SUCCESS FACTORS FOR VEGETABLE GROWERS: A STUDY IN RANAU, SABAH

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DECLARATION

All the materials in this thesis are original except for quotations, summaries and references which had been duly acknowledge.

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ABSTRACT

This research is a success factors for vegetable growers which was conducted among the vegetable growers in district of Ranau, Sabah. The aim of the present paper is to investigate hypotheses pertaining to the success factor for vegetable growers: A study in Ranau, Sabah. Three measures of success in term of Organizational, Human Capital and Social Theory. Questionnaires data was collected from 118 vegetable growers in Ranau, Sabah. There are eight hypothesis. The result of the research revelead that only 52.60% of the variance were able to explain that there was relationship between the growth. However, it was found that Size of the Farm, External Support Services, Training, Network and Family Background influenced the Growth of Sales. This research hoped to bring some benefit at least to pave the way for a more comprehensive research to be carried out to unveil the relationship between Organizational, Human Capital and Social Capital Theory with Growth.

ABSTRAK

Tajuk kajian penyelidikan ini adalah Faktor-faktor kejayaan bagi penanam sayur di daerah Ranau, Sabah. Objektif kajian ini adalah untuk menyelidik hipotesis terhadap factor-faktor kejayaan bagi penanam sayur. Tiga ukuran bagi factor-faktor kejayaan iaitu dari segi Organisasi, Kemanusiaan dan Sosial Teori. Sampel kajian ini adalah terdiri daripada 118 penanam sayur di Ranau, Sabah. Sebanyak lapan hipotesis telah dibentuk. Hasil daripada kajian ini menunjukkan bahawa hanya 52.60% peratus daripada variasi menyokong kepada kejayaan penanam sayur. Walaubagaimanapun, keluasan ladang, khidmat sokongan luar, latihan, rangkaian dan latarbelakang keluarga adalah factor-faktor yang dapat menpengaruhi pertumbuhan. Semoga kajian penyelidikan ini dapat membawa manfaat sekurang-kurangnya bagi membuka jalan untuk membuat perubahan bagi pemahaman yang lebih tepat terhadap kajian penyelidikan dan membuktikan perhubungan di antara Organisasi, Kemanusiaan dan Sosial Teori dengan Pertumbuhan.

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CHAPTER 1

INTRODUCTION

1.1 Overview of Vegetable Growers

"Enhancing income of smallholders, farmers and fishermans" (Nine Malaysia Plan, 2006 – 2010). Enhancing the income of farmers and smallholders by strengthening support services. Improving the delivery mechanism, increasing the accessibility of credits and establishing insurance coverage as well as increasing their direct involvement in downstream processing (Eight Malaysia Plan, 2001 - 2005).

Agriculture must be a Priority (Source: The Vegetable Growers News, 2003). Most of the people nowadays do not realize the value of the agriculture industry as a high value-added food, raw material producer and generating higher income. Their perception on the agricultural sector is as a low-standard profession and only for the rural areas.

Grubinger (1999) stated that successful vegetable farmers do much more than produce vegetables; they also manage money, people, and natural resources effectively. Sydenham (1985) also agreed that vegetable gardening can help everybody. Even teachers, lawyers, doctors, engineers, civil servants and traders can all benefit by growing vegetables as a part-time activity and as a hobby.

Government never put aside the agricultural sector since Seven Malaysia Plan even in the era of modernization nowadays. Budget and policy direction for the farmers, vegetable growers and planters are also emphasized in the realization of the Malaysia's Plan. One of the policy directions focusing on the encouragement for the vegetable growers: "*Strengthening domestic food production to reduce reliance on imports*

through the zoning of agricultural land to be made available to the private sector at nominal rates, encouraging large scale modern vegetable farming, and promoting the integration of livestock in rearing in plantations".

The Ninth Plan's answer to broadening the group's participation is to widen the benchmark to include not just bumiputera equity ownership, but also to promote their ownership of residential and commercial urban property, intellectual property rights and small and medium enterprises (SMEs). New foundations, trust funds and an SME Bank will be established in the future to achieve this end (Anil, 2006).

