

CHAPTER 4

Results

The research of “The Lesson Learned from the Success of the Royal Project to the Development of Royal Project Extended Areas in Thailand” uses structured interviews as a tooling for data collection. The data were analyzed by using computer and present analysis result by using the lecture table. A 4-set of poll is set and held a focus group for the Chief officers and staffs of the Extended Project. The content analysis detailed below.

4.1 Part 1 Analysis result for data of Chief officers and staffs of the Royal Project Development Center.

4.2 Part 2 Analysis result for data of the farmers in the Royal Project Development Center.

4.3 Part 3 Analysis result for data of the staff of the Extended Project.

4.4 Part 4 Analysis result for data of the farmers in the Extended Project.

4.5 Part 5 Analysis result for Focus Group of the Chief Officer of the Royal Project Center and Focus Group of the Staffs of the Extended Project.

4.1 Part 1 Analysis result for data of Chief officers and staffs of the Royal Project Development Center.

4.1.1 Gender

From the study of the personal information found that the Chief officers and staffs of the Royal Project, 96.1 % are males and 3.9% are female. (Table 4.1)

Table 4.1 Gender

N = 76

Gender	Number(Person)	Percent
1. Gender		
Male	73	96.1
Female	3	3.9

4.1.2 The general socio-economics background

From the study of the personal information found that the Chief officers and staffs of the Royal Project 48.6 % are aged 41-50 years, 25.0 % are 31-40 years of age. The minimum age is 25 years and maximum is 64 years, the average are 42.54 years. Considering of an education, 77.3 % are Bachelor Degree graduated, 17.4 % are Master Degree graduated. And the working experience at the Royal Project Development Center, 22.4 % have been worked 21-25 years, 18.4 % have 11-15 years. The working experience of the Royal Project staff is less than one year and maximum of 35 years with an average of 9.087 years. (Table 4.2)

Table 4.2 The general socio-economics background

The general socio-economics background		Number (Person)	Percent
1. Age (N = 72)			
21-30		9	12.5
31-40		18	25.0
41-50		35	48.6
51-60		9	12.5
Over 60		1	1.4
Minimum 25 years Maximum 64 years			
Average 42.54 years, Standard Deviation 8.607 years			
2. Education (N = 75)			
Diploma		3	4.0
Bachelor Degree		58	77.3
Master Degree		13	17.4
Doctorial Degree		1	1.3
3. Working experience at the Royal Project (Years)			
< 1		1	1.3
1 - 5		12	15.8
6 - 10		8	10.5
11 - 15		14	18.4
16 - 20		10	13.2
21 - 25		17	22.4
26 - 30		12	15.8
> 30		2	2.6
Minimum < 1 years Maximum 35 years			
Average 16.72 years, Standard Deviation 9.087 years			

4.1.3 The elements of the Royal Project Foundation's success lessons.

The study found that the Chief officers think that the elements of the success lessons are The specialist experts 73.7 %, Research for 68.4 %, Knowledge 60.5 %, Policies 59.2 %, Methods and Strategy Management 56.6 %, Operation format in the high land development 55.3 %, Support mechanisms 48.7 %, Learning center 46.1 % and Operation tooling 43.4 %. (Table 4.3)

Table 4.3 The elements of the Royal Project Foundation's success lessons of Chief officers and staffs of the Royal Project

N = 76

The elements of the Royal Project success lessons (Can be answered more than one)	Number	Percent
Specialist experts	56	73.7
Research	52	68.4
Knowledge	46	60.5
Policies	45	59.2
Methods and Strategy Management	43	56.6
Operation format in the high land development	42	55.3
Support mechanisms	37	48.7
Learning center	35	46.1
Operation tooling	33	43.4

4.1.4 The analysis result of the Royal Project operation model in a highland area development that can be taken as a lesson in the development of other highland areas.

1) Analysis result for the Royal Project operation model in a highland area development in 'Operation Process' that can be taken as a lesson to development of other highland areas for Chief Officers and staffs of the Royal Project's opinion found that the operation process in every subject have an effect to the success of highland area development in very high level with the total average of 3.79. It is particularly an Integrated operations with outside agencies ($\mu = 4.00$), Continuity of operations ($\mu = 3.93$), Integrated operations within the organization and Clearly regulations in practice ($\mu = 3.87$). The details are shown in Table 4.4 below.

Table 4.4 Operation Process in the Royal Project development center that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Integrated operations within the organization	16 (21.1)	38 (50)	19 (25)	2 (2.6)	1 (1.3)	3.87	0.82	High
2. Integrated operations with outside agencies	223 (30.3)	30 (39.5)	23 (30.3)	0	0	4.00	0.78	High
3. Operations in a systematic	9 (11.8)	40 (52.6)	24 (31.6)	3 (3.9)	0	3.72	0.72	High
4. Operations team	14 (18.4)	39 (51.3)	19 (25)	4 (5.3)	0	3.83	0.80	High
5. Continuity of operations	16 (21.1)	41 (53.9)	17 (22.4)	2 (2.6)	0	3.93	0.74	High
6. There are clear regulations in practice	20 (26.3)	30 (39.5)	22 (28.9)	4 (5.3)	0	3.87	0.90	High
7. Right man posting with the job	8 (10.5)	34 (44.7)	29 (38.2)	5 (6.6)	0	3.59	0.80	High
8. Working with the command line	10 (13.2)	38 (50)	25 (32.9)	2 (2.6)	1 (1.3)	3.71	0.78	High
9. Fully support factors	11 (14.5)	29 (38.2)	29 (38.2)	5 (6.6)	2 (2.6)	3.55	0.91	High
Overall						3.79		High

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2) Analysis result for the Royal Project operation in a highland area development in 'Operation Plan' that can be taken as a lesson to development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project found that the operation plan in every subject have an effect to the success of highland area development in very high level with total average of 3.91. It is especially The operational plans are set in advance ($\mu = 4.18$), Flexible plans that can be adjusted according to the situation occurred ($\mu = 3.98$), detailed as below. (Table 4.5)

Table 4.5 Operation Plan in the Royal Project development center that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Operational plans are set in advance	23 (30.3)	44 (57.9)	9 (11.8)	0	0	4.18	0.63	High
2. There are plans following National Economic and Social Development plan	8 (10.5)	42 (55.3)	24 (31.6)	1 (1.3)	1 (1.3)	3.72	0.72	High
3. Plan of the involvement by the citizens and agencies in the area	18 (23.7)	34 (44.7)	20 (26.3)	4 (5.3)	0	3.87	0.84	High
4. Integrated plans with outside agencies	18 (23.7)	34 (44.7)	20 (26.3)	4 (5.3)	0	3.80	0.77	High
5. Implementation plan can be practical	15 (19.7)	42 (55.3)	17 (22.4)	2 (2.6)	0	3.92	0.73	High
6. Flexible plans that can be adjusted according to the situation occurred	14 (21.1)	46 (60.5)	16 (21.1)	0	0	3.98	0.63	High
Overall						3.91		High

3) From the study, the Royal Project operation in a highland area development in 'Operation Manner' that can be taken as a lesson to the development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project found that, the overall of operation manner affecting to the success in developing the highland area is in high level with an average of 4.05. The most operation manner that affect to the success in highland area developing are Quality and product standards control, the Work covers the entire system and The social work ($\mu = 4.43, 4.38$ and 4.28). The operation manner that affect to the success in highland area developing in high level are conducting applied research, external agencies to support the operations, an Operations with community participation, Operation modify with quickly and timely and a contact and co-operation with foreign agencies ($\mu = 4.05, 3.87, 4.07, 3.85$ and 3.49 respectively), detailed as below. (Table 4.6)

Table 4.6 Operation Manner in the Royal Project development center that can be taken as a lesson in the development of other highland areas

Opinion Level of Chief officers and staffs of the Royal Project (Feeling)								N = 76
Subject						μ	σ	Meaning
	Very high (%)	High (%)	Moderate (%)	Low (%)	Very low (%)			
1. Conducting applied research	26 (34.2)	31 (40.8)	16 (21.1)	3 (3.9)	0	4.05	0.85	High
2. External agencies to support the operations	12 (15.8)	46 (60.5)	15 (19.7)	2 (2.6)	1 (1.3)	3.87	0.75	High
3. The social work	34 (44.7)	29 (38.3)	16 (21.1)	0	0	4.28	0.74	Very high
4. Operations with community participation	21 (27.6)	39 (51.3)	16 (21.1)	0	0	4.07	0.70	High
5. Work covers the entire system	39 (51.3)	29 (38.2)	6 (7.9)	2 (2.6)	0	4.38	0.75	Very high
6. Quality and product standards control	37 (48.7)	35 (46.1)	4 (5.3)	0	0	4.43	0.60	Very high
7. Operation modify with quickly and timely	11 (14.5)	44 (57.9)	20 (26.3)	1 (1.3)	0	3.85	0.67	High
8. Contact the co-operation with foreign agencies	10 (13.2)	29 (38.2)	27 (35.5)	8 (10.5)	2 (2.6)	3.49	0.94	High
Overall						4.05		High

4) The model of the Royal Project operation in a highland area development in 'Staff' that can be taken as a lesson to the development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project found that the properties of the Central Officers in every subjects are affecting to the success in developing the highland area in high level with the total average of 3.79 and the properties of the Operational Staffs are affecting to the success in developing the highland area in high level with the total average of 4.04. The subject of properties of the Central Officers in Willing to assist with villagers at all times is average in very high level ($\mu = 4.22$), detailed as below. (Table 4.7)

Table 4.7 Qualified staffs in the Royal Project development center that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
Central Officer								
1. Operations in a systematic	10 (13.2)	48 (63.2)	16 (21.1)	2 (2.6)	0	3.87	0.66	High
2. Dedicated to the work	9 (11.8)	38 (50)	26 (34.2)	3 (3.9)	0	3.70	0.73	High
3. Expertise in the work	10 (13.2)	50 (65.8)	16 (21.1)	0	0	3.92	0.58	High
4. A plan for practitioners in the area	5 (6.6)	44 (57.9)	26 (34.2)	1 (1.3)	0	3.70	0.61	High
5. Sanity in service and support operations to the staff in the area	11 (14.5)	39 (51.3)	23 (30.3)	3 (3.9)	0	3.76	0.75	High
6. Systems are developed to achieve more efficient operation	11 (14.5)	43 (56.6)	19 (25)	3 (3.9)	0	3.82	0.72	High
7. Support staffs to increase their knowledge in the operation area	11 (14.5)	49 (64.5)	15 (19.7)	1 (1.3)	0	3.92	0.63	High

Table 4.7 (Continued)

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
8. Regulation adjustment in order to achieve streamlined operations	8 (10.5)	38 (50)	27 (35.5)	3 (3.9)	0	3.67	0.72	High
Overall	Total					3.79		High
Operational Staffs								
1. The fundamentals agriculture knowledge can issue to farmers	8 (10.5)	52 (68.4)	16 (21.1)	0	0	3.89	0.56	High
2. Expertise in operations in the area	21 (27.6)	40 (52.6)	15 (19.7)	0	0	4.08	0.69	High
3. Has specialized knowledge	14 (18.4)	43 (56.6)	19 (25.0)	0	0	3.93	0.66	High
4. Dedicated to the work	22 (28.9)	41 (53.9)	11 (14.5)	2 (2.6)	0	4.09	0.73	High
5. Willing to assist with villagers at all times	29 (38.2)	36 (47.4)	10 (13.2)	1 (1.3)	0	4.22	0.72	Very high
6. Industrious	20 (26.3)	43 (56.6)	12 (15.8)	1 (1.3)	0	4.08	0.69	High
7. Incomprehensible to people in the area.	22 (28.9)	44 (57.9)	9 (11.8)	1 (1.3)	0	4.14	0.67	High
8. Experienced in operating on highland area for a long period.	17 (22.4)	42 (55.3)	13 (17.1)	4 (5.3)	0	3.95	0.78	High
9. Adapt to unincorporated areas.	15 (19.7)	47 (61.8)	14 (18.4)	0	0	4.01	0.62	High
10. Enthusiastic and self development	18 (23.7)	42 (55.3)	14 (18.4)	2 (2.6)	0	4.00	0.73	High
Overall						4.04		High

5) From the study, the Royal Project operation in a highland area development in ‘Organization value and culture’ that can be taken as a lesson to the development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project, found that The ‘The Organization value and culture’ affecting to the success in developing the highland area in high level with an average of 4.12. The subjects in the very high level are ‘Work with honesty’, ‘Work for the country’ and the people on highland area’ and ‘Do a thankless’ ($\mu = 4.29, 4.28$ and 4.21 , respectively). The other subjects are in high level, detailed as below. (Table 4.8)

