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Appendix A

Tables for Discrete Variables

with Significant Differences

between Sample and Population Proportions

Appendix A

Table I - 1. Ban Chung: Sample and Population Distributions for "Adequacy of Last Year's Rice Harvest for Household Consumption".

Category	P*$_z$	Z	% Sample	% Population
Enough for home consumption all year, and surplus for sale	---	1.414	70	48
Enough for home consumption all year	---	-0.343	0	1
Enough for home consumption for 10 to 12 months	.05	2.305	20	5
Enough for home consumption for 8 to 10 months	---	-0.941	0	8
Enough for home consumption for 6 to 8 months	---	-0.343	0	1
Enough for home consumption for less than 6 months	---	-0.488	0	2
Sold and rebought	---	-0.941	0	8
Did not grow rice	---	-1.196	10	27
TOTAL:			100 (N=10)	100 (N=86)

* Only probabilities of .10 or less are given

Table I - 2.   Ban Chung: Sample and Population Distributions for
            "Number of Buffalo Sold Last Year".

Category	P_z^*	Z	% Sample	% Population
None	.10	-1.812	70	88
One	—	1.372	20	8
Two	—	1.122	10	4
Total:			100	100
			(N=10)	(N=86)

*   Only probabilities of .10 or less are given

Table I - 3. Ban Chung: Sample and Population Distributions for
"Work Status of all Household Members"

Category	P_z^*	Z	% Sample	% Population
In the labour force	.05	2.083	68	54
Younger than 11 years	.02	-2.566	15	32
Too old to work	---	-1.223	0	3
Mentally or physically handicapped	---	-0.323	0	0
Studying full-time	---	1.422	17	11
Total:			100 (N=52)	100 (N=469)

* Only probabilities of .10 or less are given

Table I - 4. Ban Chung: Sample and Population Distributions for
"Industry of Main Occupation of the Labour Force"

Category	P_z^*	Z	% Sample	% Population
Farming	--	0.682	85	82
Trading	--	0.622	3	5
Home Industry	--	0.000	3	3
Construction	--	0.333	0	0
Government Service	—	0.571	3	2
Transport	--	0.667	0	1
Manufacturing Industry	--	0.364	0	0
Casual Labour	--	0.546	6	4
Retired (Management functions only)	--	1.067	0	3
Total:			100	100
			(N=35)	(N=253)

* Only probabilities of .10 or less are given

Table I - 5. Ban Chung: Sample and Population Distributions for
              "Employment Status of the Labour Force in Main
              Occupation"

Category	P^*_z	Z	% Sample	% Population
Employee	--	0.211	17	16
Self-employed	--	-0.751	26	31
Unpaid family worker	--	0.545	57	53
Total:			100	100
			(N=35)	(N=253)

* Only probabilities of .10 or less are given

Table I - 6. Ban Chung: Sample and Population Distributions for
"Industry of Subsidiary Occupation of the Labour Force"

Category	P^*_z	Z	% Sample	% Population
With subsidiary occupation	.10	1.849	51	36
Without subsidiary occupation	.10	-1.849	49	64
Total:			100	100
			(N=35)	(N=253)
None	.10	-1.849	49	64
Farming	--	1.528	14	7
Trading	--	-0.425	14	17
Home Industry	--	0.882	8	2
Construction	--	-0.317	--	3
Government Service	--	--	--	--
Transport	--	-0.533	--	1
Industry (Manufacturing)	.002	3.267	6	1
Casual Labour	--	0.329	6	3
Other	--	0.062	3	2
Total:			100	100
			(N=35)	(N=253)

* Only probabilities of .10 or less are given

Table I - 7.   Ban Chung: Sample and Population Distributions for
               "Employment Status of the Labour Force in Subsidiary
               Occupation"

Category	P^*_z	Z	% Sample	% Population
No Subsidiary Occupation	.10	-1.804	49	63
Employee	---	1.632	22	13
Self-Employed	--	0.406	20	18
Unpaid Family Worker	--	0.678	9	6
Total:			100	100
			(N=35)	(N=253)

* Only probabilities of .10 or less are given

Table II - 1. Khayai, all households: Sample and Population Distributions
for "Industry of Main Occupation of Household Head"

Category	P*z	Z	% Sample	% Population
None (management function only)	--	-0.685	0	4
Farming	--	1.392	50	30
Trading	--	0.538	10	6
Home industry	--	-0.257	40	44
Construction	--	-0.274	0	1
Government Service	--	-0.992	0	9
Transport	--	-0.274	0	1
Casual Labour	--	-0.479	0	2
Other (including housework)	--	-0.555	0	3
Total:			100	100
			(N=10)	(N=134)

* Only probabilities of .10 or less are given

Table II - 2.   Khayai, all households: Sample and Population Distribution
for "Status of Household Head in Main Occupation"

Category	P_z^*	Z	% Sample	% Population
None, Management Function only	--	-0.685	0	4
Employee	.10	-1.808	0	25
Self-employed	.05	2.026	100	71
Total:			100	100
			(N=10)	(N=134)

* Only probabilities of .10 or less are given

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Table II-3.   Khayai, all households: Sample and Population
Distributions for "Industry of Subsidiary Occupation
of Household Heads"

Category	Pz*	Z	% Sample	% Population
No Subsidiary Occupation	–	-0.823	40	54
Farming	–	-0.189	10	12
Trading	.05	2.219	10	1
Home Industry	–	1.565	40	20
Construction	–	-0.389	0	1
Government Service	–	-0.274	0	1
Casual Labour	–	-0.555	0	3
Other (not including transport or manufacturing industry)	–	-0.946	0	8
Total			100 (N=10)	100 (N=134)

