RESTICKING AGRICULTURE IN INDONESIAN ECONOMY: Facts, Policy Impact Issues and Poverty Reduction[1]

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Abstract

This paper attempts to respond two simple but very substantive questions; (1) why does the agriculture sector should be resticked in Indonesian economy? and (2) why does the sector and its policy could be strongly expected to alleviate poverty? Firstly, the facts shows that at least, the agriculture provides export earnings and it gives a source of employment for millions of rural smallholder families which are very strongly associated with poverty rates. Secondly, when the peak of Asian economic crisis hit Indonesia in August 1998, Rupiah per US$ hardest downwards (80% of its value), followed by remarkable inflation (also reached by 80%), no economic sector had the best performance in the country, except the agriculture sector. At the time, the export value of agriculture grew quickly and the income of smallholders whose agriculture exports products also rapidly soared. Those phenomenon were affected by not only production side, but also the positively consequence of the Rupiah depreciation. Needless to say, smallholders enjoyed to those crisis impacts even though Indonesian economy stopped growing in general. That is the reason why the agriculture sector is strongly believed as a leading sector and the way out of the crisis as well as poverty reduction. Finally, this paper conveys a crucial message that resticking agriculture and reempowering the Small and Medium Enterprises can be strongly expected to generate growth and employment as well as combating poverty in the country.

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A. Introduction

In this paper, an attempt has been made to explore the crucial role of agriculture in Indonesian economy, especially in generating growth and employment as well as poverty reduction. We are expecting that the paper will strengthen the society comprehension that agriculture is one of the best routes towards a poverty reduction solution. The solution therefore supports the view and the remark of numerous studies that rural agriculture sector very strongly alleviates poverty. In other words, the sector indeed has the largest contribution to combat poverty in the country. Hence, the Indonesian government's project and program however, have been addressing to rural development not only which is conducted by the government, but also in cooperating[3] with the international agencies.

To reach the expectation above, we organize the paper as follows; following this introduction (**Section A**), we extract the Indonesian macroeconomic trends for poverty alleviation in **Section B**. After these extracting, we present the rural economy spectrum in **Section C**, followed by the discussion of poverty dynamics in Indonesia (**Section D**). By keeping the view that agriculture is very strongly associated with poverty phenomenon, the next section (**Section E**) clarifies the crucial role of agriculture in Indonesian economy as well as poverty reduction during the three decades of development process (1966-1996). Then, in order to understand the government policy dynamics, a briefly description of Indonesian agricultural policy (**Section F**) should be properly emphasized. Following this, **Section G** evaluates the impact of government policies on agricultural commodity in the country. Finally, **Section H** offers two policy options for poverty alleviation and this is followed by **Section I** which reflects on an important conclusion remarks.

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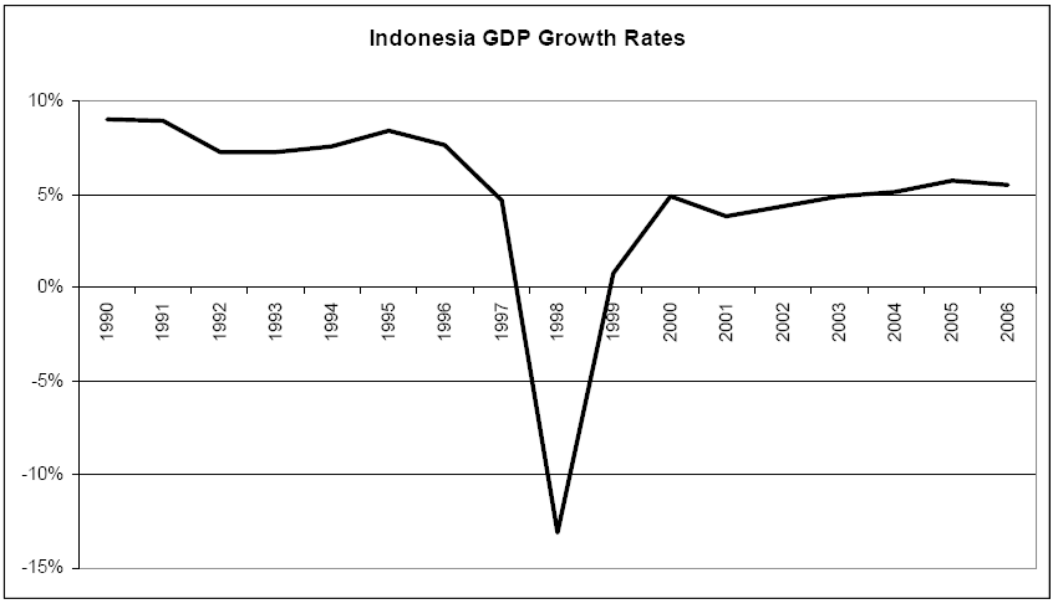
[3] For example, see Kawamura (2002), JICA Commissioned Research Report on Role of Social Statistical Analysis in Participatory Rural Community Development Programs for Poverty Alleviation. The project was carried out by the JICA and Rural Community Development Bureau (formally PMD and presently BMP following the institutional reform in 2001) in South Sulawesi Province, Indonesia where one of the priority goals of the program is to reduce a percentage of the absolute poor in the total population from the estimated 1993 figures of 13.7% and 25.9 million people to 6% and 12 million people by the end of program. See also CRIEC & World Bank Project (2002), Smallholder Tree Crop Production and Poverty Alleviation. CRIEC is Central Research Institute for Estate Crops (in Indonesia called *Pusat Penelitian Perkebunan*). The objective of the project is to provide elements of answer to the following question; "under which conditions is it possible to make the tree crop smallholders population in Indonesia to significantly contribute to growth without widening or creating a welfare balance?".

B. Recent Macroeconomic for Poverty Alleviation

i. Growth

Indonesia is a south-east Asia's biggest economy and it ranks alongside China and Vietnam for its proven ability to lift people out of poverty. Almost 20m people have been lifted out of extreme poverty since 1990, with the $1 a day rate falling from 21% in 1990 to 8.5% in 2006 (DFID 2007). As shown in **Figure 1**, Indonesia grew at an average of 8% a year in the 1990s before the crisis, 5% a year following two years of decline (-13%) and stagnation. During the late 1960s through the financial crisis in 1997, the growth was remarkably pro-poor with inequality hardly changing. In fact the poorest 20% saw their share of national income marginally increase from 19% in 1965 to 21% in 2002 (DFID 2007). As 2003 draws to a close, the Indonesian government prepares to terminate its IMF economic bailout programme, which started in 1997 at the height of the crisis. The government still owes the IMF US$ 9 billion, which it could pay off from its accumulatedly international reserves of US$ 34 billion. Instead, it has decided to enter into a "post-programme monitoring" arrangement with the IMF (UNDP 2008). Finally, the Indonesian government persuasively decided to terminate the IMF programme in 2008 and the government also has been targeting an economic growth by 6.6% a year.

Figure 1. Indonesia GDP Growth Rates 1990-2006 (WDI)



Source: DFID (2007)

The World Bank (2004) persuasively recorded some achievements on Indonesian Economy as follows:

1. Continued growth. In 2003 growth remained steady at 4.5% based on revised GDP numbers, the same as in 2002, but considerably higher than expected in the wake of the negative impact of the Iraq War and SARS. The revised numbers also show a significantly higher level of GDP, as more goods and services are included in the new numbers. Growth is mainly driven by private consumption that continues to benefit from lower interest rates and lower inflationary expectations. In addition, local government spending, fed by shares from oil and gas revenues, also fuelled growth. For the first quarter of 2004 growth was at 4.5% (yoy) confirming the positive trend continued during the period, private consumption remained the main driver of growth. Continued improvements in the international outlook and high commodity prices are likely to further support growth (see Economic Outlook, p.7).

2. Declining fiscal and external risks. Indonesia's government and external debt position has improved markedly. On the basis of higher GDP and lower deficits, government debt to GDP declined to 59% by the end of 2003, 38 percentage points below its peak level of 1999, and 9 percentage points lower than end-2002. The end-2003 ratio is below the 60% target stipulated in the State Finance Law No.17/2003.2 The preliminary 2003 state budget outturn shows that the budget deficit to GDP ratio was 2%, close to the revised budget of 1.9%. The 2003 budget benefited from favorable macroeconomic conditions such as high oil and gas prices and low domestic and international interest rates, although non-oil and gas tax collection fell below target levels. Preliminary numbers for the first quarter of 2004 suggest that the government's 1.2% deficit target remains within reach. Indonesia's external debt to GDP also declined. The ratio hit 55% in 2003, well under its peak of 158% of GDP at end- 1998, and 9 percentage points lower than at end 2002. Short-term debt over reserves, an indicator of liquidity risks, improved as well to 41% by end-September 2003, the latest available numbers. Continued fiscal consolidation and reduced vulnerability have paid off. The Government was able to float an international bond issue in early March at yields that were well below other countries with better credit ratings. The Government issued US$1 billion in bonds, more than twice the amount originally planned. Despite this, the issue was more than four times oversubscribed. Standard and Poor's, an international rating agency, has upgraded its rating outlook for

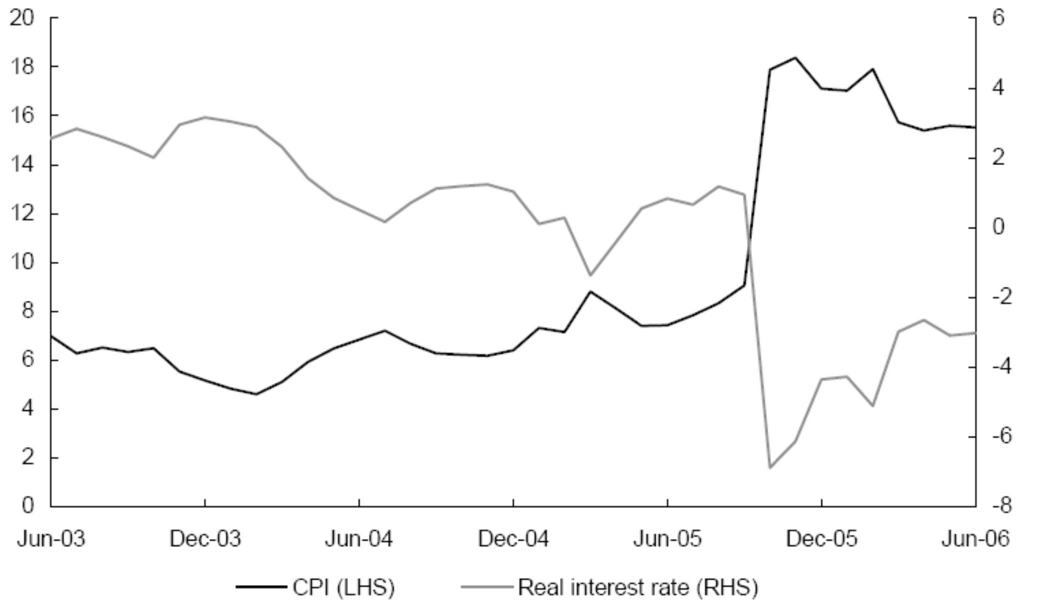
Indonesia from ‘stable’ to ‘positive,’ indicating that it is considering an upgrade in the near future.

3. Poverty declines. Preliminary results from the 2003 SUSENAS household survey suggest that poverty levels have continued to decline. The survey shows that the poverty headcount ratio dropped from 16.0% in 2002 to 15.1% in 2003, lower than the pre-crisis level of 15.7% in 1996. Steady growth and lower inflation since the survey in February last year are likely to have reduced poverty. Inflation fell below 5% earlier this year, and the rise in food prices has been modest. This is good news for the poor, who spend more than half their budget on food. However, while poverty is declining, more than half the population of Indonesians still lives on less than US$2 per day.

ii. Inflation and Interest Rate

While inflation has fallen substantially in the years following the 1997-98 crisis, the unwinding of fuel subsidies in October 2005 saw inflation rise sharply, with inflation peaking in November at over 18% through-the-year. In the first half of 2006, inflation has moderated to some extense, with the CPI rising by 15.5% through the year to June 2006 (**Figure 2**). It is expected to decline further through the second half of the year as the subsidies reductions pass through. Consensus Forecasts expects average inflation of 13.3% for the year (Lucich et al. 2008).