Table 4.8 Organization value and culture in the Royal Project development center that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
1. Patriotic organization personnel	25 (32.9)	37 (48.7)	13 (17.1)	1 (1.3)	0	4.13	0.74	High
2. Dedicated to the work	22 (28.9)	42 (55.3)	11 (14.5)	1 (1.3)	0	4.12	0.69	High
3. Work in a harmonious mutual aid	21 (21.6)	38 (50)	14 (18.4)	3 (3.9)	0	4.01	0.79	High
4. Commanding obedience	23 (30.3)	42 (55.3)	9 (11.8)	2 (2.6)	0	4.13	0.72	High
5. Do a thankless job	32 (42.1)	32 (42.1)	10 (13.2)	2 (2.6)	0	4.21	0.87	Very high
6. Work with honesty	31 (40.8)	37 (48.7)	7 (9.2)	1 (1.3)	0	4.29	0.69	Very high
7. Creativity to achieve new jobs	20 (26.3)	42 (55.3)	12 (15.8)	2 (2.6)	0	4.05	0.73	High
8. Listen to each other	18 (23.7)	40 (52.6)	14 (22.4)	1 (1.3)	0	3.97	0.77	High
9. Work for the country and the people	30 (39.5)	39 (51.3)	6 (7.9)	1 (1.3)	0	4.28	0.72	Very high
10. Indomitable obstacles	18 (23.7)	43 (56.6)	12 (15.8)	2 (2.6)	1 (1.3)	3.99	0.79	High
11. Do for common interest	25 (32.9)	41 (53.9)	8 (10.5)	1 (1.3)	1 (1.3)	4.16	0.77	High
Overall						4.12		High

6) From the study, the Royal Project operation in a highland area development in 'The farmers in the area' that can be taken as a lesson to the development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project, found that 'The farmers in the area' is affecting to the success in developing the highland area, the over all is in high level with an average of 3.98. The subject of the properties of the farmers in needing the agencies to assist in the development is average in very high level ($\mu = 4.39$). The properties of the farmers are affecting to the success in developing the highland area in high level are Ready to open to learning new things, Farmers cooperate and Farmers' confidence to the staff ($\mu = 3.84, 3.83$ and 3.87 , respectively), detailed as below. (Table 4.9)

Table 4.9 Characteristics of the farmers in the area that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. There is a need for agencies to assist in the development	34 (44.7)	38 (50)	4 (5.3)	0	0	4.39	0.59	Very high
2. Ready to open to learning new things	11 (14.5)	42 (55.3)	23 (30.3)	0	0	3.84	0.65	High
3. Farmers cooperate	11 (14.5)	42 (53.9)	23 (31.6)	0	0	3.83	0.66	High
4. Farmers' confidence to the staff	10 (13.2)	48 (63.2)	17 (22.4)	1 (1.3)	0	3.87	0.68	High
Overall						3.98		High

7) From the study, the Royal Project operation in a highland area development in ‘The potential of the area’ that can be taken as a lesson to the development of other highland areas in the opinion of the Chief Officers and staffs of the Royal Project found that ‘the potential of the area’ in every subjects are affecting to the success in developing the highland area in high level with the total average of 3.91 consist of Climate appropriate to the operations, The terrain is suitable to do the operations and Contributing to the development of cultural traditions ($\mu = 3.93, 3.96$ and 3.84), detailed as below. (Table 4.10)

Table 4.10 The potential of the area that can be taken as a lesson in the development of other highland areas.

Subject	Opinion Level of Chief officers and staffs					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Climate appropriate to the operations	17 (22.4)	39 (51.3)	18 (23.7)	2 (2.6)	0	3.93	0.75	High
2. The terrain is suitable to do the operations	17 (22.4)	40 (52.6)	18 (23.7)	1 (1.3)	0	3.96	0.72	High
3. Contributing to the development of cultural traditions	14 (18.4)	37 (48.7)	24 (31.6)	1 (1.3)	0	3.84	0.73	High
Overall						3.91		High

8) An opinion of the Chief Officers and staffs of the Royal Project in ‘Personnel / organization’ that affect the to the success of the Royal Project that can be taken as a lesson to the development of other highland areas found that the ‘Personnel / organization’ are affecting to the success in developing the highland area in high level with the total average of 4.31. The personnel / organization are affecting to the success in developing the highland area in very high level are H.M. the King and H.S.H. Prince Bhisatej Rajani next are The Royal Project board and Center staffs ($\mu = 4.99, 4.91, 4.30$ and 4.49) The personnel / organization are affecting to the success in high level are Volunteers from outside agencies, Researchers, Support from the Officers, Marketing, Packaging and Crop Protection Center ($\mu = 4.01, 4.03, 3.95, 4.16, 4.11$ and 4.13), detailed as below. (Table 4.11)

Table 4.11 Personnel /organization that affect the to the success of the Royal Project that can be taken as a lesson in the development of other highland areas

N = 76

Subject	Opinion Level of Chief officers and staffs of the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. H.M. the King	75 (98.7)	1 (1.3)	0	0	0	4.99	0.11	Very high
2. H.S.H. Prince Bhisatej Rajani	69 (90.8)	7 (9.2)	0	0	0	4.91	0.29	Very high
3. The Royal Project board	32 (42.1)	36 (47.4)	7 (9.2)	1 (1.3)	0	4.30	0.69	Very high
4. Volunteers from outside agencies	25 (32.9)	31 (40.8)	16 (21.1)	4 (5.3)	0	4.01	0.87	High
5. Center staffs	40 (52.6)	33 (43.3)	3 (3.9)	0	0	4.49	0.58	Very high
6. Researchers	28 (36.8)	26 (34.2)	18 (23.7)	4 (5.3)	0	4.03	0.91	High
7. Support from the Officers	24 (31.6)	28 (36.8)	20 (26.3)	4 (5.3)	0	3.95	0.89	High
8. Marketing	29 (38.2)	32 (42.1)	13 (17.1)	2 (2.6)	0	4.16	0.80	High
9. Packaging	28 (36.8)	31 (40.8)	14 (18.4)	3 (3.9)	0	4.11	0.84	High
10. Crop Protection Center	24 (31.6)	38 (50)	14 (18.4)	0	0	4.13	0.70	High
Overall						4.31		Very high

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4.1.5 Analysis result of the suggestion for taking the Royal Project success lessons to the Extended Project.

From the study found that 19 people of Chief officers and staffs of the Royal Project (25%) have the suggestions for taking the Royal Project achievement lessons to the Extended Project. Chief officers and staffs of the Royal Project have the suggestions for taking the Royal Project success lessons to the Extended Project most in Should analyze community needs, suitability of working area with the community and development of operation models, including integrated with external agencies at 57.9%. The next are Development of marketing 31.58%, Development of personal for operation 26.32%, Reduce conflict within the organization and Expanded portfolio of the Royal Project continuously 15.79%. The details are shown in Table 4.12 below.

Table 4.12 The suggestion of Chief officers and staffs of the Royal Project for taking the Royal Project success lessons to the Extended Project.

			N = 19
Suggestions	Number	Percent	
1. Should analyze community needs, suitability of working area with the community and development of operation models, including integrated with external agencies.	11	57.90	
2. Development of marketing for distribution and encourage the planting of the commercial crops.	6	31.58	
3. Development and instill a positive attitude in the workplace and dedication to work including welfare to establish morale of the staff.	5	26.32	
4. Reduce conflict within the organization	3	15.79	
5. Expanded portfolio of the Royal Project continuously.	3	15.79	

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4.2 Part 2 Analysis result for data of the farmers in the Royal Project Development Center

4.2.1 The general socio-economics background

1) The general socio-economics background including gender, age, Family income, number of farmers in family, debt and land holdings.

From the study, found that farmers 78.9% are male with most age range 31-40 years and 41- 50 years 30.26%. The number of farmer in household 77% are 1-3 people. The Family income 69.3% is 1-10,000 Baht/month, next 28.0% is 10,001 - 20,000 Baht. The average income is 9,559.20 Baht/month. And debt 74.6% is 1 – 100,000 Baht. The average debt is 101,110 Baht/ household. The land holding 45.3% is between 1-10 Rais, next 36.0% is 11 – 20 Rais. The average of Land holding is 15.15 Rais/ household. The details are shown in Table 4.13 below.

Table 4.13 The general socio-economics background of farmers in the Royal Project

N = 76

The general socio-economics background	Number (person)	Percent
1. Gender		
Male	60	78.9
Female	16	21.1
2. Age (year)		
10-20	1	1.32
21-30	18	23.68
31-40	23	30.26
41-50	23	30.26
51-60	10	13.16
61-70	1	1.32
minimum 16 years maximum 61 years average 39.80 years, Standard deviation 9.936 years		
3. Number of farmer in household (N = 74)		
1-3	57	77.0
4-6	15	20.3
7-9	2	2.7

Table 4.13 (Continued)

N = 76

The general socio-economics background	Number (person)	Percent
4. Income of family (Baht/ month) (N = 74)		
1-10,000	52	69.3
10,001 - 20,000	21	28.0
20,001 – 30,000	2	2.7
minimum 500 Baht, maximum 30,000 Baht		
average 9,559.20 Baht Standard deviation 5,314.11 Baht		
5. Debt of Farmer Households (Baht)		
None	9	11.8
Farmer in case (N=67)		
1-100,000	50	74.6
100,001-200,000	7	10.4
200,001-300,000	4	6.0
300,001-400,000	3	4.5
400,001-500,000	2	3.0
> 500,000	1	1.5
minimum 5,000 Baht, maximum 1,000,000 Baht		
average 101,110 Baht, Standard deviation 155,451 Baht		
6. Land holdings of farmers (Rai)		
None	1	1.3
Farmer in case (N=75)		
1-10	34	45.3
11-20	27	36.0
21-30	8	10.7
31-40	2	2.7
41-50	3	4.0
>50	1	1.3
minimum 1 Rai maximum 62 Rais		
average 15.15 Rais, Standard deviation 13.31 Rais		

2) Property in the possession of the Royal Project farmers household

From the study, found that the most farmers in the Royal Project has 1 television, refrigerator and motorcycle / household (average 84.2%, 80.3% and 51.1%) and has 2 mobile phones / household (average 50.0%) and there is no car in the household (50%). (Table 4.14)

Table 4.14 Holding assets of the Royal Project farmers'household

N = 76

Assets holding	Number of Holding property						
	(None)	(1)	(2)	(3)	(4)	(5)	(6)
	%	%	%	%	%	%	%
1.Television	2.6	84.2	10.5	2.6	0	0	0
2. Refrigerator	14.5	80.3	5.3	0	0	0	0
3. Motorcycle	0	51.3	28.9	15.8	2.6	1.3	0
4. Car	50	44.7	4.0	0	1.3	0	0
5. Mobile phone	0	23.7	50.0	14.5	2.6	7.9	1.3

4.2.2 Analysis result of the operation model in promoting the knowledge for the farmers in the Royal Project development area.

From the study of the operation model in promoting the knowledge for the farmers in the Royal Project development area in promoted quantity, Support / Facilities and Quality of the Royal Project's officer, have the total average of 3.77.

The 'promoted quantity' the knowledge to the farmers found that the result of operations in high level ($\mu = 3.61$). The farmers are regarded to the consultation / visit by staffs in very high level ($\mu = 4.53$), training, campaign and community forum are in high ($\mu = 4.03, 3.63$ and 3.95 , respectively) and demonstration plot is in low level ($\mu = 2.53$).

The 'Support / Facilities' to the farmers found that the result of operations in high level ($\mu = 3.48$). The farmers are regarded to the purchase of goods and agricultural products and product quality development in very high level ($\mu = 4.28$ and 4.49 , respectively) and the distribution of fertilizers / pesticides / seeds in high level ($\mu = 3.51$), Equipment rental / loan in moderate level ($\mu = 2.67$) and operation areas / space for rent / house for rent in low level ($\mu = 2.38$).

The ‘Quality of officers in the Royal Project development center’ in the promoting knowledge to the farmers found that the result of operations in very high level ($\mu = 4.25$). The farmers are regarded the staffs have agricultural expertise appropriate to provide knowledge to the farmers, working with people in the area, consistency and continuity of operations and Willing to serve are in very high level ($\mu = 4.38, 4.50, 4.34$ and 4.50 , respectively). And Understand the real problems and conditions and the adequacy of staffs for service are in high level ($\mu = 4.07$ and 3.72). The details are shown in Table 4.15 below.

Table 4.15 Operation model in promoting the knowledge for the farmers in the Royal Project development area.

