

## AGRICULTURE DEVELOPMENT PROGRAMS FOR POVERTY REDUCTION EVIDENCES FROM INDONESIA AND CHINA - COMPARATIVE STUDY CASE

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### ABSTRACT

The purpose of this paper is to provide an overview description of important differences in agriculture development China and Indonesia in poverty reduction efforts in rural areas and some strategy. Obviously with the view of some of the existing literature by presenting data and facts or opinions with the collaboration of several institutions associated with the topic. This paper will provide an objective picture of the development from agricultural sector level of evidence both Indonesia and China. China and Indonesia is agriculture based country with a program of integrated rural development as a whole to be a target of poverty reduction programs. Several agriculture programs related to poverty reduction has been launched and have a good impact or significance, especially in China that is able to reduce extreme poverty from 30% in 1978 to less than 3% in 2008. Certainly many lessons can be obtained from this success, especially the concept and strategy development in rural China to be a reference of other States in its development model, especially for poverty alleviation programs.

### Contribution/ Originality

The main contribution off this paper is give an example literature of the comparative study in term of poverty reduction at rural development. The aim of the paper is to contribute an overview description of important differences in agriculture development China and Indonesia in poverty reduction efforts in rural areas and some strategy.

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## 1. INTRODUCTION

China and Indonesia are generally regarded as the two large countries in the developing world that are the “success stories” of developing countries from agricultural sector. The agricultural sector became the leading sector capable of contributing to the development, especially in rural areas. This success has been defined by the high and sustained rates of growth of aggregate and per capita national income; and the substantial reduction in income poverty.

Agricultural development has a strategic role for the country to exist a country that is viewed by other Countries as a country that successfully eliminating poverty with an average growth rate of high development. Thirty year ago, China and Indonesia were considered two of the world’s poorest countries with very poor people located high within the rural areas mainly in agricultural sector as a spine with an annual per capita income of only US \$ 50. Since then, it has made great strides, achieving an average GDP growth of almost 7% per year, a growth performance that ranks among the ten fastest in the world, and is on a part with that of the dynamic Asian economies. During this period, Indonesia has moved from being a low-income country to being a middle income one but China’s growth much faster and is becoming a rich country.

The Government of Indonesia and China have launched several agricultural development programs based on poverty alleviation in rural areas. Programs for poverty reduction at the provincial level that have the similar patterns of development involving local government agencies at the provincial government to the village level occur in both China and Indonesia. Already there have been many policies or programs developed for poverty reduction in China and Indonesia, at the level of implementation, especially the contribution to poverty, where the contribution of the agricultural sector has an important role in both countries.

## 2. MATERIAL AND METHOD

This study uses quantitative data collection techniques/methods at the national level by reviewing existing literature related to supporting research and also in combination with a descriptive qualitative, graph analysis and cross tabulation method in which data collection techniques include: (1) Desk Study with depth Literature review sources data from national Journals, international journals, Bulletins, Proceedings, Monographs, International reports, newspapers, Internet and academic books. (2) Observation methods is calculated data showed by Chart, Graph and table in detailed of relationship, Phenomenon, inquisitive, compare, generalize, Ideas for agriculture development between China and Indonesia in order to effect poverty reduction n. (3) Secondary data or documents review from several resources and various institutions such as: Central Bureau of Statistics (BPS); National Bureau of Statistics of China; Agriculture Ministry of Indonesia and China; Agricultural census book: Chinese statistical yearbook; International Organization Data sheet like FAO, World Bank, UNDP etc.

## 3. RESULT AND DISCUSSION

### 3.1. Comparative strategy and policy agriculture development for poverty reduction

As we know policies that have been particularly important for Poverty Alleviation are agricultural policy, educational policy, and family planning policy. In this chapter, we will discuss about agriculture policy, especially in China and Indonesia, which certainly contributes to economic development and poverty alleviation in both countries. The fundamental difference as a critical point of the table below illustrates how the policies that contribute directly to the wheels of government in China and Indonesia, which applies to the rule contributed directly in agriculture and rural development. In the table below is a simple analysis of the condition of agriculture development policies that would provide a direct contribution to development in rural areas and

provide a direct impact on poor communities in these rural with the every program run by the government either China or Indonesia.