Figure 2. CPI and Real Interest Rate



Source: CEIC Asia database in Lucich et al. (2008).

The decline in inflation has enabled Bank Indonesia to relax monetary policy settings, with official interest rates reduced in May and June this year to the current rate of 12.25%. The reduction in interest rates should assist the banking sector, which came under pressure during the August 'mini-crisis'. In the second half of 2005, loan growth decelerated and the net non-performing loan ratio rose from 1.9% to 5.0%. In particular, State-owned commercial banks reported non-performing loan ratios of around 15%, up from 5.5% in 2004 (Lucich et al. 2008).

Indeed, what is striking is that recent inflation has been roughly in line with historical experience—until 2003, when it began to drop due to dangerously flagging aggregate demand. During the 1970s, when the economy grew at 8% per year, the consumer price index showed an annual rate of increase of 17%. In the following decade, a lower rate of economic growth was accompanied by a lower, but substantial, rate of inflation of 10%. During 1990-1996, the growth rate returned to 8% and inflation continued close to double figures, at 9%. Thus, for almost three decades of rapid growth, the economy averaged double-digit inflation, with a relatively low standard deviation. This historical experience casts doubt on allegations that recovery in Indonesia requires a very low inflation rate (UNDP 2008). Therefore, inflation targeting should be continuously considered (Arsyad 2002a). UNDP reported that in fact, the inflation rate is continuing to drop well below 10%, indicating that fiscal and monetary policies are not yet sufficiently expansionary in order to forestall a marked slowdown in growth. In Indonesia's current circumstances of weak aggregate demand, an inflation rate that is dropping towards 65% per annum is a worrying sign.

UNDP also recorded that furthering moderating real interest rates would contribute to pro-poor growth since they would be associated with monetary expansion, which would stimulate money demand and lower the costs of investment. An appropriate guideline for policy would be the so-called Golden Rule—namely, that the real interest rate for investors and savers should approximate the sustainable rate of growth of per capita income. Assuming that a growth rate of 5-6% could be sustained, and population growth in the medium term would be between 1.5 and 2%, the growth-accommodating real interest rate should be 3-4%.

iii. Foreign Direct Investment

More recently, economic growth and investment have begun to slow, with investment weakening again in the second half of 2005. Overall, investment growth for 2005 declined to 9.9%, partly due to a financial 'mini crisis', which is discussed further below. As a result, the ratio of investment to GDP, which had been moving back towards pre-crisis levels of 25-30%, has now declined to around 22% (Lucich et al. 2008). They furthermore stated that notwithstanding the terrible cost in human lives and damage to infrastructure and homes in the province of Nanggroe Aceh Darussalam (Aceh), the tsunami had only a small impact on Indonesia's economic growth in 2005. This reflected the fact that Aceh accounts for only 2% of Indonesia's GDP, and that the reduced agricultural production in the region has been largely offset by reconstruction spending[4]. According to Lucich et al., despite strong growth in the first half of 2005 (**Figure 3**, page 8), last year proved to be a testing year for the Indonesian authorities. In August, the Indonesian Rupiah and stock market both fell sharply, reflecting concerns in financial markets about the impact of higher oil prices on Indonesia's public finances and externally financial position (2008). Conducting business in Indonesia is still considerably difficult by foreign and domestic investors alike, which accounts for the relatively low investment growth, though over the past year investment has grown at a slightly higher, though still single digit growth. Without higher investment growth required for higher employment growth, poverty rates are unlikely to decline more rapidly (Thee 2008). That is the reason why the Indonesian government has a target of investment ratio to GDP by 24.4% in 2009 which was 16.0% in 2004.

The Capital Investments Coordinating Board reported that $13.2 billion

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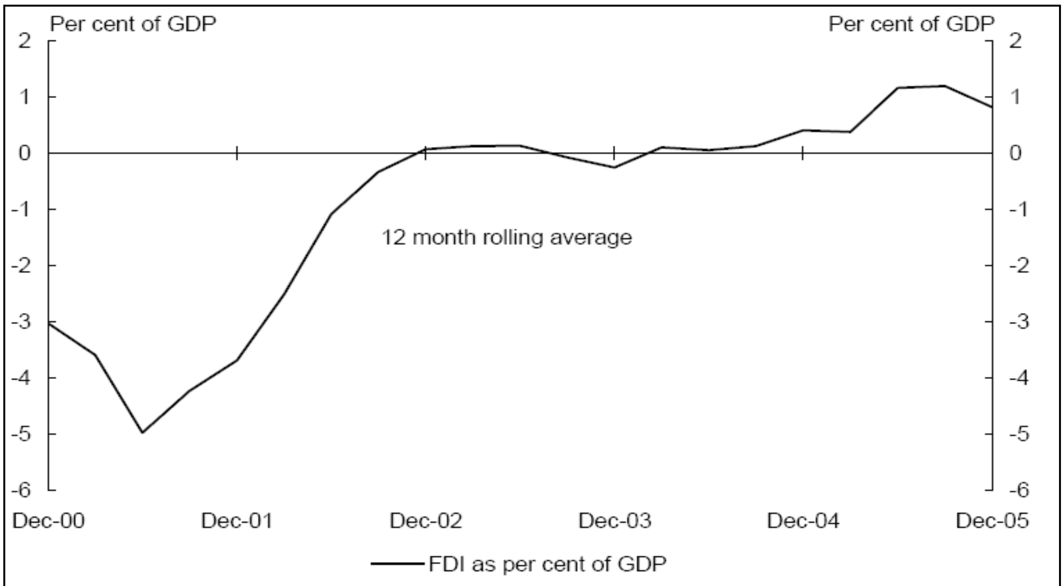
[4] Since the tsunami, Indonesia has been subject to a number of further natural disasters. A major earthquake took place off the west cost of Sumatra on 28 March 2005. The quake measured 8.7 on the Richter scale and killed around 1,300 people mainly on the island of Nias. Australia provided $1 million in emergency aid, and dispatched Australian Defence Force medical teams and equipment to Nias. Another major earthquake struck the Yogyakarta region in central Java on 27 May 2006. The quake measured 6.3 on the Richter scale, causing massive devastation across the province and killing 5,760 people. In response, Australia has committed $7.5 million to provide emergency relief and $30 million to help rebuild the region (Lucich et al. 2008).

equivalent in foreign investment projects (up from $9.8 billion in 2002) and $5.8 billion equivalent in domestic investments (up from $3 billion) were approved in 2003. The approvals covered 468 foreign and 182 domestic investment projects. In terms of realization, however, actual foreign investments amounted only to $4.9 billion or 37.6% of approvals, while domestic investments came to $2.3 billion, or 39.2% of the approvals during 2003 (ADB 2004).

An analysis of trends in the drivers of demand growth, especially since 1999, suggests that regaining a strong growth rate will be based on resuscitating investment, both public and private, rather than exports. In recent years, exports have been in dramatic decline. Also, in the medium term the world economy is unlikely to generate a rate of growth of trade that would allow Indonesia to achieve the export expansion that it did in the 1970s (UNDP 2008), which pushed economic growth and in turn it has substantially positive impact on poverty reduction.

Figure 3. Foreign Direct Investment



Source: CEIC Asia database in Lucich et al. (2008).

UNDP furthermore suggested that a robust export performance is necessary to relieve the foreign exchange constraints, pro-poor growth in Indonesia will be based in practice on growth of investment. But the revival of private investment—as well as of exports—will depend to a significant degree on expanding public investment. Then UNDP gave an example that the country's past economic performance suggests that public investment has "crowded in" private investment, not "crowded it out". During the period 1972-1997, for example, every one percentage point increase in public investment corresponded to a 0.66 percentage point increase in private investment. As Supratikno (2008) noted that in order to revive investment, the government of Indonesia issued three policy packaged in 2006: an Infrastructure Policy Package, Investment Climate Policy Package, and a Financial Sector Reform Package. Under Presidential Instruction 3/2006 on Investment Package Reform, various aspects are included: investment, taxation, customs, labor, and the development of small-medium enterprises and cooperatives.

iv. Fiscal Policy and Government Sector

Asian Development Bank recorded that the most significant economic policy developments during the course of 2004 have been on the fiscal front. Following the enactment of the State Finance Law (Law 17/2003) in March 2003, Parliament endorsed five major laws in 2004: the State Treasury Law (Law 1/2004) in January, the State Audit Law (Law 15/2004) in June, the Law on National Development Planning (Law 25/2004) in July, and amendments to the Law on Regional Autonomy (Law 32/2004) and the Law on Regional Fiscal Balance (Law 33/2004) in September 2004. They provide an overall framework for all planning, budgeting and administrative aspects of public expenditure management, and guide intergovernmental fiscal relations in Indonesia (ADB 2004), which enables both the central and local governments to make a manageable fiscal consolidation even though the Regional Autonomy (decentralization) is going on.

There is scope for increasing government expenditure since the overall deficit was 2.3% of GDP for 2000-2003. Until recently, none of these deficits has been financed through domestic borrowing; instead, they have been covered by asset sales and foreign assistance inflows. In terms of fiscal policy, only the foreign assistance component was expansionary. A legal change to allow for domestic borrowing for a further fiscal stimulus was justified in light of the economy's slow growth rate. Fortunately, Parliament made this change in 2003, allowing a government bond market to open up (UNDP 2008). Indonesia has significantly improved its fiscal situation in recent years, with the central government budget deficit narrowing from 2.4% of GDP in 2001 to 0.5% in 2005. The outcome last year was helped by the cuts in fuel subsidies and delays in spending caused by changes to budgetary procedures. The deficit is expected to widen to 1.2% in 2006, primarily reflecting spending carryovers from 2005

(Lucich et al. 2008). On the revenue side, the Indonesian government is making a concerted effort to improve tax compliance and more generally to reform the tax system. The system has a limited capacity to raise revenue due to a very large informal sector (in a country of around 220 million people there are only 10 million registered income tax payers). In 2005, total tax revenue amounted to only 12.8% of Indonesia's GDP- a low figure compared with other developing countries (Lucich et al. 2008), and the most notable fiscal policy in 2005 was the reduction of fuel subsidies. This allows the Indonesian government to increase spending on important development programs (i.e. health and education). Meanwhile, the budget deficit was kept around 1% of GDP (Supratikno 2008).