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Promoted quantity								
1) Training	33 (43.4)	22 (28.9)	12 (15.8)	8 (10.5)	1 (1.3)	4.03	1.07	High
2) Study trip	15 (19.7)	12 (15.8)	20 (26.3)	15 (19.7)	14 (18.4)	2.99	1.38	Moderate
3) Demonstration plots	7 (9.2)	11 (14.5)	18 (23.7)	19 (25.0)	21 (27.6)	2.53	1.29	Low
4) Campaign	23 (30.3)	19 (25.0)	20 (26.3)	11 (14.5)	3 (3.9)	3.63	1.18	High
5) Community forum	29 (38.2)	25 (32.9)	16 (21.1)	1 (1.3)	5 (6.6)	3.95	1.12	High
6) Consultation / visit	53 (69.7)	14 (18.4)	6 (7.9)	2 (2.6)	1 (1.3)	4.53	0.86	Very high
Average						3.61	0.76	High
2. Support / Facilities								
1) Operation areas / space for rent / house for rent	8 (10.5)	5 (6.6)	20 (26.3)	18 (23.7)	25 (32.9)	2.38	1.30	Low
2) Equipment rental / loan	11 (14.5)	10 (13.2)	19 (25.0)	15 (19.7)	21 (27.6)	2.67	1.39	Moderate

Table 4.15 (Continued)

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
3) Distribution of fertilizers / pesticides / seeds	27 (35.5)	17 (22.4)	15 (19.7)	2 (2.6)	15 (19.7)	3.51	1.49	High
4) The purchase of goods and agricultural products	47 (61.8)	15 (19.7)	6 (7.9)	4 (5.3)	4 (5.3)	4.28	1.15	Very high
5) Product quality development	51 (67.1)	16 (21.1)	5 (6.6)	3 (3.9)	1 (1.3)	4.49	0.89	Very high
Average						3.47	0.81	High
3. Quality of officers in the Royal Project development center								
1) Agricultural expertise appropriate to provide knowledge to the farmers	37 (48.7)	31 (40.8)	8 (10.5)	0	0	4.38	0.67	Very high
2) Understand the real problems and conditions	30 (39.5)	26 (34.2)	17 (22.4)	1 (1.3)	2 (2.6)	4.07	0.96	High
3) Working with people in the area	42 (55.3)	30 (39.5)	4 (5.3)	0	0	4.50	0.60	Very high
4) Consistency and continuity of operations	40 (52.6)	23 (30.3)	12 (15.8)	1 (1.3)	0	4.34	0.79	Very high
5) Willing to serve	47 (61.8)	21 (27.6)	7 (9.2)	1 (1.3)	0	4.50	0.72	Very high
6) The adequacy of staffs for service	19 (25.0)	28 (36.8)	19 (25.0)	9 (11.8)	1 (1.3)	3.72	1.01	High
Average						4.25	0.55	Very high
Overall						3.77	0.53	High

4.2.3 Analysis result of the farmers with the knowledge and understanding gained after getting promotion from the Royal Project development center.

From study of analysis result of the farmers with the knowledge and understanding gained after getting promotion from the Royal Project development center in career, social and environmental, the overall is in high level with an average of 3.70.

The knowledge in “Career” that the farmers understand after getting promotion found that the overall is in moderate level the total average of 2.95. The farmers are understood for the knowledge of Vegetables, Farm products and Preparation of fertilizer are in high level ($\mu = 3.88, 3.43$ and 3.53).

The knowledge in “Social” that the farmers understand after getting promotion found that the overall is in high level the total average of 3.86. The farmers are understood for the knowledge of Understanding of drug penalty in very high level ($\mu = 4.21$) where the others are in high level.

The knowledge in “Environment” that the farmers understand after getting promotion found that the overall is in moderate level the total average of 4.31. The farmers are understood for the knowledge of Watershed Conservation, Community forestry and Living with forest are in very high level ($\mu = 4.58, 4.50$ and 4.47 , respectively) and Vetiver planting and Reforestation three with four benefits are in high level ($\mu = 4.07$ and 3.91). The details are shown in Table 4.16 below.

Table 4.16 Farmers with the knowledge and understanding gained after getting promotion from the Royal Project development center.

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Career								
1) Vegetables	21 (27.6)	30 (39.5)	20 (26.3)	5 (6.6)	0	3.88	0.89	High
2) Fruits	8 (10.5)	20 (26.3)	23 (30.3)	18 (23.7)	7 (9.2)	3.05	1.14	Moderate

Table 4.16 (Continued)

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
3) egetables	21 (27.6)	30 (39.5)	20 (26.3)	5 (6.6)	0	3.88	0.89	High
4) Fruits	8 (10.5)	20 (26.3)	23 (30.3)	18 (23.7)	7 (9.2)	3.05	1.14	Moderate
5) Flowering plants	10 (13.2)	11 (14.5)	17 (22.4)	12 (15.8)	26 (34.2)	2.57	1.43	Low
6) Farm products	15 (19.7)	22 (28.9)	26 (34.2)	7 (9.2)	6 (7.9)	3.43	1.15	High
7) Tea	3 (3.9)	9 (11.8)	19 (25.0)	8 (10.5)	37 (48.7)	2.12	1.25	Low
8) Coffee	3 (3.9)	9 (11.8)	30 (39.5)	11 (14.5)	23 (30.3)	2.45	1.16	Low
9) Herbs	6 (7.9)	16 (21.1)	20 (26.3)	18 (23.7)	16 (21.1)	2.71	1.24	Moderate
10) Organic	17 (22.4)	15 (19.7)	22 (28.9)	14 (18.4)	8 (10.5)	3.25	1.29	Moderate
11) Preparation of fertilizer	17 (22.4)	24 (31.6)	18 (23.7)	16 (21.1)	1 (1.3)	3.53	1.10	High
12) Husbandry	14 (18.4)	18 (23.7)	27 (35.5)	10 (13.2)	7 (9.2)	3.29	1.19	Moderate
13) Traveling	6 (7.9)	7 (9.2)	26 (34.2)	22 (28.9)	15 (19.7)	2.57	1.15	Low
14) Craft	5 (6.6)	7 (9.2)	35 (46.1)	9 (11.8)	20 (26.3)	2.58	1.17	Low
Average						2.95	0.64	Moderate
2. Social								
1) Integration to community.	15 (19.7)	29 (38.2)	25 (32.9)	6 (7.9)	1 (1.3)	3.67	0.93	High
2) Culture conservation	31 (40.8)	24 (31.6)	16 (21.1)	5 (6.6)	0	4.07	0.94	High
3) Understanding of drug penalty	32 (42.1)	30 (39.5)	12 (15.8)	2 (2.6)	0	4.21	0.81	Very high

Table 4.16 (Continued)

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
4) Health secure	18 (23.7)	27 (35.5)	24 (31.6)	6 (7.9)	1 (1.3)	3.72	0.96	High
5) Family Planning	20 (26.3)	30 (39.5)	17 (22.4)	7 (9.2)	2 (2.6)	3.78	1.03	High
6) Community Plan	20 (26.3)	30 (39.5)	17 (22.4)	7 (9.2)	0	3.70	0.85	High
Average						3.86	0.60	High
3. Environment								
1) Watershed Conservation	51 (67.1)	20 (26.3)	3 (3.9)	2 (2.6)	0	4.58	0.70	Very high
2) Community forestry	44 (57.9)	27 (35.5)	4 (5.3)	1 (1.3)	0	4.50	0.66	Very high
3) Living with forest	47 (61.8)	20 (26.3)	7 (9.2)	2 (2.6)	0	4.47	0.77	Very high
4) Vetiver planting	33 (43.4)	21 (27.6)	16 (21.1)	6 (7.9)	0	4.07	0.98	High
5) Reforestation three with four benefits.	36.8 (28)	24 (31.6)	16 (21.1)	5 (2.6)	0	3.91	1.10	High
Average						4.31	0.68	Very high
Overall						3.70	0.50	High

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4.2.4 Analysis result of the Royal Project development center operations for the farmers.

1) The study of the Royal Project development center operations for the farmers in economic, social and environment are as following.

From table 4 . 1 6 the study of the Royal Project development center operation result for the farmers in economic, social and environment found that the operations result is in high level with the average of 3.88.

Operations result in ‘Economic’ found that the overall is in high level with the average of 3.75. The farmers are Increasing income and Increasing assets in high level ($\mu = 4.14$ and 3.80). The farmers are Reduced debt in moderate level ($\mu = 3.30$).

Operations result in ‘Social’ found that the overall is in high level with the average of 3.94. The operation result in all subjects are in high level.

Operations result in ‘Environment’ found that the overall is in high level with the average of 3.96. The Increased watershed conservation is in very high level ($\mu = 4.24$), Forest encroachment reduction, Forest encroachment reduction and the use of chemicals in agriculture decreased are in high level ($\mu = 3.74$, 3.95 and 3.93). The details are shown in Table 4.17 below.

Table 4.17 Operation result of the Royal Project development center for the farmers in economic, social and environment

N = 76

Subject		Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
		Very high	High	Moderate	Low	Very low			
		(%)	(%)	(%)	(%)	(%)			
1. Economic									
1)	Increasing income	33 (43.4)	26 (34.2)	13 (17.1)	3 (3.9)	1 (1.3)	4.14	0.93	High
2)	Increasing assets	22 (28.9)	22 (28.9)	28 (36.8)	3 (3.9)	1 (1.3)	3.80	0.95	High
3)	Reduced debt	5 (6.6)	29 (38.2)	29 (38.2)	10 (13.2)	3 (3.9)	3.30	0.92	Moderate
Average							3.75	0.80	High

Table 4.17 (Continued)

N = 76

Subject	Opinion Level of the farmers in the Royal Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
2. Social								
1) Get better education	32 (42.1)	24 (31.6)	17 (22.4)	3 (3.9)	0	4.12	0.89	High
2) Better health care	18 (23.7)	40 (52.6)	14 (18.4)	4 (5.3)	0	3.95	0.80	High
3) Reduced drug	26 (34.2)	24 (31.6)	20 (26.3)	6 (7.9)	0	3.92	0.96	High
4) The increase of population decline	27 (35.5)	14 (18.4)	23 (30.3)	11 (14.5)	1 (1.3)	3.72	1.14	High
5) Integration to community development increased.	18 (23.7)	34 (44.7)	18 (23.7)	5 (6.6)	1 (1.3)	3.83	0.91	High
6) The conservation of cultural heritage increased.	22 (28.9)	27 (35.5)	23 (30.3)	4 (5.3)	0	3.88	0.89	High
7) Improved infrastructure such as roads, electricity.	30 (39.5)	30 (39.5)	15 (19.7)	1 (1.3)	0	4.17	0.79	High
Average						3.94	0.60	High
3. Environment								
1) Forest encroachment reduction	26 (34.2)	21 (27.2)	17 (22.4)	7 (9.2)	5 (6.6)	3.74	1.22	High
2) Increased watershed Conservation	38 (50)	23 (30.3)	10 (13.2)	5 (6.6)	0	4.24	0.92	Very high
3) The destruction of topsoil reduced	24 (31.6)	29 (38.2)	19 (25.0)	3 (3.9)	1 (1.3)	3.95	0.92	High
4) The use of chemicals in agriculture decreased	21 (27.6)	30 (39.5)	24 (31.6)	1 (1.3)	0	3.93	0.81	High
Average						3.96	0.78	High
Overall						3.88	0.60	High

2) Analysis result of an appropriate to operate the Royal Project in other highland areas found that the farmers in the RoyalProject area 38.60% are regarded to do the operations in the other highland ares to get a better living, 36.85 % are increased development, 35.09% are stable career, 19.30% are reduced deforestation and properly use resources and 17.55% are having more knowledge. are interviewed. (Table 4.18)

Table 4.18 Opinion of the farmers in the Royal Project development center to the operation of the Royal Project in other highland areas

N = 57

	Article	Number (Person)	Percentage
1.	Other areas getting a better living	22	38.60
2.	Other areas are increased development	21	36.85
3.	Other areas are stable career	20	35.09
4.	To reduce deforestation and properly use resources.	11	19.30
5.	Other areas have more knowledge	10	17.55
6.	To reduce drug problems	3	5.27
7.	To reduce the use of chemicals	2	3.51
8.	To promote the self-sufficient lifestyle	2	3.51
9.	To help promote the creation of networks in each area	1	1.76
10.	To help strengthen the community	1	1.76

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4.2.5 Analysis of factors that affect to the operation results of the Royal Project development center to the farmers about economic, social and environment.

This study uses the multiple regression analysis to examine the relationship between dependent and independent variables that each independent variable has any relationship (positive or negative) to dependent variable and relationship level with dependent variable. An analysis uses 8 independent variables, divided into 2 groups of factor as following.

1) The Personal factors are age, number of farmer in household, Family income/month, debt and number of land holding.

2) Factors related to the operation of the Royal Project are promoted quantity, support / facilities and quality of the Royal Project's officer.

The dependent variables are operation result of the Royal Project development center for the farmers which is number of the total average of the opinion level of the farmers totally 76 people to the operation result in 3 main subjects; economic, social and environment and overall.

