saitu Gamphazol	2.98	0.11	3.09	-	0.04	0.04	2.98	0.15	3.13
(e)	Sadar Hill East	6.01	0.56	6.57	-	-	-	6.01	0.56	6.57
1.	**Senapati**	**29.81**	**0.70**	**30.51**	**-**	**0.88**	**0.88**	**29.81**	**1.58**	**31.39**
(a)	Tamenglong West	-	-	-	1.63	-	1.63	1.63	-	1.63
(b)	Tamenglong North	0.75	-	0.75	1.96	-	1.96	2.71	-	2.71
(c)	Tamenglong	0.20	-	0.20	2.35	-	2.35	2.55	-	2.55
(d)	Nungba	2.69	-	2.69	-	-	-	2.69	-	2.69
2.	**Tamenglong**	**3.64**	**-**	**3.64**	**5.94**	**-**	**5.94**	**9.58**	**-**	**9.58**
(a)	Tipaimukh	-	-	-	4.02	-	4.02	4.02	-	4.02
(b)	Thanlon	-	-	-	2.04	0.02	2.06	2.04	0.02	2.06

(c)	Churachandpur North	-	-	-	2.93	-	2.93	2.93	-	2.93
(d)	Churachandpur	1.58	-	1.58	6.16	-	6.16	7.74	-	7.74
(e)	Singngat	-	-	-	3.64	0.24	3.88	3.64	0.24	3.88
3.	**Churachandpur**	**1.58**	**-**	**1.58**	**18.79**	**0.26**	**19.05**	**20.37**	**0.26**	**20.63**
(a)	Machi	0.54	-	0.54	1.05	0.05	1.10	1.59	0.05	1.64
(a)	Tengnoupal	-	-	-	1.20	0.06	1.26	1.20	0.06	1.26
(b)	Chandel	0.83	-	0.83	0.45	0.04	0.49	1.28	0.04	1.32
(c)	Chakpikarong	0.67	0.14	0.81	2.80	0.11	2.91	3.47	0.25	3.72
4.	**Chandel**	**2.04**	**0.14**	**2.18**	**5.50**	**0.26**	**5.76**	**7.54**	**0.40**	**7.94**
(a)	Ukhrul North	-	-	-	2.36	0.11	2.47	2.36	0.11	2.47
(b)	Ukhrul Central	-	-	-	7.93	0.36	8.29	7.93	0.36	8.29
(d)	Kamjong Chassad		-	-	2.01	0.02	2.03	2.01	0.02	2.03
(c)	Phungyar Phaisat	-	-	-	1.92	0.09	2.01	1.92	0.09	2.01
(d)	Ukhrul South	-	-	-	1.15	0.03	1.18	1.15	0.03	1.18
5.	**Ukhrul**	**-**	**-**	**-**	**15.37**	**0.61**	**15.98**	**15.37**	**0.61**	**15.98**
	A – Hill Total	**37.07**	**0.84**	**37.91**	**45.60**	**2.01**	**47.61**	**82.67**	**2.85**	**85.52**
(e)	Jiribam	3.14	-	3.14	-	-	-	3.14	-	3.14
(a)	Sawombung	12.86	-	12.86	-	-	-	12.86	-	12.86
(b)	Porompat	4.48	-	4.48	-	-	-	4.48	-	4.48
(c)	Keirao Bitra	5.27	-	5.27	-	-	-	5.27	-	5.27
6.	**Imphal East**	**25.75**	**-**	**25.75**	**-**	**-**	**-**	**25.75**	**-**	**25.75**
(a)	Lamsang	8.02	-	8.02	-	-	-	8.02	-	8.02
(b)	Patsoi	6.64	-	6.64	-	-	-	6.64	-	6.64

ANNEXTURE – II(B)

Districtwise Area under Cereal Crops (Paddy & Maize) by different types of Cultivations for the Agricultural Year 2005-06 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Sub-Division /District	Area under Cereal Crops (Paddy) by different types of Cultivation								
		Permanent including Terrace			Jhum			Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(c)	Lamphelpat	0.10	-	0.10	-	-	-	0.10	-	0..10
(d)	Wangoi	4.41	-	4.41	-	-	-	4.41	-	4.41
7.	**Imphal West**	**19.17**	**-**	**19.17**	**-**	**-**	**-**	**19.17**	**-**	**19.17**
(a)	Nambol	3.86	-	3.86	-	-	-	3.86	-	3.86
(a)	Bishnupur	4.11	-	4.11	-	-	-	4.11	-	4.11
(b)	Moirang	8.06	-	8.06-	-	-	-	8.06	-	8.06
8.	**Bishnupur**	**16.03**	**-**	**16.03**	**-**	**-**	**-**	**16.03**	**-**	**16.03**
(a)	Lilong	2.78	-	2.78	-	-	-	2.78	-	2.78
(b)	Thoubal	9.10	-	9.10	-	-	-	9.10	-	9.10
(c)	Kakching	10.76	-	10.76	-	-	-	10.76	-	10.76
9.	**Thoubal**	**22.64**	**-**	**22.64**	**-**	**-**	**-**	**22.64**	**-**	**22.64**
	B – Valley	**83.59**	**-**	**83.59**	**-**	**-**	**-**	**83.59**	**-**	**83.59**
	A+B State	**120.66**	**0.84**	**121.50**	**45.60**	**2.01**	**47.61**	**166.26**	**2.85**	**169.11**

ANNEXTURE – II(c)

Districtwise Area under Cereal Crops (Paddy & Maize) by different types of Cultivations for the Agricultural Year 2006-07 in Manipur

Area in '000 hects.

Sl. No.	Name of Sub-Division /District	Area under Cereal Crops (Paddy & Maize) by different types of Cultivation								
		Permanent including Terrace			Jhum			Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(a)	Mao Maram	6.47	0.06	6.53	-	0.07	0.07	6.47	0.13	6.60
(b)	Paomata	3.68	-	3.68	-	-	-	3.68	-	3.68
(c)	Purul	4.35	-	4.35	-	0.35	0.35	4.35	0.35	4.70
(d)	Sadar Hill West	3.29	-	3.29	-	0.49	0.49	3.29	0.49	3.78
(e)	Saitu Gamphazol	3.02	0.06	3.08	-	0.02	0.02	3.02	0.08	3.10
(f)	Sadar Hill East	4.39	0.05	4.44	-	0.11	0.11	4.39	0.16	4.55
1.	**Senapati**	**25.20**	**0.17**	**25.37**	**-**	**1.04**	**1.04**	**25.20**	**1.21**	**26.41**
(a)	Tamenglong West	-	-	-	2.39	-	2.39	2.39	-	2.39
(b)	Tamenglong North	-	-	-	2.41	-	2.41	2.41	-	2.41
(c)	Tamenglong	-	-	-	1.99	-	1.99	1.99	-	1.99
(d)	Nungba	2.73	-	2.73	-	-		2.73	-	2.73
2.	**Tamenglong**	2.73	-	2.73	6.79	-	6.79	9.52	-	9.52
(a)	Tipaimukh	-	-	-	3.79	-	3.79	3.79	-	3.79
(b)	Thanlon	-	-	-	3.42	0.12	3.54	3.42	0.12	3.54
(c)	CCpur North	-	-	-	5.34	-	5.34	5.34	-	5.34
(d)	CCpur	-	-	-	8.15	-	8.15	8.15	-	8.15
(e)	Singngat	-	-	-	2.49	0.22	2.71	2.49	0.22	2.71
3.	**Churachandpur**	**-**	**-**	**-**	**23.19**	**0.34**	**23.53**	**23.19**	**0.34**	**23.53**
(a)	Machi	1.08	0.01	1.09	1.68	0.17	1.85	2.76	0.18	2.94
(b)	Tengnoupal	-	-	-	1.04	0.06	1.10	1.04	0.06	1.10
(c)	Chandel	1.36	-	1.36	0.30	0.06	0.36	1.66	0.06	1.72
(d)	Chakpikarong	1.41	-	1.41	1.65	0.18	1.83	3.06	0.18	3.24
4.	**Chandel**	3.85	0.01	3.86	4.67	0.47	5.14	8.52	0.48	9.00
(a)	Ukhrul North	2.59	0.20	2.79	-	-	-	2.59	0.20	2.79
(b)	Ukhrul Central	6.16	0.55	6.71	-	-	-	6.16	0.55	6.71
(c)	Kamjong Chassad	1.60	0.15	1.75	-	-	-	1.60	0.15	1.75
(d)	Phungyar Phaisat	1.36	0.25	1.61	-	-	-	1.36	0.25	1.61
(e)	Ukhrul South	1.69	0.16	1.85	-	-	-	1.69	0.16	1.87
5.	**Ukhrul**	**13.40**	**1.31**	**14.71**	**-**	**-**	**-**	**13.40**	**1.31**	**14.71**
A.	**Hill Total**	**45.18**	**1.49**	**46.67**	**34.65**	**1.85**	**36.50**	**79.83**	**3.34**	**83.17**
(a)	Jiribam	2.88	-	2.88	-	-	-	2.88	-	2.88
(b)	Sawombung	12.04	-	12.04	-	-	-	12.04	-	12.04
(c)	Porompat	4.22	-	4.22	-	-	-	4.22	-	4.22
(d)	Keirao Bitra	5.15	-	5.15	-	-	-	5.15	-	5.15
6.	**Imphal East**	**24.29**	**-**	**24.29**	**-**	**-**	**-**	**24.29**	**-**	**24.29**
(a)	Lamsang	9.36	-	9.36	-	-	-	9.36	-	9.36
(b)	Patsoi	6.08	-	6.08	-	-	-	6.08	-	6.08
(c)	Lamphelpat	0.15	-	0.15	-	-	-	0.15	-	0.15
(d)	Wangoi	3.30	-	3.30	-	-	-	3.30	-	3.30
7.	**Imphal West**	**18.89**	**-**	**18.89**	**-**	**-**	**-**	**18.89**	**-**	**18.89**

ANNEXURE – II(c)

Districtwise Area under Cereal Crops (Paddy & Maize) by different types of Cultivations for the Agricultural Year 2006-07 in Manipur(concld.)

Area in '000 hects.

Sl. No.	Sub-Division /District	Area under Cereal Crops (Paddy & Maize) by different types of Cultivation								
		Permanent including Terrace			Jhum			Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(a)	Nambol	2.46	-	2.46	-	-	-	2.46	-	2.46
(b)	Bishnupur	3.18	-	3.18	-	-	-	3.18	-	3.18
(c)	Moirang	9.57	-	9.57	-	-	-	9.57	-	9.57
8.	**Bishnupur**	**15.21**	**-**	**15.21**	**-**	**-**	**-**	**15.21**	**-**	**15.21**
(a)	Lilong	4.10	-	4.10	-	-	-	4.10	-	4.10
(b)	Thoubal	11.00	-	11.00	-	-	-	11.00	-	11.00
(c)	Kakching	12.05	-	12.05	-	-	-	12.05	-	12.05
9.	**Thoubal**	**27.15**	**-**	**27.15**	**-**	**-**	**-**	**25.15**	**-**	**27.15**
B.	**Valley Total**	**85.54**	**-**	**85.54**	**-**	**-**	**-**	**85.54**	**-**	**85.54**
A+B	**State**	**130.72**	**1.49**	**132.21**	**34.65**	**1.85**	**36.50**	**165.37**	**3.34**	**168.71**

ANNEXURE –III(A)

Comparative Picture of Districtwise Area under Paddy by different types of Cultivation from the Year 2005-06 & 2006-07 in Manipur

Area in '000 hects.

Sl. No.	Sub-division/ District	Area under cereal crops (paddy) by different types of cultivation					
		Permanent including terrace		Jhum		Total	
		2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Mao Maram	9.10	6.47	-	-	9.10	6.47
(b)	Paomata	2.83	3.68	-	-	2.83	3.68
(c)	Purul	4.45	4.35	-	-	4.45	4.35
(d)	Sadar Hill West	4.44	3.29	-	-	4.44	3.29
(e)	Saitu Gamphazol	2.98	3.02	-	-	2.98	3.02
(f)	Sadar Hill East	6.01	4.39	-	-	6.01	4.39
1.	**Senapati**	**29.81**	**25.20**	**-**	**-**	**29.81**	**25.20**
(a)	Tamenglong West	-	-	1.63	2.39	1.63	2.39
(b)	Tamenglong North	0.75	-	1.96	2.41	2.71	2.41
(c)	Tamenglong	0.20	-	2.35	1.99	2.55	1.99
(d)	Nungba	2.69	2.73	-	-	2.69	2.73
2.	**Tamenglong**	**3.64**	**2.73**	**5.94**	**6.79**	**9.58**	**9.52**
(a)	Tipaimukh	-	-	4.02	3.79	4.02	3.79
(b)	Thanlon	-	-	2.04	3.42	2.04	3.42
(c)	CCpur North	-	-	2.93	5.34	2.93	5.34
(d)	CCpur	1.58	-	6.16	8.15	7.74	8.15
(e)	Singngat	-	-	3.64	2.49	3.64	2.49
3.	**Churachandpur**	**1.58**	**-**	**18.79**	**23.19**	**20.37**	**23.19**
(a)	Machi	0.54	1.08	1.05	1.68	1.59	2.76
(b)	Tengnoupal		-	1.20	1.04	1.20	1.04
(c)	Chandel	0.83	1.36	0.45	0.30	1.28	1.66
(d)	Chakpikarong	0.67	1.41	2.80	1.65	3.47	3.06
4.	**Chandel**	**2.04**	**3.85**	**5.50**	**4.67**	**7.54**	**8.52**
(a)	Ukhrul North	-	2.59	2.36	-	2.36	2.59
(b)	Ukhrul Central	-	6.16	7.93	-	7.93	6.16
(c)	Kamjong Chasad	-	1.60	2.01	-	2.01	1.60
(d)	Phungyar Phaisat	-	1.36	1.92	-	1.92	1.36
(e)	Ukhrul South	-	1.69	1.15	-	1.15	1.69
5.	**Ukhrul**		**13.40**	**15.37**	**-**	**15.37**	**13.40**
A	**Hill Total**	**37.07**	**45.18**	**45.60**	**34.65**	**82.67**	**79.83**

ANNEXURE –III(A)

Comparative Picture of Districtwise Area under Paddy by different types of Cultivation from the Year 2005-06 & 2006-07 in Manipur (Contd.)

Area in '000 hects.