*
   Only probabilities of .10 or less are given

Table II - 4.   Khayai, all households: Sample and Population Distribution
for "Employment Status of Household Heads in Subsidiary
Occupation"

Category	P^*_z	Z	% Sample	% Population
No Subsidiary Occupation	--	-0.823	40	53
Employee	--	-1.037	0	10
Self-employed	--	1.483	60	37
Total:			100	100
			(N=10)	(N=134)

*   Only probabilities of .10 or less are given

Table II-5. Khayai, all households: Sample and Population
Distributions for "Industry of Subsidiary
Occupation of the Labour Force"

Category	Pz*	Z̄	% Sample	% Population
Farming	—	0.339	16	14
Trading	.00001	5.112	16	3
Home Industry	—	-0.687	18	23
Construction	—	-0.650	0	1
Government Service	—	-0.338	0	0
Casual Labour	—	-0.946	0	2
Other	—	-1.291	0	4
None	—	-0.309	50	53
Total			100	100
			(N=35)	(N=253)

* Only probabilities of .10 or less are given

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Table II - 6 Khayai, all households: Sample and Population
             Distributions for "Hiring of Permanent Employees
             During the Year Preceding the Fieldwork"

Category	Pz*	Z	% Sample	% Population
Hired Permanent Employees	.001	3.400	10	1
Did not Hire Permanent Employees	.001	-3.400	90	99
Total			100	100
			(N=10)	(N=134)

*
Only probabilities of .10 or less are given

Appendix A

Table II-7.   Khayai, all households: Sample and Population
              Distributions for "Hiring Casual Labour During
              the Year Preceding the Fieldwork"

Category	Pz*	Z	% Sample	% Population
Hired Casual Labour	.10	1.861	70	41
Did not Hire Casual Labour	.10	-1.861	30	59
Total			100	100
			(N=10)	(N=134)

*
Only probabilities of .10 or less are given

Appendix A

Table II - 8. Khayai, all households: Sample and Population
Distributions for "Place of Origin of Casual
Employees"

Category	Pz[*]	Z	% Sample	% Population
No Answer	.10	1.873	20	6
Did not Hire	.10	-1.861	30	59
Same Village	–	-0.379	10	14
Same Tambon	–	0.786	20	12
Same Amphoe	–	1.223	20	9
Total			100	100
			(N=10)	(N=134)

*
Only probabilities of .10 or less are given

Appendix A

Table II - 9. Khayai, all households: Sample and Population

Distributions for "Form of Payment of Hired Labour"

Category	Pz*	Z	% Sample	% Population
Did not Hire Labour	–	-1.270	40	60
Cash	–	0.726	50	39
Cash and Food	.05	2.219	10	1
Total			100	100
			(N=10)	(N=134)

*
 Only probabilities of .10 or less are given

Appendix A

Table II-10. Khayai, all households: Sample and Population
Distributions for "Number of Man-Days of Labour
Exchange Given"

Category	Pz*	Z	% Sample	% Population
No Labour Exchange	.10	−1.647	60	80
1 to 5 Man-Days	−	−0.274	−	1
6 to 10 Man-Days	.001	3.400	10	1
11 to 20 Man-Days	−	1.046	10	4
21 to 30 Man-Days	.10	1.659	10	2
41 or more Man-Days	−	−0.189	10	12
Total			100	100
			(N=10)	(N=134)

* Only probabilities of .10 or less are given

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Table II – 11. Khayai, Households with Land Holdings: Sample and
Population Distributions for "Use of Permanent
Employees"

Category	Pz*	Z	% Sample	% Population
Hired permanent employees	.01	2.841	17	2
Did not hire permanent employees	.01	-2.841	83	98
Total			100 (N=6)	100 (N=59)

*
Only probabilities of .10 or less are given

Table II – 12. Khayai, Households with Land Holdings: Sample and
Population Distributions for "Form of Payment of
Hired Labour"

Category	Pz*	Z	% Sample	% Population
Did not hire labour	---	-0.745	0	8
Cash	---	-0.364	83	88
Cash and food	.10	1.797	17	4
Total			100 (N=6)	100 (N=59)

*
Only probabilities of .10 or less are given

Appendix A

Table II - 13. Khayai, Households with Land Holdings: Sample
and Population Distributions for "Labour
Exchange Given in Man-days"

Category	Pz*	Z	% Sample	% Population
None	---	-1.296	32	59
1 to 5 man-days	---	-0.322	0	2
6 to 10 man-days	.01	2.841	17	2
11 to 20 man-days	---	0.963	17	7
21 to 30 man-days	---	1.291	17	5
41 man-days or more	---	-0.493	17	25
TOTAL			100	100
			(N=6)	(N=59)

*Only probabilities of .10 or less are given

Appendix A

Table II-14. Khayai, Households without Land Holdings: Sample and
Population Distributions for "Status of Household
Head in Main Occupation"

Category	Pz*	Z	% Sample	% Population
None (retired, management function only)	---	-0.408	0	4
Employee	---	-1.633	0	40
Self-employed	.10	1.773	100	56
Total			100	100
			(N=4)	(N=75)

* Only probabilities of .10 or less are given

Appendix A

Table II-15. Khayai, Households without Land Holdings: Sample
and Population Distributions for "Industry of
Subsidiary Occupation of Household Heads"

Category	Pz*	Z	% Sample	% Population
No subsidiary occupation	---	0.075	75	73
Farming	---	-0.536	0	7
Trading	.0001	4.127	25	1
Home Industry	---	-0.475	0	5
Construction	---	-0.233	0	1
Casual Labour	---	-0.331	0	3
Other	---	-0.642	0	9
Total			100	100
			(N=4)	(N=75)

*
Only probabilities of .10 or less are given

Appendix A

Table II - 16. Khayai, Households without Land Holdings: Sample
and Population Distributions for "Use of Casual
Labour"