AGRICULTURE SECTOR – MALAYSIA

Table 1.1 below illustrates the total area under selected crops since year 1990 to 2005. Vegetables industry was the number eight larger total hectare among twelve selected crops since year 1990 until present.

Table 1.1 Total Area Under Selected Crops, 1990 – 2005

Crop	Hectare ('000)			
	1990	**1995**	**2000**	**2005[e]**
Rubber	1,837	1,702	1,446	1,250
Oil Palm	2,029	2,540	3,377	3,949
Cocoa	393	190	76	35
Coconut	314	274	159	143
Pepper	12	10	13	14
Tobacco	10	11	16	n.a.
Paddy	681	673	699	680
Coffee	17.8	11.5	12.3	n.a.
Tea	3.3	2.9	3.5	n.a.
Sugarcane	21.6	22.1	21.4	n.a.
Vegetables	26	34	40	47
Fruits	168	237	312	216

[e] estimate
Source: Monthly Statistical Bulletin, January 2006, Bank Negara Malaysia.

Table 1.2 below illustrates the total production of agricultural commodities for the ten years planning which from year 2000 to 2010. Its show that vegetables increased after five years and become more productivity after ten years.

Table 1.2 Production of Agricultural Commodities, 2000 – 2010

Commodity	Metric Tonnes ('000)		
	2000	2005	2010
Industrial Commodities			
Rubber	928	1,124	1,293
Crude Palm Oil	10,842	14,961	19,561
Palm Kernel Oil	1,384	1,868	2,570
Sawlogs[1]	23,074	21,334	19,475
Cocoa	70	28	57
Food Commodities			
Padi	2,141	2,400	3,202
Fisheries	1,454	1,575	2,071
Marine	1,286	1,325	1,409
Aquaculture	168	250	662
Livestock			
Beef	17.5	28.5	45.0
Mutton	0.9	1.5	2.3
Pork	159.8	209.0	241.0
Poultry	714.3	980.1	1,295.0
Eggs	399.0	443.0	600.0
Milk[2]	29.5	41.1	68.4
Miscellaneous			
Pepper	24.0	19.1	30.0
Pineapple	265.7	407.6	1,106.0
Tobacco	7.4	14.0	12.0
Flower[3]	120.4	126.4	147.3
Fruits	993.0	1,586.9	2,555.7
Vegetables	404.0	771.3	1,133.3
Coconut	475.7	602.0	660.0

Notes: [1] Measured in thousand cubic metres.
[2] Measured in Million litres.
[3] Measured in million stalks.
Source: 9th Malaysia Plan 2006 – 2010

Table 1.3 shows the total land used for agricultural from year 2000 to year 2010. Total hectares of vegetables crop will increased by 46,000 hectares after ten years.

Table 1.3 Agricultural Land Use, 2000 – 2010

Crop	Hectares ('000)		
	2000	**2005**	**2010**
Oil Palm	3,377	4,049	4,555
Rubber	1,431	1,250	1,179
Padi[1]	478	452	450
Fruits	304	330	375
Coconut	159	180	180
Cocoa	76	33	45
Vegetables	40	64	86
Tobacco	15	11	7
Pepper	13	13	14
TOTAL[2]	**5,893**	**6,383**	**6,891**

Notes: [1] Based on padi parcel.
[2] Excludes areas for other crops like tea, coffee and herbs as well as aquaculture.
Source: 9th Malaysia Plan 2006 – 2010.

Sabah's land area, covering about 7.37 million hectares, is endowed with diverse land form, vegetation and people. About 60 percent of its area is mountainous. The landform provides a diverse range of habitats for its diverse flora and fauna. The vegetation ranges from mangrove swaps, lowland to mountain rainforest and even alpine type forest above 3,500 meter in the Mt. Kinabalu area. It also provides a diverse for the many indigenous communities, who are mostly subsistence farmers, utilizing traditional farming practices.