Sl. No.	Sub-division/ District	Area under cereal crops (paddy) by different types of cultivation .					
		Permanent including terrace		Jhum		Total	
		2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Jiribam	3.14	2.88	-	-	3.14	2.88
(b)	Sawombung	12.86	12.04	-	-	12.86	12.04
(c)	Porompat	4.48	4.22	-	-	4.48	4.22
(d)	Keirao Bitra	5.27	5.15	-	-	5.27	5.15
6.	**Imphal East**	**25.75**	**24.29**	**-**	**-**	**25.75**	**24.29**
(a)	Lamsang	8.02	9.36	-	-	8.02	9.36
(b)	Patsoi	6.64	6.08	-	-	6.64	6.08
(c)	Lamphelpat	0.10	0.15	-	-	0.10	0.15
(d)	Wangoi	4.41	3.30	-	-	4.41	3.30
7.	**Imphal West**	**19.17**	**18.89**	**-**	**-**	**19.17**	**18.89**
(a)	Nambol	3.86	2.46	-	-	3.86	2.46
(b)	Bishnupur	4.11	3.18	-	-	4.11	3.18
(c)	Moirang	8.06	9.57	-	-	8.06	9.57
8.	**Bishnupur**	**16.03**	**15.21**	**-**	**-**	**16.03**	**15.21**
(a)	Lilong	2.78	4.10	-	-	2.78	4.10
(b)	Thoubal	9.10	11.00	-	-	9.10	11.00
(c)	Kakching	10.76	12.05	-	-	10.76	12.05
9.	**Thoubal**	**22.64**	**27.15**	**-**	**-**	**22.64**	**27.15**
B.	**Valley Total**	**83.59**	**85.54**	**-**	**-**	**83.59**	**85.54**
A+B	**State**	**120.66**	**130.72**	**45.60**	**34.65**	**166.26**	**165.37**

ANNEXURE - IV(A)

District wise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2004-05 in Manipur

Area in `000 hects.

Sl. No.	Block/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		High Yielding Varieties			Improved Varieties		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Mao-Maram	-	-	-	-	-	-
(b)	Paomata	-	-	-	-	-	-
(c)	Kangpokpi	-	-	-	0.91	-	0.91
(d)	Saikul	0.98	-	0.98	3.20	-	3.20
1.	Senapati	0.98	-	0.98	4.11	-	4.11
(a)	Tousem	-	-	-	-	-	-
(b)	Tamei	-	-	-	0.18	-	0.18
(c)	Tamenglong	-	-	-	0.05	-	0.05
(d)	Nungba	-	-	-	-	-	-
2.	Tamenglong	-	-	-	0.23	-	0.23
(a)	Parbung	-	-	-	-	-	-
(b)	Thanlon	-	-	-	-	-	-
(c)	Henglep	-	-	-	-	-	-
(d)	CCpur	-	-	--	0.70	-	0.70
(e)	Singhat	-	-	-	-	-	-
(f)	Samulanlan	-	-	-	0.06	-	0.06
3.	CCpur	-	-	-	0.76	-	0.76
(a)	Tengnoupal	--	-	-	2.87	-	2.87
(b)	Chandel	--	-	-	1.15	-	1.15
(c)	Chakpikarong	-	-	-	2.60	-	2.60
4.	Chandel	-	-	-	6.62	-	6.62
(a)	Chingai	-	-	-	-	-	-
(b)	Ukhrul	-	-	-	-	-	-
(c)	Kamjong Chasad	-	-	-	-	0.08	0.08
(d)	Phungyar Phaisat	-	-	-	-	-	-
(e)	Kasom Khullen	-	-	-	-	-	-
5.	Ukhrul	-	-	-	-	0.08	0.08
A	Hill Total	0.98	-	0.98	11.72	0.08	11.80
(a)	Jiribam	2.55	-	2.55	-	-	-
(b)	Sawombung	7.70	-	7.70	0.12	-	0.12
(c)	Keirao Bitra	9.69	-	9.69	-	-	-
6.	Imphal East	19.94	-	19.94	0.12	-	0.12
(a)	Lamsang	-	-	-	18.18	-	18.18
(b)	Wangoi	-	-	-	4.27	-	4.27
7.	Imphal West	-	-	-	22.45	-	22.45
(a)	Bishnupur	1.05	-	1.05	4.01	-	4.01
(b)	Moirang	0.64	-	0.64	15.44	-	15.44
8.	Bishnupur	1.69	-	1.69	19.45	-	19.45
(a)	Thoubal	-	-	-	10.31	-	10.31
(b)	Kakching	-	-	-	14.66	-	14.66
9.	**Thoubal**	**-**	**-**	**-**	**24.97**	**-**	**24.97**
B.	**Valley Total**	**21.63**	**-**	**21.63**	**66.99**	**-**	**66.99**
	State(A+B)	**22.61**	**-**	**22.61**	**78.71**	**0.08**	**78.79**

ANNEXURE - IV (A)

District wise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2004-05 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Block/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		Others			Total		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)
(a)	**Mao-Maram**	**5.17**	**0.17**	**5.34**	**5.17**	**0.17**	**5.34**
(b)	**Paomata**	**4.88**	**0.01**	**4.89**	**4.88**	**0.01**	**4.89**
(c)	**Kangpokpi**	**8.77**	**1.19**	**9.96**	**9.68**	**1.19**	**10.87**
(d)	**Saikul**	**0.20**	**0.07**	**0.27**	**4.38**	**0.07**	**4.45**
1.	Senapati	19.02	1.44	20.46	24.11	1.44	25.55
(a)	**Tousem**	**2.24**	**-**	**2.24**	**2.24**	**-**	**2.24**
(b)	**Tamei**	**2.06**	**-**	**2.06**	**2.24**	**-**	**2.24**
(c)	**Tamenglong**	**2.40**	**-**	**2.40**	**2.45**	**-**	**2.45**
(d)	**Nungba**	**1.59**	**-**	**1.59**	**1.59**	**-**	**1.59**
2.	Tamenglong	8.29	-	8.29	8.52	-	8.52
(a)	**Parbung**	**3.45**	**-**	**3.45**	**3.45**	**-**	**3.45**
(b)	**Thanlon**	**2.46**	**-**	**2.46**	**2.46**	**-**	**2.46**
(c)	**Henglep**	**3.63**	**-**	**3.63**	**3.63**	**-**	**3.63**
(d)	**CCpur**	**7.19**	**0.13**	**7.32**	**7.89**	**0.13**	**8.02**
(e)	**Singhat**	**2.82**	**-**	**2.82**	**2.82**	**-**	**2.82**
(f)	**Samulanlan**	**0.73**	**0.03**	**0.76**	**0.79**	**0.03**	**0.82**
3.	CCpur	20.28	0.16	20.44	21.04	0.16	21.20
(a)	**Tengnoupal**	**-**	**0.09**	**0.09**	**2.87**	**0.09**	**2.96**
(b)	**Chandel**	**0.93**	**0.06**	**0.99**	**2.08**	**0.06**	**2.14**
(c)	**Chakpikarong**	**0.68**	**0.13**	**0.81**	**3.28**	**0.13**	**3.41**
4.	Chandel	1.61	0.28	1.89	8.23	0.28	8.51
(a)	**Chingai**	**2.27**	**0.19**	**2.46**	**2.27**	**0.19**	**2.46**
(b)	**Ukhrul**	**7.40**	**0.88**	**8.28**	**7.40**	**0.88**	**8.28**
(c)	**Kamjong Chasad**	**1.54**	**0.11**	**1.65**	**1.54**	**0.11**	**1.65**
(d)	**Phungyar Phaisat**	**1.27**	**0.04**	**1.31**	**1.27**	**0.12**	**1.39**
(e)	**Kasom Khullen**	**1.10**	**0.04**	**1.14**	**1.10**	**0.04**	**1.14**
5.	Ukhrul	13.58	1.26	14.84	13.58	1.34	14.92
A	Hill Total	62.78	3.14	65.92	75.48	3.22	78.70
(a)	**Jiribam**	**-**	**-**	**-**	**2.55**	**-**	**2.55**
(b)	**Sawombung**	**0.40**	**-**	**0.40**	**8.22**	**-**	**8.22**
(c)	**Keirao Bitra**	**9.75**	**-**	**9.75**	**19.44**	**-**	**19.44**
6.	Imphal East	10.15	-	10.15	30.21	-	30.21
(a)	**Lamsang**	**0.45**	**-**	**0.45**	**18.63**	**-**	**18.63**
(b)	**Wangoi**	**0.23**	**-**	**0.23**	**4.50**	**-**	**4.50**
7.	Imphal West	0.68	-	0.68	23.13	-	23.13
(a)	**Bishnupur**	**0.60**	**-**	**0.60**	**5.66**	**-**	**5.66**
(b)	**Moirang**	**-**	**-**	**-**	**16.08**	**-**	**16.08**
8.	Bishnupur	0.60	-	0.60	21.74	-	21.74
(a)	**Thoubal**	**0.44**	**-**	**0.44**	**10.75**	**-**	**10.75**
(b)	**Kakching**	**0.34**	**-**	**0.34**	**15.00**	**-**	**15.00**
9.	Thoubal	0.78	-	0.78	25.75	-	25.75
B.	Valley Total	12.21	-	12.21	100.83	-	100.83

	State (A+B)	74.99	3.14	78.13	176.31	3.22	179.53

ANNEXURE- IV(b)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2005-06 in Manipur

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		High Yielding Varieties			Improved Varieties		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	**Mao Maram**	-	-	-	-	-	-
(b)	**Paomata**	-	-	-	-	-	--
(c)	**Purul**		-	-	-	-	-
(d)	**Sadar Hill West**	-	-	-	-	-	-
(e)	**Saitu Gamphazol**	-	-	-	-	-	-
(f)	**Sadar Hill East**	**0.91**	-	**0.91**	**2.01**	-	**2.01**
1.	Senapati	0.91	-	0.91	2.01	-	2.01
(a)	**Tamenglong West**	-	-	-	-	-	-
(b)	**Tamenglong North**	-	-	-	-	-	-
(c)	**Tamenglong**	-	-	-	-	-	-
(d)	**Nungba**	-	-	-	**2.69**	-	**2.69**
2.	Tamenglong	-	-	-	**2.69**	-	**2.69**
(a)	**Tipaimukh**	-	-	-	-	-	-
(b)	**Thanlon**	-	-	-	-	-	-
(c)	**CCpur North**	-	-	-	-	-	-
(d)	**CCpur**	-	-	-	-	-	-
(e)	**Singngat**	-	-	-	-	-	-
3.	Churachandpur	-	-	-	-	-	-
(a)	**Machi**	-			-		-
(b)	**Tengnoupal**	-	-	-	**1.20**	**0.06**	**1.26**
(c)	**Chandel**	-	-	-	**0.83**	-	**0.83**
(d)	**Chakpikarong**	-	-	-	**2.07**	**0.14**	**2.21**
4.	Chandel	-	-	-	**4.10**	**0.20**	**4.30**
(a)	**Ukhrul North**	-	-	-	-	-	-
(b)	**Ukhrul Central**	-	-	-	-	-	-
(c)	**Kamjong Chassad**	-	-	-	-	-	-
(d)	**Phungyar Phaisat**	-	-	-	-	-	-
(e)	**Ukhrul South**	-	-	-	-	-	-
5.	Ukhrul	-	-	-	-	-	-
A.	Hill Total	0.91	-	0.91	8.80	0.20	9.00

Annexure IV(b)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2005-06 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		High Yielding Varieties			Improved Varieties		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	**Jiribam**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Sawombung**	**12.86**	**-**	**12.86**	**-**	**-**	**-**
(c)	**Porompat**	**2.14**	**-**	**2.14**	**-**	**-**	**-**
(d)	**Keirao Bitra**	**2.38**	**-**	**2.38**	**-**	**-**	**-**
6.	Imphal East	17.38	-	17.38	-	-	-
(a)	**Lamsang**	-	-	-	-	-	-
(b)	**Patsoi**	**-**	**-**	**-**	**4.22**	**-**	**4.22**
(c)	**Lamphelpat**	**-**	**-**	**-**	**0.10**	**-**	**0.10**
(d)	**Wangoi**	**0.02**	**-**	**0.02**	**2.80**	**-**	**2.80**
7.	Imphal West	0.02	-	0.02	7.12	-	7.12
(a)	**Nambol**	**2.96**	**-**	**2.96**	**0.20**	**-**	**0.20**
(b)	**Bishnupur**	**2.90**	**-**	**2.90**	**1.11**	**-**	**1.11**
(c)	**Moirang**	**2.96**	**-**	**2.96**	**5.10**	**-**	**5.10**
8.	Bishnupur	8.82	-	8.82	6.41	-	6.41
(a)	**Lilong**	1.72	-	1.72	1.06	-	1.06
(b)	**Thoubal**	-	-	-	9.10	-	9.10
(c)	**Kakching**	-	-	-	10.76	-	10.76
9.	Thoubal	1.72	-	1.72	20.92	-	20.92
B.	Valley Total	27.94	-	27.94	34.45	-	34.45
	State(A+B)	28.85	-	28.85	43.25	0.20	43.45

ANNEXURE - IV(b)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2005-06 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		Others			Total		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)
(a)	**Mao Maram**	**9.10**	**0.08**	**9.18**	**9.10**	**0.08**	**9.18**
(b)	**Paomata**	**2.83**	**0.22**	**3.05**	**2.83**	**0.22**	**3.05**
(c)	**Purul**	**4.45**	**0.02**	**4.47**	**4.45**	**4.02**	**4.47**
(d)	**Sadar Hill West**	**4.44**	**0.55**	**4.99**	**4.44**	**0.55**	**4.99**
(e)	**Saitu Gamphazol**	**2.98**	**0.15**	**3.13**	**2.98**	**0.15**	**3.13**
(f)	**Sadar Hill East**	**3.09**	**0.56**	**3.65**	**6.01**	**0.56**	**6.57**
1.	Senapati	26.89	1.58	28.47	29.81	1.58	31.39
(a)	**Tamenglong West**	**1.63**	**-**	**1.63**	**1.63**	**-**	**1.63**
(b)	**Tamenglong North**	**2.71**	**-**	**2.71**	**2.71**	**-**	**2.71**
(c)	**Tamenglong**	**2.55**	**-**	**2.55**	**2.55**	**-**	**2.55**
(d)	**Nungba**	**-**	**-**	**-**	**2.69**	**-**	**2.69**
2.	Tamenglong	6.89	-	6.89	9.58	-	9.58
(a)	**Tipaimukh**	**4.02**	**-**	**4.02**	**4.02**	**-**	**4.02**
(b)	**Thanlon**	**2.04**	**0.02**	**2.06**	**2.04**	**2.02**	**2.06**
(c)	**CCpur North**	**2.93**	**-**	**2.93**	**2.93**	**-**	**2.93**
(d)	**CCpur**	**7.74**	**-**	**7.74**	**7.74**	**-**	**7.74**
(e)	**Singngat**	**3.64**	**0.24**	**3.88**	**3.64**	**0.24**	**3.88**
3.	Churachandpur	20.37	0.26	20.63	20.37	0.26	20.63
(a)	**Machi**	**1.59**	**0.05**	**1.64**	**1.59**	**0.05**	**1.64**
(b)	**Tengnoupal**	**-**	**-**	**-**	**1.20**	**0.06**	**1.26**
(c)	**Chandel**	**0.45**	**0.04**	**0.49**	**1.28**	**0.04**	**1.32**
(d)	**Chakpikarong**	**1.40**	**0.11**	**1.51**	**3.47**	**0.25**	**3.72**
4.	Chandel	3.44	0.20	3.64	7.54	0.40	7.94
(a)	**Ukhrul North**	**2.36**	**0.11**	**2.47**	**2.36**	**0.11**	**2.47**
(b)	**Ukhrul Central**	**7.93**	**0.36**	**8.29**	**7.93**	**0.36**	**8.29**
(c)	**Kamjong Chassad**	**2.01**	**0.02**	**2.03**	**2.01**	**0.02**	**2.03**