Preliminary analysis on the variables that import to equation found that the average of age is 39.80 years, an average of farmer in household is 3 people/ household, an average of family income is 9,599 Baht/month and an average of debt is 101,110 Baht/household. The land holding is 15 Rais/household. In addition, in knowledge promotion from staffs and support / facilities are in high level with the average of 3.61 and 3.47, respectively. In the quality of the Royal Project's officer is in very high level with an average of 4.25. The details as shown in Table 4.19

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Table 4.19 Average and Standard deviation of variables in analysis

N = 57

Variable	Average	Standard deviation
1. Age	39.80	9.94
2. Number of farmer in household	2.70	1.32
3. Family income/month	9559.20	5314.11
4. Debt	101110.00	155451.00
5. Number of land holding	15.15	13.31
6. Promoted quantity	3.61	0.76
7. Support / Facilities	3.47	0.81
8. Quality of the Royal Project's officer	4.25	0.55

When study the relationship between Independent Variables for each pair found that, there is no Independent Variables has the relationship over 0.80 that cause of the relationship between internal Independent Variables (Multicollinearity) that is Violation of the assumptions of multiple regression analysis director. (Prasitratsin, 2001) by defining the variables to take into the equation.

Dependent Variables Y_1 = Overall operation of the Royal Project development center

Y_2 = Overall operation in economic

Y_3 = Overall operation in social

Y_4 = Overall operation in environment

Independent Variables X_1 = Age

X_2 = Number of farmer in household

X_3 = Family income/month

X_4 = Debt

X_5 = Number of land holding

X_6 = Promoted quantity

X_7 = Support / Facilities

X_8 = Quality of the Royal Project's officer

Table 4.20 Correlation coefficient between dependent and independent variables in multiple regression analysis.

Variable	Y ₁	Y ₂	Y ₃	Y ₄	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈
Y ₁	1.000				-.064	.019	.158	-.325	-.074	.592	.203	.573
Y ₂		1.000			-.130	-.035	.126	-.177	-.146	.461	.110	.415
Y ₃			1.000		-.003	.033	.277	-.268	-.005	.467	.210	.505
Y ₄				1.000	-.012	.054	.022	-.363	-.017	.534	.195	.509
X ₁					1.000	-.033	.010	.013	.188	.021	-.042	-.146
X ₂					-.033	1.000	-.003	-.087	.016	-.334	-.279	-.135
X ₃					.010	-.003	1.000	.275	.090	.094	.099	.039
X ₄					.013	-.087	.275	1.000	.083	-.351	-.136	-.343
X ₅					.188	.016	.090	.083	1.000	-.014	-.137	-.112
X ₆					.021	-.334	.094	-.351	-.014	1.000	.234	.502
X ₇					-.042	-.279	.099	-.136	-.137	.234	1.000	.329
X ₈					-.146	-.135	.039	-.343	-.112	.502	.329	1.000

Table 4.21 Multiple regression analysis of factors affecting to the performance of the Royal Project development center to the farmers in economy, society and environment.

Variable	Regression coefficients (b)	t	Sig
1) Age	.000	-.115	.909
2) Number of farmer in household	.100	2.269	.027*
3) Family income/month	1.344E-5	1.283	.204
4) Debt	-2.176E-7	-.548	.586
5) Number of land holding	-.002	-.397	.693
6) Promoted quantity	.365	4.163	.000***
7) Support / Facilities	.017	.234	.815
8) Quality of the Royal Project's officer	.365	3.164	.002**
Constant	0.630	1.051	.297
R² = 0.513 SEE = 0.4435 F= 8.837 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are $F = 8.837$ and $Sig = .000$. It means that there is a linear relationship of at least 1 independent variable with dependent variable and multiple coefficient of determinator (R^2) equal to 0.513 that mean all independent variables in equation can explain variability of dependent variables for 51.30% and in all 8 independent variables, there are 3 variables affected to dependent variables statistically significant at level 0.05 which consists of (1) number of farmer in household (2) promoted quantity and (3) quality of the Royal Project's officer. All of variable in analysis can be written as multiple regression equation as following.

$$Y_1 = 0.630 + 0.000x_1 + 0.100x_2 + 1.344E-5x_3 - 2.176E-7x_4 - 0.002x_5 + 0.365x_6 + 0.017x_7 + 0.365x_8$$

(1.051) (-.115) (2.269)* (1.283) (-.548) (-.397) (4.163)*** (.234) (3.164)**

* Significance of testing statistic $t \leq$ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.21 can conclude that, there are 3 independent variables have the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in economic, social and environment. The 3 independents (1) variables are number of farmer in household, (2) promoted quantity and (3) quality of the Royal Project's officer. The independent variables which have the positive relationship to dependent variables are number of farmer in household, family income, promoted quantity, support/facilities and quality of the Royal Project's officer.

Table 4.22 Multiple regression analysis of factors affecting operating results of the Royal Project development center to the farmers in economic part.

Variable	Regression coefficients (b)	t	Sig
1) Age	-.007	-.775	.441
2) Number of farmer in household	.072	1.018	.313
3) Family income/month	1.316E-5	.791	.432
4) Debt	1.678E-7	.266	.791
5) Number of land holding	-.007	-1.129	.263
6) Promoted quantity	.421	3.020	.004**
7) Support / Facilities	-.049	-.440	.661
8) Quality of the Royal Project's officer	.332	1.807	.075
Constant	1.026	1.076	.286
R² = 0.303 SEE = 0.7053 F= 3.639 Sig. of F = .001			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are $F = 3.639$ and $\text{Sig} = .001$ It means that there is a linear relationship of at least 1 independent variable with dependent variable and multiple coefficient of determinator (R^2) equal to 0.303 that mean all independent variables in equation can explain variability of dependent variables for 30.30% and in all 8 independent variables, there is 1 variable affected to dependent variables statistically significant at level 0.05, it is promoted quantity. A multiple regression equation is as following.

$$\begin{aligned}
 Y_2 = & 1.026 - 0.007x_1 + 0.072x_2 + 1.316E-5x_3 + 1.678E-7x_4 \\
 & (1.076) \quad (-.775) \quad (1.018) \quad (.791) \quad (.266) \\
 & -0.007x_5 + 0.421x_6 - 0.049x_7 + 0.332x_8 \\
 & (-1.129) \quad (3.020)** \quad (-.440) \quad (1.807)
 \end{aligned}$$

* Significance of testing statistic $t \leq$ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.22 can conclude that, there is 1 independent variable has the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in economic. That independent variable is promoted quantity. The independent variables which have the positive relationship to dependent variables are number of farmer in household, family income, dept, promoted quantity, and quality of the Royal Project's officer.

Table 4.23 Multiple regression analysis of factors affecting operating results of the Royal Project development center to the farmers in social part

Variable	Regression coefficients (b)	t	Sig
1) Age	.003	.444	.659
2) Number of farmer in household	.082	1.699	.094
3) Family income/month	2.935E-5	2.558	.013*
4) Debt	-4.028E-7	-.926	.358
5) Number of land holding	.001	.170	.866
6) Promoted quantity	.229	2.381	.020*
7) Support / Facilities	.036	.467	.642
8) Quality of the Royal Project's officer	.361	2.855	.006**
Constant	0.880	1.339	.185
R² = 0.417 SEE = 0.4860 F= 5.993 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are $F = 5.993$ and $Sig = .000$ It means that there is a linear relationship of at least 1 independent variable with dependent variable and multiple coefficient of determinant (R^2) equal to 0.417 that mean all independent variables in equation can explain variability of dependent variables for 41.70% and in all 8 independent variables, there are 3 variables affected to dependent variables statistically significant at level 0.05 which consists of (1) family income, (2) promoted quantity and (3) quality of the Royal Project's officer. All of variable in analysis can be written as multiple regression equation as following.

$$Y_3 = 0.880 + 0.003x_1 + 0.082x_2 + 2.935E-5x_3 - 4.028E-7x_4 + 0.001x_5 + 0.229x_6 + 0.036x_7 + 0.361x_8$$

$$(1.339) \quad (.444) \quad (1.699) \quad (2.558)^* \quad (-.926)$$

$$(.170) \quad (2.381)^* \quad (.467) \quad (2.855)^{**}$$

* Significance of statistic testing $t \leq$ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.23 can conclude that, there are 3 independent variables have the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in social. The 3 independent variables are (1) family income, (2) promoted quantity and (3) quality of the Royal Project's officer. The independent variables which have the positive relationship to dependent variables are age, number of farmer in household, family income, number of land holding, promoted quantity, support / facilities and quality of the Royal Project's officer.

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Table 4.24 Multiple regression analysis of factors affecting operating results of the Royal Project development center to the farmers in environment part

Variable	Regression coefficients (b)	t	Sig
1) Age	.002	.284	.778
2) Number of farmer in household	.147	2.358	.021*
3) Family income/month	-2.202E-6	-.149	.882
4) Debt	-4.176E-7	-.745	.459
5) Number of land holding	.002	.296	.768
6) Promoted quantity	.445	3.599	.001***
7) Support / Facilities	.063	.631	.530
8) Quality of the Royal Project's officer	.403	2.473	.016*
Constant	-0.150	-0.018	.986
R² = 0.429 SEE = 0.6257 F = 6.301 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are $F = 6.301$ and $\text{Sig} = .000$. It means that there is a linear relationship of at least 1 independent variable with dependent variable and multiple coefficient of determinator (R^2) equal to 0.429 that mean all independent variables in equation can explain variability of dependent variables for 42.90% and in all 8 independent variables, there are 3 variables affected to dependent variables statistically significant at level 0.05 which consists of (1) number of farmer in household, (2) promoted quantity and (3) quality of the Royal Project's officer. All of variable in analysis can be written as multiple regression equation as following.

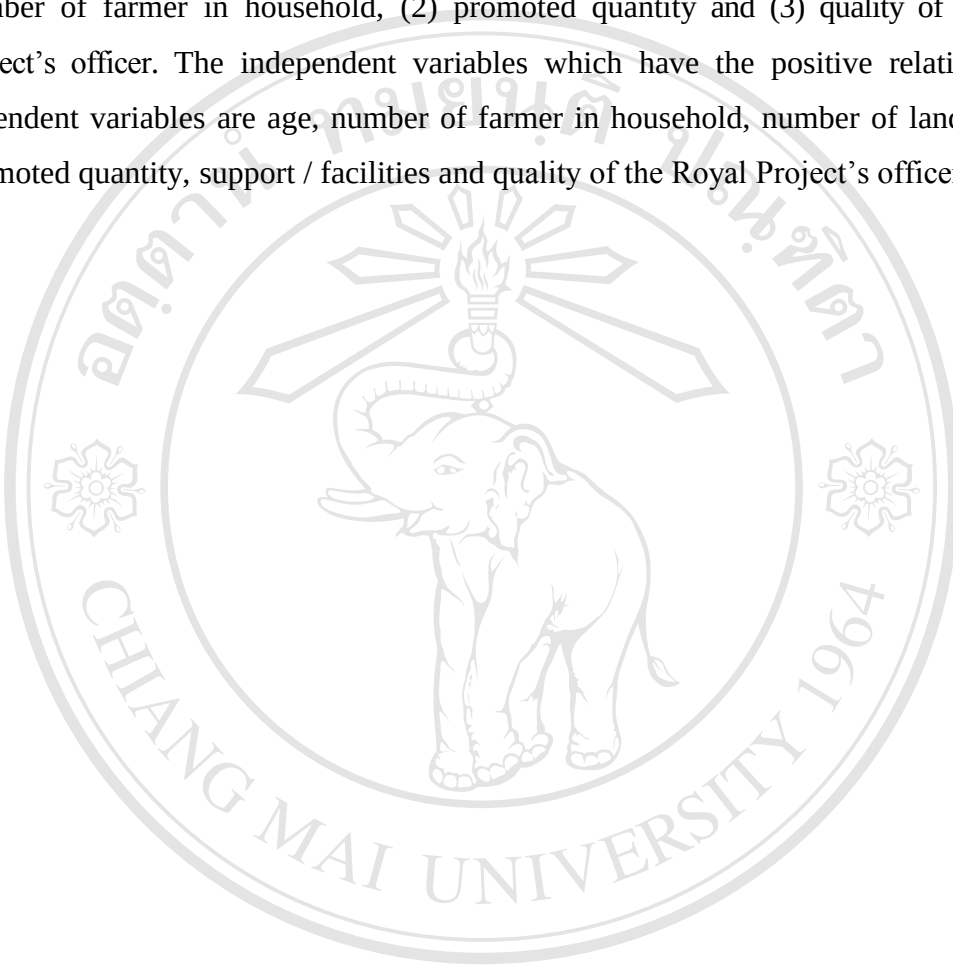
$$Y_4 = -0.150 + 0.002x_1 + 0.147x_2 - 2.202E-6x_3 - 4.176E-7x_4 + 0.002x_5 + 0.445x_6 + 0.063x_7 + 0.403x_8$$

$$(-0.018) \quad (.284) \quad (2.358)^* \quad (-.149) \quad (-.745) \quad (3.599)^{***} \quad (.631) \quad (2.473)^*$$

* Significance of testing statistic $t \leq$ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.24 can conclude that, there are 3 independent variables have the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in environment. The 3 independent variables are (1) number of farmer in household, (2) promoted quantity and (3) quality of the Royal Project's officer. The independent variables which have the positive relationship to dependent variables are age, number of farmer in household, number of land holding, promoted quantity, support / facilities and quality of the Royal Project's officer.