The vegetable industry in Sabah is dominated by small farms (small holders) with only a few large-scale farms. About eighty percent (80%) of the sample vegetable farmers, on the average, cultivate two (2) acres of vegetable farms (Arshad, H. et. al., 1991). The current scenario has not differed very much from this observation. There are two categories of vegetable types found in Sabah, that is, lowland vegetables and highland (temperate) vegetables. Highland vegetables are those grown in areas at around 3000- 5000 ft above sea level found mainly coming from the farms of

Kundasang Ranau. The Other main vegetable growing areas are the lowland type around the coastal areas and Keningau (900 ft above sea level).

AGRICULTURE SECTOR – SABAH

Table 1,4 and 1.5 below illustrates Growth of Agriculture Sector at constant and current prices form year 2000 to 2004.

Table 1.4 Growth of Agriculture Sector, 2000 – 2004 (At 1987 Constant Prices)

Year	GDP in Purchasers' Prices (RM Mil.)	Agriculture & Livestock Share To GDP (RM Mil.)	% Share of GDP	Annual % Growth of Agriculture & Livestock Sector
2000	11,976	2,553	21.32	4.20
2001	12,242	2,829	23.11	10.81
2002	13,007	2,963	22.78	4.73
2003	13,756	3,226	23.45	8.88
2004	14,333	3,379	23.57	4.74

Source: Yearbook of Statistics Sabah 2005, Department of Statistics Malaysia, Sabah.

Table 1.5 Growth of Agriculture Sector, 2000 – 2004 (At Current Prices)

Year	GDP in Purchasers' Prices (RM Mil.)	Agriculture & Livestock Share to GDP (RM Mil.)	% Share of GDP	Annual % Growth of Agriculture & Livestock Sector
2000	17,955	3,220	17.93	-28.47
2001	17,115	2,892	16.90	-10.19
2002	20,570	4,784	23.26	65.42
2003	23,694	6,255	26.40	30.75
2004	27,296	7,156	26.21	14.40

Source: Yearbook of Statistics Sabah 2005, Department of Statistics Malaysia, Sabah.

Table 1.6 Contribution of Major Agricultural Commodities to the State's GDP, 2004 (At Current Prices)

Commodities	Value (RM Million)	Percentage (%)	
		State's GDP	Sector's Contribution
Palm oil	6,609.8	24.21	92.36
Cocoa	87.7	0.32	1.23
Rubber	66.9	0.25	0.93
Other agricultural commodities	301.1	1.10	4.21
Livestock	90.7	0.33	1.27
Total Agricultural & Livestock	**7,156.2**	**26.22**	**100.00**

Source: Department of Statistics Malaysia, Sabah.

Table 1.7 Estimated Planted Hectareage of Crops, 1985 – 2004

Crops	1985	1990	1995	2004
Oil Palm	187,226	281,486	629,431	1,133,409
Cocoa	172,713	205,976	142,036	21,021
Rubber	84,434	91,901	89,234	64,593
Coconut	57,006	59,227	56,113	21,084
Paddy	38,440	52,589	51,327	40,822
Fruits	15,520	20,124	23,769	15,606
Vegetables	2,065	3,311	4,129	2,008
Others	19,008	19,575	23,620	8,538
TOTAL	**576,412**	**734,189**	**1,019,659**	**1,307,081**

Source: Department of Agriculture, Sabah.

Vegetable production area is concentrated in district of Ranau, Keningau, Lahad Datu, Penampang and Sandakan. These five district account for about 75% of the total vegetable production in Sabah. Ranau alone contributes about **42%** of total vegetable area in the country.

District of Ranau produces a wide variety of vegetables, three types of species are grown commercially which are Root, Fruit and Leafy Vegetables. The most popular are Cauliflower, Lettuce, Spring Onion, Chinese Cabbage, Chili, Wax Gourd, Tomato, and Brinjal. Ranau is the major vegetable growing area for many individual vegetable species.

While the second largest of total heactareage and production of vegetables in Sabah is District of Keningau. The most famous vegetables produce are "Sawi Keriting", Chinese Kale, Chienese White Cabbage, Lady's Finger, French Bean, Brinjal and Cucumber.