(d)	**Phungyar Phaisat**	**1.92**	**0.09**	**2.01**	**1.92**	**0.09**	**2.01**
(e)	**Ukhrul South**	**1.15**	**0.03**	**1.18**	**1.15**	**0.03**	**1.18**
5.	Ukhrul	15.37	0.61	15.98	15.37	0.61	15.98
A.	Hill Total	72.96	2.65	75.61	82.67	2.85	85.52

Annexure IV(b)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2005-06 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		Others			Total		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)
(a)	**Jiribam**	**3.14**	**-**	**3.14**	**3.14**	**-**	**3.14**
(b)	**Sawombung**	**-**	**-**	**-**	**12.86**	**-**	**12.86**
(c)	**Porompat**	**2.34**	**-**	**2.34**	**4.48**	**-**	**4.48**
(d)	**Keirao Bitra**	**2.89**	**-**	**2.89**	**5.27**	**-**	**5.27**
6.	Imphal East	8.37	-	8.37	25.75	-	25.75
(a)	**Lamsang**	**8.02**	**-**	**8.02**	**8.02**	**-**	**8.02**
(b)	**Patsoi**	**2.42**	**-**	**2.42**	**6.64**	**-**	**6.64**
(c)	**Lamphelpat**	**-**	**-**	**-**	**0.10**	**-**	**0.10**
(d)	**Wangoi**	**1.59**	**-**	**1.59**	**4.41**	**-**	**4.41**
7.	Imphal West	12.03	-	12.03	19.17	-	19.17
(a)	**Nambol**	**0.70**	**-**	**0.70**	**3.86**	**-**	**3.86**
(b)	**Bishnupur**	**0.10**	**-**	**0.10**	**4.11**	**-**	**4.11**
(c)	**Moirang**	**-**	**-**	**-**	**8.06**	**-**	**8.06**
8.	Bishnupur	0.80	-	0.80	16.03	-	16.03
(a)	**Lilong**	**-**	**-**	**-**	**2.78**	**-**	**2.78**
(b)	**Thoubal**	**-**	**-**	**-**	**9.10**	**-**	**9.10**
(c)	**Kakching**	**-**	**-**	**-**	**10.76**	**-**	**10.76**
9.	Thoubal	-	-	-	22.64	-	22.64
B.	Valley Total	21.20	-	21.20	83.59	-	83.59
	State(A+B)	94.16	2.65	96.81	166.26	2.85	169.11

ANNEXURE- IV(c)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2006-07 in Manipur

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		High Yielding Varieties			Improved Varieties		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	Mao Maram	-	-	-	-	-	-
(b)	Paomata	-	-	-	-	-	-
(c)	Purul	-	-	-	-	-	-
(d)	Sadar Hill West	0.22	-	0.22	0.22	-	0.22
(e)	Saitu Gamphazol	0.21	-	0.21	1.06	-	1.06
(f)	Sadar Hill East	1.27	-	1.27	2.74	-	2.74
1.	Senapati	1.70	-	1.70	4.02	-	4.02
(a)	Tamenglong West	-	-	-	-	-	-
(b)	Tamenglong North	-	-	-	-	-	-
(c)	Tamenglong	-	-	-	-	-	-
(d)	Nungba	-	-	-	-	-	-
2.	Tamenglong	-	-	-	-	-	-
(a)	Tipaimukh	-	-	-	-	-	-
(b)	Thanlon	-	-	-	-	-	-
(c)	CCpur North	-	-	-	-	-	-
(d)	CCpur	-	-	-	-	-	-
(e)	Singngat	-	-	-	-	-	-
3.	Churachandpur	-	-	-	-	-	-
(a)	Machi	-	-	-	1.08	-	1.08
(b)	Tengnoupal	-	-	-	1.04	0.06	1.10

(c)	**Chandel**	**-**	**-**	**-**	**1.66**	**-**	**1.66**
(d)	**Chakpikarong**	-	-	-	**3.06**	**-**	**3.06**
4.	Chandel	**-**	**-**	**-**	**6.84**	**0.06**	**6.90**
(a)	**Ukhrul North**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Ukhrul Central**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Kamjong Chassad**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Phungyar Phaisat**	**-**	**-**	**-**	**-**	**-**	**-**
(e)	**Ukhrul South**	-	-	-	-	-	-
5.	Ukhrul	-	-	-	-		
A.	Hill Total	1.70	**-**	1.70	10.86	0.06	10.92

Annexure IV(c)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2006-07 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		High Yielding Varieties			Improved Varieties		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a)	**Jiribam**	**-**	**-**	**-**	**2.88**	**-**	**2.88**
(b)	**Sawombung**	**5.24**	**-**	**5.24**	**0.06**	**-**	**0.06**
(c)	**Porompat**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Keirao Bitra**	**2.10**	**-**	**2.10**	**-**	**-**	**-**
6.	Imphal East	7.34	-	7.34	2.94	-	2.94
(a)	**Lamsang**	-	-	-	-	-	-
(b)	**Patsoi**	**0.56**	**-**	**0.56**	**5.52**	**-**	**5.52**
(c)	**Lamphelpat**	**-**	**-**	**-**	**0.15**	**-**	**0.15**
(d)	**Wangoi**	**-**	**-**	**-**	**1.20**	**-**	**1.20**
7.	Imphal West	0.56	-	0.56	6.87	-	6.87
(a)	**Nambol**	**1.72**	**-**	**1.72**	**0.27**	**-**	**0.27**
(b)	**Bishnupur**	**2.19**	**-**	**2.19**	**0.91**	**-**	**0.91**
(c)	**Moirang**	**-**	**-**		**9.57**	**-**	**9.57**
8.	Bishnupur	3.91	-	3.91	10.75	-	10.75
(a)	**Lilong**	**-**	**-**		**4.10**	**-**	**4.10**
(b)	**Thoubal**	**0.77**	**-**	**0.77**	**9.30**	**-**	**9.30**
(c)	**Kakching**	-	-		**7.56**	**-**	**7.56**

9.	Thoubal	0.77	-	0.77	20.96	-	20.96
B.	Valley Total	12.58	-	12.58	41.52	-	41.52
	State(A+B)	14.28	-	14.28	52.38	0.06	52.44

Annexure IV(c)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2006-07 in Manipur(Contd.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		Others			Total		
		Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)
(a)	**Mao Maram**	**6.47**	**0.06**	**6.53**	**6.47**	**0.06**	**6.53**
(b)	**Paomata**	**3.68**	**0.07**	**3.75**	**3.68**	**0.07**	**3.75**
(c)	**Purul**	**4.35**	**0.35**	**4.70**	**4.35**	**0.35**	**4.70**
(d)	**Sadar Hill West**	**2.85**	**0.49**	**3.34**	**3.29**	**0.49**	**3.78**
(e)	**Saitu Gamphazol**	**1.75**	**0.08**	**1.83**	**3.02**	**0.08**	**3.10**
(f)	**Sadar Hill East**	**0.38**	**0.16**	**0.54**	**4.39**	**0.16**	**4.55**
1.	Senapati	19.48	1.21	20.69	25.20	1.21	26.41
(a)	**Tamenglong West**	**2.39**	**-**	**2.39**	**2.39**	**-**	**2.39**
(b)	**Tamenglong North**	**2.41**	**-**	**2.41**	**2.41**	**-**	**2.41**
(c)	**Tamenglong**	**1.99**	**-**	**1.99**	**1.99**	**-**	**1.99**
(d)	**Nungba**	**2.73**	**-**	**2.73**	**2.73**	**-**	**2.73**
2.	Tamenglong	9.52	-	9.52	9.52	-	9.52
(a)	**Tipaimukh**	**3.79**	**-**	**3.79**	**3.79**	**-**	**3.79**
(b)	**Thanlon**	**3.42**	**0.12**	**3.54**	**3.42**	**0.12**	**3.54**

(c)	**CCpur North**	**5.34**	**-**	**5.34**	**5.34**	**-**	**5.34**
(d)	**CCpur**	**8.15**	**-**	**8.15**	**8.15**	**-**	**8.15**
(e)	**Singngat**	**2.49**	**0.22**	**2.71**	**2.49**	**0.22**	**2.71**
3.	Churachandpur	23.19	0.34	23.53	23.19	0.34	23.53
(a)	**Machi**	**1.68**	**0.18**	**1.86**	**2.76**	**0.18**	**2.94**
(b)	**Tengnoupal**	**-**	**-**	**-**	**1.04**	**0.06**	**1.10**
(c)	**Chandel**	**-**	**0.06**	**0.06**	**1.66**	**0.06**	**1.72**
(d)	**Chakpikarong**	**-**	**0.18**	**0.18**	**3.06**	**0.18**	**3.24**
4.	Chandel	1.68	0.42	2.10	8.52	0.48	9.00
(a)	**Ukhrul North**	**2.59**	**0.20**	**2.79**	**2.59**	**0.20**	**2.79**
(b)	**Ukhrul Central**	**6.16**	**0.55**	**6.71**	**6.16**	**0.55**	**6.71**
(c)	**Kamjong Chassad**	**1.60**	**0.15**	**1.75**	**1.60**	**0.15**	**1.75**
(d)	**Phungyar Phaisat**	**1.36**	**0.25**	**1.61**	**1.36**	**0.25**	**1.61**
(e)	**Ukhrul South**	**1.69**	**0.16**	**1.85**	**1.69**	**0.16**	**1.85**
5.	Ukhrul	13.40	1.31	14.71	13.40	1.31	14.71
	Hill Total	67.27	3.28	70.55	79.83	3.34	83.17

Annexure IV(c)

Districtwise area under Cereal Crops (Paddy and Maize) by different varieties of seeds used for the agricultural year 2006-07 in Manipur(Concld.)

Area in `000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different varieties of seeds used					
		Others			Total		
		Paddy	Maize	Total	Paddy	Maize	Total
1	2	(9)	(10)	(11)	(12)	(13)	(14)
(a)	**Jiribam**	**-**	**-**	**-**	**2.88**	**-**	**2.88**
(c)	**Porompat**	**4.22**	**-**	**4.22**	**4.22**	**-**	**4.22**
(d)	**Keirao Bitra**	**3.05**	**-**	**3.05**	**5.15**	**-**	**5.15**
6.	Imphal East	14.01	-	14.01	24.29	-	24.29
(a)	**Lamsang**	**9.36**	**-**	**9.36**	**9.36**	**-**	**9.36**
(b)	**Patsoi**	**-**	**-**	**-**	**6.08**	**-**	**9.08**
(c)	**Lamphelpat**	**-**	**-**	**-**	**0.15**	**-**	**0.15**
(d)	**Wangoi**	**2.10**	**-**	**2.10**	**3.30**	**-**	**3.30**
7.	Imphal West	11.46	-	11.46	18.89	-	18.89
(a)	**Nambol**	**0.47**	**-**	**0.47**	**2.46**	**-**	**2.46**
(b)	**Bishnupur**	**0.08**	**-**	**0.08**	**3.18**	**-**	**3.18**

(c)	**Moirang**	**-**	**-**	**-**	**9.57**	**-**	**9.57**
8.	Bishnupur	0.55	-	0.55	15.21	-	15.21
(a)	**Lilong**	**-**	**-**	**-**	**4.10**	**-**	**4.10**
(b)	**Thoubal**	**0.93**	**-**	**0.93**	**11.00**	**-**	**11.00**
(c)	**Kakching**	**4.49**	**-**	**4.49**	**12.05**	**-**	**12.05**
9.	Thoubal	5.42	-	5.42	27.15	-	27.15
B.	Valley Total	31.44	-	31.44	85.54	-	85.54
	State(A+B)	98.71	3.28	101.99	165.37	3.34	168.71

ANNEXURE –V

Comparative Picture of District wise Area under Paddy by different types of varieties of seeds used for the year 2005-06 & 2006-07 in Manipur

Area in '000 hects.

Sl. No.	Sub-division/ District	Area under cereal crop (paddy) by different varieties of seeds used							
		High Yielding Varieties		Improved Varities		Others		Total	
		2005 -06	2006-07	2005 -06	2006-07	2005 -06	2006-07	2005 -06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(a)	**Mao Maram**	**-**	**-**	**-**	**-**	**9.10**	**6.47**	**9.10**	**6.47**
(b)	**Paomata**	**-**	**-**	**-**	**-**	**2.83**	**3.68**	**2.83**	**3.68**
(c)	**Purul**	**-**	**-**	**-**	**-**	**4.45**	**4.35**	**4.45**	**4.35**
(d)	**Sadar Hill West**	**-**	**0.22**	**-**	**0.22**	**4.44**	**2.85**	**4.44**	**3.29**
(e)	**Saitu Gamphazol**	**-**	**0.21**	**-**	**1.06**	**2.98**	**1.75**	**2.98**	**3.02**
(f)	**Sadar Hill East**	**0.91**	**1.27**	**2.01**	**2.74**	**3.09**	**0.38**	**6.01**	**4.39**
1.	Senapati	0.91	1.70	2.01	4.02	26.89	19.48	29.81	25.20

(a)	**Tamenglong West**	**-**	**-**	**-**	**-**	**1.63**	**2.39**	**1.63**	**2.39**
(b)	**Tamenglong North**	**-**	**-**	**-**	**-**	**2.71**	**2.41**	**2.71**	**2.41**
(c)	**Tamenglong**	**-**	**-**	**-**	**-**	**2.55**	**1.99**	**2.55**	**1.99**
(d)	**Nungba**	**-**	**-**	**2.69**	**-**	**-**	**2.73**	**2.69**	**2.73**
2.	Tamenglong	-	-	2.69	-	6.89	9.52	9.58	9.52
(a)	**Tipaimukh**	**-**	**-**	**-**	**-**	**4.02**	**3.79**	**4.02**	**3.79**
(b)	**Thanlon**	**-**	**-**	**-**	**-**	**2.04**	**3.42**	**2.04**	**3.42**
(c)	**CCpur North**	**-**	**-**	**-**	**-**	**2.93**	**5.34**	**2.93**	**5.34**
(d)	**CCpur**	**-**	**-**	**-**	**-**	**7.74**	**8.15**	**7.74**	**8.15**
(e)	**Singngat**	**-**	**-**	**-**	**-**	**3.64**	**2.49**	**3.64**	**2.49**
3.	CCpur	-	-	-	-	20.37	23.19	20.37	23.19
a)	**Machi**	**-**	**-**	**-**	**1.08**	**1.59**	**1.68**	**1.59**	**2.76**
(b)	**Tengnoupal**	**-**	**-**	**1.20**	**1.04**	**-**	**-**	**1.20**	**1.04**
(c)	**Chandel**	**-**	**-**	**0.83**	**1.66**	**0.45**	**-**	**1.28**	**1.66**
(d)	**Chakpikarong**	**-**	**-**	**2.07**	**3.06**	**1.40**	**-**	**3.47**	**3.06**
4.	Chandel	-	-	4.10	6.84	3.44	1.68	7.54	8.52
(a)	**Ukhrul North**	**-**	**-**	**-**	**-**	**2.36**	**2.59**	**2.36**	**2.59**
(b)	**Ukhrul Central**	**-**	**-**	**-**	**-**	**7.93**	**6.16**	**7.93**	**6.16**
(c)	**Kamjong Chassad**	**-**	**-**	**-**	**-**	**2.01**	**1.60**	**2.01**	**1.60**
(d)	**Phungyar Phaisat**	**-**		**-**	**-**	**1.92**	**1.36**	**1.92**	**1.36**
(e)	**Ukhrul South**	**-**	**-**	**-**	**-**	**1.15**	**1.69**	**1.15**	**1.69**
5.	Ukhrul	-	-	-	-	15.37	13.40	15.37	13.40
A	Hill Total	0.91	1.70	8.80	10.86	72.96	67.27	82.67	79.83

ANNEXTURE –V

Comparative Picture of District wise Area under Paddy by different types of varieties of seeds used for the year 2005-06 & 2006-07(Conctd.)