Agricultural development in Indonesia is arguably a significant determinant of growth in other sectors of the economy. During three decades of palpable economic progress, the agriculture sector, which is expanded mostly by smallholder activity, propelled the Indonesian economy through forward and backward linkages and through demand creation [Siregar and Suryadi \(2006\)](#). [Daryanto and Morison \(1992\)](#) found that the consumption linkage effect of the induced growth in the agricultural sector represents a more potent inter-sectoral influence than the production linkages of agricultural growth. The Indonesian case study [Rada and Regmi \(2010\)](#) argues that conscious policy stimulus to agriculture was the key to the country's 30-year record of rapid, pro-poor growth (from 1967 to 1997), and that the model of smallholder agricultural development used by Indonesia is quite general. The Indonesian model is explicitly set in the broader historical literature on the role of agriculture and economic development that has been generated by successful countries not burdened with highly skewed land distributions as a starting point for their development.

Development of the country, especially the development is inseparable from how to carry out this orders to share strategies and policies relating to rural policies an usually touching the grass root that can certainly provide impact also on the alleviation of poverty. In connection with this study of course this chapter is really important to know how the growth of agricultural development in China and Indonesia in relation to policies and strategies for each country can apply at the national level as well as to the level below with reference to the data's and existing literature. Various aspects in comparing the two countries both China and Indonesia would be measured in this study how the data is showing good growth characteristics, policy strategies in the agricultural sector directly related to rural poverty alleviation is the evidence from China and Indonesia.

**Table 1: Comparison some critical point of policies and development of agriculture in China and Indonesia by period**

Period	Critical Point	Indonesia	China
1950-1970	Physic Program vs. Land social reform	Infrastructure program and intensification	Land Reform Policy
1970-1980	Base on agriculture Vs. Land Tenure and Commune	Expansion intensification, technology, Irrigation, extension reform	People's commune system reform and Agricultural land tenure change
1980-1990	Decrease Vs. Increase	Decrease financial support agriculture, liberalization policy for industry	Agricultural market policy (rural market policy), circulation system of agricultural products, protection price
1990-2000	Economic crisis Vs. Stable economy	Removal pesticide and fertilizer subsidy, high banking interest rate	rural industrial structure, macro-regulation on agriculture
2000-present	Decentralization Vs. Centralization	Decentralizations including agriculture policy	San Nong Policy, rural taxes and fees, Four Subsidies" and "One Premium,

Source: [Liu et al. \(2008\)](#), [Oktaviani et al. \(2010\)](#)

[Keith and David \(2010\)](#) conducted a study about the special issue on agricultural productivity growth: a closer look at large, developing countries that the country compares China and Indonesia with the various indicators and important issues in the productivity and agricultural policy. From the data we can see how it compares with the value percentage average annual growth rate from year 1978 - 2004, the indicator shows the total output of China's growth rate is higher with the

Indonesian compared different the difference of that about 0.57% per year and correlated positively with the total average input growth is also higher than China and Indonesia with 0.47 % difference in calculation of course this is not distinct far as the total input and total input addressing relative figures do not differ much.

The next indicator according to [Keith and David \(2010\)](#), they decomposing the sources of output growth in two ways: first, they divide this growth into the part due to resources (inputs) expansion and the part due to Total Factor Productivity (TFP); and Second, They decomposing output growth into growth in the agricultural labor force and output per worker. Growth in farm output per worker is decomposed into further growth in cropland per worker, non-land growth in other inputs per worker, improvement in average schooling of farm workers, and growth in TFP.