Category	Pz*	Z	% Sample	% Population
Hired casual labour	.0001	4.127	25	1
Did not hire casual labour	.0001	-4.127	75	99
Total			100 (N=4)	100 (N=75)

* Only probabilities of .10 or less are given

Table II - 17. Khayai, Households without Land Holdings: Sample
and Population Distributions for "Place of Origin
of Majority of Casual Labour"

Category	Pz*	Z	% Sample	% Population
No answer	.0001	4.127	25	1
Did not hire labour	.0001	-4.127	75	99
Total			100 (N=4)	100 (N=75)

* Only probabilities of .10 or less are given

Table III - 1. Thap Nan: Sample and Population Distributions for
"Industry of Main Occupation of Household Heads"

Category	P*$_z$	Z	% Sample	% Population
Retired, Management Function Only	--	-0.810	0	6
Farming	.05	2.185	100	68
Trading	--	-1.008	0	9
Government Service	--	-0.563	0	3
Casual Labour	--	-1.185	0	12
Other	--	-0.395	0	2
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III – 2. Thap Nan: Sample and Population Distributions for
                "Employment Status of Household Heads in Main Occupation."

Category	P_z^*	Z	% Sample	% Population
Retired, Management Function Only	--	-0.810	0	6
Employee	--	-1.427	0	17
Self-Employed	.10	1.732	100	77
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 3. Thap Nan: Sample and Population Distributions for
                "Industry of Main Occupation of the Labour Force"

Category	P^*_z	Z	% Sample	% Population
Farming	.002	3.170	93	70
Trading	.05	-2.132	0	10
Government Service	--	-0.119	2	3
Casual Labour	.05	-1.976	5	16
Retired	--	-0.457	0	1
Total:			100	100
			(N=41)	(N=190)

* Only probabilities of .10 or less are given

Table III - 4. Thap Nan: Sample and Population Distributions for
"Hiring of Casual Labour in the Year Preceding the
Fieldwork"

Category	P^*_z	Z	% Sample	% Population
Hired Casual Labour	.10	1.850	90	62
Did not hire casual labour	.10	-1.850	10	38
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 5. Thap Nan: Sample and Population Distributions for
"Form of Payment for Hired Labour."

Category	P^*_z	Z	% Sample	% Population
Did not hire labour	.10	-1.850	10	38
Cash	--	1.291	80	60
Cash and kind	.05	2.174	10	2
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 6.   Thap Nan: Sample and Population Distributions for
"Number of Buffalo Owned"

Category	P_z^*	Z	% Sample	% Population
None	.05	-2.046	20	52
1	--	1.103	30	17
2	--	0.563	20	14
3 to 5	--	1.281	30	15
6 to 10	--	-0.395	0	2
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 7.   Thap Nam: Sample and Population Distributions for
                 "Number of Buffalo and Cattle Sold during the Year
                 Preceding the Fieldwork"

Category	P*$_z$	Z	% Sample	% Population
None	--	-1.581	60	80
1	--	-0.079	10	11
2	--	1.268	10	3
3 to 5	.001	2.319	20	5
16 to 25	--	-0.395	0	1
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 8. Thap Nam: Sample and Population Distributions for
"Number of Hogs Owned"

Category	P^*_z	Z	% Sample	% Population
None	0.5	-2.108	0	31
1	--	0.260	20	17
2	--	-0.222	10	12
3 to 5	--	1.281	30	16
6 to 10	--	0.084	10	9
11 to 15	--	1.176	20	9
16 to 25	--	0.506	10	6
Total:			100	100
			(N=10)	(N=65)

* Only probabilities of .10 or less are given

Table III - 9. Thap Nam: Sample and Population Distributions for
                "Number of Hogs Sold during the Year Preceding the
                Fieldwork"

Category	P*$_z$	Z	% Sample	% Population
None	--	-0.750	50	61
2	--	-1.008	0	9
3 to 5	--	0.506	10	6
6 to 10	.10	1.756	40	18
11 to 15	--	-0.395	0	2
16 to 25	--	-0.395	0	2
26 to 50	--	-0.395	0	2
Total:			100	100
			(N=10)	(N=65)
Sold 3 to 10 head	.10	1.925	50	24

* Only probabilities of .10 or less are given

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Table III - 10. Thap Nam: Sample and Population Distributions for
"Number of Poultry Owned"

Category	Pz*	Z	% Sample	% Population
None	–	-1.423	10	30
1 to 5	–	-0.563	0	3
6 to 10	–	0.563	20	13
11 to 20	.01	2.598	60	24
21 to 30	–	-0.913	0	8
31 to 40	.05	2.174	10	2
41 to 50	–	-0.696	0	5
51 to 100	–	-0.696	0	5
101 to 200	–	-0.696	0	5
More than 200	–	-0.696	0	5
			100	100
			(N=10)	(N=65)

(Collapsed categories)

Category	Pz*	Z	% Sample	% Population
None	–	-1.423	10	30
1 to 20	.02	2.458	80	40
21 to 40	–	0.084	10	10
More than 40	–	-1.505	0	20
			100	100
TOTAL			100	100
			(N=10)	(N=65)

*

Only probabilities of .10 or less are given

Appendix A

Table III - 11. Thap Nam: Sample and Population Distributions
for "Employment Status of the Labour Force in
Main Occupation"

Category	Pz*	Z	% Sample	% Population
Employee	.05	-2.033	7	20
Self-employed	---	-0.636	25	29
Unpaid family worker	.05	2.231	68	51
			100	100
Total			(N=41)	(N=190)

* Only probabilities of .10 or less are given

Table IV - 1. On Tai: Sample and Population Distributions for
"Industry of Subsidiary Occupation of Household Head"