Area in '000 hects.

Sl. No.	Sub-division/ District	Area under cereal crop (paddy) by different varieties of seeds used							
		High Yielding Varieties		Improved Varieties		Others		Total	
		2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(a)	**Jiribam**	**-**	**-**		**2.88**	**3.14**	**-**	**3.14**	**2.88**
(b)	**Sawombung**	**12.86**	**5.24**	**-**	**0.06**	**-**	**6.74**	**12.86**	**12.04**
(c)	**Porompat**	**2.14**	**-**	**-**	**-**	**2.34**	**4.22**	**4.48**	**4.22**

(d)	**Keirao Bitra**	**2.38**	**2.10**		**-**	**2.89**	**3.05**	**5.27**	**5.15**
6.	Imphal East	17.38	7.34		2.94	8.37	14.01	25.75	24.29
(a)	**Lamsang**	**-**	**-**		**-**	**8.02**	**9.36**	**8.02**	**9.36**
(b)	**Patsoi**	**-**	**0.56**	**4.22**	**5.52-**	**2.42**	**-**	**6.64**	**6.08**
(c)	**Lamphelpat**		**-**	**0.10**	**0.15**	**--**	**-**	**0.10**	**0.15**
(d)	**Wangoi**	**0.02**	**-**	**2.80**	**1.20**	**1.59**	**2.10**	**4.41**	**3.30**
7.	Imphal West	0.02	0.56	7.12	6.87	12.03	11.46	19.17	18.89
(a)	**Nambol**	**2.96**	**1.72**	**0.20**	**0.27**	**0.70**	**0.47**	**3.86**	**2.46**
(b)	**Bishnupur**	**2.90**	**2.19**	**1.11**	**0.91**	**0.10**	**0.08**	**4.11**	**3.18**
(c)	**Moirang**	**2.96**	**-**	**5.10**	**9.57**	**-**	**-**	**8.06**	**9.57**
8.	Bishnupur	8.82	3.91	6.41	10.75	0.80	0.55	16.03	15.21
(a)	**Lilong**	**1.72**	**-**	**1.06**	**4.10**	**--**	**-**	**2.78**	**4.10**
(b)	**Thoubal**	**-**	**0.77**	**9.10**	**9.30**	**-**	**0.93**	**9.10**	**11.00**
(c)	**Kakching**	**-**	**-**	**10.76**	**7.56**	**-**	**4.49**	**10.76**	**12.05**
9.	Thoubal	1.72	0.77	20.92	20.96	-	5.42	22.64	27.15
B.	Valley Total	27.94	12.58	34.45	41.52	21.20	31.44	83.59	85.54
	State(A+B)	28.85	14.28	43.25	52.38	94.16	98.71	166.26	165.37

ANNEXURE VI(A)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2004-05 in Manipur

Area in ’000 hects.

Sl. No.	**Block/District**	**Area under cereal crops(paddy and maize) by different type of irrigation**

		Not irrigated			Irrigated					
					Canal			Tank		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	**Mao-Maram**	**5.17**	**0.17**	**5.34**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Paomata**	**4.88**	**0.01**	**4.89**						
(c)	**Kangpokpi**	**9.68**	**1.19**	**10.87**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Saikul**	**0.64**	**0.07**	**0.71**	**-**	**-**	**-**	**-**	**-**	**-**
1.	Senapati	20.37	**1.44**	**21.81**	**-**	**-**	**-**	**-**	**-**	**-**
(a)	**Tousem**	**2.24**	**-**	**2.24**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Tamei**	**2.06**	**-**	**2.06**	**-**	**-**	**-**	**-**	**-**	
(c)	**Tamenglong**	**2.17**	**-**	**2.17**	**0.21**	**-**	**0.21**	**-**	**-**	**-**
(d)	**Nungba**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2.	Tamenglong	**6.47**	**-**	**6.47**	**0.21**	**-**	**0.21**	**-**	**-**	**-**
(a)	**Parbung**	**3.45**	**-**	**3.45**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Thanlon**	**2.46**	**-**	**2.46**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Henglep**	**3.63**	**-**	**3.63**						
(d)	**CCpur**	**4.75**	**0.13**	**4.88**	**-**	**-**	**-**	**-**	**-**	**-**
(e)	**Singngat**	**2.82**	**-**	**2.82**	**-**	**-**	**-**	**-**	**-**	**-**
(f)	**Samulamlan**	**0.67**	**0.03**	**0.70**	**-**	**-**	**-**	**-**	**-**	**-**
3.	CCpur	**17.78**	**0.16**	**17.94**	**-**	**-**	**-**	**-**	**-**	**-**
a)	**Tengnoupal**	**2.87.**	**0.09**	**2.96**	**-**	**-**	**-**	**-**	**-**	
(b)	**Chandel**	**1.28**	**0.06**	**1.34**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Chakpikarong**	**3.28**	**0.13**	**3.41**	**-**	**-**	**-**	**-**	**-**	**-**
4.	Chandel	**7.43**	**0.28**	**7.71**						
(a)	**Chingai**	**2.27**	**0.19**	**2.46**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Ukhrul**	**7.40**	**0.88**	**8.28**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Kamjong**	**1.54**	**0.11**	**1.65**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Chassad Phungyar**	**1.27**	**0.12**	**1.39**	**-**	**-**	**-**	**-**	**-**	**-**
(e)	**Phaisat Kasom Khullen**	**1.10**	**0.04**	**1.14**	**-**	**-**	**-**	**-**	**-**	
5.	Ukhrul	13.58	1.34	14.92	-	-	-	-	-	
A	Hill Total	65.63	3.22	68.85	0.21	-	0.21	-	-	-

ANNEXURE VI(A)

District wise estimated area under Cereal Crops (Paddy & Maize) by

different types of irrigation for the Agricultural year 2004-05 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Block/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		Not irrigated			Irrigated					
					Canal			Tank		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	**Jiribam**	**1.52**	**-**	**1.52**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Sawombung**	**8.22**	**-**	**8.22**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Keirao Bitra**	**18.98**	**-**	**18.98**	**-**	**-**	**-**	**-**	**-**	**-**
6.	Imphal East	28.72	-	28.72	-	-	-	-	-	-
(a)	**Lamsang**	**8.20**	**-**	**8.20**	**1.64**	**-**	**1.64**	**-**	**-**	**-**
(b)	**Wangoi**	**4.50**	**-**	**4.50**	**-**	**-**	**-**	**-**	**-**	**-**
7.	Imphal West	12.70	-	12.70	1.64	-	1.64	-	-	-
(a)	**Bishnupur**	**3.20**	**-**	**3.20**	**0.46**	**-**	**0.46**	**-**	**-**	**-**
(b)	**Moirang**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
8.	Bishnupur	3.20	-	3.20	0.46	-	0.46	-	-	-
(a)	**Thoubal**	**4.38**	**-**	**4.38**	**4.64**	**-**	**4.64**	**-**	**-**	**-**
(b)	**Kakching**	**7.47**	**-**	**7.47**	**-**	**-**	**-**	**-**	**-**	**-**
9.	Thoubal	11.85	-	11.85	4.64	-	4.64	-	-	-
B.	Valley Total	56.47	-	56.47	6.74	-	6.74	-	-	-
	State(A+B)	122.10	3.22	125.32	6.95	-	6.95	-	-	-

ANNEXURE VI(A)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2004-05 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Block/ District	Area under cereal crops(paddy and maize) by different type of irrigation								
		River			Irrigated Others			All Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(a)	**Mao-Maram**	**-**	**-**	**-**	**-**	**-**	**-**	**5.17**	**0.17**	**5.34**
(b)	**Paomata**	**-**	**-**	**-**	**-**	**-**	**-**	**4.88**	**0.01**	**4.89**
(c)	**Kangpokpi**	**-**	**-**	**-**	**-**	**-**	**-**	**9.68**	**1.19**	**10.87**
(d)	**Saikul**	**-**	**-**	**-**	**3.74**	**-**	**3.74**	**4.38**	**0.07**	**4.45**
1.	Senapati	-	-	-	3.74	-	3.74	24.11	1.44	25.55
(a)	**Tousem**	**-**	**-**	**-**	**-**	**-**	**-**	**2.24**	**-**	**2.24**
(b)	**Tamei**	**-**	**-**	**-**	**0.18**	**-**	**0.18**	**2.24**	**-**	**2.24**
(c)	**Tamenglong**	**0.07**	**-**	**0.07**	**-**	**-**	**-**	**2.45**	**-**	**2.45**
(d)	**Nungba**	**-**	**-**	**-**	**1.59**	**-**	**1.59**	**1.59**	**-**	**1.59**
2.	Tamenglong	0.07	-	0.07	1.77	-	1.77	8.52	-	8.52
(a)	**Parbung**	**-**	**-**	**-**	**-**	**-**	**-**	**3.45**	**-**	**3.45**
(b)	**Thanlon**	**-**	**-**	**-**	**-**	**-**	**-**	**2.46**	**-**	**2.46**
(c)	**Henglep**	**-**	**-**	**-**	**-**	**-**	**-**	**3.63**	**-**	**3.63**
(d)	**CCpur**				**3.14**	**-**	**3.14**	**7.89**	**0.13**	**8.02**
(e)	**Singngat**	**-**	**-**	**-**	**-**	**-**	**-**	**2.82**	**-**	**2.82**
(f)	**Samulanlan**	**-**	**-**	**-**	**0.12**	**-**	**0.12**	**0.79**	**0.03**	**0.82**
3.	CCpur	-	-	-	3.26	-	3.26	21.04	0.16	21.20
a)	**Tengnoupal**	**-**	**-**	**-**	**-**	**-**	**-**	**2.87**	**0.09**	**2.96**
(b)	**Chandel**	**-**	**-**	**-**	**0.80**	**-**	**0.80**	**2.08**	**0.06**	**2.14**
(c)	**Chakpikarong**	**-**	**-**	**-**	**-**	**-**	**-**	**3.28**	**0.13**	**3.41**
4.	Chandel	-	-	-	0.80	-	0.80	8.23	0.28	8.51
(a)	**Chingai**	**-**	**-**	**-**	**-**	**-**	**-**	**2.27**	**0.19**	**2.46**
(b)	**Ukhrul**	**-**	**-**	**-**	**-**	**-**	**-**	**7.40**	**0.88**	**8.28**
(c)	**Kamjong**	**-**	**-**	**-**	**-**	**-**	**-**	**1.54**	**0.11**	**1.65**
(d)	**Chassad Phungyar**	**-**	**-**	**-**	**-**	**-**	**-**	**1.27**	**0.12**	**1.39**
(e)	**Phaisat Kasom Khullen**	**-**	**-**	**-**	**-**	**-**	**-**	**1.10**	**0.04**	**1.14**
5.	Ukhrul	-	-	-	-	-	-	13.58	1.34	14.92
A	Hill Total	0.07	-	0.07	9.57	-	9.57	75.48	3.22	78.70

ANNEXURE VI(A)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2004-05 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Block/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		River			Irrigated Others			All Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	**Jiribam**	**-**	**-**	**-**	**1.03**	**-**	**1.03**	**2.55**	**-**	**2.55**
(b)	**Sawombung**	**-**	**-**	**-**	**-**	**-**	**-**	**8.22**	**-**	**8.22**
(c)	**Keirao Bitra**	**-**	**-**	**-**	**0.46**	**-**	**0.46**	**19.44**	**-**	**19.44**
6.	Imphal East	-	-	-	1.49	-	1.49	30.21	-	30.21
(a)	**Lamsang**	**0.09**	**-**	**0.09**	**8.70**	**-**	**8.70**	**18.63**	**-**	**16.63**
(b)	**Wangoi**	**-**	**-**	**-**	**-**	**-**	**-**	**4.50**	**-**	**4.50**
7.	Imphal West	0.09	-	0.09	8.70	-	8.70	23.13	-	23.13
(a)	**Bishnupur**	**0.64**	**-**	**0.64**	**1.36**	**-**	**1.36**	**5.66**	**-**	**5.66**
(b)	**Moirang**	**8.64**	**-**	**8.64**	**7.44**	**-**	**7.44**	**16.08**	**-**	**16.08**
8.	Bishnupur	9.28	-	9.28	8.80	-	8.80	21.74	-	21.74
(a)	**Thoubal**	**1.73**	**-**	**1.73**	**-**	**--**	**-**	**10.75**	**-**	**10.75**
(b)	**Kakching**	**7.53**	**-**	**7.53**	**-**	**-**	**-**	**15.00**	**-**	**15.00**
9.	Thoubal	9.26	-	9.26	-	-	-	**25.75**	**-**	**25.75**
B.	Valley Total	18.63	-	18.63	18.99	-	18.99	100.83	-	100.83
	State(A+B)	18.70	-	18.70	28.56	-	28.56	176.31	3.22	179.53

ANNEXURE VI(B)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2005-06 in Manipur

Area in '000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		Not irrigated			Irrigated					
					Canal			Tank		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	Mao Maram	7.89	0.08	7.97	-	-	-	-	--	-
(b)	Paomata	2.83	0.22	3.05	-	-	-	-	--	-
(c)	Purul	4.45	0.02	4.47	-	-	-	-	--	-
(d)	Sadar Hill West	4.44	0.55	4.99	-	-	-	-	--	-
(e)	Saitu Gamphazol	2.98	0.15	3.13	-	-	-	-	--	-
(f)	Sadar Hill East	4.19	0.56	4.75	-	-	-	-	--	-
1.	Senapati	26.78	1.58	28.36	-	-	-	-	--	-
(a)	Tamenglong West	1.63		1.63	-	-	-	-	--	-
(b)	Tamenglong North	1.96		1.96	-	-	-	-	--	-
(c)	Tamenglong	2.44		2.44	-	-	-	-	--	-
(d)	Nungba	2.69		2.69	-	-	-	-	--	-
2.	Tamenglong	8.72		8.72	-	-	-	-	--	-
(a)	Tipaimukh	4.02		4.02	-	-	-	-	--	-
(b)	Thanlon	2.04	0.02	2.06	-	-	-	-	--	-
(c)	CCpur North	2.93		2.93	-	-	-	-	--	-
(d)	CCpur	7.16		7.16	-	-	-	-	--	-
(e)	Singngat	3.64	0.24	3.88	-	-	-	-	--	-
3.	Churachandpur	19.79	0.26	20.05	-	-	-	-	--	-
(a)	Machi	1.59	0.05	1.64	-	-	-	-	--	-
(b)	Tengnoupal	1.20	0.06	1.26	-	-	-	-	--	-
(c)	Chandel	1.28	0.04	1.32	-	-	-	-	--	-
(d)	Chakpikarong	3.47	0.25	3.72	-	-	-	-	--	-
4.	Chandel	7.54	0.40	7.94	-	-	-	-	--	-
(a)	Ukhrul North	2.36	0.11	2.47	-	-	-	-	--	-

(b)	**Ukhrul Central**	**7.93**	**0.36**	**8.29**	**-**	**-**	**-**	**-**	**--**	**-**
(c)	**Kamjong Chassad**	**2.01**	**0.02**	**2.03**	**-**	**-**	**-**	**-**	**--**	**-**
(d)	**Phungyar Phaisat**	**1.92**	**0.09**	**2.01**	**-**	**-**	**-**	**-**	**--**	**-**
(e)	**Ukhrul South**	1.15	0.03	1.18	**-**	**-**	**-**	**-**	**--**	**-**
5.	Ukhrul	15.37	0.61	15.98	**-**	**-**	**-**	**-**	**--**	**-**
A	Hill Total	**78.20**	**2.85**	**81.05**	**-**	**-**	**-**	**-**	**--**	**-**

ANNEXURE VI(B)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2005-06 in Manipur

Area in '000 hects.