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4.3 Part 3 Analysis result for data of the staff of the Extended Project

4.3.1 The general socio-economics background of the Extended Project' staffs.

From the study of personal information found that the interviewed staff 79.30% are male which 44.8% are age range 26-30 years, next 21.1% are age range 31-35 years. The minimum age is 23 years and maximum is 37 years, an average is 29.34 years. Considering in education, 89.7% maximum graduated in Bachelor Degree, 6.9% Master Degree and considering in working experience, 89.7% have 1-5 years experience, next 6.9% have 6-10 years. The minimum of working experience is less than 1 year and maximum is 7 years. An average is 2.724 years. (Table 4.25)

Table 4.25 The general socio-economics background of the Extended Project' staffs

N = 29

The general socio-economics background		Number (Person)	Percentage
1. Gender			
Male		23	79.3
Female		6	20.7
2. Age			
21-25		5	17.2
26-30		13	44.8
31-35		7	21.1
36-40		4	13.8
minimum 23 years maximum 37 years			
average 29.34 years, Standard deviation 4.108 years			
3. Education			
Diploma		1	3.4
Bachelor Degree		26	89.7
Master Degree		2	6.9
4. Working experience at the Extended Project (Years)			
1-5		26	89.7
6-10		2	6.9
< 1		1	3.4
minimum < 1 year maximum 7 years			
average 2.724 years, Standard deviation 1.850 years			

4.3.2 Implementation of the Royal Project success lessons to the Extended Project operations from opinion of staffs in the Extended Project

1) From the research, the Extended Project staffs are regarded about the Royal Project success lessons are consist of Specialist experts and Knowledge for 86.21%, Research 79.31%, Learning center 72.41%, Highland development method 68.96%, Operation format in the highland development 65.52% and Operation tooling 44.83%. (Table 4.26)

Table 4.26 The opinion about the component of the Royal Project success lessons

N = 29

Article	Number	Percent
1. Specialist experts	25	86.21
2. Knowledge	25	86.21
3. Research	23	79.31
4. Learning center	21	72.41
5. Highland development method	20	68.96
6. Operation format in the high landdevelopment	19	65.52
7. Operation tooling	13	44.83

2) From the research, the Extended Project staffs had been learning the Royal Project success lessons from Study trip mostly 96.55%, next is Training 68.96%, Self learning 65.52% and Advice from staffs of the Royal Project 58.62%. (Table 4.27)

Table 4.27 The Extended Project staffs learning way of the Royal Project success lessons

N = 29

Article	Number	Percent
1. Study trip	28	96.55
2. Training	20	68.96
3. Self learning	19	65.52
4. Advice from staffs of the Royal Project.	17	58.62

3) From the research, all of the Extended Project staffs are regarded about the prototype development for the Extended Project for 100%. The reasons are, 72.42% can apply and further the area of accountability in terms of cognitive processes, research and development and 20.27% is similarly in geography and climate and 13.30% is help to reduce the use of chemicals. (Table 4.28)

Table 4.28 The reason of implementation of the Royal Project success lessons to the Extended Project areas from opinion of staffs in the Extended Project

N = 29

Article	Number	Percent
1. Can apply and further the area of accountability in terms of cognitive processes, research and development.	21	72.42
2. Similarly in geography and climate.	6	20.70
3. Reduce the use of chemicals.	4	13.80
4. Restoration forestry is abundant.	1	3.45
5. Farmers to pay attention to the work of the Royal Project.	1	3.45

4) From the research, the selection criterias to implement the Royal Project success lessons to the Extended Project are consist of Characteristics of the area and climate for 82.76%, Water volume 75.86%, Height 72.41%, Needs of farmers 68.96% and Traditional economic crops, Tribes and Traditional lifestyle 55.17%. (Table 4.29)

Table 4.29 The selection criteria of implementation of the Royal Project success lessons to the Extended Project areas from opinion of staffs in the Extended Project.

N = 29

Article	Number	Percent
1. Characteristics of the area (slope, soil conditions).	24	82.76
2. Climate	24	82.76
3. Water volume	22	75.86
4. Height	21	72.41
5. Needs of farmers	20	68.96
6. Traditional economic crops	16	55.17
7. Tribes	16	55.17
8. Traditional lifestyle	16	55.17
9. Local plants	13	44.83
10. Size of area	9	31.03
11. The distance from the city	9	31.03

5) Analysis result of the Royal Project success lessons in 7 categories which selected by the Extended Project staffs are consist of reserch, knowledge, expertise, learning center, highland development method, operation toolings and support mechanism as follows:

From the study of an implementation of the Royal Project success lessons to the Extended Project found that, in “ Research” , staffs are most implemented the research of Vegetables for 27.59%, next are Fruit plants 24.14%, Low cost housing and Good cropping system 17.24%, respectively.

In ‘Knowledge’, staffs are most implemented the knowledge of Vegetables for 44.83%, next are Fruit plants 37.93%, Good cropping system 20.70%, Husbandry 13.79 %, knowledge of Coffee, Sufficient economy and Natural resources conservation 10.3%, respectively.

In ‘Expertise’, staffs are most implemented the expertise of Fruit plants for 31.03%, next are Vegetables 27.59%, Coffee and Husbandry 6.90%, respectively.

In ‘Learning center’, staffs are most implemented Pilot agricultural plots for 51.72%, next are Knowledge transferring 37.93 %, Demonstration plants in greenhouses and Examples of crop and husbandry of the Royal Project 24.14 %, respectively.

In ‘Highland development method’, staffs are most implemented Study of the area, social beliefs and the ways of the community for 58.62 %, Analysis and development planning 48.28 %, Implement the knowledge from the Roya Project 17.24% and Be willing and sincere 6.90%, respectively.

In ‘Operation tooling’, staffs are most implemented Study trip, training and community for 27.59%, next are Medias, Knowledge and Toolings and equipments 24.17% and Operation plan 10.34%, respectively.

In ‘Support mechanisms’, staffs are most implemented Support network (integration) for 34.48 %, next are Transferring knowledge to farmers 17.24 % and Manufacturing factors 13.79%. (Table 4.30)

Table 4.30 An implementation of the Royal Project success lessons to the Extended Project areas in opinion of staffs in the Extended Project

N = 29

The Royal Project's success lessons	Number	Percent
1. Research		
1) Vegetables	8	27.59
2) Fruit plants	7	24.14
3) Low cost housing	5	17.24
4) Good cropping system	5	17.24
5) Biomass materials in pesticides	3	10.34
6) Corn planting overlaped with maize legumes	3	10.34
7) Coffee	2	6.90
8) Culinary treasures	2	6.90
9) Testing of the feasibility of developing the area	2	6.90
10) The use of new technologies	1	3.45
11) Composting	1	3.45
12) Mixed cropping	1	3.45
13) Nutrient management	1	3.45
14) Raising earthworms	1	3.45
2. Knowledge		
1) Vegetables	13	44.83
2) Fruit plants	11	37.93
3) Good cropping system (Pruning, plat form and spacing)	6	20.70
4) Husbandry	4	13.79
5) Coffee	3	10.34
6) Sufficient economy	3	10.34
7) Natural Resources Conservation	3	10.34
8) Seedlings	2	6.90
9) Reducing the use of chemicals	2	6.90
3. Expertise		
1) Fruit plants	9	31.03
2) Vegetables	8	27.59
3) Coffee	2	6.90
4) Husbandry	2	6.90
5) Management of soil nutrients	1	3.45
6) Rice	1	3.45

Table 4.30 (Continued)

N = 29

The Royal Project's success lessons	Number	Percent
4. Learning center		
1) Pilot agricultural plots	15	51.72
2) Knowledge transferring	11	37.93
3) Demonstration plants in greenhouses	7	24.14
4) Examples of crop and husbandry of the Royal Project	7	24.14
5. Highland development method		
1) Study of the area, social beliefs and the ways of the community.	17	58.62
2) Analysis and development planning	14	48.28
3) Implement the knowledge from the Royal Project	5	17.24
4) Be willing and sincere	2	6.90
5) Implement external support factors	1	3.45
6) Focus on community self-reliance	1	3.45
7) Starting from a small group and gradually extension.	1	3.45
6. Operation tooling		
1) Study trip, training and community	8	27.59
2) Medias (cd, TV, flap, poster)	7	24.14
3) Knowledge	7	24.14
4) Toolings and equipments	7	24.14
5) Operation plan	3	10.34
6) Learning center	2	6.90
7. Support mechanisms		
1) Support network (integration)	10	34.48
2) Transferring knowledge to farmers.	5	17.24
3) Manufacturing factors	4	13.79
4) Working group	2	6.90
5) A team of talented from the central.	1	3.45
6) The continuous working	1	3.45
7) Transportation and marketing	1	3.45

4.3.3 Analysis result of the Extended Project operations by implementation of the Royal Project success lessons.

The study of the Extended Project operating result by implementation of the Royal Project success lessons in economic, social and environment in overall found that the operating result is in high level with an average of 3.52.

Operating result in 'Economic' found that operating result overall is in moderate level, the total average of 3.20, all subjects are in moderate level.

Operating result in 'Social' found that operating result overall is in high level, the total average of 3.80, all subjects are in high level.

Operating result in 'Environment' found that operating result overall is in high level, the total average of 3.57. The subject of Soil erosion reduced, Soil quality suitable for cropping and Caring for the forest are average in high level ($\mu = 3.69$, 3.52 and 3.86, respectively), Enough water for farming and Waste management in the Community are in moderate level ($\mu = 3.38$). (Table 4.31)

Table 4.31 The Extended Project operating result by implementation of the Royal Project success lessons

N = 29								
Subject	Opinion Level of the Extended Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Economic								
1) Family income	1 (3.4)	9 (31)	18 (62.1)	1 (3.4)	0	3.34	0.61	Moderate
2) Farmers can reduce production costs	2 (6.9)	6 (20.7)	19 (65.5)	1 (3.4)	1 (3.4)	3.24	0.79	Moderate
3) Household debt reduced	1 (3.4)	9 (31)	15 (51.7)	3 (10.3)	1 (3.4)	3.21	0.82	Moderate
4) Increased savings	3 (10.3)	8 (27.6)	13 (44.8)	4 (13.8)	1 (3.4)	3.28	0.96	Moderate
5) Increased properties	1 (3.4)	5 (17.2)	15 (51.7)	7 (24.1)	1 (3.4)	2.93	0.84	Moderate
Average						3.20	0.67	Moderate

Table 4.31 (Continued)

N = 29

Opinion Level of the Extended Project								
Subject	(Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
2. Social								
1) Increasing integration	4 (13.8)	18 (62.1)	4 (13.8)	3 (10.3)	0	3.79	0.82	High
2) Reduced drug problems	5 (17.2)	14 (48.3)	8 (27.6)	2 (6.9)	0	3.76	0.83	High
3) Study increasing	4 (13.8)	17 (58.5)	7 (24.1)	1 (3.4)	0	3.83	0.71	High
4) The community health improvement	2 (6.9)	16 (55.2)	10 (34.5)	1 (3.4)	0	3.66	0.67	High
5) Fundamentals improvement	4 (13.8)	20 (69.0)	5 (17.2)	0	0	3.97	0.57	High
Average						3.80	0.52	High
3. Environment								
1) Soil erosion reduced	3 (10.3)	15 (51.7)	10 (34.5)	1 (3.4)	0	3.69	0.71	High
2) Soil quality suitable for cropping	2 (6.9)	13 (44.8)	12 (41.4)	2 (6.9)	0	3.52	0.74	High
3) Enough water for farming	2 (6.9)	14 (48.3)	7 (24.1)	5 (17.2)	1 (3.4)	3.38	0.98	Moderate
4) Caring for the forest	5 (17.2)	17 (58.6)	5 (17.2)	2 (6.9)	0	3.86	0.79	High
5) Waste management in the Community	4 (13.8)	8 (27.6)	12 (41.4)	5 (17.2)	0	3.38	0.94	Moderate
Average						3.57	0.54	High
overall						3.52	0.51	High

4.3.4 Analysis result of problems, obstacles and suggesstions of implementation of the Royal Project success lessons to the Extended Project.