Table 2 showed that TFP has 1.80% and 1.70% in China and Indonesia respectively, that is statistically not different from average annual growth. As for the number of workers in the agricultural sector shows the relative numbers are no different from China in fact smaller than that of Indonesia this is because the number of workers in the balance with the production machinery is very high relative growth compared with the opposite number of workers in Indonesia are not balanced with the machine and also on indicators of output / worker precisely in Indonesia is also greater because Indonesia is able to add cropland in various islands such as Kalimantan and Sulawesi islands and other islands into the agricultural land but instead will tend to stagnate in china there is no growth at all. At the output capital / worker China shows the number is much higher than Indonesia, where a significant annual average rate is reached 2.30 % Growth, while Indonesia is only 0.8% this is due in rural economic in china able to grow and develop much better with effective policies implemented by the Chinese government through economic reform, rural markets form many enterprise in rural or agricultural sector to turn the wheels highly in the rural economy. Output per worker grew rapidly in China and Indonesia, the which a sharp decline Also Experienced in national poverty rates about 30 percent in the period from 1978 - 2004. This was shows how the importance of growth in the national the agricultural sector capable of providing significant contributions to the alleviation of poverty because in both countries the poor population mostly located in rural areas.

**Table 2: Sources of growth in agriculture in china and Indonesia 1978-2004**

Indicator	Average annual growth rate (%), 1978–2004	
	China	Indonesia
Total output	4.60	4.03
Total inputs	2.80	2.33
Total factor productivity (TFP)	1.80	1.70
Workers*	0.30	0.80
Output/worker	4.30	3.24
Cropland/worker	0.00	0.46
Capital/worker	2.30	0.83
Education (schooling)	0.20	0.25
Percent reduction in poverty, mid 1980s to 2001–2003**	30.0	31.6
Agricultural research spending as percentage of agricultural GDP		
1971–1975	0.36	0.24
2001–2003	0.49	0.21
Periods of major agricultural policy or institutional reforms	1979–82	1966–69 1997–98
Periods of major macroeconomic reforms	1977–78 1984–92	1983–88 1997–98

Source: [Keith and David \(2010\)](#)

**Note:** \* The number of agricultural workers is measured in constant-quality units after adjusting for changes in the average years of schooling of the national labor force. Capital inputs include animals, machinery, seed, feed, and fertilizer

\*\* Poverty is measured as the percentage of the national population subsisting on less than PPP\$2/day (World Bank 2007)

The agricultural development policy cannot be separated from government policy in allocating funds to the areas of research and development primarily because of agricultural science with research we can produce the technology or resources that can improve productivity, efficiency and product, which become tools and benchmarks in each of the programs in held by government. Here the fundamental difference between China and Indonesia on this below Chinese data have average annual growth rate figure of 0.36% and Indonesia had a rate of 0.24% in the period 1971 to 1975 and other periods in the period 2001 to 2003 china rose to 0.49 %. While Indonesia dropped to 0.21%, just a situation that was actually less favorable for agriculture sector in Indonesia due to the declining percentage of the funded for agriculture research and development that could become weapons could contribute to the technology, programs, and policies in the agricultural sector.

### **3.2. Status and achievement of agricultural and rural development in China and Indonesia**

Agricultural development in China and Indonesia during the last three decades has been a success story. The impressive growth performance of the sector contributed substantially to the achievement of China and Indonesia's development objectives: food security, low and stable prices, generation of employment and foreign earnings/savings. China and Indonesia is an excellent example regarding the role of agriculture in economic development.

Agricultural production from two countries is quite encouraging achievements show this contribution to the agricultural GDP world where China could provide a significant contribution to the average above 15% while Indonesia is able to contribute to the range - average 2.40 %. The Agricultural growth in China each year shows was a significantly increasing since almost 30 years ago with economic growth at a relatively stable and a drastic increase while the rate of growth in Indonesia has a relatively less stable. Whereas Indonesia has experienced the economic crisis in 1998 which resulted in economic growth which of course affects the sloping agricultural sector but also will tend to rise after a period of year 2000's.