Category	P^*_z	Z	% Sample	% Population
No subsidiary occupation	---	-0.633	40	50
Farming	.10	1.722	40	19
Trading	--	-0.568	0	3
Construction	--	0.068	10	9
Government service	--	-0.461	0	2
Casual labour	--	-0.043	10	11
Other (including housework)	--	-0.817	0	6
Total:			100 (N=10)	100 (N=96)

* Only probabilities of .10 or less are given

Appendix A

Table IV - 2   On Tai: Sample and Population Distributions for "Number
of Buffalo Owned at the Time of the Survey"

Category	Pz*	Z	% Sample	% Population
None	-	-0.095	60	61
1	-	-1.195	0	13
2	-	-0.043	10	10
3 - 5	-	0.485	20	15
6 - 10	.01	2.790	10	1
Total			100	100
			(N=10)	(N=96)

1 - 5	-	-0.521	30	38
6 - 10	.01	2.790	10	1

* Only probabilities of .10 or less are given

Appendix A

Table IV - 3. On Tai: Sample and Population Distributions for

"Number of Cattle Owned at the Time of the Survey"

Category	Pz*	Z	% Sample	% Population
None	.05	-2.091	10	43
1	--	-0.239	10	13
2	--	0.835	40	28
3 - 5	--	1.335	20	8
6 - 10	--	1.250	10	3
11 - 15	--	-0.461	0	2
16 - 25	--	-0.461	0	2
26 - 50	.01	2.790	10	1
Total			100	100
			(N=10)	(N=96)

3 - 10	.10	1.921	30	11
11 - 25	--	0.646	0	4

* Only probabilities of .10 or less are given

Appendix A

Table IV-4. On Tai, Land Holding Households Only: Sample and
Population Distributions for "Industry of Subsidiary
Occupation of Household Heads"

Category	Pz*	Z	% Sample	% Population
No subsidiary occupation	-	-0.489	40	48
Farming	.10	1.657	40	19
Trading	-	-0.594	0	4
Construction	-	-0.024	10	10
Government service	-	-0.482	0	2
Casual labour	-	-0.024	10	10
Other (including housework, but excluding home industry, transport, and manufacturing industry)	-	-0.855	0	7
Total			100	100
			(N=10)	(N=88)

*
 Only probabilities of .10 or less are given

Appendix A

Table V – 1. Buak Khang: Sample and Population Distributions

for "Work Status of All Household Members"

Category	Pz*	Z	% Sample	% Population
In the labour force	.01	-2.599	45	60
Younger than 11 years	.05	2.203	39	28
Too old to work	–	0.090	6	5
Physically or mentally handicapped	–	0.597	0	1
Studying full-time	–	1.293	10	6
Total			100 (N=71)	100 (N=927)

*
 Only probabilities of .10 or less are given

Appendix A

Table V - 2. Buak Khang: Sample and Population Distributions for "Industry of Main Occupation of the Labour Force"

Category	Pz*	Z	% Sample	% Population
Farming	.10	-1.745	38	53
Trading	--	0.491	6	5
Home Industry	--	0.457	9	7
Construction	--	-0.674	0	1
Government Service	.10	1.678	3	1
Transport	**	$+\infty$	3	0
Industry (Manufacturing)	.02	-2.414	0	15
Casual Labour	.05	-2.177	0	13
Other	.02	2.457	41	5
Retired - Management Function Only	--	-0.080	0	0
Total			100	100
			(N=32)	(N=558)

* Only probabilities of .10 or less are given

** This is, of course, impossible in a sample really drawn from the population it is meant to represent.

Appendix A

Table V - 3. Buak Khang: Sample and Population Distributions for
"Employment Status of the Labour Force in Main
Occupation"

Category	Pz*	Z	% Sample	% Population
No occupation (Retired, management function only)	-	-0.253	0	1
Employee	-	0.400	47	43
Self-employed	.10	1.925	31	18
Unpaid family worker	.10	-1.909	22	38
Total			100	100
			(N=32)	(N=558)

*
 Only probabilities of .10 or less are given

Appendix A

Table V - 4. Buak Khang: Sample and Population Distributions for
"Industry of Subsidiary Occupation of the Labour Force"

Category	Pz*	Z	% Sample	% Population
Farming	.05	2.267	53	34
Trading	-	0.217	3	3
Home Industry	-	-0.094	3	3
Construction	-	0.217	3	3
Industry (Manufacturing)	-	-1.378	0	5
Casual Labour	-	-1.479	0	6
Other	-	1.337	6	3
No Subsidiary Occupation	--	-1.337	32	43
Total			100	100
			(N=32)	(N=558)

* Only probabilities of .10 or less are given

Appendix A

Table V - 5. Buak Khang: Sample and Population Distributions for "Employment Status of the Labour Force in Subsidiary Occupation"

Category	Pz*	Z	% Sample	% Population
No Subsidiary Occupation	–	-1.315	31	43
Employee	.05	-2.007	9	25
Self-employed	–	0.919	16	10
Unpaid family worker	.01	2.982	44	22
Total			100	100
			(N=32)	(N=558)

---

* Only probabilities of .10 or less are given

Table V - 6. Buak Khang: Sample and Population Distributions for
"Industry of Main Occupation of Household Heads"

Category	P*$_z$	Z	% Sample	% Population
Farming	.05	2.030	80	48
Trading	--	0.197	10	8
Home Industry	--	-0.607	0	4
Construction	--	-0.607	0	4
Government Service	--	1.588	10	2
Manufacturing Industry	--	-0.425	0	2
Casual Labour	--	-1.469	0	17
Other (including domestic work)	--	-0.607	0	4
Retired (management function only)	--	-1.126	0	11
			100	100
			(N=10)	(N=169)

