

THE PROSPECT OF THE AGRIBUSINESS SECTOR IN EAST JAVA INDONESIA (1975 – 2007)

Y. Lilik Rudianto

Faculty of Economics and Business, Airlangga University

Abstract- *The objective of this paper is to map out the local context of the agribusiness sector in East Java Indonesia by providing information on the regional development of East Java, Indonesia. This paper is divided into three sections. Economic performance and agriculture in East Java are presented in the first section. A discussion of the prospect of the agribusiness sector in Indonesia will be provided in the second section, and the third section considers the development of small medium enterprise (SMEs) in Indonesia and the urgency of clustering.*

Key words: *Economic performance, agriculture, the development of SMEs, clustering*

I. INTRODUCTION

In 2003, 2005, 2007 (at 2000 constant market price), the gross domestic regional product (GRP) of East Java were Rp. 228,884.45 billion, Rp. 256,374.72 billion, and Rp. 287,814.18 billion (Jawa Timur Province in Figure, 2008). During the period from 1989 to 1993 (*Repelita V*, the Fifth Five-Year National Development Plan) the regional economy grew at 8.9 percent per annum. Then from the second year of *Repelita VI* (1994-1999) to 2000 the growth was at 7.3 percent per annum. The period from 2001 to 2009 the growth was estimated at 6.1 percent per annum. Considering the contribution of major sectors to the non-oil GRP, the trade, hotel and restaurant sector contributed the highest portion (30.8 percent) followed by the manufacturing sector (26.4 percent), agriculture (16.6 percent) and the transportation and communication sector (5.9 percent). These figures provide a picture of the significant contribution of the trade, hotel and restaurant sector and the manufacturing sector to the local economy as well as to the national economy.

The GRP per capita for 2005 (at 2000 constant prices) reached Rp. 7,063,778. This figure put East Java among the highest per capita income provinces in the country. The high GRP per capita was accompanied by an average growth of non-oil exports of 10.2 percent per annum between 2000 and 2005 with the main commodities being food, beverages and tobacco.

The most striking changes in the distribution of East Java's GRP among the agricultural (A), manufacturing (M), and services (S) sectors between 1971 and 1988 were the sharp decline in the share contributed by agriculture, from almost 50 percent in 1971 to less than 30 percent in 1987, and the equally sharp increase in the M sector (mining and quarrying, manufacturing, utilities, and construction) from 14.6 percent to nearly 24 percent over the same period, most of it occurring after 1983 (Table 1). And although less dramatic, there was also a rise in the contribution of the S sector from 36 percent to 46.5 percent, this being mainly in the trade and transport-communications sub-sectors. In 2007,

there was a rise in the contribution of the S sector from 44.4 percent to 50.1 percent.

Table 1. Sectoral distribution of gross regional and sectoral growth rates of East Java 1976 – 2007

	Sectoral Distribution (%)		
	Agri.	Min.	Ser.
1976	41.2	13.5	45.3
1983	33.7	17.0	49.3
1996	15.6	39.4	45.0
2003	20.5	35.1	44.4
2007	16.6	33.3	50.1
	Growth Rate (%)		
	Agri.	Min.	Ser.
1976	6.5	7.6	2.9
1983	4.0	12.8	9.9
1996	4.0	14.3	8.6
2003	3.8	10.5	7.4
2007	3.1	6.6	7.6

Sources: *Jawa Timur dalam Angka*, 1976, 1983, 1996, 2003, 2008

Agri. = Agriculture

Min. = Mining and Quarrying, Manufacturing, Utilities, and Construction

Ser. = Services

Apart from East Java's quite rapid rate of increase in manufacturing between 1987 and 2003, moderate but sustained rates of growth were achieved in all three major sectors during those years, and these occurred without the

Publication History

Manuscript Received : 23 October 2014
 Manuscript Accepted : 30 October 2014
 Revision Received : 30 October 2014
 Manuscript Published : 31 October 2014

erratic spurts recorded by other provinces in various sectors. The overall growth rate was relatively low in the early 1970s, with agriculture then growing almost as rapidly as manufacturing. Growth then accelerated between 1976 to 1996 and declined between 1997 to 2007, especially in the M and S sectors, declined for a time during the difficult years of low oil prices in the mid-1980s. After 1988 it recovered, and since then has sustained a rate of growth of about 8 percent per annum. The rate of growth in the A sector has declined from the high levels of the early 1970s, although it is still a creditable rate by international standards.

Table 2. Sectoral distribution of gross regional product of East Java 1975 – 2007

Sector	Percentage of total				
	1975	1980	1996	2003	2007
Agriculture	43.0	38.3	15.6	20.5	16.6
Food crops	35.0	31.7	10.4	11.2	9.0
Estates	4.1	3.5	2.6	4.1	3.1
Livestock	2.7	2.2	1.3	2.7	2.7
Forestry	0.4	0.2	0.6	0.5	0.2
Fisheries	0.8	0.7	1.1	2.0	1.6
Mining	0.2	0.2	1.7	1.9	2.0
Manufacturing	11.7	13.8	29.2	26.4	26.4
Utilities	0.4	0.6	1.8	2.7	1.7
Construction	0.7	1.0	6.7	4.1	3.4
Trade, hotels, and restaurants	20.7	23.2	20.8	25.1	30.8
Transport and communications	6.3	5.9	6.4	6.5	5.9
Banking and Finance	1.2	2.1	2.0	0.9	1.7
Dwellings	2.3	2.3	4.4	3.2	3.4
Government	11.1	11.4	4.4	4.0	3.6
Other services	2.3	2.1	5.4	4.7	4.5
Total	100.0	100.0	100.0	100.0	100.0

Sources : *Jawa Timur dalam Angka*, 1975, 1980, 1996, 2003, 2008

While the share of GRP produced by the S sector as a whole has increased considerably since 1971, the proportion contributed by 'trade, hotels and restaurants' has increased relatively more and, despite fluctuations, appears to have actually increased since 1982 (Table 2). Transport and communication has not increased its share much since 1975, according to the GRP figures, although this seems surprising when one considers the extent of 'the Colt Revolution' in rural transportation since the late 1970s. The finance and banking sub-sector grew slowly until 1982, but its share of the total has more than doubled since then. The share contributed by government services and house rents has declined, although 'other services' may have increased in the 1980s. The share contributed by trade, hotels, and restaurant has increased, although agriculture have declined in 2007.

All these figures need to be interpreted with caution, since the compilation of regional accounts data at the provincial and lower levels is still a new and imperfect statistical operation. But the patterns of structural change they reveal accord with the general impression derived from other sources of information about the way the provincial economy has been developing under the New Order.

Agriculture in East Java

Sugar, tobacco, coffee, and rubber have been by far the most important plantation crops in East Java throughout the twentieth century, with small amounts of tea, cocoa and other crops also produced at times. Smallholder production of those crops by local farmers was relatively insignificant in East Java during the colonial era. Boeke's use of the term 'dualism' was inspired mainly by the contrast he discerned between the 'dynamic', technically advanced, and efficient commercial plantation sector and the allegedly 'stagnant', subsistence-orientated smallholder sector. Yet today it is the latter which is expanding and the former which has become stagnant and inefficient. This is one of the most important structural changes that have occurred in the East Java economy since independence.