Moreover, fiscal consolidation and solid GDP growth have reduced the central government debt to GDP ratio from around 100% in 2000 to close to 50% in 2005. The ratio of external public debt to GDP has also steadily declined in recent years, from about 45% in 2000 to 27% in 2005. As part of the international response to the tsunami, Australia joined with other Paris Club members to delay debt repayments from Indonesia, allowing it to focus resources on emergency and reconstruction efforts[5]. In 2005, Indonesia's current account surplus fell to US$3 billion or 1.1% of GDP, compared with a surplus of 4.8% of GDP in 2000. In value terms, total merchandise exports rose by around 20% in 2005. However, in volume terms, export growth was flat (**Figure 4**, page 11). At the same time, merchandise imports rose by about 26% in value terms in 2005 (Lucich et al. 2008). However, the Indonesian government has been targeting the non-oil exports around 8.7% in 2009 which was only 5.5% in 2005.

v. Exchange Rate

Following the appreciation of the Rupiah in early 2003 from around Rp9,000 to $1, the exchange rate remained stable in the range of Rp8,300–8,600 from mid-2003 to April 2004. However, election-related uncertainties, the rising price of oil and the stronger demand for dollars put downward pressures on the rupiah since the end of April 2004, making it the weakest-performing currency in Asia

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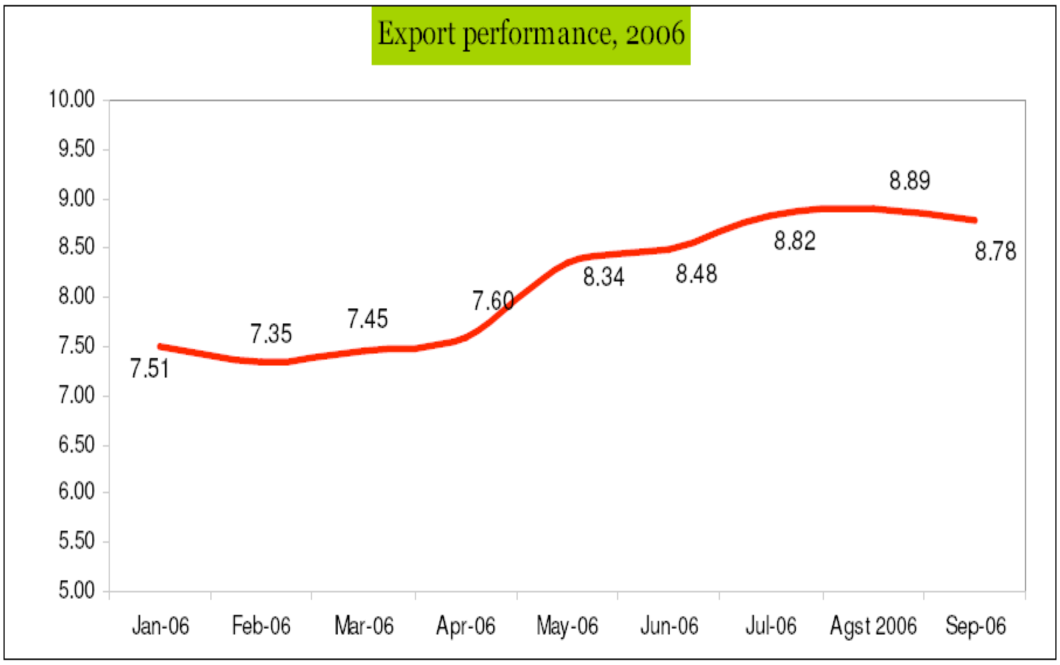
[5] The deferred debt will be repaid between 1 December 2006 and 1 December 2009. This rescheduling affected approximately US$12.5 million in payments to Australia. Australia is owed approximately $1.16 billion in sovereign debt by Indonesia, all but $27.3 million of which is on the National Interest Account (Lucich et al. 2008).

this year so far. It reached its lowest level over the last 20 months in early June, at Rp9,600 to $1, losing 11% of its value since January (ADB 2004), then fluctuation of the Rupiah was under-controlled (flat) in the middle of July (around Rp9,200/US$) up to December 2006 (almost Rp9,000/US$) as shown in **Figure 5** (page 12).

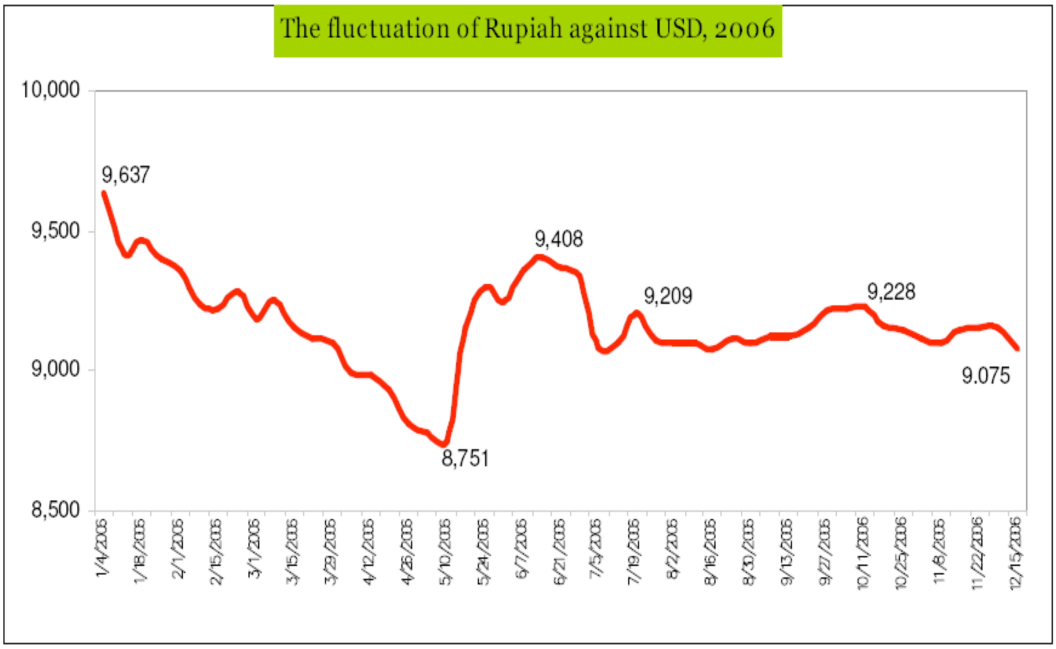
Figure 4. Indonesian Export Performance Jan-Sept 2006.



Source: Supratikno (2008).

Although the World Bank persuasively recorded some achievements on Indonesian Economy, however there are also <u>some challenges</u> on it. <u>Firstly</u>, as Lucich et al. noted it (2008). They pointed out that despite experiencing some major challenges last year, Indonesia's short-term growth prospects remain positive. However, to significantly reducing rates of poverty and unemployment, economic growth needs to be increased. Poverty is widespread, with half of the population surviving on less than US$2 a day. While at current growth rates the economy is adding a net 1.2 to 1.4 million jobs a year, 1.6 to 1.8 million new workers are entering the workforce each year. In 2005 the unemployment rate was 10.3%, more than double its pre-crisis level of 4.7% in 1997. Inroads into Indonesia's unemployment and poverty rates will not be achieved unless economic growth of greater than 6% per annum is sustained. The Asian Development Bank in 2004 reported that the Indonesian economy grew by 4.5% in 2003, up significantly from 3.7% in the previous year, but it is yet to show promise of turning in the higher growth rates needed for employment generation and sustainable poverty reduction.

Figure 5. Indonesian Rupiah Exchange Rate, January-December 2006



Source: Supratikno (2008).

Secondly, the performance of manufacturing sector is quite worrying. In 2005, it only grew at 4.6%. The contribution of this sector to GDP has shown a decline, from 29.1% in 2003 to 28.05% in 2005. Worse, in 2006 this sector is estimated only growing at 3.1% (Supratikno 2008). Supratikno also pointed out that despite impressive achievement in managing inflationary pressures, bank lending slowed quite drastically in 2006. The target for credit expansion of 18% in 2006 would not be achievable. Loan to deposit ratio in the last two years were still around 60%, far below the ideal level of 90%. The ratio of credit to GDP stands around 25%, far below the pre-crisis level at 53%. This suggests that the intermediation function of banking industry is still far from optimal and the perceived credit risk remain high (2008). Thirdly, in the Economic and Social Update Report, World Bank also identified some challenges on Indonesian Economy namely:

1. Financial markets have come off their high. While the markets reacted positively to the peacefully parliamentary elections in early April, concerns on rising global interest rates and a slowdown of China's economy sent markets off their peaks achieved earlier in the year. The Rupiah depreciated to above Rp.9,000 against the US dollar in May to a levels not seen since November 2002. And the Jakarta Stock Exchange index fell below 700 in mid-May, about 20% below its all-time high recorded at the end of April. Foreign investors, who had boosted the stock market and the Rupiah earlier in the year, have been selling off their stocks in recent weeks, whereas foreign banks have reduced their net exposure to the overnight interbank market, a proxy for demands on the Rupiah assets. The direct impact of these financial market movements is unlikely to be substantial, as shareholding by individuals is still limited, and the effects on private consumption, the main driver of growth, are likely to be small. Better prospects for the US economy, the reason for higher interest rates, are likely to have a positive impact on the economy through exports.

2. Investment activity remains weak. Weak investment growth is one of the main factors holding back Indonesia's growth. Investment grew by only 2.2% in 2003, and the investment to GDP ratio declined to 17.8% in 2003, the lowest level since the early 1970s.[6] The quality of investment is also of concern. In recent years, investment has shifted to property investment such as construction of shopping malls and apartments. In contrast, non-property investment declined in 2003. Investment approval numbers suggest that this trend is not likely to turn around soon: data[7] until April this year show that domestic investment approvals are 28% below in 2003, foreign investment is down by 49%. On a positive note, 15 new oil and gas contracts were signed in 2003, compared with just one in 2002.[8]

3. Export competitiveness is under pressure. Indonesia need to strengthen its international competitiveness to take advantages should work on its international competitiveness to take advantage of the improving international environment. Export growth is lagging behind that of regional competitors: Indonesia's exports increased by only 10% in 1996-2003. During the same period, Korea's exports grew by 114% followed by Thailand (70%) and Malaysia (43%). Even in the rapidly growing exports to China, Indonesia is falling behind as well. While Indonesia's exports to China grew by 30% in 2003, they are not growing as rapidly as those of regional competitors, so Indonesia is losing market share. In 2000, Indonesia's share in China among 5 East Asian economies (Indonesia, Korea, Malaysia, the Philippines and Thailand) was still 11.2%, but it fell to 7.4%

[6] The ratio before 1983 is derived from constant data due to data availability.
[7] Oil and gas sector, and financial sector are not included
[8] In 1997, Indonesia signed 29 oil and gas contracts

in 2003.

4. Unemployment is still rising. Despite macroeconomic stability and steady growth, labor market conditions continue to decline. The unemployment rate increased from 9.1% in 2002 to 9.5% in 2003. Among the unemployed, young people account for an increasing share: almost 2/3 of the unemployed are between 15 and 24. The youth unemployment rate stood at 27.9% in 2003, three times the overall unemployment rate. Another worrying trend is the decline in employment in the formal sector—new jobs are only created in the informal sector, and these jobs are generally low skill and low paid. It is in particular the low-skill laborers that are losing their jobs in the formal sector.

5. Weak services delivery leading to poor social development outcomes. Despite the reduction in income poverty, the non-income aspects of poverty persist as serious problems in Indonesia, compounded by the weak delivery of services to the poor. The Government recently issued its *Progress Report on the Millennium Development Goals*.

The above account of Indonesia's current economic conditions and short-term economic prospects, Indonesia's immediate development strategy and priority should be directed at increasing investment rates by improving its poor investment climate. Higher investment in the real sector will create more employment and reduce absolute poverty. Dreams of national grandeur by building up 'strategic, hi-tech industries promoted by a strong development state' should be abandoned in favour of the much more urgent task of raising the low standards of living of the Indonesian population by increasing employment, and reducing poverty by improving the public goods of primary health care, extending and improving education et all levels and improving the dilapidated infrastructure (Thee 2008) both in urban and rural areas.

Over the last few years, the government's policy direction has been to integrate poverty reduction with medium-term planning and budgeting instruments. It has attempted to base poverty reduction on comprehensive analyses of current and future needs, targets and overall macroeconomic and fiscal realities. However, effective integration of pro-poor elements into the planning and budgeting process needs more consistent initiatives at the central government level, and more importantly at the local levels (ADB 2004). By having this consideration, efforts to alleviate poverty can be expected to be more effective and efficient.

C. Indonesian Rural Economy Spectrum

The majority of Indonesians still live in rural areas. According the data from Population Census 2000, around 58% of Indonesians are rural residents. Aside from providing food supplies for the whole economy, the rural areas also contribute importantly to foreign exchange earnings from export of commodities (Suryahadi et al. 2006a). This obviously calls for more focused attention and more rigorous efforts in rural development. This requires a clear and effective strategy to jump-start and sustain economic growth in rural areas. Since rural areas are closely identified with the agricultural sector, a more specific question is whether investments should be directed to improve productivity in the agricultural sector or whether it is more effective to invest in the development of the rural non-agricultural sector directly. Ultimately, the answer to this question and the formulation of the rural development strategy adopted should depend on the potential to push growth for the whole rural economy (Suryahadi et al. 2006a).