* Only probabilities of .10 or less are given

Table V - 7.   Buak Khang: Sample and Population Distributions for
"Industry of Subsidiary Occupation of Household Heads"

Category	P^*_z	Z	% Sample	% Population
None	--	-0.167	40	43
Farming	--	-0.701	20	30
Trading	--	-0.750	0	5
Home Industry	.001	3.668	20	2
Construction	--	0.930	10	4
Manufacturing Industry	--	-0.346	0	1
Casual Labour	--	-0.913	0	8
Other (including domestic work, but excluding government service and transport)	--	0.448	10	7
Total:			100	100
			(N=10)	(N=169)

* Only probabilities of .10 or less are given

Table V - 8. Buak Khang: Sample and Population Distributions for

"Employment Status of Household Head in Main Occupation"

Category	P^*_z	Z	% Sample	% Population
None, Management Function only	--	-1.126	0	11
Employer	--	-0.244	0	1
Employee	.10	-1.653	10	35
Self-employed	.02	2.329	90	53
Total:			100	100
			(N=10)	(N=169)

* Only probabilities of .10 or less are given

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Variables Available from the
Socio - Economic Profile Schedule
(Round I, 1969 -'70)

The variables considered in this study are marked with an asterisk(*).

Quantitative Variables

*   Number of household members

*   Number of children of household head (both at home and away from home)

*   Number of persons in the labour force

*   Number of persons younger than eleven years

*   Number of persons too old to work

*   Number of persons physically or mentally handicapped

*   Number of persons eleven years or older engaged in full-time study or training

*   Number of persons in the labour force engaged only in agriculture

*   Number of persons in the labour force engaged only in non-agriculture

*   Number of persons in the labour force engaged in both agriculture and non-agriculture

    Number of children of household head permanently away from home

    Number of children of household head permanently away from home who were engaged only in agriculture

    Number of children of household head permanently away from home who were engaged only in non-agriculture

    Number of children of household head permanently away from home who were engaged in both agriculture and non-agriculture

    Number of rai of agricultural land owned

*   Operational holding in rai. (This is defined as land owned + land rented in + land used without ownership title - land rented out.)

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* Number of rai of land used in the rainy season

* Number of rai of land used in the dry season

* Number of rai of land rented in

* Number of rai of land rented out

* Number of rai of land used without ownership title

* Number of rai of land under wet-season irrigation

* Number of rai of land under all-year irrigation

* Number of plots of land farmed

* Average size per plot of farm land (in rai)

* Percent unnecessary labour in the household during the rice
  planting season

* Percent unnecessary labour in the household during the rice
  harvesting season

* Percent unnecessary labour in the household during periods
  other than the rice planting and rice harvesting seasons

* Number of members of the labour force engaged in full-time
  agricultural employment

* Number of members of the labour force engaged in part-time
  agricultural employment

* Number of members of the labour force engaged in full-time
  non-agricultural employment

* Number of members of the labour force engaged in part-time
  non-agricultural employment

* Number of persons taking employment in the same tambon

* Number of persons taking employment in the same amphoe, but
  outside the tambon

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*   Number of persons taking employment in the same changwat, but
    outside the amphoe

*   Number of persons taking employment in a neighbouring changwat

*. Number of persons taking employment in the same region, but not
    in the same or a neighbouring changwat

*   Number of persons taking employment in a different region

*   Number of persons taking employment in Bangkok-Thonburi

*   Number of persons taking employment in several of the above
    places

*   Number of persons doing full-time own-account non-farm work

*   Number of persons doing part-time own-account non-farm work

*   Man-months spent working by hired labour

*   Percent of arable land farmed in the rainy season only

*   Percent of arable land farmed in the dry season only

*   Percent of arable land farmed under two-season cropping

*   Average rice yield per rai over the past five years (in 10
    kilograms)

*   Total rice production last year (in 10 kilograms)

*   Percent of last year's rice harvest bartered or sold

*   Percent of crops other than rice bartered or sold

Appendix B
Discrete Variables

Kinship composition of households

Age group of household head

Level of education of household head

Place of birth of household head

Marital status of household head

* Industry of main occupation of household head

* Industry of subsidiary occupation of household head

* Employment status of household head in main occupation

* Employment status of household head in subsidiary occupation

Land title for 50% or more of land owned

Source of water for all-year irrigation (if any)

* Adequacy of last year's rice harvest for household consumption

Land tenure status of the household

Source of acquired land

Source of inherited land

Inheritance practice in the family (in the past)

Ideal inheritance practice in the village (What is the most

favoured inheritance practice in this village?)

Main reason for change in size of owned land during the period

1959-1969 for households with land in 1969.

Main reason for change in size of total holding during the

period 1964-1969 for households with land in 1969.

Main reason for change in size of operational holding during

the period 1964-1969 for households with land in 1969.

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Length of land tenancy

Place of residence of landlord

* Did you hire permanent employees (i.e. for 180 days or more) during the past year?

* Place of origin of majority of permanent employees

* Did you hire casual labour during the past year?

* Place of origin of majority of casual labour

* Form of payment of hired labour

* Labour exchange given (man-days)

* Labour exchange received (man-days)

Market outlet for sale of rice

Market outlet for sale of fruits and vegetables

Market outlet for sale of tobacco

Market outlet for sale of crops other than rice, fruits and vegetables, and tobacco.

* Why not getting best results out of farming land?