Sugar

Sugar production constituted the leading sector of the East Java economy during the century before World War II. Sugarcane is still an important crop cultivated on more than 150,000 hectares of land every year and directly affecting the lives of at least 200,000 households. Yet it no longer has its former significance in the provincial economy. The stimulus to new investment and growth in the provincial economy, generated by the rapid expansion of sugar cultivation in the late colonial period, collapsed abruptly in 1930 and has never been reactivated, despite an attempt in 1975 to reconstitute the industry on a radically new basis through the introduction of the TRI (Tebu Rakyat Intensifikasi or Smallholder Sugarcane Intensification) system.

The introduction of the TRI system in 1975 was a major initiative by the government to tackle the problem of declining productivity, and it sought to revive the industry by transferring the task of cultivating cane from the mills to the farmers themselves, and at the same time gearing the cash payments they received to the sucrose output from the cane they deliver to the mill. It was hoped that this would give farmers an incentive to increase production and improve yields. The role of the mills was reduced so that they were responsible only for crushing the cane brought in by the farmers, providing technical advice and 'guidance', and providing materials such as fertilizers, pesticides, and seedlings appropriate to the area. In principle the TRI scheme seemed a well-conceived idea, but it went badly wrong on two counts, one was that the government arbitrarily determined the prices paid to farmers for cane, and frequently the prices were at levels lagging far behind the inflation rate so that in most areas cane cultivation returned less income to them than rice. The other was that various forms of coercion were applied to farmers by the local authorities in order to achieve that mill's cane cultivation targets for each district, sub-district, and village. Instead of having new and strong incentives to improve their cultivation practices and raises

sugar yields, most farmers now plant sugarcane reluctantly and feel little incentive to put more effort into their work beyond the minimum needed to achieve the area targets imposed upon them. A “target mentality” among growers, state plantation officials, and local government authorities responsible for ensuring that each village or sub-district plants the required amount of cane has replaced any incentive towards achieving higher productivity and efficiency across the industry as a whole.

Table 3. East java: Estate and smallholder production of sugar, 1999 – 2007

	Area Planted (‘000 hectares)			Production (‘000 tonnes)		
	A	B	C	A	B	C
1999	141.6	5.4	0.9	707.9	27.4	4.2
2003	156.3	19.8	0.9	810.1	97.3	2.7
2007	177.0	19.7	1.6	1,137.7	62.9	6.7

Sources: *JawaTimurdalamAngka*, 2002, 2008

- A = Smallholders
B = Government Estates
C = Private Estates

The initial results of the new system were encouraging, for a time, and production of sugar in East Java rose rapidly to slightly over a million tonnes per annum by the early 1990s, although it has not risen much beyond that level since (Table 3). Although the output figures show an impressive increase, the socio-economic consequences of the TRI system have been costly to most of the farmers concerned. Yields per hectare have declined even further, and the overall productivity, efficiency, and profitability of the sugar industry have deteriorated almost everywhere.

Tobacco

Tobacco became an important plantation crop in East Java in the second half of the nineteenth century when the legendary cigar tobacco estates in *Besuki* Residency, first developed by George Birnie around 1860, began producing a high-grade leaf suitable for the European cigar market. Since independence, two major changes have occurred, apart from the nationalization of the Dutch estates. The most striking has been a shift from the colonial-era, estate-dominated mode of production of cigar tobacco towards one in which smallholder cultivation (and the processing of cigar tobacco leaf) is now widespread. The other has been a rise in domestic demand for lower quality tobacco from the fast-growing *kretek* (clove-flavored) cigarette manufacturing industry, which has coincided with the decline in the international market for high-quality cigar tobacco.

Tobacco has a short growing season, and since it causes little disruption to wet-season rice cultivation it is very suitable for smallholder cultivation. High-quality leaf can frequently obtain a substantial premium in the market, but there is a great deal of risk attached to its cultivation and trade since export tobacco is subject to wild price fluctuations in accordance with weather conditions and international demand.

Coffee

Since 1945 coffee has become East Java’s major export crop. By the late 1980s the total area under coffee in Indonesia was almost 950,000 hectares (including both large commercial plantations and small-holdings), this being nearly three times the area devoted to coffee in the 1950s. In East Java, coffee plantations are the main form of hill-country estate of the classic enclave or “dualistic” type which still survive there.

Table 4. East java: Estate and smallholder production of tobacco, 1998-2007

	Area planted (‘000 hectares)		Production (‘000 tonnes)	
	A	B	A	B
1998	111.7	1.0	95.2	1.8
2003	148.6	1.0	109.7	1.5
2007	100.3	1.0	109.6	1.4

Sources : *JawaTimurdalamAngka*, 2002, 2008

- A = Smallholders
B = Government Estates

This is the nation’s main region for plantation coffee, and in the 1980s they covered almost, 40,000 hectares.

In the other provinces coffee is cultivated almost entirely by smallholders, and in East Java smallholder cultivation expanded after the 1960s to a point where its area (44,000 hectares in 1988) slightly exceeded that of the estates, although the quantity and quality of coffee produced have been lower (*JawaTimurdalamAngka*, 1990). This indicates a greater degree of adaptability on the part of smallholders in responding to favorable world market prices (prior to the collapse of the World Coffee Agreement in 1989) than was shown by the estates, which achieved only a small increase in area after 1970.

Table 5. East java: Estate and smallholder production of major tree crops, 1997–2007

	Area Planted (‘000 hectares)			Production (‘000 tonnes)		
	A	B	C	A	B	C
Coffee						
1997	45.3	22.2	19.5	16.8	12.2	8.8
2003	50.9	23.6	18.4	20.2	15.6	7.6
2007	52.5	20.5	18.4	27.8	10.7	6.4
Cloves						
1997	32.4	1.9	3.5	6.6	0.3	0.6
2003	33.7	1.9	3.8	8.8	0.4	1.1
2007	35.2	1.9	3.9	9.2	0.4	1.4
Coconuts						
1997	273.2	1.8	3.4	240.5	1.1	0.8
2003	281.7	1.8	3.4	259.7	1.0	1.1
2007	287.6	1.8	2.4	231.5	1.0	1.9
Kapok						
1997	87.2	0.7	2.9	22.6	0.1	0.5
2003	87.2	0.7	3.9	25.1	0.3	1.0
2007	78.1	0.7	3.3	27.6	0.4	1.5

Sources : *JawaTimurdalamAngka*, 2002, 2008

- A = Smallholders
 B = Government Estates
 C = Private Estates

Other Three Crops

The total area in East Java which was planted with tree crops other than coffee and fruit (in particular, rubber, cocoa, tea, cloves, vanilla, cashew nuts, cinnamon, coconuts and kapok) amounted to almost 470,000 hectares in the late 1980s, and more than half of this comprised smallholder coconut stands and nearly a quarter was under kapok. Except for cloves, no great increase appears to be occurring in any of these crops in East Java, and their relative economic importance has declined greatly since the early years of the twentieth century. Rubber tea, cocoa, and cinnamon are exclusively plantation crops in East Java, but they account for less than 50,000 hectares in total. Production of rubber and tea has stagnated since the 1930s and is confined primarily to a few old *Jember* and *Banyuwangi* estates. With static production levels they amount to little more than relics from the colonial era.