Sl. No.	**Sub-division/District**	**Area under cereal crops(paddy and maize) by different type of irrigation**								
		Not irrigated			**Irrigated**					
					Canal			**Tank**		
		Paddy	**Maize**	**Total**	**Paddy**	**Maize**	**Total**	**Paddy**	**Maize**	**Total**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
(a)	**Jiribam**	**2.63**	**-**	**2.63**	**0.51**	**-**	**0.51**	**-**	**-**	**-**
(b)	**Sawombung**	**10.71**	**-**	**10.71**	**2.15**	**-**	**2.15**	**-**	**-**	**-**
(c)	**Porompat**	**4.48**	**-**	**4.48**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Keirao Bitra**	**5.27**	**-**	**5.27**	**-**	**-**	**-**	**-**	**-**	**-**
6.	Imphal East	23.09	-	23.09	2.66	-	2.66	-	-	-
(a)	**Lamsang**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Patsoi**	**0.27**	**-**	**0.27**	**3.06**	**-**	**3.06**	**-**	**-**	**-**
(c)	**Lamphelpat**	**0.10**	**-**	**0.10**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Wangoi**	**4.41**	**-**	**4.41**	**-**	**-**	**-**	**-**	**-**	**-**
7.	Imphal West	4.78	-	4.78	3.06	-	3.06	-	-	-
(a)	**Nambol**	**1.38**	**-**	**1.38**	**0.67**		**0.67**			
(b)	**Bishnupur**	**1.22**	**-**	**1.22**	**0.16**		**0.16**			
(c)	**Moirang**	**0.02**	**-**	**0.02**	**-**	**-**	**-**	**0.40**		**0.40**
8.	Bishnupur	2.62	-	2.62	0.83		0.83	0.40	-	0.40
(a)	**Lilong**	**2.29**	**-**	**2.29**	**0.47**		**0.47**			
(b)	**Thoubal**	**2.59**	**-**	**2.59**	**2.40**		**2.40**			
(c)	**Kakching**	**9.02**	**-**	**9.02**	**0.56**		**0.56**			
9.	Thoubal	13.90	-	13.90	3.43		3.43			
B	Valley Total	44.39	-	44.39	9.98		9.98	0.40		0.40
	State(A+B)	122.59	2.85	125.44	9.98		9.98	0.40		0.40

ANNEXURE VI(B)

District wise estimated area under Cereal Crops (Paddy & Maize)) by different types of irrigation for the Agricultural year 2005-06 in Manipur

(Contd.) (Area in '000 hects.)

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		Irrigated								
		River			Others			All Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	Mao Maram	-	-	-	1.21	-	1.21	9.10	0.08	9.18
(b)	Paomata	-	-	-				2.83	0.22	3.05
(c)	Purul	-	-	-				4.45	0.02	4.47
(d)	Sadar Hill West	-	-	-				4.44	0.55	4.99
(e)	Saitu Gamphazol	-	-	-				2.98	0.15	3.13
(f)	Sadar Hill East	-	-	-	1.82	-	1.82	6.01	0.56	6.57
1.	Senapati	-	-	-	3.03	-	3.03	29.81	1.58	31.39
(a)	Tamenglong West	-	-	-				1.63	-	1.63
(b)	Tamenglong North	-	-	-	0.75	-	0.75	2.71	-	2.71
(c)	Tamenglong	-	-	-	0.11	-	0.11	2.55	-	2.55
(d)	Nungba	-	-	-				2.69	-	2.69
2.	Tamenglong	-	-	-	0.86	-	0.86	9.58	-	9.58

(a)	**Tipaimukh**	**-**	**-**	**-**				**4.02**	**-**	**4.02**
(b)	**Thanlon**	**-**	**-**	**-**				**2.04**	**0.02**	**2.06**
(c)	**CCpur North**	**-**	**-**	**-**				**2.93**	**-**	**2.93**
(d)	**CCpur**	**-**	**-**	**-**	**0.58**	**-**	**0.58**	**7.74**	**-**	**7.74**
(e)	**Singngat**	**-**	**-**	**-**				**3.64**	**0.24**	**3.88**
3.	Churachandpur	-	-	-	**0.58**	**-**	**0.58**	**20.37**	**0.26**	**20.63**
(a)	**Machi**	**-**	**-**	**-**				**1.59**	**0.05**	**1.64**
(b)	**Tengnoupal**	**-**	**-**	**-**				**1.20**	**0.06**	**1.26**
(c)	**Chandel**	**-**	**-**	**-**				**1.28**	**0.04**	**1.32**
(d)	**Chakpikarong**	**-**	**-**	**-**				**3.47**	**0.25**	**3.72**
4.	Chandel	-	-	-				**7.54**	**0.40**	**7.94**
(a)	**Ukhrul North**	**-**	**-**	**-**	**-**	**-**	**-**	**2.36**	**0.11**	**2.47**
(b)	**Ukhrul Central**	**-**	**-**	**-**	**-**	**-**	**-**	**7.93**	**0.36**	**8.29**
(c)	**Kamjong Chassad**	**-**	**-**	**-**	**-**	**-**	**-**	**2.01**	**0.02**	**2.03**
(d)	**Phungyar Phaisat**	**-**	**-**	**-**	**-**	**-**	**-**	**1.92**	**0.09**	**2.01**
(e)	**Ukhrul South**	-	-	-	**-**	**-**	**-**	**1.15**	**0.03**	**1.18**
5.	Ukhrul	-	-	-	**-**	**-**	**-**	**15.37**	**0.61**	**15.98**
	Hill Total	-	-	-	4.47	-	4.47	82.67	2.85	85.52

ANNEXURE VI(B)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2005-06 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	**Sub-division/District**	**Area under cereal crops(paddy and maize) by different type of irrigation**								
		River			**Irrigated Others**			**All Total**		
		Paddy	**Maize**	**Total**	**Paddy**	**Maize**	**Total**	**Paddy**	**Maize**	**Total**
1	**2**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(a)	**Jiribam**	**-**	**-**	**-**	**-**	**-**	**-**	**3.14**	**-**	**3.14**
(b)	**Sawombung**	**-**	**-**	**-**	**-**	**-**	**-**	**12.86**	**-**	**12.86**
(c)	**Porompat**	**-**	**-**	**-**	**-**	**-**	**-**	**4.48**	**-**	**4.48**
(d)	**Keirao Bitra**	**-**	**-**	**-**	**-**	**-**	**-**	**5.27**	**-**	**5.27**
6.	Imphal East	-	**-**	-	-	-	-	**25.75**	**-**	**25.75**
(a)	**Lamsang**	**-**	**-**	**-**	**8.02**	**-**	**8.02**	**8.02**	**-**	**8.02**
(b)	**Patsoi**	**-**	**-**	**-**	**3.31**	**-**	**3.31**	**6.64**	**-**	**6.64**

(c)	**Lamphelpat**	**-**	**-**	**-**	**-**	**-**	**-**	**0.10**	**-**	**0.10**
(d)	**Wangoi**	**-**	**-**	**-**	**-**	**-**	**-**	**4.41**	**-**	**4.41**
7.	Imphal West	-	-	-	11.33	-	11.33	**19.17**	**-**	**19.17**
(a)	**Nambol**	**0.70**	**-**	**0.70**	**1.11**	**-**	**1.11**	**3.86**	**-**	**3.86**
(b)	**Bishnupur**	**2.03**	**-**	**2.03**	**0.70**	**-**	**0.70**	**4.11**	**-**	**4.11**
(c)	**Moirang**	**5.10**	**-**	**5.10**	**2.54**	**-**	**2.54**	**8.06**	**-**	**8.06**
8.	Bishnupur	7.83	-	7.83	4.35	-	4.35	16.03	-	16.03
(a)	**Lilong**	**-**	**-**	**-**	**0.02**	**-**	**0.02**	**2.78**	**-**	**2.78**
(b)	**Thoubal**	**4.11**	**-**	**4.11**	**-**	**-**	**-**	**9.10**	**-**	**9.10**
(c)	**Kakching**	**1.18**	**-**	**1.18**	**-**	**-**	**-**	**10.76**	**-**	**10.76**
9.	Thoubal	5.29	-	5.29	0.02	-	0.02	22.64	-	22.64
B.	Valley Total	13.12	-	13.12	15.70	-	15.70	83.59	-	83.59
	State(A+B)	13.12	-	13.12	20.17	-	20.17	166.26	2.85	169.11

ANNEXURE VI(c)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2006-07 in Manipur

Area in '000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		Not irrigated			Irrigated					
					Canal			Tank		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	**Mao Maram**	**6.47**	**0.06**	**6.53**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Paomata**	**3.68**	**0.07**	**3.75**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Purul**	**4.35**	**0.35**	**4.70**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Sadar Hill West**	**3.00**	**0.49**	**3.49**	**-**	**-**	**-**	**-**	**-**	**-**

(e)	**Saitu Gamphazol**	**0.45**	**0.08**	**0.53**	**-**	**-**	**-**	**-**	**-**	**-**
(f)	**Sadar Hill East**	**1.80**	**0.16**	**1.96**	**-**	**-**	**-**	**-**	**-**	**-**
1.	Senapati	19.75	1.21	20.96	-	-	-	-	-	-
(a)	**Tamenglong West**	**2.39**	**-**	**2.39**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Tamenglong North**	**2.41**	**-**	**2.41**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Tamenglong**	**1.99**	**-**	**1.99**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Nungba**	**2.73**	**-**	**2.73**	**-**	**-**	**-**	**-**	**-**	**-**
2.	Tamenglong	9.52	-	9.52	**-**	**-**	**-**	**-**	**-**	**-**
(a)	**Tipaimukh**	**3.79**	**-**	**3.79**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Thanlon**	**3.42**	**0.12**	**3.54**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**CCpur North**	**5.34**	**-**	**5.34**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**CCpur**	**8.15**	**-**	**8.15**	-	-	-	-	-	-
(e)	**Singngat**	**2.49**	**0.22**	**2.71**	**-**	**-**	**-**	**-**	**-**	**-**
3.	Churachandpur	23.19	0.34	23.53	**-**	**-**	**-**	**-**	**-**	**-**
(a)	**Machi**	**2.76**	**0.18**	**2.94**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Tengnoupal**	**1.04**	**0.06**	**1.10**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Chandel**	**1.66**	**0.06**	**1.72**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Chakpikarong**	**3.06**	**0.18**	**3.24**	**-**	**-**	**-**	**-**	**-**	**-**
4.	Chandel	8.52	0.48	9.00	**-**	**-**	**-**	**-**	**-**	**-**
(a)	**Ukhrul North**	**2.59**	**0.20**	**2.79**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Ukhrul Central**	**6.16**	**0.55**	**6.71**	-	-	-	-	-	-
(c)	**Kamjong Chassad**	**1.60**	**0.15**	**1.75**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Phungyar Phaisat**	**1.36**	**0.25**	**1.61**	**-**	**-**	**-**	**-**	**-**	**-**
(e)	**Ukhrul South**	**1.69**	**0.16**	**1.85**	-	-	-	-	-	-
5.	Ukhrul	13.40	1.31	14.71	**-**	**-**	**-**	**-**	**-**	**-**
	Hill Total	74.38	3.34	77.72	**-**	**-**	**-**	**-**	**-**	**-**

ANNEXURE VI(c)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2006-07 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Sub-division/Distri	Area under cereal crops(paddy and maize) by different type of irrigation	
		Not irrigated	Irrigated

	ct				Canal			Tank		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	3	4	5	6	7	8	9	10	11
(a)	**Jiribam**	**2.88**	**-**	**2.88**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Sawombung**	**12.04**	**-**	**12.04**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Porompat**	**4.22**	**-**	**4.22**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Keirao Bitra**	**5.15**	**-**	**5.15**	**-**	**-**	**-**	**-**	**-**	**-**
6.	Imphal East	24.29	-	24.29	-	-	-	-	-	-
(a)	**Lamsang**	**8.84**	**-**	**8.84**	**0.52**	**-**	**0.52**	**-**	**-**	**-**
(b)	**Patsoi**	**6.08**	**-**	**6.08**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Lamphelpat**	**0.15**	**-**	**0.15**	**-**	**-**	**-**	**-**	**-**	**-**
(d)	**Wangoi**	**3.30**	**-**	**3.30**	**-**	**-**	**-**	**-**	**-**	**-**
7.	Imphal West	18.37	-	18.37	0.52-	-	0.52	-	-	-
(a)	**Nambol**	**0.70**	**-**	**0.70**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Bishnupur**	**0.08**	**-**	**0.08**	**-**	**-**	**-**	**-**	**-**	**-**
(c)	**Moirang**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
8.	Bishnupur	0.78	-	0.78	-	-	-	-	-	-
(a)	**Lilong**	**4.10**	**-**	**4.10**	**-**	**-**	**-**	**-**	**-**	**-**
(b)	**Thoubal**	**9 . 88**	**-**	**9.88**	**0.04**	**-**	**0.04**	**-**	**-**	**-**
(c)	**Kakching**	**0. 6 5**	**-**	**0.65**	**-**	**-**	**-**	**0.42**	**-**	**0.42**
9.	Thoubal	14.63	-	14.63	0.04	-	0.04	0.42	-	0.42
B.	Valley Total	58.07	-	58.07	0.56	-	0.56	0.42	-	0.42
	State(A+B)	132.45	3.34	135.79	0.56	-	0.56	0.42	-	0.42