China experienced significant improvement in the agricultural sector of which the period of the 1990s, agricultural policy among the rural market program, the government introduced a set of adjustment policies, the third regime, starting in 1990 (OECD, 1995). Apart from constraints on the development of rural industry, the government implemented further reform in the grain sector, aimed at phasing out the old centrally planned purchase and supply system in favor of more market-oriented solutions. For example, purchase and selling grain prices were equated, i.e., grain and oilseed price subsidies to urban dwellers were eliminated. Further, interregional grain transfers that had been previously arranged by the central government were now replaced by a contract system between provincial governments. The government reformed the input supply system by removing subsidies and allowing private firms to supply inputs to producers. In addition, the system of in kind supplies of fertilizers and fuel for deliveries of grain and oil crops to the country agencies was converted to monetary payments. These policy measures aim at partially substituting governmental interference in markets by functioning market forces, thus to avoid government failure due to information problems. However, market reform in agriculture remained incomplete, reflected by the different degrees of price and quantity controls in different sub-sectors (grain, cotton and oil crops vs. livestock and vegetables), by the segmentation of regional agricultural markets, and by the isolation of domestic markets from international markets.

Despite the fact that Indonesia has an agricultural policy with the result according to the data show characteristics of sloping Slowly increase production from year to year but capable of self-

sufficiency in rice in 1985 with programs and policies of the government on agricultural intensification and extension that developed at that time but returned to fade in period of 1998 due to global economic crisis that hit Indonesia effect on the agricultural sector this is also supported by the opinion of [Piazza and Julia \(2010\)](#). Economic Transformation in Indonesia had been relatively slow even before the country was hit by the monetary crisis in 1997. Prior to the crisis, the contribution of agriculture to GDP decreased from 17.9 per cent in 1993 to 14.9 per cent in 1997, but it Increased During the crisis to 17.1 per cent in 1999. In line with the economic recovery process, the contribution of agriculture to GDP declined to 15.9 per cent in 2002. On the other hand, the contribution of the manufacturing sector has been gradually Increasing; from 22.3 per cent in 1993 to 26.6 per cent in 2002. Indonesia has implemented extensive general economic reform since the 1980s, relaxation of foreign investment including Regulations, reduction in many qualitative tariffs and import restrictions, a more flexible exchange rate policy, and phasing out of price subsidies for many goods. Nevertheless, the agriculture sector and agricultural trade had been slow and limited.

China and Indonesia is a country that has a large population of mainly rural population of China in global unity, while Indonesia is the fourth after India and the United States, the data above we can see the condition of rural populations in China and Indonesia in the years 1987-2007 the most represents the farmers or working in the agricultural sector. Rural population in China is very high and is the world's largest rural population reached 815 million people in 1987, while Indonesia is only around 121 million, of course, a resource that should be a boon for a country, but even when people in villages own many of the polemics in the face various problems, especially poverty. From a large population of China and Indonesia is largely a rural population which, according to data on China in 1987 amounted to 75.24% and with a very dominant development started in rural areas could reduce the number of people in rural areas amounted to 56% in 2009 while Indonesia also decreased significantly the number of people from the beginning of 1987 from 72.1% of the total population dropped 24, 68% to 47.42% at the same time over 22 years. This shows the performance of government programs that address the reduction of population and development in rural areas, especially agricultural work well with the decreasing population in rural areas as indicators of success and poverty alleviation in both countries.

### **3.3. Contribution of agriculture to economic development in China and Indonesia**

Economic growth in Indonesia and China cannot be separated from the contribution of agriculture sector in the economic structure of both countries. The agricultural sector into other sectors pedestal base or both industry and services to grow and this is also true in China and Indonesia. The data below shows the economic growth of both countries could be a pretty picture of how the importance of the agricultural sector as a power for development.

The contribution of agricultural GDP per capita of the agricultural population of countries between China and Indonesia as a national show differences mainly due to the population encountered in the agricultural sector. National Agricultural GDP or GDP of China was actually much bigger than Indonesia, because GDP per capita of course inversely proportional to the population especially in rural areas. There is a stable tendency of increase of both countries by the year in 1994 - 2007 which China could increase the per capita GDP of the agricultural population of 181 dollars to 285 dollars, while Indonesia is able to show the performance increase is quite stable in the year 1994 to 1996 is 264 dollars and rose to 365 in 2007.