* Use of modern equipment

* Use of tractor and power pump

Source of improved rice seed

Use of improved seed for other crops

* Use of fertilizers

Amount spent on chemical fertilizers

Amount spent on herbicides and insecticides

* Number of buffalo owned (categorized)

* Number of cattle owned (categorized)

* Number of hogs owned (categorized)

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* Number of poultry owned (categorized)

* Number of buffalo and cattle sold last year (categorized)

   Market outlet for sale of buffalo and cattle

* Number of hogs sold last year (categorized)

   Market outlet for sale of hogs

* Number of poultry sold last year (categorized)

   Market outlet for sale of poultry

* Number of work-animal-weeks hired last year (categorized)

* Number of work-animal-weeks borrowed last year (categorized)

   Form of payment for hired animals

   Source of borrowed money

   Length of time of loan

   Rate of interest paid per month

   Form of security for loans

   Receivers of money lent

   Rate of interest received per month

   Use of formal savings institutions

   Contribution to merit-making activities

   Improvements in Farm Inputs

   Improvements in Farm Techniques

   Improvements in Farm Outputs

   Influences to adopt innovations

        -Government administrative officers

        -Government extension workers

        -Government development agencies

        -Local leaders

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    -Commercial enterprises

    -Radio, television

    -Literature

    -Other influences

Place of birth of the population

Marital status of the population

Education level of the population

* Work status of the population

* Industry of main occupation of the labour force

* Industry of subsidiary occupation of the labour force

* Employment status of the labour force in main occupation

* Employment status of the labour force in subsidiary occupation

Appendix C

Glossary of Thai Terms

Used in this Study

Appendix C

GLOSSARY OF THAI TERMS USED IN THIS STUDY

Amphoe   The largest subdivision of a changwat, roughly corresponding
          to a county or district. There are usually 6 to 8 amphoe in
          a changwat. At the time of writing, the changwat with the
          fewest amphoe had 2, and with the most, 19.

Baht   Denomination of currency. At the time of writing, U.S.$ 1.00
          = Baht 20.45.

Changwat Province. At the time of writing, the Kingdom was divided
          into 71 changwats or provinces.

Kamnan   The head of a tambon. The kamnan is elected by the village
          headmen of all villages in a tambon, from amongst their number.

Mathayom Suksa Secondary level education. In Thailand, this consists
          of 5 grades, equivalent to grades 8 to 12.

Rai   The measure of land area used throughout the Kingdom. 1 rai
          = 0.160 hectares, or 0.395 acres. 1 hectare = 6.250 rai.
          1 acre = 2.532 rai.

Samlor   Rickshaw. The word samlor is usually used to refer to three-
          wheeled   bicycle-like peddle-driven vehicles with a seat
          to carry one or two passengers either at the front or at the
          back. It can also mean a similar three-wheeled vehicle powered
          by a motor-cycle engine.

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Tambon   Subdivision of an amphoe, roughly corresponding to a township or sub-district. There are usually 5 to 10 tambons in an amphoe.

Wat   Buddhist temple. The temple in a Thai village is usually the centre of social life as well as of religious life.

Appendix D

Expanded Tables

from Chapter III

Table 3.1 Expanded. Ban Chung, Whole Village: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values, and Other Closely Related Variables.

Variable	μ	σ^2	$\bar{x}$	s^2	Z	Pz*	χ^2	Pχ^2**
Number of household members	5.50	4.56	5.60	2.44	0.149	--	0.54	
Number of persons in the labour force	2.99	1.47	3.90	1.69	2.345	.02	1.15	--
Number of persons younger than eleven years	1.74	2.49	0.80	1.36	-1.891	.10	0.55	--
Number of persons engaging in both agricultural and non-agricultural activities	0.81	1.16	1.60	2.64	2.316	.05	2.28	--
Number of persons taking full-time agricultural employment	0.22	0.57	0.50	2.25	1.171	--	3.92	.05
Number of persons taking part-time agricultural employment	0.17	0.43	0.40	1.44	1.097	--	3.37	.05
Number of persons taking full-time non-agricultural employment	0.21	0.28	0.50	0.45	1.732	.10	1.58	--
Number of persons taking employment in the same tambon	0.67	1.07	1.40	3.04	2.232	.05	2.85	--
Number of persons taking employment in the same region	0.05	0.07	0.20	0.36	1.850	.10	5.27	.10
Number of persons doing part-time own-account non-farm work	0.51	0.65	1.10	1.29	2.330	.02	1.98	--
Size of operational holding in rai	25.7	164.8	27.0	76.0	0.821	--	0.46	--(df=8)
Number of rai of agricultural land owned	10.2	216.0	10.6	247.4	0.079	--	1.15	--(df=8)
Total rice production last year(in 100 kilograms)	123	87,676	210	267,905	2.773	.01	3.01	.05(df=8)

* Only probabilities of .10 or less are given
** Only probabilities of .05 or more are given
df for this table = 9, unless otherwise indicated

Table 3.3 Expanded. Ban Chung, Households with Land Holdings: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

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Variable	μ	$\bar{X}$	σ^2	S^2	Z	P_Z*	χ^2	$P_{\chi^2}^{**}$
Number of persons younger than eleven years	1.78	0.56	2.68	0.91	-2.239	.05	0.34	--
Number of persons taking part-time agricultural employment	0.11	0.44	0.32	1.58	1.765	.10	4.92	--
Number of persons taking full-time non-agricultural employment	0.17	0.44	0.24	0.47	1.655	.10	1.96	--
Number of persons taking employment in the same tambon	0.35	1.00	0.54	1.78	2.571	.02	3.08	.05
Number of persons taking part-time non-agricultural employment	0.11	2.22	0.13	0.40	0.932	--	3.03	.05

* Only probabilities of .10 or less are given
** Only probabilities of .05 or more are given

df for this table = 8

Table 3.4 Expanded. Khayai, Whole Village, Only Variables Applicable to the Whole Village: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