ANNEXURE VI(c)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2006-07 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		River			Irrigated Others			All Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	**Mao Maram**	**-**	**-**	**-**	**-**	**-**	**-**	**6.47**	**0.06**	**6.53**
(b)	**Paomata**	**-**	**-**	**-**	**-**	**-**	**-**	**3.68**	**0.07**	**3.75**
(c)	**Purul**	**-**	**-**	**-**	**-**	**-**	**-**	**4.35**	**0.35**	**4.70**
(d)	**Sadar Hill West**	**-**	**-**	**-**	**0.29**	**-**	**0.29**	**3.29**	**0.49**	**3.78**
(e)	**Saitu Gamphazol**	**-**	**-**	**-**	**2.57**	**-**	**2.57**	**3.02**	**0.08**	**3.10**
(f)	**Sadar Hill East**	**-**	**-**	**-**	**2.59**	**-**	**2.59**	**4.39**	**0.16**	**4.55**
1.	Senapati	-	-	-	5.45	-	5.45	25.20	1.21	26.41
(a)	**Tamenglong West**	**-**	**-**	**-**	**-**	**-**	**-**	**2.39**	**-**	**2.39**
(b)	**Tamenglong North**	**-**	**-**	**-**	**-**	**-**	**-**	**2.41**	**-**	**2.41**
(c)	**Tamenglong**	**-**	**-**	**-**	**-**	**-**	**-**	**1.99**	**-**	**1.99**
(d)	**Nungba**	**-**	**-**	**-**	**-**	**-**	**-**	**2.73**	**-**	**2.73**
2.	Tamenglong	-	-	-	-	-	-	9.52	-	9.52
(a)	**Tipaimukh**	**-**	**-**	**-**	**-**	**-**	**-**	**3.79**	**-**	**3.79**
(b)	**Thanlon**	**-**	**-**	**-**	**-**	**-**	**-**	**3.42**	**0.12**	**3.54**
(c)	**CCpur North**	**-**	**-**	**-**	**-**	**-**	**-**	**5.34**	**-**	**5.34**
(d)	**CCpur**	**-**	**-**	**-**	**-**	**-**	**-**	**8.15**	**-**	**8.15**
(e)	**Singngat**	**-**	**-**	**-**	**-**	**-**	**-**	**2.49**	**0.22**	**2.71**
3.	Churachandpur	-	-	-	-	-	-	23.19	0.34	23.53
(a)	**Machi**	**-**	**-**	**-**	**-**	**-**	**-**	**2.76**	**0.18**	**2.94**
(b)	**Tengnoupal**	**-**	**-**	**-**	**-**	**-**	**-**	**1.04**	**0.06**	**1.10**
(c)	**Chandel**	**-**	**-**	**-**	**-**	**-**	**-**	**1.66**	**0.06**	**1.72**
(d)	**Chakpikarong**	**-**	**-**	**-**	**-**	**-**	**-**	**3.06**	**0.18**	**3.24**
4.	Chandel	-	-	-	-	-	-	8.52	0.48	9.00
(a)	**Ukhrul North**	**-**	**-**	**-**	**-**	**-**	**-**	**2.59**	**0.20**	**2.79**
(b)	**Ukhrul Central**	**-**	**-**	**-**	**-**	**-**	**-**	**6.16**	**0.55**	**6.71**
(c)	**Kamjong Chassad**	**-**	**-**	**-**	**-**	**-**	**-**	**1.60**	**0.15**	**1.75**
(d)	**Phungyar Phaisat**	**-**	**-**	**-**	**-**	**-**	**-**	**1.36**	**0.25**	**1.61**
(e)	**Ukhrul South**	**-**	**-**	**-**	**-**	**-**	**-**	**1.69**	**0.16**	**1.85**
5.	Ukhrul	**-**	**-**	**-**	**-**	**-**	-	13.40	1.31	14.71
A.	Hill Total	**-**	**-**	**-**	5.45	**-**	5.45	79.83	3.34	83.17

ANNEXURE VI(c)

District wise estimated area under Cereal Crops (Paddy & Maize) by different types of irrigation for the Agricultural year 2006-07 in Manipur

(Contd.)Area in '000 hects.

Sl. No.	Sub-division/District	Area under cereal crops(paddy and maize) by different type of irrigation								
		River			Irrigated Others			All Total		
		Paddy	Maize	Total	Paddy	Maize	Total	Paddy	Maize	Total
1	2	12	13	14	15	16	17	18	19	20
(a)	**Jiribam**	**-**	**-**	**-**	**-**	**-**	**-**	**2.88**	**-**	**2.88**
(b)	**Sawombung**	**-**	**-**	**-**	**-**	**-**	**-**	**12.04**	**-**	**12.04**
(c)	**Porompat**	**-**	**-**	**-**	**-**	**-**	**-**	**4.22**	**-**	**4.22**
(d)	**Keirao Bitra**	**-**	**-**	**-**	**-**	**-**	**-**	**5.15**	**-**	**5.15**
6.	Imphal East	**-**	**-**	-	-	-	-	24.29	-	24.29
(a)	**Lamsang**	**-**	**-**	**-**	**-**	**-**	**-**	**9.36**	**-**	**9.36**
(b)	**Patsoi**	**-**	**-**	**-**	**-**	**-**	**-**	**6.08**	**-**	**6.08**
(c)	**Lamphelpat**	**-**	**-**	**-**	**-**	**-**	**-**	**0.15**	**-**	**0.15**
(d)	**Wangoi**		**-**	**-**	**-**	**-**	**-**	**3.30**	**-**	**3.30**
7.	Imphal West	**-**	**-**	-	-	-	-	18.89	-	18.89
(a)	**Nambol**	**0.13**	**-**	**0.13**	**1.63**	**-**	**1.63**	**2.46**	**-**	**2.46**
(b)	**Bishnupur**	**1.74**	**-**	**1.74**	**1.36**	**-**	**1.36**	**3.18**	**-**	**3.18**
(c)	**Moirang**	**-**	**-**	**-**	**9.57**	**-**	**9.57**	**9.57**	**-**	**9.57**
8.	Bishnupur	1.87	-	1.87	12.56	-	12.56	15.21	-	15.21
(a)	**Lilong**	**-**	**-**	**-**	**-**	**-**	**-**	**4.10**	**-**	**4.10**
(b)	**Thoubal**	**-**	**-**	**-**	**1.08**	**-**	**1.08**	**11.00**	**-**	**11.00**
(c)	**Kakching**	**10.98**	**-**	**10.98**	**-**	**-**	**-**	**12.05**	**-**	**12.05**
9.	Thoubal	10.98	-	10.98	1.08	-	1.08	27.15	-	27.15
B.	Valley Total	12.85	-	12.85	13.64	-	13.64	85.54	-	85.54
	State(A+B)	12.85	-	12.85	19.09	-	19.09	165.37	3.34	168.71

ANNEXURE VII

Comparative picture of districtwise area under Paddy by different irrigation for the years 2005-06 & 2006-07 in Manipur

Area in '000 hects

Sl. No	Sub-division/ district	Area under paddy in 1000 hects. By different types of irrigation							
		Not irrigated		Irrigated Canal, River & Others		Irrigated Tank		Total	
		2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(a)	Mao Maram	7.89	6.47	1.21	-	-	-	9.10	6.47
(b)	Paomata	2.83	3.68	-	-	-	-	2.83	3.68
(c)	Purul	4.45	4.35	-	-	-	-	4.45	4.35
(d)	Sadar Hill West	4.44	3.00	-	0.29	-	-	4.44	3.29
(e)	Saitu Gamphazol	2.98	0.45	-	2.57	-	-	2.98	3.02
(f)	Sadar Hill East	4.19	1.80	1.82	2.59	-	-	6.01	4.39
1.	Senapati	26.78	19.75	3.03	5.45	-	-	29.81	25.20
(a)	Tamenglong West	1.63	2.39	-	-	-	-	1.63	2.39
(b)	Tamenglong North	1.96	2.41	0.75	-	-	-	2.71	2.41
(c)	Tamenglong	2.44	1.99	0.11	-	-	-	2.55	1.99
(d)	Nungba	2.69	2.73	-	-	-	-	2.69	2.73
2.	Tamenglong	8.72	9.52	0.86	-	-	-	9.58	9.52
(a)	Tipaimukh	4.02	3.79	-	-	-	-	4.02	3.79
(b)	Thanlon	2.04	3.42	-	-	-	-	2.04	3.42
(c)	CCpur North	2.93	5.34	0.58	-	-	-	2.93	5.34
(d)	CCpur	7.16	8.15	-	-	-	-	7.74	8.15
(e)	Singngat	3.64	2.49	-	-	-	-	3.64	2.49
3.	CCpur	19.79	23.19	0.58	-	-	-	20.37	23.19
a)	Machi	1.59	2.76	-	-	-	-	1.59	2.76
(b)	Tengnoupal	1.20	1.04	-	-	-	-	1.20	1.04
(c)	Chandel	1.28	1.66	-	-	-	-	1.28	1.66
(d)	Chakpikarong	3.47	3.06	-	-	-	-	3.47	3.06
4.	Chandel	7.54	8.52	-	-	-	-	7.54	8.52
(a)	Ukhrul North	2.36	2.59	-	-	-	-	2.36	2.59
(b)	Ukhrul Central	7.93	6.16	-	-	-	-	7.93	6.16
(c)	Kamjong Chassad	2.01	1.36	-	-	-	-	2.01	1.60
(d)	Phungyar Phaisat	1.92	1.60	-	-	-	-	1.92	1.36
(e)	Ukhrul South	1.15	1.69	-	-	-	-	1.15	1.69

5.	Ukhrul	15.37	13.40	-	-	-	-	15.37	13.40
A	Hill Total	78.20	74.38	4.47	5.45	-	-	82.67	79.83

ANNEXURE VII

Comparative picture of districtwise area under Paddy by different irrigation for the years 2005-06 & 2006-07(Contd.)

Area in '000 hects

Sl. No.	Sub-division/ district	Area under paddy in 1000 hects. by different types of irrigation							
		Not irrigated		Irrigated Canal, River & Others		Irrigated Tank		Total	
		2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(a)	**Jiribam**	**2.63**	**2.88**	**0.51**	**-**	**-**	**-**	**3.14**	**2.88**
(b)	**Sawombung**	**10.71**	**12.04**	**2.15**	**-**	**-**	**-**	**12.86**	**12.04**
(c)	**Porompat**	**4.48**	**4.22**	**-**	**-**	**-**	**-**	**4.48**	**4.22**
(d)	**Keirao Bitra**	**5.27**	**5.15**	**-**	**-**	**-**	**-**	**5.27**	**5.15**
6.	Imphal East	23.09	24.29	2.66	-	-	-	25.75	24.29
(a)	**Lamsang**		**8.84**	**8.02**	**0.52**	**-**	**-**	**8.02**	**9.36**
(b)	**Patsoi**	**0.27**	**6.08**	**6.37**	**-**	**-**	**-**	**6.64**	**6.08**
(c)	**Lamphelpat**	**0.10**	**0.15**	**-**	**-**	**-**	**-**	**0.10**	**0.15**
(d)	**Wangoi**	**4.41**	**3.30**	**-**	**-**	**-**	**-**	**4.41**	**3.30**
7.	Imphal West	4.78	18.37	14.39	0.52	-	-	19.17	18.89
(a)	**Nambol**	**1.38**	**0.70**	**2.48**	**1.76**	**-**	**-**	**3.86**	**2.46**
(b)	**Bishnupur**	**1.22**	**0.08**	**2.89**	**3.10**	**-**	**-**	**4.11**	**3.18**
(c)	**Moirang**	**0.02**	**-**	**7.64**	**9.57**	**0.40**	**-**	**8.06**	**9.57**
8.	Bishnupur	2.62	0.78	13.01	14.43	0.40	-	16.03	15.21
(a)	**Lilong**	**2.29**	**4.10**	**0.49**		**-**	**-**	**2.78**	**4.10**
(b)	**Thoubal**	**2.59**	**9.88**	**6.61**	**1.12**	**-**	**-**	**9.10**	**11.00**
(c)	**Kakching**	**9.02**	**0.65**	**1.74**	**10.98**	**-**	**0.42**	**10.76**	**12.05**
9.	Thoubal	13.90	14.63	8.84	12.10	-	0.42	22.74	27.15
B.	Valley Total	44.39	58.07	38.90	27.05	-	0.42	83.59	85.54
	State(A+B)	122.59	132.45	43.37	32.50	-	0.42	166.26	165.37

APPENDIX

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Senapati
Sub-Division : Paomata

Sl. No.	Name of Villages			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**CHINGMEI KHUNOU**	**LAII**	**KHAIKHO**	**TUNGAM KHULLEN**
2.	**LIYAI KHULLEN**	**CHINGMEI KHULLEN**	**MAIBA**	**RAKHUTAO**
3.	**PAOMATA CENTRE**	**TUNGJOY RIKHUBUMAI**	**LAII**	**PHUBA THAPHAM**
4.	**TUNGAM AFII**	**TUNGAM MAKHUFII**	**CHINGMEI KHULLEN**	**NEW LAII**
5.	**KHAIKHO**	**SARANAMEI**	**TUNGJOY RIKHUBUMAI**	**CHINGMEI KHUNOU**
6.	**MAIBA**	**PHUBA KHUMAN**	**TUINGAM MAKHUFII**	**IYAI KHULLEN**

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Senapati
Name of Sub-Division : Purul

Sl. No.	Name of Villages			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**OINAM**	**PHAIBUNG KHUNOU**	**KEIYE**	**SHIRONG**
2.	**RAAFII**	**NGARI LISHANG**	**CHOFII**	**PHAIBUNG KHULLEN**
3.	**KOIDE MAKHA**	**KHONGDEI SHIMPHUNG**	**PURUL ATONGBA**	**NGARI KHULLEN**
4.	**PURUL AKUTPA**	**THINGBA KHULLEN**	**KODOM KHULLEN**	**KHONGDEI KHUMAN**
5.	**KODOM KHAVII**	**KAPAO**	**LOWER PAHIBUNG**	**OINAM**
6.	**NGARI RAIDOLUMAI**	**KOIDE MATHAK**	**THIWA**	**RAAFII**

APPENDIX

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Senapati
Name of Sub-Division-Sadar Hill West