In point of GDP per capita in China and Indonesia in the period in 1994-1996 showed that numbers do not differ much between the two countries where China actually smaller than Indonesia, there is little difference of \$ 53 constant 2000 prices. But china driving very fast with per capita GDP exceeded Indonesia in the period 1999-2001 this is because China is very rapid development in other sectors like industry and services but Indonesia still depend on agricultural sector of at least the industrial sector is Slowly grow and Also That reason in period Indonesian

economic crisis have financial problems make suffer and grow stagnant. This is supported by the opinion of share of GDP of industrial sector in national GDP fluctuated Between 1970 and 1985, Increasing gradually after the late 1980s and rose from 41% in 1990 to 49% in 2007. In contrast to agriculture, the sector expanded rapidly. The share of service sector in national GDP increased from 13% in 1970 to 21% in 1980 and 40% in 2007. This trend is expected to persist in the coming years as China continues to promote its structural adjustment policies and economic Reforms in response to domestic demand and external trade patterns changes.

In the case in china there is a shift from agricultural to industrial and service sectors as well as Indonesia experienced it but fluctuated very varied and tend to speed very slowly in accordance with the opinion of The growth rate of the agricultural sector has fluctuated around an average growth rate of 2.4 percent per year before the crisis (1993-1996) and 1.4 per cent per year post-crisis (2000-2002). The growth rate of the manufacturing sector fluctuated also before the crisis but it was much higher than that of the agricultural sector.

The growth rate of the manufacturing sector which has declined since the crisis, Indonesia's indicates its relatively slow economic recovery. Also this is indicated by the average growth rate of GDP, 7.6 per cent per year before the crisis, and 2.6 per cent per-year post-Crisis. Consequently, the growth rate of GDP per capita in local currency decreased from 5.9 per cent per year before the crisis to 3.3 percent per year after the crisis. GDP per capita, in U.S. \$ terms, fell dramatically from U.S. \$ 862 per capita on average in 1993-1996 to an average of U.S. \$ 211 per capita in 2000-2002 [Piazza and Julia \(2010\)](#).

Economic growth in China and Indonesia from the agricultural sector shows a relatively has stable rate over the same period except in 1997-1998 when the economic crisis hit Indonesia. The data above shows the indicator Agriculture value added per worker (constant 2000 US \$) Chinese figures show a relatively lower compared with Indonesia because the number of workers in the agricultural sector in China far more appeal in Indonesia so that the value added automatic per worker go low. Average value of value added per worker in both countries tend to rise from year to year and has a positive impact to the economy and rural development, especially reducing poverty becomes a very difficult disease to be cured in rural areas.

### **3.4. Comparison of agriculture production China and Indonesia**

Agricultural production of in the country is an important indicator of development will surely become a benchmark of success of development for the agricultural sector. China and Indonesia has increased agricultural production from year to year becomes the priority in development, especially staple food. Increasing agricultural productivity, including yields for staple crops, will from be critical in Countering pressures for agricultural protection. Staple crops are still the largest agricultural sub-sector.

China's and Indonesia Agriculture has gone undergone since the early 1980's. Rapid economic growth, urbanization and market development are major factor in the changes, rising income and urban expansion have increased the demand almost all agricultural product food staple although non-staple food. That change has stimulated sudden shifts in the structure of agriculture to industrialization agricultural sector especially in China.

Total production for some commodities important in China and Indonesia are relatively quite high enough where China dominates the numbers, especially on food crops, fruit vegetables, tea, cotton and tobacco this is possible with a total land area is much larger production and development of production fruit and vegetable centers, especially growth in china both small and large scale. For the tea plantations, tobacco and cotton china showed significant differences compared with Indonesia this is because the resource potential for all three commodities were much better, especially the seeds are available and land is much greater than Indonesia. Productivity

commodities in Indonesia should be entitled a higher amount than the china is there on the commodity coffee, cloves, cocoa, coconut and oil crops. Some of these commodities are commodities from Indonesia who would be a contributor to country revenues, especially in the agricultural sector. For Indonesian coconut significantly different from China because Indonesia is an archipelagic nation every beach and coconut-producing regions almost become country land, while China is a very small area is a coastal region. Interesting phenomenon in oil commodity crops where the china in the period 1987 – 2004 showed a much higher production compared with Indonesia, there is a declining trend after 2005 which is still in the domination of its oil production from bean plants and seeds - seeds which remained a food crop, in the year 2005 production figures could be surpassed by Indonesia this is because Indonesia is an exporter of the world's first vegetable oil and commodities which have spread in almost all provinces, especially in Sumatra and Kalimantan, namely palm oil which was developed by the government and multinational companies for both domestic demand and abroad.