On the other hand, cultivation of cloves and various minor tree crops, such as vanilla and cashew nuts, are expanding rapidly, grown largely by smallholders and totaling around 100,000 hectares. Coconut production, which occurs in nearly all parts of the province, but particularly in *Banyuwangi*, *Jember* and *Blitar*, was important in the early twentieth century; it then remained static for along time before increasing slowly in the late 1980s. Kapok production has been rising at a faster rate, but it is a significant source of income in only a few areas. Clove production for the *Kretek* industry has been the greatest tree-crop success story in East Java since Independence. Although it can be extremely profitable, nevertheless it is a risky crop because of its susceptibility to disease. Smallholders grow cloves in most part of East Java, usually in very small gardens.

Fruit and Vegetables

The cash incomes generated by smallholder cultivation of fruit and vegetables have become very important for farmers because at times high prices can be earned for these crops, and this has been especially apparent in many parts of East Java during the New Order years. Rising demand for fruit and vegetables has extended more broadly into modest but widespread increases in their production throughout most of the province. Fruit and vegetables of many kinds have long been grown both commercially and for domestic consumption in nearly all parts of Indonesia, but large-scale and intensive commercial cultivation have developed vigorously in East Java only since the 1970s, stimulated mainly by the rise in urban demand associated with rising middle-class incomes.

The increases in production recorded for some fruit between 1983 and 1987 were considerable (*JawaTimurdalamAngka*, 1987); for example, threefold increases were recorded for pineapples, some types of *jeruk* (citrus) and mangoes, as well as other minor fruit, and *jeruksiam* (tangerine) production rose ten-fold. The increase in commercial demand for various crops, such as pineapples and several types of *jeruk*, has led to dramatic growth in

production in certain districts with favorable physical conditions.

The poorer regions of the south-west and north-west are minor producers of fruit and vegetables, but it is not clear whether this is due to poor soils and water supplies or other factors, and it is relevant to note that some of them are now producing cloves in abundance.

Table 6. East Java: Fruit production, 2006

Fruit	Total Production ('000 tones)
Avocado	48.2
Mango	611.3
Rambutan	58.2
Lanzon	6.2
Orange	526.2
Durian	53.3
Guava	30.4
Pawpaw/pepaya	209.1
Sopodila	19.0
Banana	885.9
Pineapple	113.6
Salacia	82.4

Source: BPS (2007)

Table 7. East Java: Vegetable production, 2006

Vegetable	Total Production ('000 tones)	Area ('000 ha)
Shallots	253.7	25.0
Spring Onions	59.9	5.8
Cabbage	162.8	8.4
Carrots	44.3	3.0
Potatoes	90.3	6.4
Mustard Green	56.9	5.1

Source: BPS (2007)

Proximity to urban markets is also an important factor, although the spread of truck transportation has enabled some remote areas to flourish.

The increasingly prominent role of smallholders in the production of sugar, tobacco, coffee, fruit, vegetables, and various other tree crops, is a trend of potentially great significance in the socio-economic development of East Java. As domestic demand increase in the years ahead prices and farmer's incomes may be expected to rise as production increases.

One point that these trends underline is that demand conditions are decisive in most spheres of commodity production, as they generally are in all countries. The dramatic increase in smallholder output of fruit, vegetables, cloves, and tobacco for domestic markets since the 1970s, in response to the growing urban markets for these commodities, provides clear evidence of that. Farmers have been quick to seize market opportunities whenever they can gain access to them, although the establishment of commercial linkages can be a capricious process, and price

fluctuations or plant diseases can be disastrous for smallholders in the short term.

The prospect of the agribusiness sector in Indonesia

The agribusiness/agro-industry sector has made a positive contribution to the Indonesian economy, even during the monetary crisis of the late 1990s. This reality can be seen in the distribution of GDP and the trade balance. However there were obstacles in terms of the tight competition, limitations to diversification, and a lack of brand and product quality standardization. Moreover, these problems applied to both domestic and export markets. The first issues which need to be addressed concern the technical problems in crop production, coordination, and maintenance which have not been optimally carried out. The second issue concerns the transportation, marketing, and distribution of the products. And the final problem concerns the implementation of high technology in the agribusiness sector. These matters must be addressed if the agribusiness sector is to survive and compete in the era of AFTA.

Although it experienced some development in terms of investment during the years 1998 to 2002, and despite increasing numbers of people concentrated in agribusiness, a major jump in the agribusiness sector has not eventuated and growth remains similar to the other Indonesian economic sectors. The fundamental cause of this is that direct investment has not been seriously implemented. Additionally, commodity marketing and the low quality of the products of the agribusiness sectors remain poor, and for the most part production is only carried out on a small scale. However, there is still an expectation that agribusinesses will develop more fully in the future.

After experiencing a monetary crisis in the late 1990s, economic growth in Indonesia returned and has continued steadily since 1999. Based on the Gross Domestic Product (GDP), which is seen from the constant price in 1993, Indonesia had achieved overall economic growth of 0.23%, and excluding the oil and gas sector the economic growth has been about 0.35% (see table 8).

Table 8. Growth rate of gross domestic product at onstant 1993 market prices by industrial origin (percent), 2000 – 2006

Industrial Origin	2000	2003	2005	2006
Agriculture	1.88	2.48	2.66	2.98
Mining and Quarrying	5.51	0.46	3.11	2.21
Manufacturing Industry	5.98	3.50	4.57	4.33
Electricity, Gas & Water Supply	7.56	6.82	6.30	5.87
Construction	5.64	6.70	7.42	8.97
Trade, Hotel & Restaurant	5.67	3.74	8.38	6.13
Transport & Communication	8.59	10.69	12.97	13.64
Financial, Ownership& Business Services	4.59	6.28	6.79	5.65
Services	2.33	3.44	5.05	6.22
	4.92	4.10	5.68	5.48
	5.31	4.60	6.57	6.09

Gross Domestic Product				
Gross Domestic Product Without Oil And Gas				

Source: Statistical Year Book of Indonesia, 2003, 2007.

Table 9. Percentage distribution of gross domestic product at current market prices by industrial origin, 2000 – 2006

Industrial Origin	2000	2003	2005	2006
Agriculture	17.23	16.58	13.07	12.90
Mining and Quarrying	13.86	10.70	11.07	10.62
Manufacturing Industry	24.90	24.65	27.71	28.05
Electricity, Gas & Water Supply	1.31	2.22	0.96	0.91
Construction	6.05	6.00	7.03	7.46
Trade, Hotel & Restaurant	15.74	16.32	15.45	14.87
Transport & Communication	4.93	6.25	6.50	6.92
Financial, Ownership& Business Services	6.36	6.88	8.28	8.13
Services	9.63	10.39	9.94	10.14
Gross Domestic Product	100.00	100.00	100.00	100.00
Gross Domestic Product Without Oil And Gas	85.49	89.27	88.62	89.17

Source: Statistical Year Book of Indonesia, 2003, 2007.