Brickell (1992) clarified that more and more people are discovering the deep satisfaction of growing their own vegetables. They do so for many reasons: for some gardeners it is the joy of freshness and flavour rarely to be found in shop-bought produce, while for others it is a chance to grow exotic crops or some of the unusual varieties that they cannot otherwise obtain.

These vegetable growers operating their farming activities whether for household used or for monthly income. They start to operate commercialize to earn higher income or to continue the family tradition of vegetables farm. Besides that, high quality of vegetables can be export to other country and this can increase the Malaysia currency.

Brunei is one of our vegetable importers who is concern about the vegetables quality requirement and comply with the tagging system. The vegetable exporters must ensure their export products contain accurate information to make it easier for the relevant departments or agencies to trace them and the vegetable growers. All the vegetable growers are also required to register with the Agriculture Department, while the exporters must register with FAMA (Source: Daily Express, Oct. 2003). Government concerns the product quality and reputation of Malaysia towards improving the performance of the vegetable growers in Sabah.

According to the personal interview with Miss Slyvia Edward, Statistic Division officer of Agricultural Department, Kota Kinabalu said that the actual number of vegetable growers in Sabah could not be easily collected because of no co-operation

and feedback from the vegetable growers especially in the rural areas. They refused to give the information and register to the agriculture department.

Table 1.8 below illustrates the estimate number of registered vegetable growers in Sabah in year 2005.

TABLE 1.8 NUMBER OF REGISTERED VEGETABLE GROWERS IN SABAH (ESTIMATION)

NO	DISTRICTS	NO. OF VEGETABLE GROWERS
1	Tawau	-
2	Semporna	31
3	Lahad Datu	49
4	Kunak	46
5	Sandakan	54
6	Kinabatangan	1
7	Beluran	5
8	Telupid / Tongod	6
9	Kudat	57
10	Matunggong	71
11	Pitas	106
12	Kota Marudu	-
13	Kota Belud	38
14	Ranau	661
15	Tuaran	24
16	Penampang	197
17	Papar	20
18	Beaufort	1
19	Sipitang	10
20	Kuala Penyu	7
21	Tenom	24
22	Keningau	50
23	Sook	-
24	Tambunan	7
25	Pensiangan	17
	TOTAL	**1,482**

Source : Statistics Division, Report From Department of Agriculture, Kota Kinabalu,2005

Table 1.9 shows the total hectarage of vegetables by district and types of vegetables. Specific calculation of total hectareage of vegetables taken from report for year 2005 (haven't yet released) shows that among the 27 district Ranau is the highest producer of all the three types of vegetables and largest total of hectareages of vegetables farm.

Table 1.9 Total Hectareage of Vegetables

DISTRICTS	TOTAL HECTAREAGE OF VEGETABLES			TOTAL HECTAREAGE
	LEAFY VEG.	FRUIT VEG.	ROOT VEG.	
Tawau	32.0	21.0	1.0	54.0
Semporna	3.0	5.1	-	8.1
Lahad Datu	120.0	71.0	4.0	195.0
Kunak	3.7	5.7	-	9.4
Sandakan	86.1	35.3	-	121.4
Kinabatangan	1.9	-	-	1.9
Tongod	-	-	-	-
Beluran	0.3	0.1	-	0.4
Telupid	-	-	-	-
Kudat	3.4	3.7	0.1	7.2
Matunggong	8.6	9.4	-	18.0
Pitas	6.2	2.4	-	8.6
Kota Marudu	4.9	13.9	-	18.8
Kota Belud	1.2	1.5	-	2.7
Ranau	544.0	223.5	11.7	779.2
Tuaran	30.8	41.7	0.2	72.7
Penampang	117.5	76.7	2.6	196.8
Papar	27.4	55.9	-	83.3
Beaufort	13.4	4.0	-	17.4
Sipitang	9.1	14.0	0.1	23.2
Kuala Penyu	6.1	4.3	-	10.4
Tenom	13.8	19.2	-	33.0
Keningau	133.6	149.5	-	283.1
Sook	5.6	27.6	10.9	44.1
Tambunan	13.8	4.0	0.5	18.3
Nabawan	0.4	0.2	-	0.6
TOTAL	**1,186.8**	**789.7**	**31.1**	**2,007.6**

Source: Statistics Division, Report From Department of Agriculture, Kota Kinabalu,2005

Table 1.10 gives the summary for the Total hectareage and production of vegetables in Sabah. The summary shows that vegetable growers in Ranau are productivity than other districts.