The twenty-five years from 1970 to 1995 witnessed dramatic changes in the role of agriculture in Indonesian economy. There was a marked decline in the proportion of total national output (GDP) accruing from the agricultural sector, and the proportion of the labour force employed in agriculture also fell. By 1990, just under half the employed labour force was working in agriculture (in the sense that agriculture was the main source of income), according to the Population Census of that year. Between 1990 and 1995 the absolute size of the agricultural labour force declined, and by 1995 only 44% of the employed labour force was reported as “working in agriculture”. This percentage was lower for the densely populated inner islands of Java and Bali where the process of structural change and diversification away from agriculture was especially rapid. If the absolute increase in the employed labour force between 1990 and 1995 is distributed between urban and rural areas, and between economic sectors, it is clear that much of the increase in the non-agricultural labour force occurred in urban areas. In rural areas, which accounted for about one third of the total increase in employment over these five years, much of the growth occurred in the trade and service sector (Booth 2004).

In 1995, the Intercensal survey (*Supas*) reported that there were 45.7 millions households in Indonesia, of which only about 32% were wholly dependent on agriculture for their income, and a further 9.5% were largely dependent on agriculture with some non-agricultural income sources. Less than half of the households located in rural areas, which comprised 65% of all households, were earning all their income from agriculture in 1995. On the other hand of those rural household earning at least part of their income from agriculture (over 70% of all rural households), the great majority reported that agriculture was either the sole or the main source of their income. Clearly it would be wrong to argue that agriculture sector, even before the crisis of 1997, was not important source of income for many millions of rural households in Indonesia (Booth 2004). In 1990, fully three quarters of the Indonesian workforce worked in rural areas. By 2003, although the proportion of rural workforce had declined substantially, around 60% of the working population still worked in rural areas (Suryahadi et al. 2006a), while the same year, only 40% of the employed labour was working in urban areas (**Table 1**). However, the Indonesian government has been targeting an unemployment rates by 5.15% in 2009 which was still high in 2004 (9.7%).

Table 1. Employment share of Rural and Urban areas in Indonesia, 1990-2003 (%)

Area	1990	1995	2000	2003
Rural	75	67	62	60
Urban	25	33	38	40

Source: Calculated by Suryahadi, et al. (2006a) from Sakernas Data.

Table 2 (page 17) shows that within the rural areas, the large majority of rural workers stated that their main occupations were in the agricultural sector. In 1990, around 70% of the rural workforce worked mainly in the agricultural sector. This proportion had declined substantially during the pre-crisis era, so that by 1995 the proportion of agricultural workforce had fallen to 60%. After the onset of the economic crisis in 1997-98, however, the role of agricultural sector in providing employment opportunities in rural areas regained its importance. As a result, in 2003 the proportion of the rural workforce working in the agricultural sector increased again to 68%. On the other hand, after increasing during the pre-crisis period, the proportions of rural workforce who worked in the industrial and services sectors have both declined during the post-crisis period (Suryahadi, et al. 2006a).

Typically in many parts of Indonesia trade and services provide employment for large numbers of women workers. In 1995, the trade sector provided more employment for both male and female workers than manufacturing in rural areas (Booth 2004). There are considerable regional variations in the extent to which agricultural households in Indonesia have been able (or been compelled) to diversify their incomes away from exclusive reliance on the farm holding. While the proportion of on-farm to total income has fallen in some of the more isolated and agriculturally less productive parts of the country between 1984 and 1993, it is clear from the 1993 data that many household in East Nusa Tenggara, East Timor and Irian Jaya were unable fully to compensate for low on-farm earnings by earning more from off-farm employment. This is unlikely to change in the immediate future. There seems to be a persuasive case for continued emphasis on increasing agricultural productivity in Eastern Indonesia, and on improving rural infrastructure (roads, irrigation, etc.) and rural credit facilities. The government investment in these programmes will be needed both to increase on-farm incomes and to expand access to off-farm employment (Booth 2004) in order to simultaneously increase the total income of households.

Table 2. Sectoral Employment Share in Rural areas in Indonesia (1990-2003) (%)

Sector	1990	1995	2000	2003
Agriculture	70	60	66	68
Industry	9	11	10	9
Services	22	29	24	24

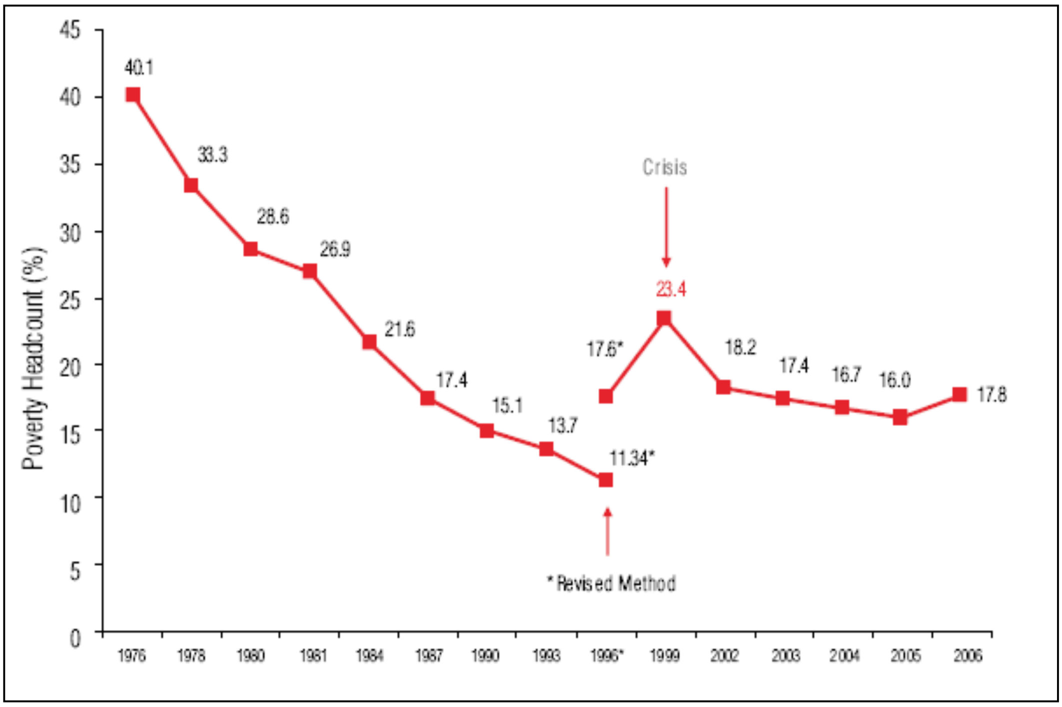
Source: Calculated by Suryahadi, et al. (2006a) from Sakernas Data.

For Indonesia as a whole, off-farm income grew more rapidly than on-farm income over the nine years from 1984 to 1993, but the difference in growth rates was certainly much less than in Taiwan during the 1960s and 1970s. Indeed a higher proportion of agricultural households in Indonesia were wholly dependent on farming for their income in 1993 than was the case in Taiwan in 1960 (Booth 2004). This is a crucial message that the agricultural sector can not be neglected in Indonesian economy both in term of growth contribution and employment share as well as poverty reduction.

D. Poverty Dynamics in Indonesia

The success story, that is the numerous paper recorded that Indonesia had a success story not only in maintaining economic growth by 7% a year (1966-1996), but also in alleviating poverty from 40.1% in the middle of 1976 declined significant to 17.6% in 1996, but it increased again in 1997 (just economic crisis) as shown in **Figure 6**. However, poverty rates consistently declined after a peak of 23.4% in 1999 to 17.4% in 2004. Unfortunately, as Thee (2008) noted that in September 2006 the Central Agency of Statistics (BPS) announced that poverty rate had increased from 16.0% in February 2005 to 17.8% in March 2006, corresponding to an increase in the number of poor people from 35 million to 39 million over this short period. It was the second time that the measured poverty rate had risen in recent years, the first and much more severe increase having occurred in 1998-1999 following the sharp contraction of the economy in 1998 (Lindblasd & Thee 2007). However, the Indonesian government has been targeting poverty rates by 8.2% in 2009.

Figure 6. Poverty Trends in Indonesia (The World Bank 2006)



The World Bank provided the answer below for the question why did poverty increase from 2005 to 2006 in Indonesia?

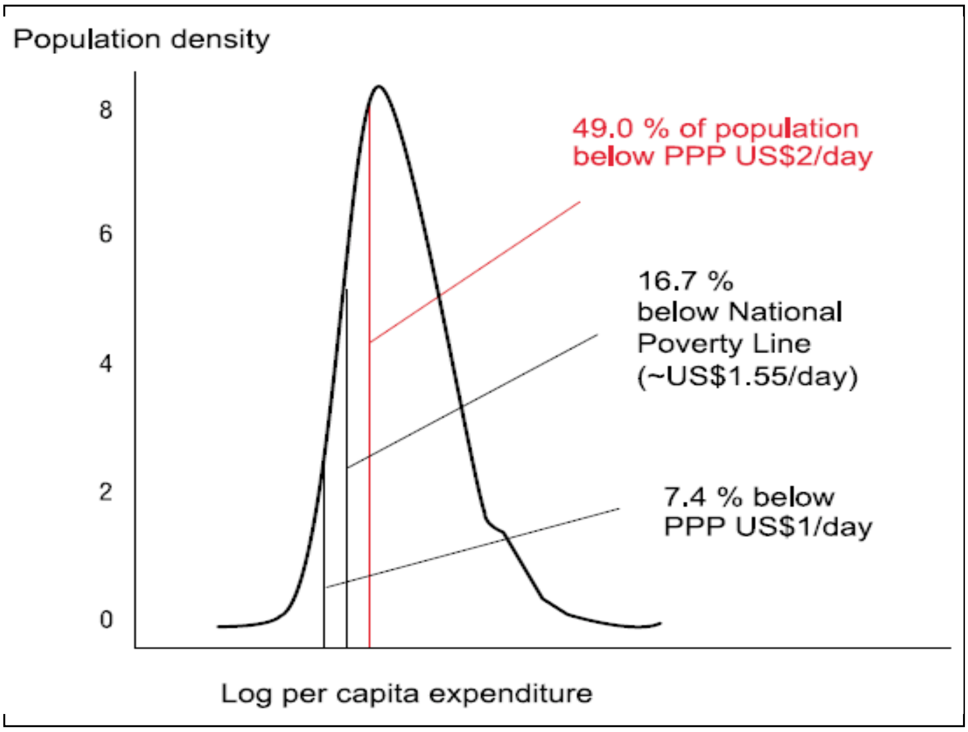
The 33% increase in rice prices between February 2005 and March 2006-mostly due to the ban on rice imports-is the main reason that poverty rates have increased. Around three-quarters of the additional four million people falling into poverty during this period did so as a result of the rice price increase and, in addition, recent analysis indicates that the fuel price increase was not a *major factor in the increased poverty rate. The unconditional cash transfer (UCT) program, which provided cash transfers to 19.2 million poor and near-poor households, more than offset, on average, the negative impact of the fuel price increase for the poor. In other words, the impact of the combined effects of the fuel price increase and the UCT compensation point to a net positive income gain, overall, for the poorest 20% of the population. However, with rice prices still going up, and the UCT program drawing to an end, there is a possibility that poverty rates could rise again next year unless economic growth increases significantly.*

In an overview of *Making the New Indonesia Work for the Poor*, The World Bank in 2006 also gave some dimensions of poverty in Indonesia as follows:

1. **Poverty in Indonesia has three salient features.** First, many households are clustered around the national income poverty line of about PPP US$1.55-a-day, making even many of the non-poor vulnerable to poverty. Second, the income poverty measure does not capture the true extent of poverty in Indonesia; many who may not be 'income poor' could be classified as poor on the basis of their lack of access to basic services and poor human development outcomes. Third, given the vast size of and varying conditions in the Indonesian archipelago, regional disparities are a fundamental feature of poverty in the country.
2. **A large number of Indonesians are vulnerable to poverty.** The national poverty rate masks the large number of people who live just above the national poverty line. Close to 42% of all Indonesians live between the US$1- and US$2-a-day poverty lines-a remarkable and defining aspect of poverty in Indonesia (see **Figure 7,** page 20). Analysis indicates that, there is little that distinguishes the poor from the near-poor, suggesting that poverty reduction strategies should focus on improving the welfare of the lowest two quintile groups. This also means that the vulnerability to falling into poverty is particularly high in Indonesia: while only 16.7% of Indonesians surveyed were poor in 2004, more than 59% had been poor at some time during the year preceding the survey. Recent data also indicate

a high degree of movement in and out of poverty over time: over 38% of poor households in 2004 were not poor in 2003.