Based on table 8, above, it can be seen that during the peak of the monetary and economics crisis there were only a few sectors (and in particular, agriculture, electricity, gas and water) which had positive growth. As seen from the total figures for GDP in Indonesia, the industrial, agricultural and trade sectors have become the biggest contributors, and in 1999 they comprised 25.78 percent, 19.41 percent, and 16.51 percent of GDP respectively (see table 9). If the industrial and non-oil sub-sectors which derive from the process of the agricultural sectors, are included in the industrial sector, the real contribution of this sector will be greater. As the economic conditions have improved in the last few years, the activity involved in the agro industry with further developments in the sectors of food, drink and tobacco, wood and other forest-related products, paper and other printing industry, as well as fertilizer and rubber.

In the domestic market the economic and monetary crisis decreased the purchasing power of the society. From an industrial point of view, the crisis caused a decrease in business activities within related sectors and this can be seen in the reality that there are several product capacities that have not been optimally managed. This has had negative

impacts for the small and medium enterprises in the trade sectors. However, food products and other basic goods that are developed from agricultural products have not shown a significant change.

In relation to the above reality, several experts have predicted that there will be a food problem if political and social conditions were to deteriorate and if laws are not properly applied.

In foreign trade, the Indonesian trade balance experienced a significant increase of \$US 28.46 billion in the year 2000, a rise of 14.41 percent compared to 1999, and this was supported by an increase in the non-oil and gas sectors of 8.84 percent. Meanwhile, there was a sharp surge in Indonesia's export sectors with a rise of 27.47 percent compared to 1999 and export sales of \$US 62.3 billion. This consisted of oil and gas exports of \$US 12.48 billion (an increase of 45.85 percent), and from the sectors of non-oil and gas products to the value of \$ US 47.75 billion (an increase of 22.85 percent). The composition of non-oil and gas exports is dominated by industrial products which increased by 4.52 percent. Meanwhile, between 1999 and 2000 there was a drop of 6.33 percent in the sale of agricultural products (BPS, 2000, in the training and education of DEPDAGRI-Otda, 2001).

There are several factors contributing to the competitive weakness of the agribusiness/agro-industrial sector. Firstly, Indonesia still has limited capability to diversify. As a result, several primary commodities such as copra, rubber, cacao and tobacco continue to be exported in the conventional form so that value-adding to these products is enjoyed by other countries. Secondly, there is no standardization in terms of product labeling and product quality, and these shortcomings have greatly hampered food exporters seeking to sell on the global market. Improvements are usually done by the producers and manufacturers, but since there have been problems concerning the availability of capital, these improvements have been carried out. The development of exports of several commodities, including agribusiness and agro-industry products, can be seen in table 10.

Aside from the various obstacles mentioned above, Indonesia has many competitors who traditionally make similar goods. In 2002 Indonesia's main competitors were the ASEAN countries (including the newcomers such as Vietnam, Cambodia, Myanmar and Laos), Australia, Latin America, and several countries in Africa. Australia, with its high levels of technology and its abundant natural resources is major competitor for many products, and similarly Thailand and Malaysia are serious competitors in other horticultural commodities.

In recent years the export markets for agribusiness/agro-industry commodities have mainly been Japan, United States, Singapore, and Western Europe (Nainggolan, 2000). The Indonesian commodity exports to the US consist primarily of bananas, rubber, coffee, cacao, spices, oil, meat, poultry products, milk, animal fat, processed leather, farm-animal food, fruits, vegetables, tobacco, coconut oil and other fisheries products. It can be seen that the sharp increase in the export of commodities into those countries comprises mainly agricultural and horticultural products. It seems that in the

years following 2009 the opportunity to export horticultural product will still be wide open. However, it is also apparent that the events of 11 September 2001 have subsequently influenced world trade because economic decisions are now subject to heightened political scrutiny in Northern America and Western Europe, and this, in turn, may lead to changes to Indonesia's export trade.

For Western Europe, Indonesia is traditionally seen as an exporter of plantation commodities such as cacao, coffee, tea, coconut oil and spices. However, fisheries commodities, (such as fish, tuna and *kerapu*) are also important Indonesian exports, as are horticultural products such as exotic fruits like pineapple, mangusta and rambutan.

Table 10. Indonesian export of agricultural sector by commodity 2000 – 2004

Commodity	2000	2001	2002	2003		2004	
	Value	in US\$	million	Tons ('000)	US\$ Million	Tons ('000)	US\$ Million
TOTAL	2.608	2.310	2.475	1.87	2.438	1.965	2.412
Shrimps	1.003	940	840	134	853	128	824
Fish and Miscellaneous	364	359	378	523	424	553	471
Cocoa beans	236	277	521	266	410	277	370
Coffee	312	183	219	321	251	339	282
Spices	314	174	189	121	186	115	154
Tea	108	95	98	85	92	56	65
Fruits	56	32	46	110	54	141	61
Tobacco	64	81	66	28	44	28	46
Other vegetables materials	20	22	20	63	27	78	33
Vegetables	28	30	33	107	33	87	30
Seeds	7	5	10	19	12	75	23
Resin and gum resin	25	18	23	53	21	41	17
Natural rubber	8	8	7	14	12	13	15
Copal and others	8	10	12	17	11	23	14
Medicinal herbs	7	5	4	6	5	6	6
Shell and others	2	3	2	3	2	3	1
Wood in the rough	45	68	10	2	1	1	1
Other agricultural products	102	129	93	114	88	118	84

Source: Statistical Year Book of Indonesia, 2004

In Asia, and especially Singapore and Japan, Indonesian exports are more varied and consist of plantation commodities (rubber, coffee, tea, cacao and spices), horticultural vegetables (cabbage, tomato and potato), nursery products, and fisheries products (shrimp, tuna, pearl, jelly fish and bull frog) (Nainggolan, 2000). In 2002 exports to Singapore and Japan reached a high level, and it seems that this trade has not been influenced by particular global trade policies but because both of those countries are net importers of agricultural commodities and both have strong capital procurement.

Considering Indonesia's near neighbors, food and horticultural commodities, fisheries product, and plantation goods are exported to Malaysia, Brunei Darussalam, and the Philippines. Malaysia has become one of the principal export destinations for processed food (fruit juice and vegetables), fresh vegetable (potato and cabbage), corn, soy beans, beef, lamb, poultry meat, pork, butter, canned fish, crab, coconut oil, cacao and tea. Brunei Darussalam purchases such commodities as potatoes and several commercial processed food products. Meanwhile, the Philippines takes fisheries products (such as frozen food), and plantation products such as cacao. The fish exported to the Philippines include tuna, *cakalang* and *tongkol* (adapted from Nainggolan, 2000, and the direct verification in 2001).