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**HAIPI**	**MAKUI MATANGKHANG**	**KHOLJANG**	**THONGLANG ATONGBA**
2.	**TAPHOU KUKI**	**KEITHELMANBI**	**T. KHULLEN**	**M.NINGTHOUPHAM**
3.	**MAOHING NEPALI**	**HARUP KHOPI H**	**HARUP KUKI**	**MAKUI NAGA**
4.	**JANGNOM**	**SONGPEKJANG NEPALI**	**SONGJANG PAKANG**	**THONGLANG AKUTPA**
5.	**GOVAJANG**	**GOPIBUNG NEPALI**	**SELSI**	**CHANDRAMAN**
6.	**HAIJANG**	**SAIKOTJANG**	**M. CHALJANG**	**KHARKHARI**

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Senapati
Name of Sub-Division : Saitu Gamphazol

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample –I**	**Sub-sample – II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**CHAROIPANDONGBA KABUI**	**NUNGANG KABUI**	**NUNGSAI CHIRU**	**LEIMAKHONG**
2.	**S..SILEN**	**ICHUM KEIRAP**	**ICHUNG KEIRAP**	**PHAIJANG**
3.	**WAROICHING**	**BUNGTE CHIRU**	**CHAR HAZAR**	**DOLANG KHUNOU**
4.	**KHENGJANG**	**LEIKHAMPOKPI**	**A. SONGPIYANG**	**KHONOMJANG**
5.	**MOLHOI**	**KHONGLONG KABUI**	**KOLPECHONG NEPALI**	**SONGJANG WAPHONG**
6.	**MOTBUNG**	**HAIBUNG**	**HAIBUNG**	**KARAM THADOI**

APPENDIX

Sub-Divlision-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Senapati
Name of Sub-Division : Sadar Hill East

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-1**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**TUISOMJANG**	**JANGNOI**	**MAPHOU KUKI**	**LUNGTHER**
2.	**Y.LANGKHONG**	**ZALENPHAI**	**KAMUCHING**	**SANDANGSENBA MARING**
3.	**LUNGTHER**	**LEISHIPHUNG**	**S. BUNGJANG**	**CHONGPHEL**
4.	**SAIKUL**	**GWALTABI KUKI**	**S.KHONOMPHAI**	**N. PHAILEN**
5.	**SONGPHEL**	**LAIKOICHING**	**T. WAKANPHAI**	**TUISOMJANG**
6.	**N. PHAILEN**	**NEW BOLJANG**	**WAITHOU**	**Y. LANGKHONG**

CHIRU

Sub-Division-wise list of villages surveyed in 2006-2007 & 2007-2008
Name of District : Tamenglong
Name of Sub-division : Tamenglong West

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-Sample - I**	**Sub-Sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**MUKTOKHAL**	**ABEN**	**TOUSEM**	**SIBILONG**
2.	**NAMTIRAM**	**PHOKLONG**	**VANGCHEMNGPHAI**	**PHOKLONG**
3.	**J. PABRAM**	**MANDU**	**CHINGKAO**	**KATANG**
4.	**IMPA**	**OINAMLONG**	**J. PABRAM**	**OINAM LONG**
5.	**KAIMAI**	**RANG KEKILONG**	**IMPA**	**TANINGJAM**
6.	**TOUSEM**	**LONGCHAI**	**KAIMAI**	**TOGORAM**

APPENDIX

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Tamenglong
Name of Sub-division : Tamenglong North

Sl. No.	Name of Village			
	2006-2007		**2007-2008**	
	Sub-sample-I	**Sub-sample-II**	**Slub-sample -I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**LANGPRAM**	**ELLENG**	**KUILONG-I**	**OLD THENJANG**
2.	**PALLONG**	**NEW KADI**	**ALLENG**	**LANGMEI**
3.	**NALLONG**	**DUNONG**	**LANGPRAM**	**CHATON-I**

4.	**OLD LAMTA**	**LENGLONG**	**PALLONG**	**OLD LEMTA**
5.	**KUILONG-I**	**N. KHUNDONG KHUNKHAIBA**	**LENGLONG**	**MAKUINONG**
6.	**ELLENG**	**OLD KADI**	**KHUNDONG KHUNKHAIBA**	**ATANG KHUNOU**

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Tamenglong
Name of Sub-division : Tamenglong

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**WAIRANGBA**	**KHONGARON KHUKHA**	**KHONGJARON KHUNKHA**	**HAOCHONG**
2.	**TAMENGLONG**	**DUGAILONG**	**DUIGAILONG**	**LUKHAMBI**
3.	**KHONGJARON KHUNTHAK**	**LANGKHONG**	**LANGKHONG**	**WAIRANGBA**
4.	**KAHULONG**	**THARON**	**THARON**	**BHALOK**
5.	**KABUI KHULLEN**	**BHALOK**	**AWANGKHUL**	**KHEBUCHING**
6.	**LUKHAMBI**	**TAMENGLONG**	**TAMENGLONG**	**KAHULONG**

APPENDIX

Sub-Division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Tamenglong
Name of Sub-division : Nungba

Sl. No.	Name of Village	
	2006-2007	2007-2008

(1)	Sub-sample-I (2)	Sub-sample-II (3)	Sub-sample-I (4)	Sub-sample-II (5)
1.	CHINGMEI KABUI	GALLON	SHANGJI	LUWANGLONG KHUNOU
2.	NUNGADANG	CHAROI CHAKOTLONG II	LAMDANGM EI	NUNGBA
3.	TOUSANG	MUKTI KHULLEN	LONGPHAILUM	NUNGNANG
4.	S. MOLBUNG	NONEY	NONGJARONG KHUNOU	NUNBA I
5.	THANGAL	KHOUPUM	NUNGBA	LEISHOK
6.	NUNGANG	LEIKOT	KHOUPUM	TOUSANG

Sub-Division-wise list of villages surveyed in 2006-07& 2007-08
Name of District : Churachandpur
Name of Sub-division: Tipaimukh

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	SENVON	LEISEN	PARVACHAWM	KANGRENG
2.	TUAITENGMUN	PATPUIHMUM	ANGKHASUO (SIBAPURIKHAL)	PATPUIOHMUM
3.	ROVAKOT	PARBUNG	PARBUNG	LUNGTHULEIN
4.	TUOLBUNG	LOIBUOL	JAKRADOR PHAIMUOL	SENVON
5.	PHERZAWL	HENCHUNG PUNJI	NGAMPABUNG	SATRUINEK
6.	ANKHASUO (SIBADURIKHA)	TINSUONG	TAITHU	TUISEN(NONTULALPANI)

APPENDIX

Block-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Churachandpur
Name of Sub-division : Thanlon

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	SONGTAL	TALLIAN	BUALTANG	SSONGTAL
2.	SINJAWL	PHAILIANG BUNG	PHAMJAL	SINJAWL
3.	MUALNUAM	GAMHUI	TUILIJANG	MUALMUAM
4.	TUIKO MUALLUM	PAIKHOLUM J.(MUNTHA)	[JAOKKHOLUM J. (MNUNTHA)	TUIKU MUALLUM
5.	MONG-ON	SINJAWL	SUANGSANG	MONG-ON
6.	JUOTUNG	BUKPI	BUKPI	JOUTUNG

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Churachandpur
Name of Sub-division : Churachandpur North

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	KOLHEN	LAILONG(S)	CHOTHE MONPI	L. KHENGJANG
2.	VANTUNGBUNG	K. TUILIPHA	D. MUNLUI	SANTING
3.	MAJURON KABUI	LUNGCHONG	VUNGBUK	KUNGPI NAOSEN
4.	NAHALON	NABIL KHUMAN	N. CHNGPHEI	KOLHEN
5.	L.PHAILEN	THANGSHI	PAKOL	CHANGLEI
6.	CHONGKHOJOU	CHAROI KHULLEN	AINA	GAMNOMPHAI

APPENDIX

Sub-division-wise list of villages surveyed in 2006-07 & 2007 -08
Name of District : Churachandpur
Name of Sub-division: Churachandpur

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**SAGANG**	**KHENGJANG**	**S. GOTENGJANG**	**KAPRANG**
2.	**HEICHANGLOK**	**MONGJANG TAMPAK**	**KULBUNG**	**SAIKOT**
3.	**KHOUSABUNG**	**MAICHAMMUN**	**TUINOM KHOPI**	**MUALHOIH**
4.	**KHONGJALOK**	**MATIJANG**	**MUOLBVAIPHEI**	**SABUAL**
5.	**KHOIPUI BUNG**	**DAMPI**	**LINGSIPHAI**	**GAMNOM**
6.	**ZENHANG LAMKA**	**MATA**	**SAIBOH**	**DONGJANG**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Churachandpur
Name of Sub-division: Singngat

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**SINGHAT**	**BEHJANG (V)**	**TUIKUI MUALLUM**	**NGALJANG**
2.	**CHAHNOU**	**S. GELTUI**	**KANGKAP**	**BEHIANG(V)**
3.	**T. KHAJANG**	**ALLUSINGTAM**	**SINGNGAT**	**SIMBUK**
4.	**SUANGPHU**	**HIANGTAM I**	**TOMNGLON(K)**	**K. THENJOL**
5.	**LUNGTHUL**	**SUANGDOH**	**SUANGKUANG**	**TANGPIJOL**
6.	**SUMCHINVUM**	**NGALEJANG**	**SIALBU**	**SUANGDOH**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Chandel
Name of Sub-division : Machi

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-1**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**KHULSAIBUNG (KARONGTHEL)**	**MACHI**	**KANGOI KHULLEN**	**KOIJAM**
2.	**BONGMOL**	**LANGOL**	**LAMLONG KHULLEN**	**PHUNCHONG**
3.	**PARENGTONG**	**LAICHING KHULLEN**	**KHULSAIBUNG (KARONGTHEL)**	**KHUNBI**
4.	**KHOIBU**	**LAMLONG CHRISTIAN**	**LAICHING KHUNOU**	**LANGOL**
5.	**KANGOI KHULLEN**	**M.RINGPAM**	**HEINOUKHONG**	**WABACHING**
6.	**LAMLONG KHULLEN**	**KHUNBI TUINEM**	**LAICHING KANGSHANG**	**TOLLEN**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Chandel
Name of Sub-division : Tengnoupal

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**MAIPI MANGSOM**	**KHUDEI KHULLEN**	**MOLNOM**	**L. PHAIJANG**
2.	**CHEHLEP**	**L. PHAIJANG**	**TOUTHANG**	**RILAM CENTRE**
			BONGMOL	

3.	LEIBI	RILAM CENTRE	CHALSONL TENGNOUPAL	CHAHMOL
4.	GOVAJANG	CHAHMOL	TENGNOUPAL	KWATHA
5.	ISLAND	KWATHA	ANGBRASU	PHALBUNG
6.	KAMBANG KHULLEN	PHALBUNG	AKHUNJAI	KHUDEI KHULLEN

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Chandel
Name of Sub-division: Chandel

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	ANGKHEL CHAYANG	LITAN	DUTHANG	KAJIPHUNG
2.	LARONG KHULLEN	KAJIPHUNG	UNOUPAT	MAHA CENTRE BAZAR(EAST)
3.	LAMPHU PASANA	KHONGJON	THANMAPOKPI	CHAGNAGCHING KHUNOU
4.	MAHA CENTRE BAZAR (WEST)	CHARANGCHING KHUNOU	MAHA CENTRE BAZAR(WEST)	ANAL KHULLEN
5.	ZOINTLANG	ANAL KHULLEN	LIWA MARING	KHUDEI KHUNOU
6.	MANTRI PANTHA	KHUDEI KHUNOU	ZAPHOU	LITAN

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Chandel
Name of Sub-division : Chakpikarong

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**HAIKA**	**K. SELHAI**	**TOITUNG**	**K. SAVUMPA**
2.	**CHAKPIKARONG**	**PALDAI**	**KHENGJOY**	**HENGSHI**
3.	**NEW SOMTAL**	**N. GAMNOM**	**HRINGKHU A**	**PHIRAN MACHET**
4.	**SUGNU LAMHANG**	**MOLPHEI**	**PALDAI**	**KEHNGJOY**
5.	**SEHAO**	**KHULLENKHALLET**	**N.KGAMNOM**	**WAYANG**
6.	**T. NAMPHAO**	**KHENGJOY**	**MOLPHEI**	**T. PHICHAM**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Ukhrul
Name of sub-division – Ukhrul North

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**KUIREI**	**PHUNGCHAM**	**CHINGJAROI CHRISTIAN**	**KUIREI**
2.	**NUNGBI KHULLEN**	**MAREMPHUNG**	**SORAPHUNG**	**NUNGBI KHULLEN**
3.	**KHARASOM**	**CHINGAI**	**HUISHU**	**KHARASOM**
4.	**PAOYEI**	**KALHANG**	**PHUNGCHAM**	**PAOYAL**
5.	**CHINGJAROI KHULLEN**	**NEW TUSOM**	**JESSAMI**	**CHINGJAROI KHULLEN**
6.	**JESSAMI**	**HUISHU**	**WAHONG**	**JESSAMI**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Ukhrul
Name of sub-division : Ukhrul Central

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**HUIME**	**SANAKHEITHEL**	**KHAMASOM**	**CHAMPHUNG**
2.	**MANGKOT CHEPU**	**NGAIMU**	**UKHRUL**	**LAMBUI**
3.	**SIHAI**	**HUNDUNG**	**TORA**	**LUNGHAR**
4.	**SOMDAL**	**MAICHON**	**PHARUNG**	**TUINEM**
5.	**TOLLOI**	**SHOKVAO**	**SHANGSHAK KHUNOU**	**HUNDUNG**
6.	**UKHRUL**	**LANG DANG**	**SOMDAL**	**NUNGSHONG KHOUNOU**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Ukhrul
Name of Sub-division: Kamjong Chassad

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**GAMBAL**	**LMAOKOT**	**KHAYANG**	**GAMBAL**
2.	**NINGTHI**	**KANGPAT KHUNOU**	**CHAMU**	**HANGKOU**
3.	**BUNGPA KHULLEN**	**GRIHANG**	**PHAIKOK**	**BUNGPA KHULLEN**
4.	**NINCHOU**	**BUNGPA KHULLEN**	**CHATRIK**	**MAKU**
5.	**CHAHONG KHUNOU**	**CHAHONG KHULLEN**	**NINGTHI**	**PHAIMOL**

6.	**KONGKAN**	**NAMPISA**	**BUNGPA KHULLEN**	**PIHANG**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Ukhrul
Name of sub-division : - Phungyar Phaisat

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**TUSOM**	**PHUNGYAR**	**T.HUNDUNG KHULLEN**	**MEIRING**
2.	**SORBUNG**	**KOSO**	**SORBUNG**	**H. GODAH**
3.	**NONGMAN**	**SHINGTA**	**NONGMAN**	**PHALANG**
4.	**SIKIBONG**	**LEITING**	**SIKIIBUNG**	**SHINGKAP**
5.	**CHUNGKAI**	**LEISHI**	**CHUNGKAI**	**SIKIPHUNG**
6.	**KHONGJAL**	**NGAPRUM**	**KHONGJAL**	**PHUNGE**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District :Ukhrul
Name of Sub-division : Ukhrul South