Table 1.10 Total Hectareage / Production Of Vegetables In Sabah

DISTRICTS	TOTAL HECTAREAGE O / PRODUCTION VEGETABLES	
	HECTAREAGE	PRODUCTION (MT)
Tawau	54.0	735.9
Semporna	8.1	196.6
Lahad Datu	195.0	4565
Kunak	9.4	70.8
Sandakan	121.4	1359
Kinabatangan	1.9	3
Tongod	-	-
Beluran	0.4	2.4
Telupid	-	-
Kudat	7.2	104.3
Matunggong	18.0	194.7
Pitas	8.6	34.3
Kota Marudu	18.8	208.7
Kota Belud	2.7	36
Ranau	779.2	11,729.0
Tuaran	72.7	1,235.6
Penampang	196.8	1,698.4
Papar	83.3	1,060.2
Beaufort	17.4	105.3
Sipitang	23.2	255.1
Kuala Penyu	10.4	56.7
Tenom	33.0	531
Keningau	283.1	3,213.2
Sook	44.1	430.2
Tambunan	18.3	209.6
Nabawan	0.6	5.9
TOTAL	**2,007.6**	**28,041.0**

Source : Statistics Division, Report From Department of Agriculture, Kota Kinabalu, 2005

1.2 Rationale of this study

The rationale of this study is to analyze and investigate the success factors for vegetable growers. The results of this research shall be used as data to guide the vegetable growers to success in the vegetable farming. As a long term measure, the study proposes the development and establishment of vegetable growers that will increase the total production of vegetable growers and to be one of the biggest distributors to the export industry in Malaysia.

1.3 Problem Statement

Majority of the vegetable growers having problem of earning high income and yet vegetable farming was the main source of their household income. They also are facing low productivity of their vegetable and this affecting the monthly sales of the vegetable growers. Due to low income and productivity, performance of the vegetable growers inconsistent from year to year.

Eventhough Agriculture department had prepared many support and programmes for the vegetable growers such as material supports, consultation, capital, training, seminar and a number of activities to guide them for the success of their business but it didn't worked for some of the vegetable growers.

Most of them unaware of the support and infrastructure provided for them especially in the rural areas. Some of them do not realize that government had provided them many advantages as a small entrepreneur. And therefore, some of the vegetable growers are successful and some of them are not successful.

In this research, in order to measure the performance of the vegetable growers, the theory of Organizational, Human Capital and Social Capital were used. Organizational Theory involves the size of the farm, age of the farm and external

support services received by the vegetable growers. While Human Capital Theory includes education, training and number of experiences of the vegetable growers. Social Capital Theory is consisting of network and family background.

Hence, the current research is needed in order to understand " **to what extent does Organizational, Human Capital and Social Capital Theory determine the performance of the vegetable growers.**"

1.4 Scope and Objectives

The general aim of this study is to investigate the success factors for vegetable growers scope study in Ranau, Sabah. The main interest of this study is to examine whether there are significant relationship between Organizational, Human Capital and Social Capital Theory and Growth. To examine how these three theories related to the growth sales of the vegetable growers and important towards the success factors for vegetable growers. Specifically, the objectives of this study are :

1. To what extent the Organizational Theory (size of the farm, age of the farm and external support services) influence the Growth?

2. To what extent the Human Capital Theory (education, training and experience) influence the Growth?

3. To what extent the Social Capital Theory (network and family background) influence the Growth?

BIBLIOGRAPHY

Anil Netto. 2006. *Malaysia Economic Plan, Old Wine, New Bottle.* Malaysia Today.