In the past, Indonesia possessed several outstanding products which had the ability to compete on global markets, and these included such items as spices, tropical fruit, plantation products, and seafood (both processed and fresh). However, with increasing competition and changes in consumers needs, the nation's exports may have to change and there is a need for research into the commodities and manufactured goods that might give the country a competitive advantage in the future. Consequently, serious efforts need to be made by the relevant parties in agribusiness/agro-industry in order to address the main obstacles to the sector in the era of globalization (Gumbira-Sa'id, 2001).

First, there are problems concerning the post-crop treatment which has not been optimally carried out. There has been no guarantee of the quality of products, and strict requirements for quality cannot always be fulfilled. This has hindered the sale of commodities to quality-conscious customers such as Japan, Europe, and the United States. The conditions for product quality will need to be controlled by sanitary and Phyto-Sanitary Measures (SPS). Moreover, Japan has introduced three kinds of regulations concerning food importation: a Food Safety Law which regulates the maximum content of chemicals such as additives and saccharine, and the maximum quantity of pesticide residue, etc.; a Plant Protection Law which requires stringent adherence to all conditions of SPS; and a Food Control Law which regulates labeling so that it provides information about nutrition content, producer address, and local importer. In a similar vein, the United States has introduced a system called Hazard Analysis Control Point (HAACP), a stringent quality-control standard which many overseas producers cannot attain. Accentuated by the events of 11 September 2001, import controls in Northern America and Western Europe have become even tighter because of fears of biological or chemical poisoning.

Secondly, the nation needs to address the issues of poor marketing, transportation and distribution. Furthermore, there are geographical factors and numerous related cultural factors (such as language differences and different cultural expectations) to be considered in improving the nation's export effort and in developing marketing channels in other unfamiliar countries. Additionally, access to market information is crucial for all parts of the supply chain (Production-Distribution-Marketing), and this is particularly essential if producers are to respond promptly to market changes. Since 2002 business practitioners have had to make greater efforts to improve systems of promotion and consultation, in order to give the Indonesian products greater exposure to global markets.

The third obstacle to be faced is the need to adopt more efficient forms of technology. The future of business will be depend upon new investment, and agribusinesses need the support and confidence of bankers to promote agribusiness projects with good prospects. The country is hindered by the conventional system of payment, the lack of an effective electronic business system, and the limited knowledge of the requirements for foreign trade, such as the complicated process of documentation. Related to these issues is the limited and slow process of technological and research and

development in the rural sector. Besides, there is a general lack of understanding of these matters, and as a result investors do not wholly trust the future of some products, and this, in turn, restricts the processes of developing and maintaining those products. Indonesian research and development parties have not been fully focused on the activities of the agribusiness sectors and there is a need for a mechanism to provide a synchronization of the agribusiness needs to the broader needs of the society.

During 2002 there were final preparations by the Indonesian business sector to face the era globalization, and this was signaled by the commencement of the AFTA in 2003. The year 2002 was crucial for all of the parties in Indonesia to introduce improvements to the standards of both processes and products, and it was a time to explain to the community the importance of the agribusiness/agro-industry sector for the entire country. Additionally, it was an opportunity to educate the policy makers (not only for the executives but also the legislators) about the importance of the agricultural sector as a whole. Finally, this researcher believes that in addition to its obvious economic benefits the development of the agribusiness sector is important for national unity.

SMEs development in Indonesia and the urgency of clustering

Being crucial for providing employment, the small and medium companies can greatly contribute to the growth of the Indonesian economy by successfully developing international trade. Small and medium companies have become the most crucial business sector in Indonesia, and they have the capability to further develop manufacturing industries and to promote low cost of goods. Additionally, the small and medium companies also have the roles of promoting the manufacturing of industrials tools and equipment and of providing industrial equipments for major international concerns. It is relevant to note here that in 1997, when Indonesia suffered a major currency and economic crisis, the small industries appeared to be the strongest sector and were able to survive better than many of the bigger companies. It was probably inevitable that several large companies suffered severely during this economic down-turn, however, the smaller industries more easily adapted to the severe situation and continued to function despite the difficulties. In relation to this matter, Berry et al. (2001) suggested several possible opinions concerning the small and medium industries. They considered that small and medium industries have the capability to be independent, and are not so easily influenced by the broader economic conditions. Moreover, it was suggested that the small and medium business have the ability to provide prompt reactions to sudden changes and are more easily adapted to changing environments and hard times than the bigger industries.

In 1988 Indonesia established several new development programs which were aimed at fostering the business sectors in Indonesia. Those efforts have also been directed to anticipating hard times. The new development programs included lending money companies, providing support, and establishing rules of business. Besides, by also encouraging

the clustering of small and medium companies it secures their futures by maximizing continuous help from others.

When the world of business is characterized by trade liberalization and economic globalization, entrepreneurs and all people involved in business will have to compete more strongly and efficiently to secure a place. To achieve this it is essential to adopt technological developments and to train people as entrepreneurs. There are many obstacles for small and medium companies in Indonesia, and unlike the bigger companies they have difficulty acquiring new technology and educating staff. The drawbacks of the small and medium companies are in the form of low levels of financial supports, small number of qualified personnel, inadequate mastery of technology, and a lack of entrepreneurial and business training.

At present most small businesses are focused on fulfilling their trading activities, and they have few resources to spare to foster either raining or technological development. Trade liberalization offers both obstacles and opportunities. However it is doubtful if many small and medium companies in Indonesia will be capable of seizing opportunities because they have to be able to prove that they can create goods or service which has higher competitive capacity. Moreover, their products must be of reasonable value, capable of being produced in greater numbers, be internationally recognized and readily obtainable. At present there are numerous small and medium companies which are operated in villages or remote locations which are unlikely to be able to fulfill these requirements. Those companies also encounter a lack of training facilities for staff, the absence of useful business strategies, the unreliable provision of resource materials, and inadequate technology to support manufacturing operations.

Furthermore, it is apparent that the strategy of clustering, especially in the developed countries, has proved to be a beneficial strategy for small and medium companies to solve some of the problems mentioned above. Richard (1996) suggests that support for this can be found through the experiences and opinions of some experts from several areas in Europe. Furthermore, it is evident that without clustering in some European countries it would be impossible for small and medium companies to achieve their goals, though it is not clear that large companies can benefit from the same strategy. Clustering aids small and medium companies to identify the obstacles which may hinder their capacity to produce more, and it helps with such issues as marketing and distribution. Additionally, clustering may assist firms to more effectively deal with issues of the supply of raw materials, to take advantage of efficiencies of scale, and the need for current information about global trading activities.

It is suggested by Humphrey and Schmitz (1995), that the strategy of clustering the small and medium companies offers the possibilities to benefit from the positive features of each companies about such matters as equipments and production tools; the availability of qualified staff; as well as the opportunities for training staff in new manufacturing processes and techniques. It is predicted that a number of entrepreneurs will be interested in the clustering strategy, and as a result they will have the desire to purchase goods produced by other manufacturers within the cluster. In line with this idea, Berry et al (2001) pointed out that the

purchase of resources and raw materials several traders within the cluster at one time will decrease the amount of money needed in the trading activities. Besides, clustering may provide opportunities for entrepreneurs collectively to have their voices heard by the decision makers of the country. Clustering might also support increasing access to supporting equipment and infrastructure, and it might enhance the level of consultation needed by staff and workers. Tambunan (2000) suggested that a clustering strategy can only be applied to companies which have certain elements of commonality and mutual interest, and that not all businesses lend themselves to this situation.