Figure 7. Indonesia's Population lives on between US$1 & US$2 a day



Source: Susenas Panel data, in *Making the New Indonesia Work for the Poor*, World Bank (2006).

3. **Non-income poverty is a more serious problem than income poverty.** When one acknowledges all dimensions of human well-being-adequate consumption, reduced vulnerability, education, health and access to basic infrastructure-then almost half of all Indonesians would be considered to have experience at least one type of poverty. Nonetheless, Indonesia has made good progress in past years on some human capital outcomes. There have been notable improvements in educational attainment at the primary school level; basic healthcare coverage (particularly in birth attendance and immunization); and dramatic reductions in child mortality. But in some MDG related indicators Indonesia has failed to make significant progress and lags behind other countries in the region. Indeed, specific areas that warrant concern are:
   - Malnutrition rates are high and have even risen in recent years: a quarter of children below the age of five are malnourished in

Indonesia, with malnutrition rates stagnating in recent years despite reductions in poverty.

- Maternal health is much worse than comparable countries in the region: Indonesia's maternal mortality rate (307 deaths in 100,000 births) is three times that of Vietnam and six times that of China and Malaysia; only about 72% of births are accompanied by skilled birth attendants.
- Education outcomes are weak. Transition rates from primary to secondary school are low, particularly among the poor: among 16- to 18-year-olds from the poorest quintile, only 55% completed junior secondary school, compared with 89% from the richest quintile from the same cohort.
- Access to safe water is low, especially among the poor. For the lowest quintile access to safe water in rural areas is only 48%, against 78% in urban areas. Access to sanitation is a crucial problem. Eighty percent of the rural poor and 59% of the urban poor do not have access to septic tanks, while less than 1% of all Indonesians have access to piped sewerage services.

4. **Regional disparities in poverty are considerable**. Wide regional differences characterize Indonesia, some of which are reflected in disparities between rural and urban areas. Rural households account for about 57% of the poor in Indonesia and also frequently lack access to basic infrastructure services: only about 50% of the rural poor have access to an improved source of water, compared with 80% for the urban poor. Importantly, across the vast Indonesian archipelago, it is also reflected in broad swathes of regional poverty, in addition to smaller pockets of poverty within regions. For example, the poverty rate is 15.7% in Java/Bali and 38.7% in more remote Papua. Services are also unequally distributed across regions, with an undersupply of facilities in remote areas. In Java the average distance of a household to the nearest public health clinic is 4 kilometers, whereas in Papua it is 32 kilometers. While 66% of the poorest quintile in Java/Bali have access to improved water, this number is 35% for Kalimantan and only 9% for Papua. A challenge faced by the government is that although poverty incidence is far higher in eastern Indonesia and in more remote areas, most of Indonesia's poor live

in the densely populated western regions of the archipelago. For example, while the poverty incidence in Java/Bali is relatively low, the island is home to 57% of Indonesia's total poor, compared with Papua, which only has 3% of the poor.

E. Role of Agriculture in Indonesian Economy

After 30 years (1966-1996) of rapid economic growth on average 7% per year, controlled unemployment and inflation rate, under the political stabilization, industrial transformation, rapid technological progress, and steady food security, Indonesia was suddenly hit by an Asian financial crisis in mid 1997. It has become the general secret that the crisis indeed has remarkably negative impact on Indonesian economy, particularly manufacturing, construction and finance sectors. Abimanyu (2008) calculated that the domestic currency depreciated by about 67% against the U.S dollar between July and December 1997 and it depreciated an additional 118% between December 1997 and January 1998. Even though the currency recovered about 27% of its value from January to April 1998, it depreciated about 83% from April until June 1998. After that, the exchange rate began to recover somewhat. In a year, between June 1998 and June 1999, the exchange rate appreciated about 41%. Within that period, the exchange rate appreciation averaged about 6% per month.

During the peak of the crisis, no economic sector had the best performance in the country, except the agriculture sector and its sub-sector. At the time, the export value of the agriculture products grew quickly and the income of cocoa smallholder also rapidly soared. Those situations were affected by not only production side, but also the positively consequence of Indonesian Rupiah depreciation which was an increasing demand for Indonesian agricultural exports products. Hence, the agriculture sector is believed as a leading sector and the way out of the crisis in the country. Tambunan (2007) explained that soon after the end of 1997, the currency depreciation became a financial crisis as the banking sector collapsed, and in 1998, it ended in an economic crisis as productions in many sectors declined leading to the fall in the country's GDP by 13.4%. Surprisingly, among three important factors, agriculture was one of the least affected by the crisis, as its output declined by less than 2%.

In 2007, IFAD recorded that more than half of Indonesia's 235 million people are poor. Most struggle to survive on less than US$2 a day, and are at risk of even more severe poverty. About 18% live on US$1 or less. Approximately 60% of the population lives in rural areas where agriculture is the main source of livelihood. Poverty has always been a concern in Indonesia. In the 1970s the country entered a period of steady economic growth, accompanied by progressive social development. Then in 1997 and 1998 the Indonesian economy came close to collapse, when a financial crisis swept through South-Eastern Asia. Before the crisis, 16.8% of the country's families were officially classified as poor. At the height of the financial upheaval, the proportion of poor households in the country doubled. Although the crisis hit harder in urban areas, recovery was also more rapid in the cities and towns. Instead, in rural areas, poverty is greater than it was before the financial crisis. Millions of small farmers, farm workers and fishers are materially and financially unable to tap into the opportunities offered by years of economic growth.

The above fact is an important serious problem we are facing in Indonesia today, and in this situation, growth is not single guarantee to reduce poverty, but also pro-equity policy is a necessary factor. In other words, development strategy for poverty reduction in Indonesia also needs equity dimensions.

As already foregoing noted that although agricultural sector and its sub-sectors plays a strategic roles in Indonesian economy, not only provides export earnings which will redistributed by the government to compensate both the producers and consumers, but also consistently gives a source of employment for millions of rural smallholders household. However, rural areas lag behind urban areas, both in terms of physical infrastructure as well as socio-economic welfare. As a consequence, recorded around 80% of all the poor nations are found in rural areas (see also Suryahadi et al. 2006a). Moreover, rural agriculture economy has contributed to strengthen staple food in the country and at the same time, the employment share of agriculture is much larger than industry.

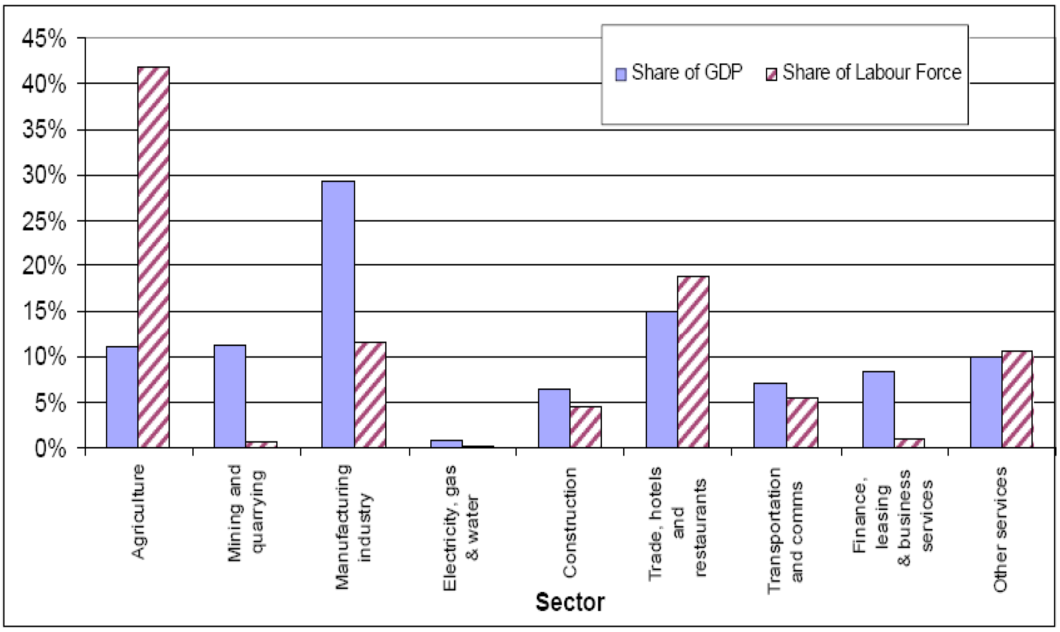
Table 3. Distribution of the Poor in Indonesia by Sector, 1996-2002 (%)

Sector	1996	1999	2002
Agriculture	68.5	58.4	67.4
Industry	6.7	8.7	10.3
Services	24.7	32.9	22.4

Source: Calculated by Suryahadi et al. (2006a) from Susenas Data.

Since agriculture's share of output fell faster than its share of employment, output per agricultural worker fell in relative terms compared to output per worker in other sectors. This implies that over time agricultural workers have become relatively poorer than nonagricultural workers. Unsurprisingly, therefore, the agriculture sector has the highest poverty incidence and contains the largest proportion of the poor in the country. As has shown in **Table 3** (page 23) shows the distribution of the poor population in Indonesia across sector. In 2002, more than two thirds of the poor had a livelihood in the agricultural sector. This is similar to the level reached in 1996. Meanwhile, due to the economic crisis which hit the modern sectors harder, in 1999 the proportion of the poor who made a living in the agricultural sector fell to below 60% (Suryahadi et al. 2006a). However, this conveys a message that strongly negative impact of the crisis on employment has been secured by agricultural sector and its sub-sector. **Figure 8** shows that although agriculture share only more than 10% in 2005, but surprisingly the sector can secure more than 40% of labour force rather than the other sectors.

Figure 8. Sectoral Share of GDP and Labour Force 2005 (Bank of Indonesia)



Source: DFID (2007)

In 2002, Asian Development Bank recorded that about 58% of the poor in Indonesia derive their income primarily from agriculture. Forty percent of people engaged in agriculture are poor (the highest rate in any economic sector). Poverty is largely a rural phenomenon. The rate of agricultural growth in Indonesia averaged about 3.8% annually in the 1980s. Between 1990 and 1995, however, this rate slowed to 2.9%, and was negative during the economic crisis and under the impact of successive occurrences of El Niño. Per capita gross domestic product (GDP) in the non-agriculture sector in 1995 was almost five times higher than in agriculture. In 2000 the Government spent approximately Rp1,053,634 million ($105.3 million) on its agricultural interventions. Agricultural growth and rural development have always been the key to poverty reduction in Indonesia.

In fact, **Table 4** shows that in 2002 almost 80% of Indonesia's poor population resided in rural areas. This proportion has declined from the 1996 level which reached 85%. Again due to the economic crisis, this proportion reached its lowest level in 1999 with 76% (Suryahadi et al. 2006a), this is also because of a persistent '*urban bias*' in Indonesia's development. Moreover, millions more people were living precariously just above poverty line (the near poor), thus were vulnerable to fall below the poverty line again in the event of external shocks or natural disasters which struck Indonesia in several places since 2004 (Thee 2008). Within this situation, poor people who are just moving out of poverty, they have no option except falling into poverty again.

Table 4. Distribution of the Poor in Indonesia by Rural-Urban Areas, 1996-2002 (%)

Area	1996	1999	2002
Rural	85.0	76.2	79.7
Urban	15.0	23.8	20.3

Source: Calculated by Suryahadi et al. (2006a) from Susenas Data.