Variable	μ	σ^2	$\bar{x}$	s^2	Z	Pz*	χ^2	$P_\chi 2$**
Number of household members	4.90	32.94	6.50	3.05	0.880	--	0.09	--
Number of persons in the labour force	2.85	1.83	3.80	1.56	2.411	.02	0.85	--
Number of persons younger than eleven years	1.21	1.41	2.20	2.36	2.360	.02	1.67	--
Percent unnecessary labour during the rice planting season	10.89	412.8	30.83	1003.5	2.402	.02	2.43	.20 (df=5)
Number of persons doing full-time own-account non-farm work	1.22	3.05	3.10	3.69	3.411	.001	1.21	--
Number of persons doing part-time own-account non-farm work	0.51	2.56	1.10	4.80	2.330	.02	1.88	--

* Only probabilities of .10 or less are given

** Only probabilities of .05 or more are given

df for this table = 9 unless otherwise indicated

Table 3.6 Expanded. Khayai, Households with Land Holdings: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

Variable	μ	$\bar{x}$	σ^2	s^2	Z	Pz*	χ^2	Pχ**
Number of persons younger than eleven years	1.12	2.50	1.09	1.58	3.244	.002	1.46	.05
Number of persons taking part-time non-agricultural employment	0.12	1.50	0.21	1.25	2.057	.05	6.06	.70
Number of persons doing full-time own-account non-farm work	1.16	2.00	2.20	3.00	1.387	--	1.63	.05
Number of persons in the labour force	3.10	3.67	1.62	2.22	1.088	--	1.37	.05
Percent of last years' rice production bartered or sold	33.0	47.8	379.7	1524.6	1.511	--	2.63	.20
Percent of unnecessary labour during the rice planting season	16.6	30.8	535.0	1005.7	1.504	--	1.88	.10

* Only probabilities of .10 or less are given
** Only probabilities of .05 or more are given
df for this table = 5

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Table 3.7 Expanded. Khayai, Households without Land Holdings: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

Variable	μ	$\bar{x}$	σ^2	s^2	Z	Pz*	χ^2	Pχ^2**
Number of persons in the labour force	2.65	4.00	1.91	0.50	1.951	.10	0.26	--
Number of persons engaged only in non-agriculture	2.31	4.00	2.32	0.50	2.224	.05	0.22	--
Number of persons doing full-time own-account non-farm work	1.27	3.50	3.58	4.25	2.360	.02	1.19	.20
Number of children of household head	3.29	4.25	4.85	2.19	0.869	---	0.45	.05
Number of persons younger than eleven years	1.21	1.75	1.66	3.19	0.833	---	1.92	.40
Number of persons engaged in full-time study or training	0.41	0.50	0.56	0.25	0.231	---	0.44	.05

* Only probabilities of .10 or less are given

** Only probabilities of .05 or more are given

df for this table = 3.

Table 3.8 Expanded. Thap Nam, Whole Village: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values

Variable	μ	σ^2	$\bar{X}$	s^2	Z	Pz*	χ^2	Pχ^2**
Number of household members	5.34	5.48	7.80	6.56	3.202	.002	1.20	--
Number of children of household head	4.23	5.72	5.50	4.25	1.679	.10	0.74	--
Number of persons in the labour force	2.92	2.07	4.10	2.09	2.586	.01	1.01	--
Number of persons younger than eleven years	1.68	2.37	2.50	2.25	1.690	.10	0.95	--
Number of persons eleven or older engaged in full-time study or training	0.49	0.40	0.90	0.49	2.029	.05	1.21	--
Number of persons working only in agriculture	1.42	2.55	2.60	3.04	2.346	.02	1.19	--
Size of operational holding in rai	33.8	549.2	48.7	316.4	1.905	.10	0.58	-- (df=8)
Number of rai of land used in the rainy season	33.8	549.2	48.7	316.4	1.905	.10	0.58	-- (df=8)
Number of plots of land farmed	3.30	5.12	4.67	8.89	1.818	.10	1.74	-- (df=8)
Number of persons engaged in full-time non-agricultural employment	0.49	0.90	1.00	1.20	1.696	.10	1.34	--
Percent of crops other than rice bartered or sold	84.5	109.3	65.3	89.6	-2.402	.02	0.47	.20(df=2)

* Only probabilities of .10 or less are given
** Only probabilities of .05 or more are given
df for this table = 9, unless otherwise indicated

Table 3.10 Expanded. Thap Nam, Households with Land Holdings: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

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Variable	μ	$\bar{X}$	σ^2	s^2	Z	Pz*	χ^2	P χ^{2}**
Number of persons in the labour force	3.19	4.22	2.20	2.17	2.086	.05	0.99	--
Number of persons eleven or older engaged in full-time study or training	0.49	0.89	0.38	0.54	1.951	.10	1.44	--
Number of persons engaged only in agriculture	1.83	2.78	2.74	3.06	1.719	.10	1.12	--
Size of operational holding in rai	33.8	48.7	549.2	316.4	1.905	.10	0.58	--
Number of persons taking full-time non-agricultural employment	0.53	1.11	0.97	1.21	1.762	.10	1.24	--

* Only probabilities of .10 or less are given
** Only probabilities of .05 or more are given
df for this table = 8

Table 3.11 Expanded. On Tai, Whole Village: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z and χ^2 Values.

Variable	μ	σ^2	$\bar{X}$	s^2	Z	Pz*	χ^2	P*χ^2*
Number of persons taking employment in the same region, but not the same or a neighbouring changwat	0.01	0.10	0.01	0.09	2.790	.01	8.73	.50
Number of persons taking employment in a different region	0.01	0.10	0.01	0.09	2.790	.01	8.73	.50

* Only probabilities of .10 or less are given

** Only probabilities of .05 or more are given

df for this table = 9

Table 3.13 Expanded. On Tai, Households with Land Holdings: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values.