1) The study of the opinions of the Extended Project staffs about Problems and obstacles of implementation of the Royal Project success lessons to the Extended Project found that the most 24.14% is Selling, marketing and transportation system of agricultural products, next are Misunderstanding of the villagers about the Extended Project and the Royal Project 20.69% and Communication and The villagers do not cooperate 17.24% as follows : (Table 4.32)

Table 4.32 Problems and obstacles of implementation of the Royal Project success lessons to the Extended Project

N = 29

Article	Number (Person)	Percent
1) Selling, marketing and transportation system of agricultural products	7	24.14
2) Misunderstanding of the villagers about the Extended Project and the Royal Project	6	20.69
3) Communication	5	17.24
4) The villagers do not cooperate	5	17.24
5) Practical staffs are inadequate.	4	13.79
6) Lack of a specialist in the area.	3	10.34
7) Communities in remote areas, making integration difficult.	2	6.90
8) Transportation difficulties	2	6.90
9) Locations inappropriate	2	6.90
10) Different location in bringing knowledge to use.	2	6.90
11) Lack of continuity in operations.	1	3.45

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2) The study of the Extended Project staffs suggestions about an implementation of the Royal Project success lessons to the Extended Project areas, there are only 20 staffs (68.97%) are answered in suggestion section and found that the most is should develop the market because the remoted area with high cost of transportation for 25.00%, next is Staffs must study the plan carefully before operation 20.00%, Should explain the villagers to understand the differences between the Royal Project and Extended Project areas, Adapted to suit for operational budget, Must work as a team, not divided, Sufficient water resources development for agriculture, Local staffs should not change frequently and Should create a team of specialists that willing to work 10.00%, as follows Table 4.33.

Table 4.33 The suggestions about an implementation of the Royal Project success lessons to the Extended Project areas

N = 20

	Article	Number (person)	Percent
1)	Should develop the market because the remoted area with high cost of transportation.	5	25.00
2)	Staffs must study the plan carefully before operation.	4	20.00
3)	Should explain the villagers to understand the differences between the Royal Project and Extended Project areas.	2	10.00
4)	Adapted to suit for operational budget.	2	10.00
5)	Must work as a team, not divided	2	10.00
6)	Sufficient water resources development for agriculture.	2	10.00
7)	Local staffs should not change frequently.	2	10.00
8)	Should create a team of specialists that willing to work	2	10.00

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4.4 Part 4 Analysis result for data of the farmers in the Extended Project

4.4.1 The general socio-economics background of the farmers in the Extended Project

1) From the study of personal information found that interviewed farmers 81.0% is male with most age range 41 – 50 years 36.2% next 31 – 40 years is 31.0%. The number of farmer in household 56.9% is 1-3 people, next 37.9% is 4-6 people. The Family income 60.3% is 1 -1 0 ,0 0 0 Baht/month, next 26.7% is 1 0 ,0 0 1 -2 0 ,0 0 0 Baht/month. The average income is 12,006 Baht/month. And debt 64.3% is 1 – 100,000 Baht, next 27.6% has no debt. The average of debt is 81,819 Baht/ household. The land holding 25.9% is between 1-10 Rais, next 22.4% is 11 – 20 Rais. The average of Land holding is 21.32 Rais/ household. as follows Table 4.34.

Table 4.34 The general socio-economics background of the farmers in the Extended Project

			N = 58
The general socio-economics background		Number (person)	Percent
1. Gender			
Male		47	81.0
Female		11	19.0
2. Age (year)			
21-30		8	13.8
31-40		18	31.0
41-50		21	36.2
51-60		10	17.2
61-70		1	1.8
minimum 21 years maximum 63 years			
average 41.60 years, Standard deviation 9.233 years			
3. Number of farmer in household			
1-3		33	56.9
4-6		22	37.9
7-9		2	3.4
>9		1	1.8

Table 4.34 (Continued)

N = 58

The general socio-economics background	Number	Percent
4. Family income/month (Baht)		
1-10,000	35	60.3
10,001 - 20,000	16	27.6
20,001 – 30,000	4	6.9
30,001 – 40,000	3	5.2
minimum 1,000 Baht maximum 38,000 Baht		
average 12,006 Baht, Standard deviation 9,287.28 Baht		
5. Debt of Farmer Households (Baht)		
None	16	27.6
Farmer in case (N=42)		
1-100,000	27	64.3
100,001-200,000	8	19.0
200,001-300,000	5	11.9
300,001-400,000	1	2.4
400,001-500,000	0	0
> 500,000	1	2.4
minimum 3,000 Baht maximum 542,000 Baht		
average 81,819 Baht, Standard deviation 110,386 Baht		
6. Land holdings of farmers (Rai)		
None	6	10.3
Farmer in case (N=52)		
1-10	15	28.9
11-20	13	25.0
21-30	10	19.2
31-40	7	13.5
41-50	5	9.6
> 50	2	3.8
minimum 1 Rai maximum 65 Rais		
average 21.32 Rais, Standard deviation 16.383 Rais		

2) Property in the possession of the Extended Project farmers household.

From the study, farmers in the Extended Project have 1 television, refrigerator and motorcycle / household (average 77.6%, 65.5% and 51.7%, respectively) and have 2 mobile phones / household (average 39.7%) and there is no car in the household (50%). (Table 4.35)

Table 4.35 Holding assets of the Extended Project farmers' household

N = 58

Assets holding	Assets holding number						
	(None)	(1)	(2)	(3)	(4)	(5)	(6)
	%	%	%	%	%	%	%
1. Television	10.3	77.6	10.3	0	1.8	0	0
2. Refrigerator	31.0	65.5	3.4	0	0	0	0
3. Motorcycle	5.2	51.7	19.0	22.4	1.7	0	0
4. Car	50.0	41.4	6.9	1.7	0	0	0
5. Mobile phone	8.6	20.7	39.7	12.1	12.1	5.2	1.7

4.4.2 Analysis result of the operation model in promoting the knowledge for the farmers in the Extended Project areas

From the study found that the operation model in promoting the knowledge to the farmers, the farmers was regarded about the operations in high level. The total average is 3.77.

The 'promoted quantity' the knowledge to the farmers found that the result of operations in high level with the total average of 3.77. The farmers are regarded to the consultation / visit by staffs in very high level ($\mu = 4.21$ and 4.39), campaign and community forum are in high ($\mu = 3.88$ and 3.86), study trip and demonstration plots are in moderate level ($\mu = 3.19$ and 3.14).

The 'Support / Facilities' to the farmers found that the result of operations is in moderate level with an average of 3.38. The farmers are regarded to the distribution of fertilizers / pesticides / seeds and product quality development in high level ($\mu = 3.81$ and 4.09, respectively) and support operation areas / space for rent / house for rent, Equipment rental / loan and purchase of goods and agricultural products are in moderate level ($\mu = 2.61$, 3.25 and 3.21).

The ‘Quality of staff in the Extended Project areas’ in the promoting knowledge to the farmers found that the result of operations is in high level with an average of 4.17. The farmers are regarded the staffs have agricultural expertise appropriate to provide knowledge to the farmers, working with people in the area, consistency and continuity of operations and Willing to serve are in very high level ($\mu = 4.25, 4.42, 4.21$ and 4.51 , respectively). And Understand the real problems and conditions and the adequacy of staffs for service are in high level ($\mu = 4.09$ and 3.60) (Table 4.36).

Table 4.36 Operation model in promoting the knowledge for the farmers in the Extended Project areas

N = 58								
Subject	Opinion Level of the farmers in the Extended Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Promoted quantity								
1) Training	25 (41.1)	22 (37.9)	9 (15.5)	2 (3.4)	0	4.21	0.84	Very high
2) Study trip	7 (12.1)	15 (25.9)	21 (36.2)	12 (20.7)	3 (5.2)	3.19	1.08	Moderate
3) Demonstration plots	11 (19)	13 (22.4)	14 (24.1)	19 (25.0)	21 (27.6)	3.14	1.32	Moderate
4) Campaign	16 (27.6)	24 (41.4)	13 (22.4)	4 (6.9)	1 (1.7)	3.88	0.96	High
5) Community forum	17 (29.3)	24 (41.4)	9 (15.5)	7 (12.1)	1 (1.7)	3.86	1.04	High
6) Consultation / visit	29 (50)	24 (41.4)	3 (5.2)	2 (3.4)	0	4.39	0.75	Very high
Average						3.77	0.56	High
2. Support / Facilities								
1) Operation areas / space for rent / house for rent.	4 (6.9)	19 (32.8)	5 (8.6)	10 (17.2)	20 (34.5)	2.61	1.44	Moderate
2) Equipment rental / loan	17 (29.3)	9 (15.5)	13 (22.4)	8 (13.8)	11 (19)	3.25	1.49	Moderate

Table 4.36 (Continued)

N = 76

Subject	Opinion Level of the farmers in the Extended Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
3) Distribution of fertilizers / pesticides	19 (32.8)	18 (31)	14 (24.1)	5 (8.6)	2 (3.4)	3.81	1.11	High
4) The purchase of goods and agricultural products	8 (13.8)	16 (27.6)	16 (27.6)	15 (25.9)	3 (5.2)	3.21	1.13	Moderate
5) Product quality development	18 (31)	30 (51.7)	8 (13.8)	1 (1.7)	1 (1.7)	4.09	0.83	High
Average						3.38	0.90	Moderate
3. Quality of staff in the Extended Project								
1) Agricultural expertise appropriate to provide knowledge to the farmers.	20 (34.5)	32 (55.2)	6 (10.3)	0	0	4.25	0.63	Very high
2) Understand the real problems and conditions.	19 (32.8)	24 (41.4)	15 (25.9)	0	0	4.09	0.76	High
3) Working with people in the area.	31 (53.4)	20 (34.5)	7 (12.1)	0	0	4.42	0.71	Very high
4) Consistency and continuity of operations.	23 (39.7)	26 (44.8)	7 (12.1)	2 (3.4)	0	4.21	0.80	Very high
5) Willing to serve.	31 (53.4)	25 (43.1)	2 (3.4)	0	0	4.51	0.57	Very high
6) The adequacy of staffs for service	8 (13.8)	23 (39.7)	21 (36.2)	6 (10.3)	0	3.60	0.84	High
Average						4.17	0.51	High
Overall						3.77	0.56	High

4.4.3 Analysis result of the farmers with the knowledge and understanding gained after getting promotion from the Extended Project.

From study of analysis result of the farmers with the knowledge and understanding gained after getting promotion from Extended Project in career, social and environmental, the farmers were regarded about the operations in very high level. The total average is 3.82.

The knowledge in ‘Career’, the farmers with the knowledge and understanding gained after getting promotion from the Extended Project in overall is in moderate level with the total average of 3.35. The farmers are understood in Vegetables, farm products, organic, Preparation of fertilizer and Husbandry In high level ($\mu = 3.84$ 3.82 3.96, 3.79, 3.88 and 3.70). And the knowledge of Flowering plants is in low level ($\mu = 2.47$).

The knowledge in ‘ocial’, the farmers with the knowledge and understanding gained after getting promotion from the Extended Project in overall is in high level, the total average of 4.05. The farmers are understood of Community Planning in very high level ($\mu = 4.21$). The others are in high level.

The knowledge in ‘Environmen’, the farmers with the knowledge and understanding gained after getting promotion from the Extended Project in overall is in high level, the total average of 4.08. The farmers are understood of Watershed Conservation and Community forestry in very high level ($\mu = 4.25$). and Living with forest, Vetiver planting and Reforestation three with four benefits ($\mu = 4.61$, 4.02 and 3.75). (Table 4.37)

Table 4.37 The knowledge and understanding gained of the farmer after getting promotion from the Extended Project

N = 58

Subject	Opinion Level (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Career								
1) Vegetables	12 20.7)	29 (50)	14 (24.1)	2 (3.4)	1 (1.7)	3.84	0.86	High
2) Fruit plants	12 (20.7)	30 (51.7)	11 (19.0)	4 (69.0)	1 (1.7)	3.82	0.91	High
3) Flowering plants	12 (3.4)	11 (19.0)	11 (19.0)	23 (39.7)	11 (19.0)	2.47	1.12	Low
4) Farm products	22 (37.9)	18 (31.0)	13 (22.4)	4 (6.9)	1 (1.7)	3.96	1.03	High
5) Tea	7 (12.6)	16 (27.6)	5 (8.6)	13 (22.4)	17 (29.3)	2.70	1.46	Moderate
6) Coffee	4 (6.9)	15 (25.9)	14 (24.1)	14 (24.1)	11 (19.0)	3.30	1.34	Moderate
7) Herbs	17 (29.3)	21 (36.2)	12 (20.7)	7 (12.1)	1 (1.7)	2.77	1.24	Moderate
8) Organic	18 (31)	23 (39.7)	10 (17.2)	6 (10.3)	1 (1.7)	3.79	1.06	High
9) Preparation of fertilizer	14 (24.1)	22 (37.9)	15 (25.9)	5 (8.6)	2 (3.4)	3.88	1.04	High
10)Husbandry	14 (24.1)	22 (37.9)	15 (25.9)	5 (8.6)	2 (3.4)	3.70	1.05	High
11)Traveling	6 (10.3)	14 (24.1)	11 (19.0)	20 (34.5)	7 (12.1)	2.86	1.23	Moderate
12)Craft	5 (8.6)	13 (22.4)	26 (44.8)	8 (13.8)	6 (10.3)	3.05	1.08	Moderate
Average						3.35	0.60	Moderate

Table 4.37 (Continued)