Major characteristic of agricultural in Indonesia is subsistence agriculture. For instance, since cocoa was functioned as a component of economic sector, the total area of Indonesian cocoa has been contributed by three categories of producer, namely Smallholders Estate (*Perkebunan Rakyat*, PR), Government Estate (*Perkebunan Besar Negara*, PTPN) and Private Estate (*Perkebunan Besar Swasta*, PBS). Then, the total area at the national level covered 821,449 ha in 2001 and 1,167,046 ha in 2005. It means that during this period the increasing of area is more than twice. Within this period, the growth rate of cocoa area in Indonesia was ranging 4.68%-12.10% and its average by 8.32% per year or around 990,519 ha per year, a substantial growth for Cocoa Tree Crop in land competition. The total production of cocoa at the national level reached 536,804 ton in 2001 and 748,828 ton in 2005. Within this period, the average growth of production in Indonesia around 10.49% per year, a substantial growth for cocoa production with the highest growth (21.55%) was achieved in 2001. The interesting point is most of this production (90.83% per year during 2001-2005) was produced by Smallholders Estate (more than 400,000 smallholders household) with subsistence cultivation, which are very strongly associated with poverty phenomenon where their livelihood in the agricultural sector. This also indicates that most of the poor live in rural areas and working in agriculture.

Subsistence-oriented agriculture is said to lack efficiency of resource use for various reasons: (1) the priority given to satisfy family needs implies foregoing the benefits of comparative advantage, specialization and division of labor. It assures only a low standard of living for subsistence farmers and their families; (2) formal credit and external inputs are rarely used in subsistence production. Simple technologies, lack of entrepreneurship and absence of specialization keep land and labor productivity low; (3) markets are supplied only if there are surpluses of subsistence production, occurring mainly in good harvest years. Subsistence agriculture, therefore, cannot be relied upon for providing a continuous food supply for the urban population. Also, such production pattern triggers high price instability on food markets; (4) subsistence agriculture displays low responsiveness to policies and, therefore, is difficult to control and direct (Bruntrup & Heidhues 2002).

Based on the above discussion, since smallholders practices their subsistence farming, it is easily to identify that smallholders in Indonesia have been categorized as a poor community. Thus, it is also become characteristic of agriculture sector in the country. Nevertheless, there is the next debate regarding both the agriculture sector and the other. Suryahadi et al. (2006a) examined that there is a consensus that agriculture has strong linkages and a large growth multiplier with other sectors in the rural economy and, because of that, it is essential to develop the agriculture sector first, in order to develop the whole rural area. Not all rural development thinkers and practitioners agree with the agriculture-first strategy, however. Some have argued for the opposite, that it is the non-agriculture sectors that have strong potential to push economic growth in the rural areas and pull the poor out of poverty. Others, meanwhile, have argued that both agricultural and nonagricultural sectors have strong potential to become the engine of growth in rural areas and, hence, call for a more balanced growth strategy. In the context of Indonesia, unfortunately, there is no known or published study on sector demand and growth linkages in rural areas. This is unfortunate considering the importance of the rural areas for the Indonesian economy, in particular as the location where the majority of workers find employment. Furthermore, the vast majority of the poor in Indonesia lives in rural areas and work in the agricultural sector.

The role of agriculture has been launched by Daryanto quoted in Martin & Warr (1993) also strengthen this discussion. They examines that agriculture cannot be regarded as a neglected sector in Indonesian economy. Agricultural and rural development has consistently been given high priority in national development planning. The transfer of resources out of agriculture in the form of direct and indirect taxes was partially balanced by infusions of capital into the agricultural and rural sector for infrastructure development and services. The oil boom profits allowed high levels of government investment in agriculture in the 1970s and 1980s for the provision of subsidized credit to farmers, extension of irrigation infrastructure, provision of modern high-yielding rice varieties and other extension services, and rice and secondary crops market interventions. As a result, technical change has been faster in agriculture than in the rest of the Indonesian economy (Daryanto 1999).

In a fast urbanizing Indonesia, the rural sector still plays an important role in the country's economy. The majority of the population, and hence the workforce, still live and find employment in rural areas. Rural areas also provide crucial services to the whole economy, in particular by providing food supplies for all of the population. In addition, rural areas also contribute importantly to foreign exchange earnings from export of commodities. On the other hand, rural areas lag behind urban areas, both in terms of physical infrastructure as well as socio-economic welfare of its inhabitants. Strong evidence of this is that around 80% of all the poor in the country are found in rural areas. Although, in the long run, Indonesia will be more urbanized, and the rural areas can be expected to diminish, this still calls for a more focused attention and more rigorous effort in rural development (Suryahadi et al. 2006a), and this gives us a comprehension in examining that agriculture sector has contributed to strengthen staple food in the country and at the same time, the sector also creates the export earnings.

Indonesia is experiencing economic and social shocks of unprecedented severity. Output has contracted, and inflation and unemployment rates have soared. The status of health and education has greatly deteriorated. These facts are sharply in contrast with the picture in the recent past when Indonesia has seen high growth, low unemployment and visible improvements in many indicators of social development. The crisis threatens to reverse many of the past achievements. However, efforts are being made by the government and international community to minimize the damage. Despite the Indonesian economy's contraction by 13.7% in 1998, the agriculture sector did not decline. This draws attention to the expansion of agriculture as one of the main ways to overcome the crisis. The agricultural sector functions as a 'social safety valve', by absorbing some of the retrenched labor, as well as new entrants to the labor force unable to find work in urban areas. Farmers appear to have responded by hiring more than the usual amount of labor at lower wages (Daryanto 1999).

During the crisis, however, the agricultural sector was the only sector that still recorded positive growth, while the other two sectors as well as the total GDP decreased. In 1998, when the real output shrank from the level in the previous year by an unprecedented magnitude of 9.2% in the industrial sector and 19% in the services sector, the output of the agriculture sector fell only slightly, by 0.7%. In the following year, the agricultural sector led the recovery by growing positively at 2.1%, helped by the industrial sector which grew by 1.4%, while the services sector was still in negative growth territory. By 2002, the industrial and services sectors had rebounded, reaching a level slightly higher than their 1996 levels, while the agricultural sector continued its trend of relatively lower growth (Suryahadi et al. 2006b), and this phenomenon, however, persuasively shows that the agriculture sector has been contributing to Indonesia's GDP.

Therefore, the expansion of agricultural sector needs a suitable economic policy due to its crucial role in Indonesian economy. Daryanto (1999) pointed out some features of agriculture. <u>First</u>, provision of adequate basic need commodities (which include agricultural products) is a strategic priority of the government in order to preserve the conditions of stable rule and legitimacy. <u>Second</u>, the low proportion of imported inputs in the agriculture sector means agriculture has not been as badly affected as other sectors by the crisis. Mounting food imports and foreign exchange constraints have increasingly turned attention towards the need to expand food production. <u>Third</u>, the agricultural sector functions as a 'social safety valve', by absorbing some of the retrenched labor, as well as new entrants to the labor force unable to find work in urban areas. Fourth, the agriculture sector can make useful contributions to foreign exchange either by raising a country's earning from exports or by producing agricultural import substitutes. The drastic currency depreciation provides increased opportunities for expanding traditional crops (such as coffee, tea, cocoa beans, fishery and forestry products). Fifth, the agricultural sector is an important potential source of demand for other sectors. A growing agricultural sector will stimulate the demand for industrial products. With increasing incomes in the agricultural sector, the effective demand for domestic manufactured goods would be bolstered.

F. Indonesian Agricultural Policy: A Brief Overview

Indonesia is among the agriculture countries in the world. Over the past three decades of development process (1966-1996), Indonesia was considered a successful case of development process including agriculture among developing countries, particularly to strengthen the food security. Hence, a number of government policies have supported the agricultural sector in Indonesian economy. In the other words, agricultural development through the policy instruments, however, has been one of the major programs in Indonesia's economic development. Suparmoko (2002) describes that in fact it has been several decades (since 1960's) that the Indonesian farmers enjoyed the input subsidies in the rice production. The policy was to encourage farmers to plant rice to increase rice production to meet the increasing demand of rice in the country. A specific agricultural scheme of input subsidies was introduced such as the provision of high yielding rice varieties which requires a lot of chemical fertilizer, insecticides, irrigation water; and other agricultural extension services. Until the 1980's the government provided heavy subsidies for fertilizer in order to ensure the use of fertilizer by the farmers. The government has heavily subsidized fertilizer, insecticides and farmer credits to stimulate rice production. However, in the mid 1980's insecticide subsidies were eliminated and imports of a number of insecticides were restricted. In the early 1990's integrated pest management programs were introduced in Java. The impact of the abolition of insecticide subsidies and the adoption of integrated pest management techniques was a decline in the application of chemical insecticides in the irrigated rice areas.

Fertilizer subsidies were significantly reduced in late 1990's and had almost been eliminated by 1997.

Moreover, Daryanto (1999) identified the dynamics of policies in improving agriculture sector in Indonesia as follows. To stimulate production and reduce the impact on farmers of the removal of fertilizer subsidies, as well as increasing the floor price of rice, the government reduced the interest rate in the subsidized farm credit program (KUT) from 14% to 10.5% per annum, and the ceiling on loans per hectare has been raised to Rp 2 million. The annual aggregate maximum value of subsidized loans has been set at Rp 6.9 trillion. Indonesia has implemented extensive general economic reform since the 1980s, including relaxation of foreign investment regulations, reduction in many tariffs and qualitative import restrictions, a more flexible exchange rate policy, and phasing out of price subsidies for many goods. But the agriculture sector and agricultural trade had been slow and limited during the pre-crisis period. The following is a listing of some significant reforms imposed through the IMF loan agreement that have a bearing on the agriculture sector:

(a) From February 1998, BULOG's[9] monopoly was limited solely to rice. This means its existing monopoly over the import and distribution of sugar as well as its monopoly over the distribution of wheat flour was eliminated.
(b) From February 1998, all restrictive marketing arrangements were abolished, leaving firms free to produce and export their products as they wish and as the market decides. The Indonesian Plywood Association (APKINDO) monopoly over plywood exports was eliminated, and the Clove Marketing Board was also eliminated from June 1998.
(c) From February 1998, all formal and informal restrictions to investment in palm oil plantation were removed.
(d) From February 1998, local content rules on dairy products were abolished.
(e) From April 1998, the ban on palm oil product exports was removed and replace with an export tax of 40%. A further reform package which was announced by the government on 1 December 1998 includes the following features:
(a) For the first time in 30 years, the private sector is permitted to import rice.
(b) Special market operations (OPK) for rice at subsidized prices are to be

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9 BULOG is *Badan Urusan Logistik,* the National Logistic Agency, a non-departmental agency in the country.

targeted to those with incomes below the official poverty line.

(c) The rates of rice subsidies are to be reduced once the agricultural sector has returned to normal production levels.

(d) Food subsidies for commodities other than rice are to be eliminated.

(e) Fertilizer subsidies are to be eliminated and their prices determined by market mechanisms.

By May 17, 2006 the Indonesian government issued the increasing of fertilizer price by 15% after subsidy withdrawal at the last few years. Then, the government also planned the export tax imposition on cocoa. This planning, however, became a lively debate in Indonesia. For example, ASKINDO[10] has reiterated its opposition to the planning. The reason is that the tax would be an additional burden to the farmers and it can reduce their income.

G. Indonesian Agricultural Commodity: Some Policies Impact Issues

Impacts of export tax policy. There are several previous studies on the policy. <u>Firstly</u>, we appreciate Susila's study in 2004 which very clearly focused on evaluation and projection of the impacts of CPO-export tax. Susila found that this export tax policy has had significant impact on industry. Within the time horizon 1994-1999 when the effective tax rate was around 13.33%, the mature area of oil palm plantation had been reduced by 2.56% per annum or around 37 000 ha per annum. This indicates that this policy had a substantial negative effect on investment in the industry. As a result of this negative investment effect, CPO production had also been depressed by the policy. It is estimated that the policy had caused a loss of around 0.81% of the total production or around 36 000 t CPO per annum. <u>Secondly</u>, Hasan, Reed & Marchant in 2001 persuasively showed that the imposition of an export tax has long-lasting, negative effects on competitiveness of Indonesian palm oil industry. In fact, the effect of an export tax was not immediate; it appears in the second month and reaches a peak in the fourth month after the export tax of Indonesian palm oil is imposed; and the effects remain long after that time.