The enterprises will more likely attain their production and profit targets more readily if the cooperation between the businesses in the cluster remains healthy. It is possible, too, that enterprises within a cluster might benefit from the experiences of business practitioners from other groups. Despite competition, there may also be a degree of cooperation between other sections of the economy such as other smalls and medium companies, large corporations, the parties which support the companies activities, entrepreneurs, the banking sector, and the related governmental and nongovernmental offices. Those parties provide different opportunities for businesses to develop and to improve the quality of their products, and they can also support the other companies within the groups. The above strategies are proposed by UNIDO and are directed to developing and technologically advanced countries. With each cluster it is possible for improved cooperation between companies, the people involved may have more opportunity to share their opinions and experiences in order to achieve improved development, better production levels, and new markets (ADB, 2001).

Experience suggests that the strategy of clustering small and medium companies is suitable for remote locations and that this can benefit not just the local area but the wider economy. Clustering may also provide positive benefits to other countries with limited economic resources and which are still in the process of developing. Besides, the small and medium companies within a cluster may collectively create better and different strategies by developing different and new fields of business. This collective benefit capitalizes on the positive cooperation within the group.

Moreover, non-government as well as government organization which are associated with the clustered group of companies can assist with coordination and supportive roles. Regulations are applied to all areas of business, and regulatory agencies also have a role in working with clusters of small businesses by assisting and not hampering their activities. All enterprises have to operate within the parameters of the local society, but governmental agencies responsible for the oversight of particular sectors can assist, and their involvement may be directed to increasing manufacturing processes and finding more markets. Moreover, their activates may be in the forms of educational advancement and the production of supporting training materials, collecting funds, and determining to problems hindering production equipment and supporting tools. The solutions to problems hindering production processes will usually emerge form discussions between interested parties,

and companies both big and small have to address their problems the same way. Hence, professional solutions are needed to overcome those obstacles which sometimes resulting form new regulations.

The emergence of the small and medium companies clustering in Indonesia

Nowadays, businesses in Indonesia apply the word 'cluster' in its broadest sense. Meanwhile, the Ministry of Industry has popularized a slightly newer term, '*sentraindustri*' which means a 'centre of industry'. Furthermore, '*sentraindustri*' can be described as the clustering of the companies (usually twenty or more) which run similar production activities. Meanwhile, the same Ministry fostered the concept of *LingkunganIndustri Kecil* which has, in recent decades, become quite popular among people involved in small business. That term refers to small-scale industrial estates that comprise several small enterprises with the same business activities and grouped in the same place. Over the past decade or so *sentraindustri* has increased in terms of the natural activities of business because they tend to be linked to the rich traditions of their localities and by relying on their strengths concerning the goods they produce and the place they operated their companies. It is recognized that several companies within the group are likely to possess the capacity to be developed further by making use of the strength of the goods produced, by paying attention to the availability of supporting resources, production tools, and equipment, as well as the availability of educated and trained human resources. The groups of *batik* manufacturers which have existed for many years within villages in several places in Java are proof of companies that have developed in accordance with the traditions and resources of their local areas. It is also relevant to note that Supratikno (2002) pointed out that the widely spread of *LingkunganIndustri Kecil* has forced the policy makers in Indonesia to participate in industrial activities.

In relations to the role of *sentraindustri*, Klampwijk and Weijland (1997, 1999) have stated that the business groups in Indonesia have become a particular focus for governments wishing to foster particular industries and regions. Consequently, the development of small and medium companies has often focused on villages and other special places in Indonesia, and as a result many other similar enterprises have moved to those areas. Based on the findings of the Ministry of Industry, which has produced formally recognized records since 1994, about 10.000 of the 70.000 distinctive rural areas in Indonesia are recognized as having clusters of related small businesses.

Research conducted by Smyth (1990, 1992) determined that the clustering of companies not only aided the business sectors, but also increased the welfare and living conditions of the surrounding district. The research by Smith referred to the economic and social benefits of the clustering of rattan furniture manufacturers in the area of *Tegal Wangi*, West Java, and how it has influenced those villages as well as stimulating related industries in several nearby regions. Similar evidence is supplied by Schiller and Martin Schiller (1997), who describe the advantages flowing from the strategy of clustering wood furniture manufacturers and international traders in *Jepara* (Central Java). Here, the

condition of the city has been changed into an important location of trade with an extensive region for the display of wooden households materials, a vibrant business center, a luxurious leisure place, several trade banks, shopping centers, modern communication facilities, and outlets serving European food. In similar vein Soemardjan (1992) describes the development of clusters producing roof tiles in several rural areas Bali, and he demonstrates that these have aided the standards of living and the welfare of the people in the surrounding area.

Further examples have been supplied by Klapwijk (1997) and Weijland (1994, 1999), who have conducted field studies of small and medium companies within villages in Java. They have suggested that the strategy of clustering small and medium companies have significantly assisted those companies to grow within their respective villages. Overall, the evidence indicates that clustering has had the effect of boosting output form individual enterprises, and that both individual and mutual benefits are being enjoyed by members of these clusters. It seems that clustering encourages the cooperation between entrepreneur and between both large and small concerns. Moreover, Sandee (1995, 1996), states that another benefit is that companies in clusters are more able to keep in touch with new developments, new technologies, new markets, and other issues of mutual interest.

Considering the examples quoted above, it can be seen that the strategy of clustering companies has become a most significant strategy for promoting the development of small and medium companies in Indonesia. But while there are advantages and benefits to clustering, Sato (2000) has suggested that there is still little specialization by companies within a group. Studies by Supratikno (2002) into eight groups in villages in Central Java indicates that while there is cooperation between entrepreneur as well as manufactures inside the groups, nevertheless they totally rely on their business funding coming form other companies. Moreover, it is not easy to determine the small and medium companies in Indonesia which are in cooperation with the big companies. Hence, based on the evidence collected from the Central Bureau of Statistics (CBS) during 2001, it can be seen that around 90 percent of small and medium companies operate alone and without any cooperation with bigger companies.

In general, there are some issues concerning the clarification of the roles small and medium companies. The first thing that needs to be clarified is whether differentiation within a cluster is advantageous, and whether it is the result of the process of transformation or is it an aspect resulting from two different treatments. Is there any reason for some clusters performing well and achieving good results although they are not helped by the government, while others perform poorly although they get assistance from the government. In summary, considering the situation across the country, there are contradictory results as to the efficacy of clusters and the variations may be due to the length of operations of the enterprises and the degree of cooperation between the members. Hence, it is difficult to be definitive about the value and ideal features of clusters, for while many prosper other flounder (Schmitz, 1997).