Arshad, H., Jipanin, J., Lee, S.H. and Michalik, S. (1991). Factors Influencing the Pesticides Use Pattern of Vegetable Farmers in Sabah, East Malaysia: An Exploratory Baseline Survey, MGPP- DOA, Sabah.

Ball A. & Wiley A. 2005. The Aspirations of Farm Parents and Pre-Adolescent Children For The Generational Succession of the Family Farm. *Journal of Agricultural Education.* **46**(2) : 36-46

Bilikopf, E. 2000. *The Voice of The Vegetable Industry.* The Vegetable Growers News.

Bolger, D. 1998. *Off-farm Theory and Practice.* Ministry of Agriculture and Forestry Policy Technical Paper, MAF Policy. Wellington.

Bourdieu, P. 1986. *The Forms of Capital.*

Brickell, C. 1992. *Encyclopedia of Gardening, A Dorling Kindersley Book.* London.

Cooper, D.R., Schindler, P.S. 2006. *Business Research Methods.* Sixth Edition.Mc Graw Hill International Edition.

Daily Express News. 10 October 2003. *Brunei still detect pesticide on our greens.*

Deolalikar, A.B. 1981. The Inverse Relationship Between Productivity and Farm Size: A Test Using Regional Data From India. *American journal of agricultural economics.* **63** (2), 275 – 279.

Dess, Lumpkin and Taylor. 2004. *Strategic Management.* McGraw Hills Companies

Djurfeldt, G. 1996. *Defining and Operationalizing Family Farm from Sociological Perspective*. Sociologia Ruralis, **36** (3) 340-355.

Dominic Lim (ed). 1993. *Agricultural Research & Development: The Need To Be User Sensitive*. Institute For Development Studies, Konrad Adenauer Foundation.

Dunne, T., Roberts, M.J. and Samuelson, L. 1988. Patterns of firm entry and exit in US manufacturing industries. *Rand Journal of Economics*. **19**(4), 495-515.

Eighth Malaysia Plan 2001 – 2005, April 2001

Elder, G. H., & Conger, R. D. 2000. *Children of the land*. Chicago: University of Chicago Press.

Entrepreneur, The Small Business Authority, September 1994

Entrepreneur, The Small Business Authority, December, 1994.

Evans, D.S. 1987a. The Relationship between firm growth, size and age estimates for 100 manufacturing industries. *Journal of Industrial Economic*. **35** (4), 567-582.

Factor: Definition, Synonyms and Much More From Answer.Com. http://www/answer.com/topic/factors. Last modified on 2006.

Garcia L., Benites J., Martinez A. & Holgado A. 2003. *Conservation Agriculture*. Kluwer Academic Publishers.

Gasson, R. and Errington, A. 1993. *The Farm Family Business*. CAB Intenational, Wallingford.

Glancey, K. 1998. Determinants of Growth and Profitability in Small Entrepreneurial Firms. *International Journal of Entrepreneurship Behaviour & Reseacrh*

Greiner, L.E. 1972. *Evaluation and Revolution as Organizational Grow*. Harvard Busines Review. July – Aug.

Growers – definition of growers by the Free Online Dictionary. http://www.thefreedictionary.com/growers. Last modified on 2006.

Grubinger, V. P. 1999. *Sustainable Vegetable Production From Start Up To Market.* United State.

Guarino, L. 1997. *Traditional African Vegetables.* International Plant Genetic Resources Institute, Via delle Sette Chiese.

Hall, G. 1995. *Surviving and Prospering in the Small Firm Sector.* Routledge, London.

Harper, P., Light, J., Madsen, C. and Hamilton, G. 1994. *The Natural Garden Book.* Gaia Books Limited, London.

Harsh, S. B., Connor, L. J. & Schwab, G. D. 1981. *Managing The Farm Business.* Prentice Hall, Inc,. Englewoof Cliffs.