<u>Thirdly</u>, export taxes on palm oil products also affected the coconut oil market. The major sources of cooking oil in Indonesia are copra (raw material for coconut oil) and crude palm oil. Palm cooking oil is used more than any

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[10] ASKINDO is *Asosiasi Kakao Indonesia*, the Indonesian Cocoa Association.

other cooking oil in Indonesia, accounting for about 75% of the domestic market, and it is also exported. Coconut oil covers about 17% of the local market. The tax on palm oil has diverted the supply of palm oil from exports to the local market, thus putting downward pressure on the price of coconut oil. Under this competitive pressure, many coconut factories closed down (Piermartini 2004) and in turn it creates unemployment.

Fourth, the Indonesian government also planned the export tax on cocoa, and it became a lively debate in Indonesia. Although this policy is not launched yet, but there are some studies which has assessed the impact of the policy. For instance, Arsyad in 2007 found that the policy (export tax by 5%) can decrease Indonesia export price for the exporter, then it strongly alleviates domestic price (2.51%). As a result, domestic price has a negative impact to the cocoa harvested area which is cultivated by smallholders, as the price does not fully satisfy them to expand their plantation area. Therefore, cocoa production will decrease 0.14% for South Sulawesi, 4.25% for West Sulawesi, 2.98% for Center Sulawesi, and 2.76% for East Java. Finally in national level, the decreasing of production in all research regions has a negative impact to decrease Indonesia cocoa production about 0.14%. Next implication of this condition is declining the Indonesia cocoa exports by 0.63%.

Impacts of fertilizer subsidy policy. There are some research findings on impact of the policy. In 2007, Arsyad in his research on Indonesian cocoa found that the policy (fertilizer subsidy of 15%) increased the cocoa yield in all research regions (South Sulawesi of 3.10%, Center Sulawesi of 0.34% and East Java of 8.30%), except for West Sulawesi. An increase in productivity causes cocoa production increasing on the range 0.38-8.63% in the regions. Put it in national ways, this phenomenon encouraged the Indonesia cocoa production by 1.93%. Furthermore, this condition also increased the national export by 1.00%. These positive impacts conveys a message that fertilizer subsidy as one of the agricultural inputs could be very strongly expected in increasing Indonesia cocoa exports and production.

This finding is consistent to Kariyasa’s conclusion (2003) on corn commodity. By using time series data and dynamic model, he found that the fertilizer price declining through subsidy will increase corn yield in Indonesia. One year later (2004), Arsyad, Sanim & Sinaga disclosed the same dynamic impacts (in sign, not magnitude) of the policy on the cocoa, too. Even though by picking up South Sulawesi Province only[11], they had very strongly suggestion to choose fertilizer subsidy policy rather than the others in encouraging Indonesia cocoa exports and production.

Impacts of oil price increasing policy. The policy (oil price increasing of 30%) decreased domestic cocoa demand. This indicates that oil price increasing can be expected to decrease domestic cocoa demand. As a result, domestic cocoa price depressed of 0.16%. Another ways, oil price increasing policy or price subsidy decreasing on oil can be expected to depress the price domestic even if the percentage is relatively low. This finding is consistent to Astana's study (2003) on Indonesian plywood. He pointed out that the price subsidy decreasing on oil can be expected to decrease plywood price in the country, although with small percentage around 0.75%. However, it should be noted here that according to Arsyad & Yusuf's assessments in 2008, the cocoa price decreasing has a negative impact to alleviate cocoa harvested area in the research regions i.e. West Sulawesi of 0.03%, Center Sulawesi of 0.31% and East Java of 0.02% due to the farmers did not interested to expand the area. Furthermore, this situation also has substantial impact to depress cocoa yield in West Sulawesi of 0.02%, Center Sulawesi of 0.01% and East Java of 0.15%. Its next implication is cocoa production in all research regions also depressed, except for South Sulawesi.

Put it in national ways, oil prices increasing policy indeed has a strongly negative impact to decrease Indonesia cocoa production by 1.04% per annum or around 1,725 Ton per annum which is contributed by smallholders of 88% or around 1,518 Ton (data in 2000). Similarly, the policy also has depressed cocoa exports by 1.03% per annum or around 2,247 Ton per annum. Then, if we convert it to the export value by using mean of world price, the policy is strongly losing by US$ 3.73 million per annum, a potential loss of foreign exchange components. This could be direction that, if we are constantly expecting to maintain the export and production sustainability, the government should avoid this type of policy in the next future.

Impacts of interest rates decreasing policy. Unlike oil price

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[11] During 1997-2000 this province has biggest contribution both total cocoa area and production in Indonesia. Since they calculated its share, for instance in 2000, they found that around 23.5% of national cocoa area and 32.83% of production were located in the province. It does mean the province plays an important role in Indonesian cocoa regulation, not only supply side but also its trade. That is the reason why the research deals with Indonesian cocoa, especially in selecting the research site always consider the province, whatever method being used, both the domestic and foreign researchers.

increasing policy, this policy (interest rates decreasing of 20%) can stimulate the cocoa farmers to expand their plantation area in all research regions, namely South Sulawesi of 0.66%, West Sulawesi of 1.58%, Center Sulawesi of 0.04% and East Java of 0.05%. In 2008, Arsyad & Yusuf has persuasively proved this. Then, they also found that the policy strongly push cocoa yield in each region or province. Therefore, cocoa production substantially increases of 7.14% in South Sulawesi, 0.82% in West Sulawesi and 0.03% in Center Sulawesi. In the macro level, this situation has a potential impact to increase the national cocoa production by 0.48% per annum or around 1,047 Ton per annum. Another impact possibility by increasing production is that the national cocoa exports also soar by 0.08% per annum or around 133 Ton per annum whose value about US$ 221,046

This finding is very strongly supported by some researchers. Firstly, it is consistent to Kariyasa's conclusion (2003) on corn commodity. By using time series data and dynamic model, he also found that an interest rates declining through subsidy can be expected to increase corn yield in Indonesia. Secondly, Mellor in 2004 explained that interest rates are particularly important to high rates of agricultural growth. Credit is needed to finance the agric-businesses that are vital to growth in the high value agricultural commodities. High interest rates inhibit that growth. Credit is also important to farmers to finance the high operating capital requirements for purchased inputs in horticulture and for animals in livestock production. Particularly if the government expenditure is substantially deficit the burden falls on the Central Bank to contain inflation with high interest rates. International organizations, perhaps with foreign capital flows in mind, generally favor high interest rates. That conjunction of pressures is deleterious to high rates of agricultural growth. It appears that macro policy in Indonesia is in fact moving quickly to lower interest rates.

Thirdly, Salam & Abbas (2004) in their research used Working Capital term. They pointed out that working capital is a cash used by farmers to run the rice farming; for example cash for buying chemicals, fertilizer, hired-labor costs, etc. In actual situation the farmers in the research sites get their working capital by various sources such as capital accumulation from the previous season, borrowing from other farmers, neighbors, and relatives or borrowing fertilizer, for instance from *Toko Tani*. Other forms of lending institution are government-supported credit and commercial credit issued by private and state banks. Their research also substantially supports Mellor's statements in 2004 that competition among credit institutions is also important. Many institutions with many branches lead to lack of scale economies. That must be managed by credit institutions offering a wide range of service, certainly including both lending and deposit mobilization in order to increase the scale of business. Again, the public sector, most likely the Central Bank needs to understand these rapid rising needs for financial institutions in the rural sector, and act to encourage the needed offering of competitive services. The government also has an important role in monitoring operation of the credit system and may need to take special steps to ensure a full range of credit institutions.

H. Policy Options for Poverty Reduction

In this sub-section, we will not try to engage in a frame of policy story for poverty reduction in Indonesia. The literature on an overview of policy story for it and its success as well as failures abounds with an advantage and weakness of each policy. Simply, it is very clear that the Indonesian government has done so much for the past in order to alleviate poverty. Rather, we will attempt to give the answer for the question, what then should we emphasize in Indonesian economic development in order to continue poverty alleviation, as it has been since three decades of development process (1966-1996)? In response it, there are two options offered which is strongly believed to be a way of pro-poor policy as well as generating growth and employment in the country:

i. Revitalizing Agricultural Development

Much of the growth in Indonesia in the medium term will still rely heavily on agriculture. Agricultural growth will also be the main engine for poverty reduction. Urban manufacturing is unlikely to recover soon the dynamism it enjoyed in the pre-crisis period. This puts a premium on increasing public investment in agriculture and rural development in general. The priorities are the re-allocation of resources to investments in rural infrastructure and social services (UNDP 2008). There are some who suggest that poverty can be fought indirectly but effectively through policies that support the trickle down mechanism of economic growth. The assumption here is that by investing in urban areas and the industrial sector, benefits will eventually filter down to the rural areas and therefore reach most of the poor. But evidence in many developing countries does not seem to support this notion. Benefits of urban-led development do not appear to have trickled down to the rural areas (Tambunan 2007). Furthermore, Tambunan explained that this implies that in countries dominated by rural economy or agriculture such as Indonesia, India and China, the growth center must be in the rural areas or started from agriculture. The assumption here is that rural development, including development of agriculture, has important positive effects on overall development. Improving income in rural areas necessarily spills over to improvement of income in urban areas. Many studies indeed show that in many developing countries, the largest growth in poverty reduction has occurred as a result of agricultural growth. The implication of this evidence is that agricultural growth is generally pro-poor.

When agro-business is added to primary agriculture, they account together for about 70% of all employment. Agro-industry is certainly critical for increasing agricultural prosperity. But agricultural development remains the essential foundation for the rise of agroindustry itself. Increasing agricultural output is tremendously important because it has strong multiplier effects throughout the economy (UNDP 2008). A 2005 DFID Policy Paper emphasized that agriculture at ‘the heart’ of poverty reduction’. Further, DFID pointed out that firstly, our approach to agriculture is based on the premise that agriculture’s importance to poverty reduction goes far beyond its direct impact on farmers’ incomes. There is a mass of evidence that increasing agricultural productivity has benefited millions through higher incomes, more plentiful and cheaper food, and by generating patterns of development that are employment-intensive and benefit both rural and urban areas. More importantly, it has provided the spur to economic development outside agriculture where growth and job creation are faster and wages higher. Secondly, making the transition to a more diversified and faster growing economy is the key to sustained poverty reduction for the world’s poorest countries. But it is increasing agricultural productivity that has allowed poor countries to make the initial step on to the ladder leading to prosperity. This is particularly the case for labour-intensive, small-scale agriculture with its strong links to growth in other areas. No poor country has ever successfully reduced poverty through agriculture alone, but almost none have achieved it without first increasing agricultural productivity (p.1).

Revitalize agriculture and increase agricultural productivity. That is also World Bank reminded in 2006. The bank pointed out that with almost two-thirds of poor household heads still working in agriculture, boosting agricultural capability remains essential for broad-based poverty reduction. Analysis shows that households working in informal agriculture are most likely to be poor, with increases in consumption associated with moving to formal agriculture. Yet agriculture in Indonesia is not doing well. Despite labor productivity remaining buoyant with the outflow of labor from agriculture, agricultural total factor productivity growth has been negative since the early 1990s, from annual gains of 2.5% in 1968-92 to annual contractions of 0.1% from 1993 to 2000. The government can contribute to increasing agricultural productivity through: boosting investment in key infrastructure, notably farm-to-market roads and irrigation, while widening local water management; encouraging and supporting diversification into higher value-added crops; working with the private sector to ensure that exports meet world standards; boosting expenditure on agricultural research; and redesigning the decentralized extension service to allow for greater involvement of the private sector and civil society. These efforts to improve agricultural productivity should also include development of better marketing and information systems for rural-based businesses. Efforts to speed up land titling and more broadly ensure appropriate forms of secure tenure throughout the country will also help.