N = 58

Opinion Level of the farmers in the Extended								
Subject	Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
2. Social								
1) Integration to community development.	16 (27.6)	27 (46.6)	12 (20.7)	6 (3.4)	1 (1.7)	3.96	0.89	High
2) Culture conservation	17 (29.3)	27 (46.6)	11 (19.0)	3 (5.2)	0	4.00	0.85	High
3) Understanding of drug penalty	21 (36.2)	27 (46.6)	7 (12.1)	3 (5.2)	0	4.14	0.83	High
4) Health secure	15 (25.9)	27 (46.6)	14 (24.1)	1 (1.7)	1 (1.7)	3.95	0.85	High
5) Family Planning	19 (32.8)	24 (41.4)	12 (20.7)	3 (5.2)	0	4.02	0.88	High
6) Community Planning	28 (48.3)	19 (32.8)	6 (10.3)	5 (8.6)	0	4.21	0.96	Very high
Average						4.05	0.62	High
3. Environment								
1) Watershed Conservation	22 (37.9)	31 (53.4)	3 (5.2)	1 (1.7)	1 (1.7)	4.25	0.79	Very high
2) Community forestry	28 (48.3)	21 (36.2)	5 (5.6)	3 (5.2)	1 (1.7)	4.25	0.95	Very high
3) Living with forest	21 (36.2)	28 (48.3)	6 (10.3)	3 (5.2)	0	4.16	0.82	High
4) Vetiver planting	24 (41.4)	16 (27.6)	15 (25.9)	1 (1.7)	2 (3.4)	4.02	1.04	High
5) Reforestation three with four benefits.	17 (29.3)	21 (36.2)	12 (20.7)	5 (8.6)	3 (5.2)	3.75	1.14	High
Average						4.08	0.76	High
Overall						3.82	0.55	High

4.4.4 Analysis result of the the Extended Project operating to the farmers.

1) The study of Analysis result of the the Extended Project operating to the farmers in economic, social and environment in overall found that, the operating result is in high level with an average of 3.81.

Operating result in 'Economic', found that operating result overall is in high level ($\mu = 3.41$). The farmers are Increasing income in high level ($\mu = 3.72$) Increasing assets and Reduced debt are in moderate level ($\mu = 3.26$ and 3.25).

Operating result in 'Social', found that operating result overall is in high level ($\mu = 3.91$). The subject of The increase of population decline is in very high level ($\mu = 4.35$), the other subjects are in high level.

Operating result in 'Environment', found that operating result overall is in high level, the total average ($\mu = 4.12$). The subject of Increased watershed Conservation is in very high level ($\mu = 4.35$), and Forest encroachment reduction, The destruction of topsoil reduced and The use of chemicals in agriculture decreased are in high level ($\mu = 4.12$, 4.02 and 3.98). (Table 4.38)

Table 4.38 Analysis result of the Extended Project operating to the farmers in economic, social and environment

N = 58								
Subject	Opinion Level (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
1. Economic								
1) Increasing income	9 (15.5)	31 (34.2)	13 (22.4)	3 (5.2)	2 (3.4)	3.72	0.92	High
2) Increasing assets	4 (6.9)	19 (32.8)	27 (46.6)	4 (6.9)	4 (6.9)	3.26	0.95	Moderate
3) Reduced debt	6 (10.3)	17 (29.3)	25 (43.1)	5 (8.6)	5 (8.6)	3.25	1.06	Moderate
Average						3.41	0.77	High
2. Social								
1) Get better education	9 (15.5)	24 (41.4)	22 (37.9)	2 (3.4)	1 (1.7)	3.67	0.85	High
2) Better health care	10 (17.2)	33 (56.9)	12 (20.7)	2 (3.4)	1 (1.7)	3.86	0.81	High

Table 4.38 (Continued)

N = 58

Subject	Opinion Level of the farmers in the Extended Project (Feeling)					μ	σ	Meaning
	Very high	High	Moderate	Low	Very low			
	(%)	(%)	(%)	(%)	(%)			
3) Reduced drug	17 (29.3)	23 (39.7)	14 (24.1)	3 (5.2)	1 (1.7)	3.89	0.96	High
4) The increase of population decline	14 (24.1)	25 (43.1)	16 (27.6)	2 (3.4)	1 (1.7)	3.84	0.90	High
5) Integration to community development increased.	24 (41.4)	28 (48.3)	6 (10.3)	0	0	4.32	0.66	Very high
6) The conservation of cultural heritage increased	23 (39.7)	21 (36.2)	13 (22.4)	1 (1.7)	0	4.14	0.83	High
7) Improved infrastructure such as roads, electricity, water	12 (20.7)	20 (34.5)	22 (37.9)	3 (5.2)	1 (1.7)	3.67	0.93	High
8) Improved infrastructure.	12 (20.7)	20 (34.5)	22 (37.9)	3 (5.2)	1 (1.7)	3.67	0.93	High
Average						3.91	0.57	High
3. Environment								
1) Forest encroachment reduction	23 (39.7)	24 (41.4)	6 (10.3)	4 (6.9)	1 (1.7)	4.12	0.96	High
2) Increased watershed Conservation	28 (48.3)	22 (37.9)	8 (13.8)	0	0	4.35	0.72	Very high
3) The destruction of topsoil reduced	21 (36.2)	20 (34.5)	14 (24.1)	2 (3.4)	1 (1.7)	4.02	0.95	High
4) The use of chemicals in agriculture decreased	20 (34.5)	21 (36.2)	14 (24.1)	2 (1.3)	1 (1.7)	3.98	0.95	High
Average						4.12	0.76	High
Overall						3.81	0.58	High

2) The analysis of farmers' opinions about changing in the community after implementation of the Extended Project in the area.

The farmers in the Extended Project are regarded good result of most Knowledge of the career increased for 63.79% and Farmers have better lives 41.38%, Natural resources conservation by community 31.03% and Communities have more bundles resulting strong community 24.14%, respectively as follows Table 4.39.

Table 4.39 The farmers' opinions about changing in the community after implementation of the Extended Project in the area

N = 58

Article	Number (person)	Percent
1) Knowledge of the career increased.	37	63.79
2) Farmers have better lives.	24	41.38
3) Natural resources conservation by community	18	31.03
4) Communities have more bundles resulting strong community	14	24.14
5) Community reduce the use of chemicals.	7	12.07
6) A career outside the agricultural sector increased.	5	8.62
7) There is a consultant	5	8.62
8) Agencies to provide support and development increased.	4	6.90
9) Development of tourism has to be increased.	4	6.90
10) People in the community become more health conscious.	3	5.17

3) Problem, obstacles and suggestions in promoting the knowledge to the farmers between staffs and farmers.

From the study found that 28 farmers in the Extended Project (48.28%) are regarded to the Problem, obstacles and suggestions in promoting the knowledge to the farmers between staffs and farmers.

The farmers in the Extended Project have the Problem, obstacles and suggestions are as A small number of staff cause not thoroughly worked (less area access) for 53.57%, Difficult communication (language) and The lack of staff continuity due to frequently changes 17.86%, Staff should understand the needs of farmers 14.28%, Staff should have specific expertise, Lack of infrastructure (roads,

electricity), No support market for the products and Water shortages and water distribution (consume) 10.71%, Lack of vehicles to transport agricultural products and Lack of capital 7.14%. (Table 4.40)

Table 4.40 Problem, obstacles and suggestions in promoting the knowledge to the farmers between staffs and farmers

N = 28

Article	Number (person)	Percent
1) A small number of staff cause not thoroughly worked (less area access)	15	53.57
2) Difficult communication (language)	5	17.86
3) The lack of staff continuity due to frequently changes	5	17.86
4) Staff should understand the needs of farmers	4	14.28
5) Staff should have specific expertise	3	10.71
6) Lack of infrastructure (roads, electricity)	3	10.71
7) No support market for the products	3	10.71
8) Water shortages and water distribution (consume)	3	10.71
9) Lack of vehicles to transport agricultural products	2	7.14
10) Lack of capital	2	7.14

4.4.5 The factors affecting the operation results of the Extended Project to the farmers in economic, social and environment.

This study uses the Multiple Regression Analysis to examine the relationship between many dependent and independent variables that each independent variable has any relationship (positive or negative) to dependent variable and relationship level with dependent variable. An anylysis uses 8 independent variables divided into 2 groups of factor as following.

1) Personal factors are age, number of farmer in household, Family income/month, debt and number of land holding.

2) Factors related to the operation of the Extended Project are promoted quantity, support / facilities and quality of staff in the Extended Project areas.

The dependent variables are operation result of the Extended Project Project to the farmers which is number of the total average of the opinion level of the farmers totally 58 people to the operation result in 3 main subjects; economic, social and environment and overall.

Preliminary analysis on the variables that import to equation found that the average of age is 41.60 years, an average of farmer in household is 4 people/ household, an average of family income is 12,006 Baht/month and an average of debt is 81,819 Baht/household. The land holding is 21 Rais/household. In addition, in knowledge promotion from staffs and Quality of the Royal Project's officer are in high level with the average of 3.77 and 4.17, respectively. In the support / facilities is in moderate level with an average of 3.38. The details as shown in Table 4.41.

Table 4.41 Average and standard deviation of analysis variables

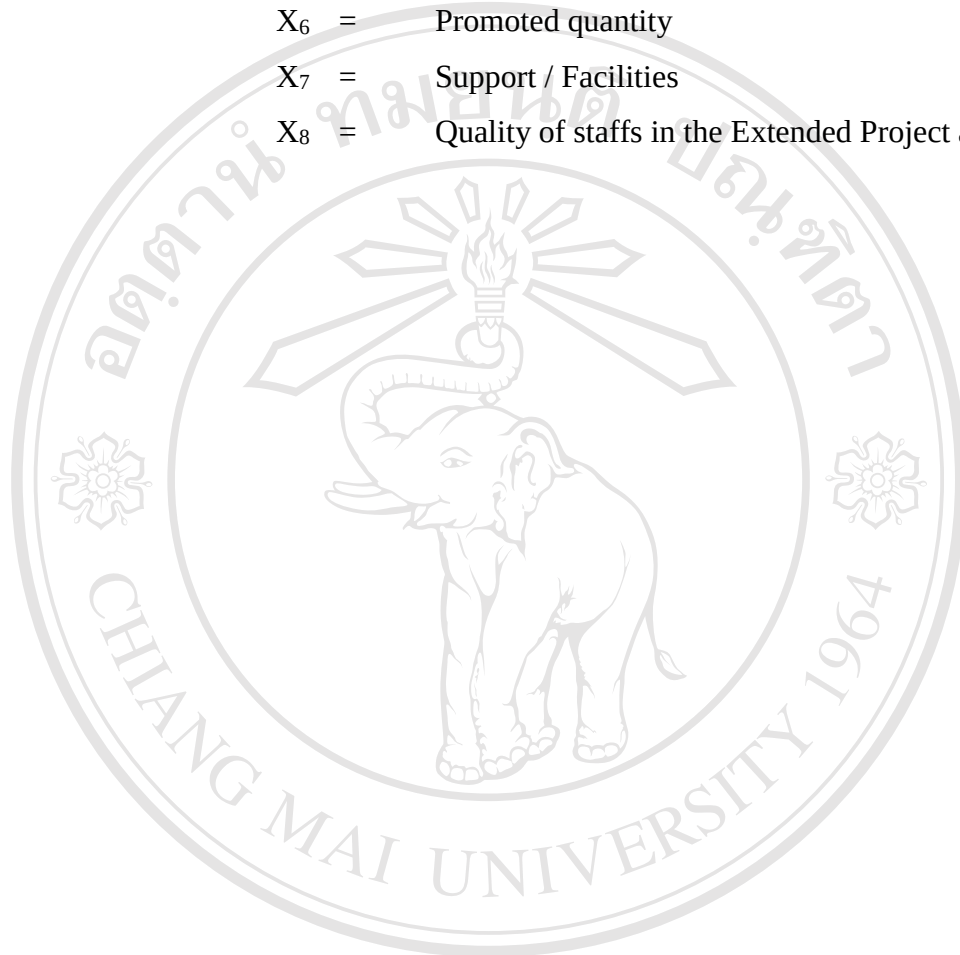
N = 58

Variable	Average	Standard deviation
1. Age	41.60	9.23
2. Number of farmer in household	3.50	1.97
3. Family income/month	12,006.00	9,287.28
4. Debt	81,819.00	110,386
5. Number of land holding	21.32	16.30
6. Promoted quantity	3.77	0.60
7. Support / Facilities	3.38	0.90
8. Quality of staffs in the Extended Project areas	4.17	0.51

When study the relationship between independent variables for each pair found that, there is no independent variables has the relationship over 0.80 that cause of the relationship between internal Independent Variables (Multicollinearity) that is Violation of the assumptions of multiple regression analysis director. (Suchart Prasitratsin, 2001) by defining the variables to take into the equation.