Hessayon D.G. 2002. *The Vegetable & Herb Expert.* Expert Books, Random House Group Ltd.

Heike Michelsen, Carry Zuidema, Christian Hoste & David Shapiro. 2003. *Improving Agricultural Research at Universities in Sub-Saharan Africa: A study Guide.* Washington.

Heidi, K. 1994. *A Handbook For Farmers and Investors : The New Rural Industries.* Vol. 3, Jamison Centre, ACT 2614.

Hildebrand, J.H. 2005. Agriculturists – Who is "Growing" Them? *The Planter.* **81** (950) , May 2005

Source taken from: HRM Guide Network, Organization Theory,14 June 2006

Huffman, W.E. 1980. Farm and off farm work decisions: the role of human capital. *The Review of Economics and Statistics.* **62**(1): 14-23.

Human Capital _ Wikipedia, the free encyclopedia. http://en.wikipedia.org/miki/human-capital. Latest modified on 6 June 2006.

IFAD. 2000. *"Socio-economic and Gender Equity Aspects of the Target Group."* Grenada: Rural Enterprises Project: Formulation Mission Report. Working Paper I, Rome.

Ilbery B., Chiotti Q. & Richarr T. 1997. *Agricultural Restructuring and Sustainability.* Biddles Ltd, Guilford.

Ison, R. & Russell, D. 2000. *Agricultural Extension and Rural Development: Breaking Out of Traditions.* University of Cambridge. United Kingdom.

James, J.C. 1968. *Planters and Speculators, Chinese and European Agricultural Enterprise in Malaya 1786-1921.* Craftsman Press Ltd, Singapore.

Jackson, C.J. 1968. *Planters and Speculators: Chinese and European Agricultural Enterprise in Malaya 1786-1921.* Craftsman Press Ltd, Singapore.

Jensen M.C and Meckling W.H, 'The Nature of Man,' *The Journal of Applied Corporate Finance* (Summer 1994), pp. 4-19. Reprinted in Michael C. Jensen, Foundations of Organizational Strategy, (Harvard University Press, 1998).

Johanson, J., and Mattsson, L. 1998. *Internationalisation in industrial systems – A Network Approach.* The Internationalisation of the Firm – A Reader. Academic Press, London.

Jovanovic, B. 1982. *Selection and The Evaluation of Industry.* Econometrica. **50**(3), 649-670.

Kimhi, A. and M. Lee. 1996. Off-farm work decisions of farm couples: estimating structural simultaneous equations with ordered categorical dependent variables. *American Journal of Agricultural Economics.* **78**: 687-698

Law, D. A., & Pepple, J. 1990. A state plan for agricultural education. *The Agricultural Education Magazine.* **62**(8), 10-12.

Lee, D. and Newby H. 1983. *The Problem of Sociology: An introduction to the discipline*, London: Unwin Hyman.

The Vegetable Growers News. March 2003. *Agriculture must be a Priority says National Farmers Union Trade*

The Vegetable Growers News, December 2001.

Mission. http://epu.jpm.my/News%20Folder/development%20plan/midterm-RM8.htm. Last modified on 2006.

Mission. http: //epu.jpm.my/News%20Folder/development%20plan/RM7.htm. Last modified on 2006.

Moller, K.K., and Halinen, A. 1999. Business relationships and networks: Managerial challenge of network era. *Industrial Marketing Management*, **28**(5): 413-427.

Minnesota Department of Agriculture, 2002, A Bountiful Harvest : Minnesota Fruit and Vegetables Growers Manage Pest, United States Environmental Protection Agency, Chicago.

National Research Council. 1989. *Alternative agriculture*. National Academy Press, Washington, DC., 448.

Neal R. 2006. *New Focus on Vegetable Industry Growth*. The Hon Peter McGauran MP, Federal Minister for Agriculture, Fisheries and Forestry.

Nelson, P.V. 2003. *Greenhouse Operation & Management*. Pearson Education Ltd. Sixth Edition.

Nine Malaysia Plan, 2006 – 2010, April 2006.