Variable	μ	$\bar{x}$	σ^2	s^2	Z	Pz*	χ^2	Pχ^2**
Number of persons taking employment in the same region, but not the same changwat or a neighbouring changwat	0.01	0.10	0.01	0.09	2.644	.01	8.01	.40
Number of persons taking employment in a different region	0.01	0.10	0.01	0.09	2.644	.01	8.01	.40

* Only probabilities of .10 or less are given

** Only probabilities of .05 or more are given

df for this table = 9

Table 3.14 Expanded. Buak Khang, Whole Village: Population and Sample Means and Variances, and Z and χ^2 Values, with Significance Levels, for Quantitative Variables with Significant Z or χ^2 Values

Variable	μ	$\bar{X}$	σ^2	s^2	Z	Pz^*	χ^2	$P\chi^{2**}$
Number of household members	5.44	7.10	6.02	5.89	2.142	.05	0.98	--
Number of persons younger than 11 years	1.49	2.80	2.27	1.56	2.745	.01	0.69	--
Number of persons engaged in full-time study or training	0.31	0.70	0.39	0.41	1.950	.10	1.04	--
Number of rai of land owned	8.1	16.1	216.0	247.4	2.285	.05	1.15	--
Size of operational holding in rai	13.3	17.9	71.0	63.9	1.712	.10	0.90	--
Amount of land used in the rainy season	13.2	17.8	71.0	64.8	1.723	.10	0.91	--
Amount of land used in the dry season	0.8	2.2	5.4	11.4	2.507	.02	2.10	--
Number of rai rented in	6.2	1.1	47.6	4.9	-2.318	.05	0.10	--
Number of plots of land farmed	1.75	2.30	0.68	0.61	2.098	.05	0.90	--
Percent unnecessary labour at times other than the rice planting and rice harvesting seasons	3.78	27.3	167.0	523.6	5.755	.00001	3.14	--
Number of persons doing full-time own-account non-farm work	0.15	0.50	0.24	0.45	2.250	.05	1.90	--
Man-months worked by hired labour	2.88	6.56	17.03	7.73	2.838	.01	0.45	--(df = 8)
Percent of arable land under two-season cropping	3.54	8.50	76.8	300.5	1.790	.10	3.91	.05
Average rice yield per rai over the past five years	35.5	44.4	259.2	200.5	1.672	.10	0.77	--(df = 8)
Total rice production last year	422	694	134,905	66,123	2.339	.02	0.49	--
Percent of last year's rice production bartered or sold	12.6	29.3	515.5	171.2	2.322	.05	0.33	--
Percent of arable land farmed in the wet season only	94.8	90.7	82.3	291.0	-1.436	----	3.54	.05

* Only probabilities of .10 or less are given

** Only probabilities of .05 or more are given.

df for this table = 9, unless otherwise indicated.

Appendix E

Summary of the

Labour Utilization Data

for

Ban   Chung

Khayai

Thap Nam

On Tai

Table 5.1 Total Time Available, Total Time Worked, and Percent of Total Time Worked Spent on Different
Activities, during the Year 1 June 1969 to 30 May 1970, for Sample Land Holding Households in
Ban Chung, Khayai,Thap Nam, and On Tai, and Sample Households without Land Holdings in Khayai

	Ban Chung	Khayai, Households with Land Holdings	Khayai, Households without Land Holdings	Thap Nam	On Tai
Hours Available	75,400	44,100	34,800	85,800	81,750
Hours Worked (excluding Domestic Work)	51,969	34,563	24,710	65,364	59,231
Hours Spent on Domestic Work	16,136	8,541	7,143	17,137	15,574
Total Hours Worked,(including Domestic Work)	68,105	43,104	31,853	82,501	74,805
Total Hours Worked as % of Hours Available	90.3	97.7	91.5	96.2	91.5
Total Hours Worked or Ill	70,501	43,778	n.a.	85,360	n.a.
Total Hours Worked or Ill as % of Hours Available	93.5	99.3	n.a.	99.5	n.a.
Percent of Total Hours Worked Spent on :					
Crops	34.9	13.4	0.1	16.9	21.3
Livestock	9.9	10.2	0.0	37.0	21.2
Agricultural Support	5.7	2.7	0.0	4.4	6.2
(Total – Farm Work)	(50.5)	(26.3)	(0.1)	(58.3)	(50.5)
Domestic Work	23.7	19.8	22.4	20.8	20.8
Cottage Industry	0.7	39.3	70.2	0.9	1.6
Off-farm Work	25.1	14.6	7.2	20.0	20.9
Subdivision of Off-farm Work :					
Off-farm Work – self-employed	9.1	9.2	n.a.	2.8	n.a.
– employee	9.2	2.3	n.a.	13.4	n.a.
Labour Exchange	2.6	1.8	n.a.	1.7	n.a.
Hunting and Fishing	3.6	1.2	n.a.	1.6	n.a.
Community Work	0.6	0.1	n.a.	0.5	n.a.

n.a. The figures were not available to the present investigator

Table 5.2 Total Time Worked, as a Percent of Hours Available, by Months, for the Year 1 June 1969 to 30 May 1970, in Sample Land-Holding Households of Ban Chung, Khayai, Thap Nam and On Tai.

Appendix E

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	All Year
Ban Chung	96	138	111	79	77	71	104	115	71	77	65	76	90
Khayai	107	99	101	107	84	89	104	107	90	100	87	98	98
Thap Nam	103	99	96	95	85	88	95	117	98	98	83	97	96
On Tai	90	84	105	89	93	88	116	98	89	88	77	82	92

[1] Taken from Fuhs (1974) for Ban Chung, Khayai, and Thap Nam. Calculated from the raw data for On Tai.

Curriculum Vitae

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