It seems then, that four strategies are suggested concerning the clustering of companies in Indonesia. The primary strategy can be described as an 'artisanal' cluster, and this is the most important point in every cluster comprising the same industries in Indonesia, and these are found in about 90 percent of the cases. *Artisanal* clusters particularly encompass small companies which have limited ability to produce goods and pay decent salaries. There is some cooperation and division of labor inside the companies within these groups. This reflects the fact that in some districts and in some enterprises there are insufficient skilled and educated workers. It is evident that several clusters have not succeeded and have made little growth. Based on the data compiled by ADB (2001), some clusters and industries have shown no significant increase in trading activity for a long time, however others have demonstrated fast growing business activities as well as expanded capacity for manufacturing, the creation of new strategies for manufacturing, and increasing the quality of goods and services. In line with this situation, Sandee and Wingel (2002) pointed out that the 'artisanal' clusters are have shown some transformation and development over recent decades. It can be seen that the manufacturers will create similar products, applying similar supportive equipment, in which the consumers from similar business areas will purchase the goods the same as the previous time. However, both the producers and the products remain the same, because the trading areas are available for the goods they sell, especially those that are related to the society with a small and medium earning capability. According to Altenburg and Mayer-Stamer (1999) those cluster are considered as the strong and tough clusters of small companies.

Furthermore, the next cluster is classified as being 'mobile'. This cluster classification is characterized by rapid growth, development and adaptation. Meanwhile, the development of the cluster covers the creation of new goods new application for supporting equipment and the suitable application of trading systems both inside and outside the country. It is highly likely that those *mobile* and different clusters have *artisanal* features. As a consequence, the trading areas of these cluster business activities generally consisted of either local or other regions within the country. Besides, it is usual that these *mobile* groups have several obstacles connected to the marketing of their products. Supratikno (2002) suggested several specific illustrations of the *mobileartisanal* groups. Those groups are ranging from the clusters of households producers, manufacturers of iron goods, sports equipments producers, leather producers and silver manufacturers. These types of clusters are able to be widely recognized in many areas in Java. Within these clusters, several small companies demonstrate the features of the entire cluster. Meanwhile, several other companies create goods to be sold to other countries with the assistance of businessmen belonging to the other groups.

The next type of cluster is called a 'dynamic' group. Several manufacturers are involved in this form, and they possess the capacity to conduct an outstanding and well-maintained business cooperation in the local areas as well as overseas. Meanwhile, distinct characteristics of these clusters concern their capacity, their equipment, and the forms of business they conduct. There is good communication within

the company as well as between the companies within the clusters. However, the ability of entrepreneurs to create this form of cluster strategy has become the significant feature of the classification. Those kinds of companies are typically bigger and have the ability to develop faster compared to other companies. Therefore it needs greater effort to maintain the connections involving the other companies and organizations both inside and in other parts of the group. It is an interesting phenomenon to find business activities managed by people from the other countries and not by locals, for instance in furniture company clusters in *Jepara* and handicraft clusters in *Kasongan* (Supratikno, 2002).

The fourth type of cluster is the modern or advanced cluster, but few meet this classification. These clusters are more complex, more coordinated, well-maintained, and the companies within the cluster have good cooperation with other companies in the matter of industrial equipment, including the tools, the machinery. Also, there can be good cooperation in such aspects as marketing, funding and financial backing. That is why this type of cluster performs better in both the local and overseas markets. They also make greater use of research, readily adopt technological change, and pay attention to education and training of staff. Based on the information available from ADB (2001), most of the companies within these clusters focus much of their effort to international business. Some do this directly, others by means of third parties or brokers who are skilled in international business.

In relation to these clusters, Supratikno (2002) suggested that several outstanding companies have made use of practical industrial supporting equipment and tools in maximizing the production of goods within the clusters. The examples he quotes are the tobacco companies clustered in *Kudus*, Central Java, the cluster producing popular drinks in the town of *Slawi*, and the tourism clusters in *Bali*. Furthermore, in his study, Supratikno (2002) noted that the companies in *Kudus* have the ability to compete with the other major manufactures such as Philip Morris and BAT. Similarity, the tea-processing group in *Slawi*, which is dominated by the largest company, *Sosro*, has developed itself so that is now dominated the beverage industry in this country, exceeding even Coca Cola.

Furthermore, it has been found that the advanced clusters have the possibility to benefit other clusters in the nearby areas. This is clearly seen in the area of the *Yogyakarta-Solo* districts. It is apparent that, within the two regions there are sectors which rely on, and get advantage from, both districts, in such industries as tourism, rental accommodation, the production of iron, silver, brass handicraft manufacturers, footwear and clothing. It can be explained further that links exist between some of these industries; for example, silver manufactures help the fashion industry, and the travel industry has links to the accommodation industry.

CONCLUSION

This paper has provided an overview of the conditions and development of the agribusiness in Indonesia. It has illustrated the geographical features of East Java, the economic performance and agriculture in East Java, the

prospects for the agribusiness sector, SMEs development in Indonesia, and the features of clustering.

It is relevant to note that East Java's development over the past 20 or so years has been impressive by any standards, the more so because the initial conditions in the late 1960s were unfavorable. Secondly, it is a revealing example of development which has not relied on export-led industrialization. While outward-looking industrialization has certainly been very successful in some cases, this is obviously not the only viable approach. Additionally, East Java seems to have combined impressive rates of growth with fairly balanced development in terms of sectoral composition, income distribution, and regional equity. Although there is still great inequality in income and expenditure, development seems to have redressed rather than exacerbated the problem. It is intriguing to consider whether these last two generalizations may not in fact be connected. The unbalanced economic structures associated with export-oriented industrialization may well led, without offsetting policy measures, to unbalanced distribution, whereas more balanced growth less dependent upon the international economy may well be conducive to achievement of greater equity.