Norton, R.D. 2004. *Agricultural Development Policy*. John Wiley & Sons Ltd, Chichester.

Organizational Studies _ Wikipedia, the free of Encyclopedia. http://en_wikipedia.org/wiki/organization behaviour. Latest Modified on 5 June 2006.

Oyce M. Hawkins. 1991. *Oxford Fajar*. Penerbit Fajar Bakti Sdn. Bhd.

Phillips, R. and Rix, M. 1993. *Vegetables: Over 650 Vegetables in Superb Colour*. Pan Macmillan Publisher Limited, London.

Price, A. 2006. *Organization Theory*. HRM Guide Network.

Rao, A. P. 1967. *"Size of Holding and Productivity."* Econ. and Polit. Weekly, 11 Nov. 1967, pp. 1989-91.

Reijntjes, C., Haverkort, B & Waters, A.B. 1995. *Farming For The Future: An Introduction For Low-External-Input Sustainable Agriculture*. Macmillan Education Ltd.

Rizov, M. and Mathijs, E. 2003. Farm Survival and Growth in Transition Economies: Theory and Empirical Evidence from Hungary. *Post-Communist Economies*. **15** (2) 227-242.

Rowell, B. 1999. *Fruit and Vegetable Crops Research Report*, Kentucky.

Robinson, G. 2004. *Geographies of Agriculture*. Pearson Education Limited.

Saini, G. R. 1971. *"Holding Size, Productivity, and Some Related Aspects of Indian Agriculture."* Econ. and Polit. Weekly, 26 June 1971, pp. A79-A85

Salmon, S. 1992. Prairie patrimony: *Family, farming, and community in the midwest*. Chapel Hill: University of North Carolina Press.

Salamon, S., Gengenbacher, K. M., and Penas, D. J. 1986. Family factors affecting the intergenerational succession to farming. *Human Organization,* ***45***(1): 24-33.

Scherer, F.M. 1980. *Industrial Market Structure and Economic Performance.* Chicago, IL: Rand McNally College Publishing Co.

Seventh Malaysia Plan, 1996 – 2000. Third National Agricultural Plan.

Sivalingam G. 1993. *Malaysia's Agricultural Transformation.* Pelanduk Publication, Selangor.

Social Capital _ WIkipedia, the free encyclopedia. http://en-wikipedia.org/wiki/social-capital. Latest modified on 23 May 2006.

Soffe, R.J. 2001. *The Agricultural Notebook.* 19th Edition. Primrose McConnell, University of Plymount.

Stanes, R. 1990. *Market Gardening.* The Crowood Press, Witshire.

Success: Definition, Synonyms and Much More and More From Answer.Com. http://www.answer.com/topic/success. Last modified on 2006.

Sydenham D.H.J. 1991. *Success in Vegetable Production.* Macmillan Publishers.

Taylor, C N. and Little, H. M. 1995. *Means of survival? A study of off-farm employment.* Taylor Baines & Associates, Christchurch.

The Application of Network Theory to the New Zealand agricultural. http://66.249.93.104/search?q=cache:4dIVE8K4SBAJ:muresk.curtin.edu.au/conference/imp/proceedings/cs3a2_015.pdf. Latest Modified on 2005.

Tivy, J. 1990. *Agricultural Ecology.* Logman Singapore Publishers Ltd, Singapore.

Uma Sekaran. 2000. *Research Method For Business, A Skill Binding Approach.* 4th Edition. John Wiley & Sons. Inc.

Vegetable: Definition and Much More From Answer.Com. http://www.answer.com/topic/vegetable. Last modified on 2006.

Wilkinson, I., and Young, L. 2002. On cooperating: Firms, relations and networks. *Journal of Business Research.* **55**(2): 123-132.

Warren, K. 2003. *Agriculture must be a priority says National Farmers Union Trade Panel*. The Vegetable Growers News.

2001 Census of agriltural – Profiles of Quebec's farm operators. http://statcan.ca/english/agcensus2001/first/profiles/02que.htm. Last modified on 02 December 2002.