Development of agriculture is also a fitting long-term strategy of poverty alleviation, as in Indonesia over 60% of the country's population lives in rural areas, and the majority of them make a living in agricultural activities. The most important component of policies towards development of agriculture is policy on the distribution of land. This is central to any assessment of poverty and income inequality. So, there is also a need to have policies that improve the functioning of labor and land markets in rural areas. The growth of rural factor markets may generate overall income growth and reduce rural as well as rural-urban inequalities, and so it may also reduce urban poverty (Tambunan 2008) as well as to be a source of pro-poor economic growth in Indonesia. Besides, UNDP in 2008 also pointed out that investment in agriculture remains essential to the development of Eastern Java and all non-Java islands. While Jakarta and West Java are the most industrialized areas of the country, agricultural development will be decisively important in the rest of the country. A greater focus on agricultural development, particularly outside Java, has the advantage of helping to mitigate regional inequalities and making direct contributions to poverty reduction. The move towards greater decentralization can help tailor investment to local needs but the central government has to retain a major responsibility for ensuring the equitable distribution of public resources across provinces.

A number of facts also shows that at least, first, the Indonesian agriculture provides export earnings and it gives a source of employment for millions of rural smallholder families which is very strongly associated with poverty rate. Second, when the peak of Asian economic crisis hit Indonesia in August 1998, rupiah per US$ hardest downwards (80% of its value), followed by remarkable inflation (also reached 80%), no economic sector had the best performance in the country, except the agriculture sector (Arsyad 2008). At the time, the export value of the sector grew quickly and the income of smallholder whose agriculture exports products also rapidly soared. Those phenomenon were affected by not only production side, but also a positively consequence of the Rupiah depreciation. Needless to say, smallholder enjoyed to those crisis impacts even though Indonesian economy stopped growing in general. Finally, what is made clear by these facts above is that revitalizing agriculture can strongly be expected as a leading sector and the way out of the crisis as well as the best route of poverty reduction in the country, that is, the best performance of agriculture growth at 'the heart' of Indonesian economic development.

ii. Reempowering SMEs

In 2008, UNDP recorded that the role of Small and Medium Enterprises (SMEs)[12] in generating growth, employment and poverty reduction is strategically important in Indonesia. SMEs in Indonesia employ over 73 million workers. However, although SMEs accounted in 2001 for over 99% of all 67 enterprises and over 99% of all employment, they accounted for much smaller shares of exports and GDP. For example, SMEs accounted for 63% of GDP in 2001. Large enterprises (only about 2,000 in number) contributed the other 37% of GDP. However, large enterprises contributed about 81% of all exports. The SME contribution of 19% was little changed from their 15% contribution in 1992. By comparison, SMEs in the Republic of Korea accounted for 40% of exports in 2001. Further, UNDP emphasized that these summary statistics underscore the importance of more pro-active public policies to promote SME development. The focus needs to be on raising productivity and wages. If successful, such policies could make a substantial contribution to reducing poverty. UNDP also recommended that a first

[12] Central Bureau of Statistics in Indonesia classified that small firms has less than 20 employees, medium is ranging 20 & 100 and large firms exceed 100).

step would be for the Government to establish an administrative unit that could coordinate all support to SMEs. In Japan, for example, such an institution is the Japan Small Business Corporation and in the Republic of Korea the Small and Medium Business Administration. In Indonesia, by contrast, there are at least six ministries (and the National Family Planning Board) that have some responsibility for SME development. But there is little coordination among them and considerable overlap in their programmes. Moreover, the programmes are poorly matched to the needs of entrepreneurs, many of whom are not even aware of them.

SME development, which is essential for employment creation, is closely tied to agricultural development since many inputs into SME production are based on agricultural and forestry products. With such strong backward linkages to the agricultural sector, SME manufactures are much less import-intensive than those of large enterprises. But agricultural prosperity will not only stimulate SME development through such supply channels; its income effect will also generate increased demand by the rural population for SME products (UNDP 2008). Then, UNDP identified that a major constraint on SME development is their lack of ability to develop overseas markets on their own. This is a major reason that their share of exports is less than 20%. Another part of the explanation is the privileges enjoyed by the economic elite that controls the large corporations in the country. Government could boost the growth of SMEs through more active export promotion of their products. It could also encourage import substitution of products in which they are competitive.

These above considerations becomes a principal reason why we are proposing a policy frame to reempower SMEs as the next alternative for creating employment as well as fighting poverty in the country.

I. Conclusion Remarks

This paper deals with an essential role of agriculture in Indonesian economy as well as poverty reduction. The main findings are that (i) besides strengthen staple food security, agricultural sector still plays a crucial role in absorbing the labour force. The negative impact of quickly growth of labour force on unemployment can be secured by agriculture (source of employment); (ii) although agricultural sector is not single factor to alleviate poverty, but since almost 70% of the poor nation works in rural agriculture, however, the sector should be resticked in

Indonesian economy and it can be a way of pro-poor policy. Similarly, since the Small and Medium Enterprises (SMEs) is closely to agriculture (many raw materials of SMEs are based on agriculture product), reempowering SMEs is also strongly considered to be the next routes in generating growth and employment as well as combating poverty in the country.

References

* Indicates the downloaded year. The year of publication is not available on the full-text.

Abimanyu, Y., 2008*. Sectoral Contribution to Indonesia's Economic Recovery: The Potential of Agriculture and Agribusiness (11 pages). [http: www.tcf.or.jp/data/20000127_28_yoopi_abimanyu.pdf].

Arsyad, M., 2002a Monetary Policy: Reflections of Inflation Targeting 2001. Journal of Kinerja, 2 (3):15-27.

Arsyad, M., 2002b. Contribution of Cocoa Sector on Economic Performance in Southeast Sulawesi Province, Indonesia. Unpublished. Term Paper in Agricultural Development Planning. Second Semester 2002/03. Graduate School, Bogor Agricultural University (IPB), Bogor.

Arsyad, M., B.Sanim, & BM. Sinaga, 2004. The Impact of Fertilizer Price and Devaluation on Cocoa Exports and Production. Journal of Forum Pascasarjana, IPB, 27 (3):255-269.

Arsyad, M., 2004. The Impact of Economic Policies on Cocoa Exports and Production in South Sulawesi Province, Indonesia. Master Thesis. Graduate School, Bogor Agricultural University, Bogor. Unpublished.

Arsyad, M., S.Yusuf, Hasnah, B.M.Sinaga, & H.Siregar, 2007. Evaluation of Government Policy Impact on Indonesian Cocoa Exports and Production Post Uruguay Round. HIBAH PEKERTI Research. Depdiknas, Jakarta.

Arsyad, M., 2007. The Impact of Fertilizer Subsidy and Export Tax Policies on Indonesia Cocoa Exports and Production. Ryukoku Journal of Economic Studies, 47 (3):1-21.

Arsyad, M & S. Yusuf, 2008. Assessing the Impact of Oil Prices and Interest Rates Policies: The Case of Indonesian Cocoa. Ryukoku Journal of Economic Studies, in print.

Asian Development Bank, 2002. Technical Assistance to the Republic of Indonesia for Agriculture & Rural Development Strategy Study. ADB.

Asian Development Bank, 2004. Country Economic Report: INDONESIA. Asian

Development Bank, CER: INO 2004-22.

Booth, A., 2004. The Changing Importance of Off-Farm Income for Agricultural Households in Indonesia [in The Indonesian Rural Economy: Mobility, Work and Enterprise]. Edited by Thomas R. Leinbach. Institute of Southeast Asian Studies, Singapore.

Bruntrub, M. & Heidhuez, F., 2002. Subsistence Agriculture in Development: Its Role in Processes of Structural Change. Discussion Paper. Center for Agriculture in the Tropics and Subtropics, Institute of Agricultural Economics and Social Sciences in the Tropics and Subtropics. Beuren.

Center Research Institute for Estate Crops (CRIEC) & World Bank. 2002. The Performance Analysis of Cocoa (Report Studies on Smallholder Tree Crops Production and Poverty Alleviation). CRIEC-World Bank.

Daryanto, A., 1999. Indonesia's Crisis and the Agricultural Sector: The Relevance of Agricultural Demand-Led Industrialisation. UNEAC Asia Papers, 62(2): 61-72.

DFID, 2005. Growth and Poverty Reduction: the Role of Agriculture. Department for International Development. London.

DFID, 2007. DFID Indonesia Country Assistance Plan Preparation: Growth Analysis. Department for International Development. London.

Hasan, M.F., M.R. Reed & M.A. Marchant, 2001. Effects of an Export Tax on Competitiveness:The Case of the Indonesian Palm Oil Industry. Journal of Economic Development, 26 (2):77.

IFAD, 2007. Enabling the Rural Poor to Overcome Poverty in Indonesia. IFAD, Rome.

Kariyasa, I.K., 2003. Keterkaitan Pasar Jagung, Pakan dan Daging Ayam Ras di Indonesia. Tesis Magister. Sekolah Pascasarjana, IPB, Bogor.

Kawamura, Y., 2002. Role of Social Statistical Analysis in Participatory Rural Community Development Programs for Poverty Alleviation; Case of JICA Project in South Sulawesi, Indonesia. JICA Commissioned Report.

Lucich, M., Bon, N.D. & Houston E., 2008*. The Indonesian Economy after the Boxing Day Tsunami and Treasury's Role in the Government Partnership Fund.

Mellor, J.W., 2004. Agriculture and Development Process. Paper Prepared for the Conference on Agriculture Policy for the Future. Hosted by Bappenas, FAO and UNDP, organized by UNSFIR, 12-13 February. Jakarta.

Piermartini, R., 2004. The Role of Export Taxes in the Field of Primary Commodities. World Trade Organization. Geneva.

Salam, M., & R. Abbas, 2004. The Profitability and Competitiveness of Rice Farming in Polmas District, South Sulawesi, Indonesia. Ryukoku Journal of Economic Studies, 44 (2):105-127.

Suparmoko, 2002. The Impact of the WTO Agreement on Agriculture in the Rice Sector. Paper Presented at the Workshop on Integrated Assessment of the WTO Agreement on Agriculture in the Rice Sector, Geneva.

Supratikno, H., 2008*. Indonesia Economic and Business Outlook: 2007 and Beyond. [http: //www.iseas.edu.sq/rof07hs.pdf]

Suryahadi, A., D.Suryadarma, S.Sumarto & J. Molyneaux, 2006a. Agricultural Demand Linkages and Growth Multiplier in Rural Indonesia. SMERU Research Institute. Jakarta.

Suryahadi, A., Suryadarma, D., & Sumarto, S., 2006b. Economic Growth and Poverty Reduction in Indonesia: The Effects of Location and Sectoral Components of Growth. SMERU Research Institute. Jakarta.

Susila, W.R., 2004. Impacts of CPO-Export Tax on Several Aspects of Indonesian CPO Industry. Oil Palm Industry Economic Journal, 4 (2):2.

Tambunan, T., 2007*. Agricultural and Poverty Reduction in Indonesia (28 pages).
[http: agriculture-poverty_jejaki2.pdf].

Tambunan, T., 2008*. Urban Poverty and Social Safety Net in Indonesia. Research Institute, Indonesian Chamber of Commerce & Industry. Jakarta. [http://www.gdnet.org/fulltext/tambunan.pdf].

Thee, K.W., 2008. Indonesia's Economic Development During and After the Soeharto Era –Achievements and Failings. Paper Presented at the International Workshop for the Stocktaking Work on Asian Experiences of Economic Development and their Policy Implications for Africa, 5-6 February. JICA and JBIC, Tokyo.

World Bank, 2004. Economic and Social Update: Consultative Group on Indonesia, Mid-Year Review Meeting. World Bank (WB), Jakarta.

World Bank, 2006. Making the New Indonesia Work for the Poor. WB, Jakarta.

United Nations Development Programme (UNDP), 2008*. The Macroeconomics of Poverty Reduction in Indonesia: An Independent Study. UNDP.
[http:www.undp-povertycentre.org/publications/reports/Indonesia.pdf]

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