Dependent Variables	Y_1	=	Overall operation of the Extended Project areas
	Y_2	=	Overall operation in economic
	Y_3	=	Overall operation in social
	Y_4	=	Overall operation in social

Independent Variables	X_1	=	Age
	X_2	=	Number of farmer in household
	X_3	=	Family income/month
	X_4	=	Debt
	X_5	=	Number of land holding
	X_6	=	Promoted quantity
	X_7	=	Support / Facilities
	X_8	=	Quality of staffs in the Extended Project areas



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Table 4.42 Correlation coefficient between dependent and independent variables in multiple regression analysis

Variable	Y ₁	Y ₂	Y ₃	Y ₄	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈
Y ₁	1.000				.433	-.241	.481	-.136	.122	.629	.263	.454
Y ₂		1.000			.226	-.102	.268	-.081	.039	.296	.223	.294
Y ₃			1.000		.329	-.224	.395	-.220	.096	.689	.403	.471
Y ₄				1.000	.474	-.255	.489	-.051	.154	.560	.054	.348
X ₁					1.000	-.282	.301	-.018	.262	.314	.029	.175
X ₂					-.282	1.000	-.199	-.253	.081	-.048	.221	.113
X ₃					.301	-.199	1.000	.197	.314	.259	-.210	.032
X ₄					-.018	-.253	.197	1.000	.027	-.288	-.245	-.123
X ₅					.262	.081	.314	.027	1.000	.129	-.001	-.019
X ₆					.314	-.048	.259	-.288	.129	1.000	.654	.538
X ₇					.029	.221	-.210	-.245	-.001	.654	1.000	.574
X ₈					.175	.113	.032	-.123	-.019	.538	.574	1.000

Table 4.43 Multiple regression analysis of factors affecting operating results of of the Extended Project to the farmers in economy, social and environment

Variable	Regression coefficients (b)	t	Sig
1) Age	.009	1.235	.224
2) Number of farmer in household	-.045	-1.420	.163
3) Family income/month	1.955E-5	2.574	.014*
4) Debt	-5.647E-7	-1.035	.307
5) Number of land holding	-.002	-.413	.682
6) Promoted quantity	.340	1.971	.055
7) Support / Facilities	-.022	-.224	.824
8) Quality of staffs in the Extended Project areas	.295	2.001	.052
Constant	1.066	1.789	.081
R² = 0.599 SEE = 0.3809 F = 7.649 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are F = 7.649 and Sig = .000 It means that there is a linear relationship of at least 1 independent variable with dependent variable and Multiple Coefficient of Determinator (R²) equal to 0.599 that mean all independent variables in equation can explain variability of dependent variables for 59.90% and in all 8 independent variables, there is 1 variable affected to dependent variables statistically significant at level 0.05, it is family income/month. All of variable in analysis can be written as multiple regression equation as following.

$$Y_1 = 1.066 + 0.009x_1 - 0.045x_2 + 1.955E-5x_3 - 5.647E-7x_4 - 0.002x_5 + 0.340x_6 - 0.022x_7 + 0.295x_8$$

(1.789) (1.235) (-1.420) (2.574)* (-1.035) (-.413) (1.971) (-.224) (2.001)

* Significance of testing statistic t ≤ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.43 can conclude that, there is 1 independent variable has the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in economic. That independent variable is family income. The independent variables which have the positive relationship to dependent variables are age, family income, promoted quantity, and quality of officer in the Extended Project areas.

Table 4.44 Multiple regression analysis of factors affecting operating results of the Extended Project to the farmers in economy

Variable	Regression coefficients (b)	t	Sig
1) Age	.008	.662	.512
2) Number of farmer in household	-.042	-.721	.475
3) Family income/month	2.617E-5	1.869	.069
4) Debt	-7.898E-7	-.785	.437
5) Number of land holding	-.003	-.409	.685
6) Promoted quantity	-.170	-.536	.595
7) Support / Facilities	.208	1.142	.260
8) Quality of staffs in the Extended Project areas	.266	.980	.333
Constant	1.908	1.736	.090
R ² = 0.209 SEE = 0.7024 F= 1.355 Sig. of F = .245			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are F = 1.355 and Sig = .245. It means that there is no any linear relationship of independent variable with dependent variable.

Hypothesis testing

Multiple regression analysis as Table 4.44 can conclude that, there is no any independent variable is related with dependent variable.

Table 4.45 Multiple regression analysis of factors affecting operating results of the
Extended Project to the farmers in social

Variable	Regression coefficients (b)	t	Sig
1) Age	1.410	2.300	.027*
2) Number of farmer in household	.002	.227	.821
3) Family income/month	-.068	-2.073	.045*
4) Debt	1.948E-5	2.496	.017*
5) Number of land holding	-9.298E-7	-1.658	.105
6) Promoted quantity	.000	-.256	.800
7) Support / Facilities	.343	1.935	.060
8) Quality of staffs in the Extended Project areas	.087	.859	.395
Constant	.234	1.547	.129
R² = 0.609 SEE = 0.3915 F= 7.955 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are F = 7.955 and Sig = .000. It means that there is a linear relationship of at least 1 independent variable with dependent variable and Multiple Coefficient of Determinator or R² equal to 0.609 that mean all independent variables in equation can explain variability of dependent variables for 60.90% and in all 8 independent variables, there are 3 variables affected to dependent variables statistically significant at level 0.05 which consists of (1) age, (2) family income and (3) debt. All of variable in analysis can be written as multiple regression equation as following.

$$Y_3 = 0.234 + 1.410x_1 + 0.002x_2 - 0.068x_3 + 1.948E-5x_4 - 9.298E-7x_5 + 0.000x_6 + 0.343x_7 + 0.087x_8$$

(1.547) (2.300)* (.227) (-2.073)* (2.496)*
(-1.658) (-.256) (1.935) (.859)

* Significance of testing statistic $t \leq$ significant level 0.05

Hypothesis testing

Multiple regression analysis as Table 4.45 can conclude that, there are 3 independent variables have the relationship with dependent variables that can prove the hypothesis of some of the factors are related with the overall operating result of the Extended Project to the farmers in economic, social and environment. The 3 independent variables are (1) age, (2) family income, and (3) dept. The independent variables which have the positive relationship to dependent variables are number of farmer in household, dept, support / facilities and Quality of the Royal Project's officer.

Table 4.46 Multiple regression analysis of factors affecting operating results of the Extended Project to the farmers in environment

Variable	Regression coefficients (b)	t	Sig
1) Age	.016	1.603	.117
2) Number of farmer in household	-.025	-.570	.572
3) Family income/month	1.299E-5	1.217	.230
4) Debt	2.544E-8	.033	.974
5) Number of land holding	.000	-.158	.876
6) Promoted quantity	.847	3.496	.001**
7) Support / Facilities	-.362	-2.605	.013*
8) Quality of staffs in the Extended Project areas	.383	1.852	.071
Constant	-.119	-.142	.887
R² = 0.590 SEE = 0.5354 F= 7.386 Sig. of F = .000			

Multiple regression analysis with the 8 variables in the equation to calculate by Enter method the result are $F = 7.386$ and $Sig = .000$. It means that there is a linear relationship of at least 1 independent variable with dependent variable and Multiple Coefficient of Determinator (R^2) equal to 0.590 that mean all independent variables in equation can explain variability of dependent variables for 59.00 and in all 8 independent variables, there are 2 variables affected to dependent variables statistically significant at level 0.05 which consists of (1) promoted quantity and (2) support / facilities. All of variable in analysis can be written as multiple regression equation as following.

$$\begin{aligned}
Y_4 = & -0.119 + 0.016x_1 - 0.025x_2 + 1.299E-5x_3 + 2.544E-8x_4 \\
& (-0.142) \quad (1.603) \quad (-.570) \quad (1.217) \quad (.033) \\
& +0.000x_5 + 0.847x_6 - 0.362x_7 + 0.383x_8 \\
& (-.158) \quad (3.496)** \quad (-2.605)* \quad (1.852)
\end{aligned}$$

* Significance of t test $\leq$ Significant level 0.05

Hypothesis testing

Multiple regression analysis is summarized as in Table 4.46, there are two independent variables correlated with the dependent variable. It can be assumed that there are some factors are associated with the implementation of the expansion projects to the farmers in the environmental area . 2 independent variables , including (1) promoted quantity and (2) support / facilities. The independent variables are positively correlated with the dependent variables , including age, income, household debt solution implementation and support . Project staff and quality Extended Project areas.

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4.5 Part 5 Analysis result for Focus Group of the Chief Officer of the Royal Project Center and Focus Group of the Staffs of the Extended Project.

4.5.1 Analysis result of the success operating model of the Royal Project in highland development from focus-group meeting of the Royal Project Chief officers.

Analysis result of 8 the Royal Project development center Chief officers are as following.

1) The Royal project success lessons, the important are “Operation model” which is public access to build communities’ faith result in making the operation successfully. The next is the knowledge which is promoting to transfer to the farmers such as GAP, the post harvest management, learning center and demonstration plots for interesting people.

2) The Royal Project operation model, the importances are operating guidelines that H.M. the King had put such as reduction process, do the thankless job, hurry up, and help him help yourself. By operating the obvious goal is to "stop the opium, promote professional income, promoting environmental, reduce deforestation and shifting cultivation". The working is with community officials to be embedded in a long and ongoing community for depth understanding of the conditions and by focusing on the needs of the community into the mainstream. The turnkey operations are from production to marketing featured marketing and ensuring to the farmers.

3) Factors affecting to the successful implementation of the Royal Projects, they are community’s characteristic, cooperation from the community, integrated working with government agencies and local agencies, performance out of concrete, staffs with expertise and experienced of work, various crops to farmers through the promotion of research and productivity, diversity, and quality.

4) Suggestions for implementation of the Royal Project success lessons to the Extended Project, it should be done in areas where there is a need for the development starting by building communities’ faith, embedded closer to community, give priority to the basic needs of the community into the mainstream, do not think for community, analyze problems and find the solutions of the community problems by requesting the cooperation of concerned agencies . The operations must not change

staffs frequently. The promoting to plant will need to consider the market is important. The officer must always increase the knowledge relied on the community to the reliability of the community.

4.5.2 The analysis result of implementation of the Royal Project success lessons to the Extended Project including problem, obstacles and suggestions from focus-group meeting of the Extended Project staffs.

The analysis result of 8 the Extended Project Chief officers and staffs and the Director of Development department of Highland Research and Development Institute focus-group meeting, the result as following.

1) The Royal Project success lessons that can be used in the Extended Project in all areas are consist of 2 mains; (1) Operating model in a highland area development which is the most important thing to start operations due to the nature of the Extended Project is similar to the implementation of the Royal Project. It is a difficult task, working in remote areas, must adhere and continued to work. (2) Integrating with other agencies which is much needed by local staffs witharious government agencies.

In knowledge, research, tooling and expertise must be selected from the appropriated area emphasis on the analysis of potential areas to meet the operating needs of the community and social climate of the area including the acceptance of farmers. The Royal Project success lessons in this section will help to ensure the implementation of the Extended Project is faster due to the knowledge that a lot of studies to selectively adapted to fit for the area. Thus, it is resulting in shorten the duration of the operation.

2) The Extended Project operation policy is following the Royal Project operation. The Extended Project is primarily focused on working with the community. It is a catalyst for the community to play a role in all community activities due to the number of staffs and budget are limited.

3) The operation result of implementation of the Royal Project success lessons to the Extended Project adpted in economic, social and environment found that performance on all three catagories are similar because they were developed concurrently. Each project implementation will affect the three aspects, such as the

promotion of maize by legume overlap will result in economic and the environment is to make more revenue. A reduce soil and corn stubble, it will help the environment. The social is inherent in every project like various bundles. If evaluate the success of past performance, it should be evaluated separately for each extension project. Because the beginning of the development of each area, it is impossible to use the same indicators used in the assessment. It is including the length of time it takes to develop the area, it would be different.

4) The effect factors in an implementation of the Royal Project success lessons to the Extended Project are (1) Characteristics of the area (climate, landform, society) because each area has different issues. (2) The Extended Project staffs ,because each staff has different potencies and responsibility. Therefore, in this section must be trained to educate the staff to get to work in the area and instill the values of the organization, so the staffs are willing to continue their work and dedication to the job. (3) Changing staff should not be done frequently, because of needing time to work with the community to make a community trusting. The development work will take several years to be very clear.

5) Problems and obstacles for implementation, nowadays society is quite complex compared to the past, modern people are quite large and difficult to be accepted to take the time to do the job. Sometimes they are accepted but not implemented because of a lack of confidence in the authorities. In addition, staffs are lacked knowledge, navigation knowledge projects adapted to suit the community.

6) Other suggestions are (1) Highland Research and Development Institute must maintain personnel the Institute has developed knowledge. (2) To build confidence in the community of the Extended Project areas. (3) Central agencies should provide support for the operation of the Extended Project and local staffs to achieve agility and fast operation finding the ways to build a team in the organization.