REFERENCES

- [1] ADB, 2001, Best Practice in Developing Industry Clusters and Business Networks, Asian Development Bank SME Development, Policy Paper No.8, Kantor Menteri Negara UrusanKoperasidan UKM, Jakarta.
- [2] Altenburg, T. and Meyer-Stamer, J. 1999. 'How to Promote Clusters: Policy' Experiences from Latin America', World Development, vol. 27 (9), pp. 1213-1230.
- [3] BadanPusatStatistik 1990, Jakarta.
- [4] Bank Indonesia 1980, Jakarta.
- [5] Bank Indonesia 1990, Jakarta.
- [6] Berry, A., Edgard Rodriguez and Henry, S. 2001, 'Small and Medium Enterprise Dynamics in Indonesia,' Bulletin of Indonesian Economic Studies, vol. 37 (3), pp. 363-84.
- [7] Ceglie, G. and Dini, M. 1999, SME cluster and Network development in developing countries: The experience of UNIDO, UNIDO PSD Technical Working Paper Series, Geneva.
- [8] Dess, G.G., Lumpkin, G.T. and Covin, J.G. 1997, Entrepreneurial strategymaking andfirm performance: tests of contingency and configurational models, Strategic Management Journal 18(9): 677-695.
- [9] Department PerindustriandanPerdagangan 1979, Jakarta.
- [10] DepartemenPerindustriandanPerdagangan 1990, Jakarta.
- [11] Durkan, P., Harrison, R., Lindsay, P. and Thompson, E. 1993, 'Competence and Executive Education and Development in an SME environment,' Irish Business Administration, Res., vol. 14 (1) pp. 65-80.
- [12] Gumbira-sa'id, 2001, PenerapanManajemenTeknologidalamMeningkatkanDayaSaing Global ProdukAgribisnis (application of technology management in increase global competitiveness in agribusiness products) IPB, Bogor.
- [13] Hofer, C.W. and Sandberg, W.R. 1987, 'Improving new venture performance: some guidelines for success,' American Journal Small Business, Vol. 12 (1), pp. 11-25.
- [14] Hyde, K. 1998, The New rural industries: A handbook for farmers and investors, RIRDC, Cambera.
- [15] JawaTimurdalamangka (East Java in Figures) 1975, Surabaya
- [16] JawaTimurdalamangka (East Java in Figures) 1976, Surabaya
- [17] JawaTimurdalamangka (East Java in Figures) 1980, Surabaya
- [18] JawaTimurdalamangka (East Java in Figures) 1983, Surabaya
- [19] JawaTimurdalamangka (East Java in Figures) 1987, Surabaya
- [20] JawaTimurdalamangka (East Java in Figures) 1988, Surabaya
- [21] JawaTimurdalamangka (East Java in Figures) 1996, Surabaya
- [22] JawaTimurdalamangka (East Java in Figures) 2002,Surabaya
- [23] JawaTimurdalamangka (East Java in Figures) 2003, Surabaya
- [24] JawaTimurdalamangka (East Java in Figures) 2008, Surabaya
- [25] Klapwijk and Weijland, H. 1997, The role of middlemen in rural industry Indonesia, Faculty of Economics, Free University Amsterdam.
- [26] Nainggolan,2000, MencariPeluangPasarKomoditiUnggulan (look, for niche market for superior product), Panel Discussion, Jakarta.
- [27] Oral, M., 1986, 'An industrial competitiveness model,' IIE Trans., vol. 18 (2), pp. 148-157.
- [28] Organization for Economic Co-operation and Development (OECD) 1993, Smalland Medium-sized Enterprises: Technology and Competitiveness, Paris.
- [29] Porter, M. 1980, Competitive Strategy: Techniques for Analysing Industries and Competitors, The Free Press, New York.
- [30] Rice, R.C., Koperasi, K.M.N., and dam Menengah, P.K. 2000, Factors Affecting the
- [31] Competitiveness of Small and Medium Enterprises. Partnership for Economic
- [32] Growth, Indonesia (<http://www.pegasus.or.id>).
- [33] Sandee, H. 1994, 'The Impact of Technological Change on Inter firm Linkages.A Case Study of Clustered Rural Small-Scale Roof Tile Enterprises in Central Java,' in P.O. Pedersen, A. Sverrison, and M.P.vanDijk (eds.), Flexible Specialization The Dynamics of Small-Scale Industries inthe South. Intermediate Technology Publications, London.
- [34] Sandee, H. 1995, Innovation Adoption in Rural Industry: Technological Change in Roof Tile Clusters in Central Java, Indonesia, Unpublished PhD dissertation, VrijeUniversiteit, Amsterdam.
- [35] Sandee, H. 1996, Small-Scale and Cottage Industry Clusters in Central Java: Characteristics, Research Issues, and Policy Options, Paper presented at the International Seminar on Small Scale and Micro Enterprises in Economic Development. Anticipating Globalization and Free Trade, SatyaWacanaChristian University, November 4-5, Salatiga.
- [36] Sandee, H. and Wingel, J. 2002, SME Cluster Development Strategies in Indonesia: What Can We Learnfrom Successful Clusters?, paper presented for JICA Workshop on Strengthening Capacity of SME Clusters in Indonesia, March 5-6, Jakarta.

- [37] Sato, Y. 2000, 'Linkage Formation by Small Firms: The Case of a Rural Cluster in Indonesia,' *Bulletin of Indonesian Economic Studies* vol. 36(1): pp. 137-166.
- [38] Schiller, J. and Martin-Schiller, B. 1997, 'Market, Culture and State in the Emergence of Indonesian Export Furniture Industry,' *Journal of Asian Business*, vol. 13(1), pp. 12-23.
- [39] Schmitz, H. 1997, *Collective Efficiency and Increasing Returns*, IDS Working Paper 50, March, University of Sussex, Sussex.
- [40] Schouten, M. 1995, 'Eras and Areas: Export Crops and Subsistence in Minahasa, 1817-1985', paper presented at the First European Association of South-east Asian Studies Conference, Leiden, 29 June to 1 July 1995.
- [41] Schumpeter, J.A. 1934, 'The fundamental phenomenon of economic development.' In P. Kilby, *Entrepreneurship and Economic Development* (1971), pp. 43--70. The Free Press, New York.
- [42] Sexton and Smilor, R. 1986, 'The Art and Science of Entrepreneurship.' *Sociology*, vol. 20(2), 25-48.
- [43] Smyth Ines, A. 1990, *Collective efficiency and selective benefits: the growth of the rattan industry of Tegalwangi*, Working Paper Series, B-1, December, Bandung.
- [44] Smyth Ines, A. 1992, 'The Effects of a Development Project on Handicrafts Production in a Sundanese Village,' *PRISMA*, vol. 52, pp. 12-30.
- [45] Snell, R and Lau, A. 1994, *Exploring local competencies salient for expanding small business*. *Journal Management Development*, Vol. 13(3), pp. 4-15.
- [46] Soemardjan, S. 1992, 'Pejaten: Poverty Turned Into Prosperity,' *Prisma: The Indonesian Indicator*, No.52, pp. 27-42.
- [47] *Statistical Year Book of Indonesia 2003*, Jakarta.
- [48] *Statistical Year Book of Indonesia 2004*, Jakarta.
- [49] *Statistical Year Book of Indonesia 2008*, Jakarta
- [50] Stoner, C.R 1987, 'Distinctive competence and competitive advantage,' *J Small Business Management*, vol. 25 (2), pp. 33-39.
- [51] Supratikno, H. 2002, *The Development of SME Clusters in Indonesia*, paper presented at the ASEAN Roundtable on "Entrepreneurship and Small and Medium-Sized Enterprises (SMEs) in Southeast Asia's Economic Development," ISEAS, November 7-8, Singapore.
- [52] Swamidass, P. 1993. "Does Strategy need game theory?" *Strategic management journal*, Winter 12, pp. 137-152.
- [53] Szilagyi, A.D. and Schweiger, D.M. 1984, 'Matching managers to strategies: A review and suggested framework,' *Academy of Management Review*, vol 9(4), pp. 626-637.
- [54] Tambunan, T. 2000, *Development of small-scale industries during the new order government in Indonesia*, Asghate, London.
- [55] *Trade and Industrial Department of East Java Indonesia, 2002*, Surabaya.