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**KANGOI**	**NAMBASHI KHULLEN**	**KANGKUM**	**KASOM KHULLEN**

2.	**KASOM KHULLEN**	**K.LEIHAORAM**	**NAMBASHI KHULLEN**	**LAIRAM KHULLEN**
3.	**K.LEIHAORAM**	**NONGDAM**	**K.LEIHAORAM**	**MAWAI**
4.	**MAWAI**	**MAKAN**	**NONGDAM**	**NONGDAM**
5.	**NAMBASHI KHUNOU**	**TARONG**	**MAKAN**	**CHONGDAN**
6.	**CHONGDAN**	**KANGKUM**	**TARONG**	**KANGOI**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal East
Sub-division : Jiribam

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**LATINGKHAL**	**BHUTANGKHAL**	**MAKHA BOSTI**	**LATINGKHAL**
2.	**JAROLPOKPI**	**CHOTOBEKRA**	**JAKRADHOR PART-I**	**JAOLPOKPI**
3.	**BHUTANGKHAL**	**BHOMIKPARA**	**JAROLPOKPI**	**BHUTANGKHAL**
4.	**CHOUDHURIKHAL**	**CHAMPANAGAR MEITEI**	**CHHOTOBEKRA**	**CHNOUDHURIKHAL**
5.	**KASHIMPUR**	**DIBONG**	**BERABAK**	**KASIMPUR**
6.	**NUNGKHAL**	**KAMARANGA**	**NARAYANPUR**	**NUNGKHAL**
7.	**SONAPUR**	**GUAKHAL**	**LALPANI**	**SONAPUR**
8.	**NUNGPHOU**	**JAKURADHOR PART II**	**MULLARLGAO**	**NUNGPHOU**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal East
Sub-division : Sawombung

Sl. No.	Name of Village	
	2006-07	2007-08

	Sub-sample-1	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	NUNGOI	KHABEISOI	TAKHEL	YUMNAM KHUNOU
2.	KANGBA CHENGJIL	PUKHAO AHALLUP	LAIKOT	TELLOU
3.	KEIBI KUMUDA	SEKTA	PUKHAO NAHARUP	KHUNDRAKPAM
4.	UYUMPOK	WAITON	KAMENG	KAKCHING
5.	LAIKOT	SANJENBAM	SANGOMSANG	HARAROU
6.	PUKHAO CHABAM	PUKHAO NAHARUP	PAORABI	SINAM
7.	KAMENG	KHUNDRAKPAM	NONGGREN	KEIBI KHULLEN
8.	KEIBI HEIKAK MAPAL	SAROUTHEL	KEIBI KUMUDA	IYAMPAL

Sub--wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal East
Sub-division : Porompat

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	KSHETRIGAO	KABO SIPHAI	KABO SIPHAI	KAIRANG MEITEI
2.	KIYAMGEI	KHOMIDOK	KHOMIDOK	NAHARUP
3.	ACHANBIGEI	LUWANGSHANGBAM	LUWANGSANG BAM	THANGJAM LEIKAI
4.	WAKHA	HEINGANG	HEINGANG	KSHETRI BENGOON
5.	KHAIDEM LEIKAI	LAIRIKYENGBAM LEIKAI	GANGAPAT	MAIBA KHUN
6.	KONTHA KHABAM	THONGJU	WANGKHEI LOUMANBI	KIYAMGEI
7.	KONTHA AHALLUP	KHURAI KONSAM LEIKAI	KHURAI KONSAM LEIKAI	ACHANBIGEI
8.	NILAKUTHI	MONGJAM	MONGJAM	UCHEKON

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal East
Sub-division : Keirao Bitra

Sl. No.	Name of Village			
	2006-2007		2007-2008	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**THIYAM KONJIT**	**POIROU KHONGJIT**	**CHANAM SANDROK**	**THIYAM KONJIL**
2.	**TULIHAL**	**ANGTHA**	**NUNGBRANG**	**TULIHAL**
3.	**YAMBEM**	**YAMBEM**	**POIROU KHONGJIL**	**ANGTHA**
4.	**CHANGAMDABI**	**MOIRANGPURAL**	**ANGTHA**	**CHANGAMDABI**
5.	**HUIKAP**	**HUIKAP**	**YAMBEM**	**MOIRANG PUREL**
6.	**TOP CHINGTHA**	**KHANAROK**	**MOIRANG PUREL**	**TOP CHINGTHA**
7.	**ITHAM**	**BAMON KAMPU**	**HUIKAP**	**MACHAHAL**
8.	**KEIRAO MAKTING**	**NUNGBRUNG**	**TOP CHINGTHA**	**KEIRAO BITRA**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal West
Sub-division - Lamsang

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**TINGRI**	**SEKMAI (PART)**	**MAYANG LANGJING**	**TINGRI**
2.	**KAMENG**	**KANGLATOMBI**	**KHARANG KOIRENG**	**KAMENG**
3.	**KHURKHUL**	**PHUMLOU**	**KADANGBAND**	**KHURKHUL**
4.	**MAYANG LANGJING**	**KHURKHUL**	**KANTO**	**MAYANG LANGJING**
5.	**THOURIPHAI**	**TENDONGYAN**	**SEKMAI(PAT)**	**HEIBOKPOKPI**
6.	**KHONGHAMPAT**	**AKHAM**	**LAMBAL**	**KHONGHAMPAT**
7.	**LOITANG KHULLEN**	**MAHARABI**	**PHUMLOU**	**LOITANG KHULLLEN**
8.	**POTSANGBAM KHOIRU**	**SENJAM KHUNOU**	**KHURKHUL**	**POTSANGBAM KHOIRU**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal West
Sub-division - Patsoi

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample - II**	**Sub-sample I**	**Sub – Sample II**
(1)	**(4)**	**(5)**	**(4)**	**(5)**
1.	**YAROU BAMDIAR**	**MOIDANGPOK KHULLEN**	**KHUMBONG**	**HEIGRUJAM**
2.	**MODANGPOK KHULLEN**	**NGAIRANGBAM**	**MOIDANGPOKKHULLEN**	**LANSONBI**
3.	**LAUSONBI**	**AWANG KHUNOU**	**NGAIRANGBAM**	**YUREMBAM**
4.	**YUREMBAM**	**MEISNAM KANGMONG**	**AWANG KHUNOU**	**MEISNAM KANGMONG**
5.	**MEISNAM KANGMONG**	**THANGJING KHULLEN**	**YUREMBAM**	**CHANGANGEI**
6.	**TAOBUNGKHOK**	**AWANG JIRI**	**GHARI**	**LUKER**
7.	**MAKLANG**	**MOIDANGPOK KHUNOU**	**AWANG JIRI**	**KAHIDEM**
8.	**KHAIDEM**	**KHUMBONG**	**MAKLANG**	**YAROU BAMDIAR**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal West
Sub-division - Lamphel

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	**Sub-sample II**	**Sub-sample I**	**Sub-sample II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**IROISEMBA**	**OINAM THINGEL**	**HEINOUKHONGNEMBI**	**IROISEMBA**
2.	**IROISEMBA**	**MAIBAM LEIKAI**	**MEITEI LANGOL, THARON,TARUNG**	**AHONGSANGBAM LEIKAI**
3.	**SAGOLBAND(PART)**	**MEITEI LANGOL,THAROL, TARUNG**	**LALAMBUNG**	**MAIBAM LEIKAI**
4.	**HEINOU KHONGNEMBI**	**LALAMBUNG (PART)**	**TAKYELMAPAL**	**HEINOUKHONGNEMBI**
5.	**MEITEI LANGOL,THAROL, TARUNG**	**LALAMBUNG (PART)**	**IROISEMBA**	**MEITEI LANGOL, THARON, TARUNG**
6.	**LALAMBUNG**	**TAKYEL MAPAL**	**IROISEMBA**	**LALAMBUNG PAT**
7.	**IROISEMBA**	**IROISEMBA**	**AHONGSANGBAM LEIKAI**	**TAKYEL MAPAL**
8.	**SOROKHAIBAM LEIKAI**	**IROISEMBA**	**MAIBAM LEIKAI**	**IROISEMBA**

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Imphal West
Sub-division : Wangoi

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	NINGOMBAM	PHOUBAKCHAO	HANGOON	PHOUBAKCHAO
2.	LAIRENJAM	LANTHABAL KUNJA	IROM MEIJRAO	HEIYEL
3.	KODOMPOKPI	THONGAM	LAIRENJAM	BITRA UROKHONG
4.	UCHIWA	MALOM TULIHAL	KODOMPOKPI	NINGOMBAM
5.	KOMLAKHONG	LAPHUPAT TERA	UCHIWA	MALOM TULIHAL
6.	PHOUBAKCHAO	SAMUSHANG	KOMLAKHONG	KODOMPOKPI
7.	HAYEL	KOMLAKHONG	PHOUBAKCHAO	SAMUSANG
8.	BITRA UROKHONG	PHOUBAKCHAO	CHONGTHAM KONA	KOMLAKHONG

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Bishnupur
Sub-division - Nambol

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	Sub-sample -II	Sub-sample-I	Sub-sample -II
(1)	(2)	(3)	(4)	(5)
1.	NGAIKHONG KHUNOU	ISHOK	PUKHRAMBAM	LEIMAPOKPAM
2.	UTLOU	IRENGBAM	LEIMAPOKPAM	YUMNAM KHUNOU
3.	KEINOU	PUKHRAMBAM	LEIMAPOKPAM	LEIMARAM
4.	ISHOK	LEIMAPOKPAM	SADU KOIRENG	ISHOK
5.	IRENGBAM	LEIMAPOKPAM	KAKYAI LANGPOK	IRENGBAM
6.	PUKHRAMBAM	SADU KOIRENG	KEINOU	PUKHRAMBAM
7.	LEIMAPOKPAM	UTLOU	ISHOK	PUKHRAMBAM

8.	**LEIMAPOKPAM**	**KEINOU**	**IRENGBAM**	**LEIMAPOKPAM**

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Sub-division-wise list of villages surveyed in 2005-06 & 2006-07
Name of District : Bishnupur
Sub-division : Bishnupur

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	Sub-sample-II	Sub-sample-I	Sub-sample-II
(1)	(2)	(3)	(4)	(5)
1.	**KHOIJUMAN KHUNOU**	**NARANSEINA**	**POTSANGBAM**	**THINUNGEI**
2.	**NARANSEINA**	**THINUNGEI**	**TENGKHAN KHUNOU**	**POTSANGBAM**
3.	**THINUNGEI**	**POTSANGBAM**	**TOUBUL**	**NINGTHOUKHONG AWANG**
4.	**POTSANGBAM**	**NINGTHOUKHONG KHA**	**KHOIJUMAN KHULLEN**	**SUNU SIPHAI**
5.	**TENGKHAL KHUNOU**	**TOUBUL**	**NACHOU**	**NGAIKHONG KHULLEN**
6.	**TOUBUL**	**KHOIJUMAN KHULLEN**	**KHOIJUMAN KHNUNOU**	**NACHOU**
7.	**KHOIJUMAN KHULLEN**	**NACHOU**	**NARAN SAINA**	**PHUBALA**
8.	**NACHOU**	**KHOIJUMAN KHUNOU**	**THINUNGEI**	**NARAN SAINA**

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Bishnupur
Sub-division: Moirang

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**WANGOO LAHALLUP**	**WANGOO AHALLUP**	**SAGANG**	**KHA THINUNGEI**

2.	THANGA	WAPOKPI	KHA THINUNGEI	WANGOO AHALLUP
3.	NGANGKHA LAWAI	TANGLENG	WANGOO AHALLUP	WANGOO AHALLUP
4.	SAITON	TORBUNG	WANGOOL AHALLUP	ITHAI
5.	KWAKTA	KWAKTA	KHORDAK	NGANGKHA LAWAI
6.	SAGANG	SAGANG	TANGJENG	SAITON
7.	KHA THINGUNGEI	KHA THINGUNGEI	TORBUNG	KWAKTA
8.	WANGOO AHALLUP	WANGOO AHALLUP	KWAKTA	SAGANG

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Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Thoubal
Sub-division - Lilong

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-I	Sub-sample - II	Sub-sample-I	Sub-sample - II
(1)	(2)	(3)	(4)	(5)
1.	IRONG CHASABA	IRONG CHASABA	MAIBAM KONJIN	KHEKMAN
2.	ATOUKHONG	IRONG THOKCHOM	LEISHANGTHEM	UCHIWA
3.	NUNGEI	NUNGEI	IRONG CHESABA	MAIBAM KONJIN
4.	OINAM	OINAM	LAIPHRAKPAM	IRONG CHESABA
5.	LILONG	LILONG	HANGOON	IRONG CHESABA
6.	UCHIWA	UCHIWA	MOIJIMNG	HEIYEL
7.	MAIBAM KONJIL	MAIBAM KONJIT	LILONG	HANGOON
8.	LEISHANGTHEM	LEISHANGTHEM	UCHIWA	MOIJING

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Thoubal
Sub-division : Thoubal

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**CHARANGPAT MAMANG**	**WANGJING**	**LANGATHEL**	**HEIROK-PART II**
2.	**KANGTHOKCHAO**	**WANGKHEM**	**SANGAIYUMPHAM**	**TENTHA**
3.	**SANGAIYUMPHAM**	**HEIROK PART I**	**HEIROK-PART II**	**KHANGABOK**
4.	**HEIROK PART II**	**TENTHA**	**TENTHA**	**CHINGDOMPOK**
5.	**TENTHA**	**KHANGABOK**	**KHANGABOK**	**WANGBAL**
6.	**KHANGABOK**	**BUMPA KHULLEN**	**LOUREMBAM**	**KANGYAMBEM**
7.	**HAYEL LABUK**	**CHARANGPAT MAKLANG**	**CHINGTHAM**	**WANGJING**
8.	**CHINGTHAM**	**SAPAM**	**KHOIROM**	**WANGKHEM**

APPENDIX

Sub-division-wise list of villages surveyed in 2006-07 & 2007-08
Name of District : Thoubal
Name of Sub-Division : Kakching.

Sl. No.	Name of Village			
	2006-07		2007-08	
	Sub-sample-1	**Sub-sample-II**	**Sub-sample-I**	**Sub-sample-II**
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	**KEIRAK**	**WANGOO**	**WABAGAI**	**LAIMANAI**
2.	**WANGOO**	**WABAGAI**	**HIYANGLAM-I**	**IRENGBAND**
3.	**WABAGAI**	**HIYANGLAM**	**HIYANGLAM-II**	**LANGMEIDONG**
4.	**HIYANGLAM**	**ARONG NONGMAI KHONG**	**THONGJAO**	**WANGOO**
5.	**KHARUNGPAT**	**ELANG KHANGPOKPI**	**SEROU**	**WABAGAI**
6.	**THONGJAO**	**LAIMANAI**	**CHAIREN**	**HIYANGLAM-I**
7.	**SEROU**	**IRENGBAM**	**KEIRAK**	**PALLEL**
8.	**CHAIREL**	**LANGMEIDONG**	**WANGOO**	**ELANGKHANGPOKPI**