Productivity is a centrally important issue in economics because it is one of the principal determinants of economic welfare. Analysis of agricultural productivity has a special place in agricultural economics because of the large dependency on natural resources in this sector and periodic concerns that we may be reaching limits in natural resource capital available for food production. The sharp rise in agricultural commodity prices over 2007–2008 elevated concerns of global supply and demand imbalances—that the rising demand for grain from the increasingly larger and wealthier world population and from the newly emerging biofuel industry was outstripping the ability of farmers to raise production, thus leading to a permanent era of higher real agricultural prices [Keith and David \(2010\)](#).

### **3.5. Agriculture development and its impact to poverty alleviation in China and Indonesia**

Indonesia and China have significant economic growth from the agricultural sector before the era of 90 'but the growth of agriculture will be the backbone of the economy towards industry, the GDP of agriculture in total GDP which from 1994 -1996 agriculture GDP showed no significant differences in which China and Indonesia showed 16.1% and 15.1% on declining share of agriculture in total GDP, especially towards China due to changes in this industry in line with the opinions of [Huang et al. \(2004\)](#) While China's past record of economic growth and poverty reduction is impressive, there are still great challenges ahead. The agricultural growth rate has declined since the late 1980s. Rising input levels in many areas of China and diminishing marginal returns mean that increasing inputs will not provide large increases in output. Water shortages and increasing competition from industry and domestic use for the remaining scarce supplies do not provide much hope for large gains in area or yields from new irrigation expansion. In the future, many have predicted that almost all gains will be productivity driven and these will have to come from second- and third- generation Green Revolution technologies. The poverty impact of growth in the agricultural sector will thus depend increasingly on the poor connecting to these new growth processes, either as smallholders or as laborers. Vertically integrated supply Growth and poverty reduction in agriculture's three world's chains may pose particular challenges for them although recent evidence from China suggests that small and poor farmers take an active part in China's rapidly expanding horticulture economy.

According to [Pasandaran and Rantetana \(2003\)](#) overall economic growth explains much of China's record of success in poverty reduction since 1990. Both over time and across provinces, growth in per capita GDP has been closely associated with the pace of poverty reduction. Available evidence also confirms that the impact of aggregate growth on poverty in China has been substantially influenced by the regional and sectoral composition of that growth. Slower-than-average growth in poor regions explains in part the increasing regional concentration of poverty. In addition, uneven growth in agriculture, the main source of income for the rural poor, has contributed to differences in the rate of poverty reduction. Poverty reduction has been slower where agricultural growth has lagged, and faster where agricultural growth has more or less kept pace with that in other sectors.

For these reasons, macroeconomic policies that promote growth, especially those that promote efficient agricultural growth and that target regions with high concentrations of poor such as the recent infrastructure investment program, should be seen as highly complementary to microeconomic poverty interventions.

**Table 3: Relationship from Agriculture development and poverty indicator such as Number of Poor People (million), Percentage of Poor People, (%) Agriculture annual growth (%), Agricultural GDP (Million \$ constant 2000 prices)**

Year	Number of Poor People (million)		Percentage of Poor People (%)		Agriculture annual growth (%)		Agricultural GDP (Million \$ constant 2000 prices)	
	China	Indonesia	China	Indonesia	China	Indonesia	China	Indonesia
1978	250,00	47,20	30,70	33,30	4.1	5.2	*	*
1980	*	42,30	*	28,60	-1.5	6.92	*	*
1981	*	40,60	*	26,90	7	4.80	*	*
1984	128	35,00	15.1	21,60	12.9	4.62	*	*
1987	125,00	30,00	14,8	17,40	4.7	2.1	*	*
1990	85,00	27,20	9,40	15,10	7.3	2.8	*	*
1993	70,00	25,90	7,70	13,70	4.7	2.1	*	*
1996	65,00	39,30	7,10	17,75	5.1	3.1	152,494	23,981
1997	49,62	34,01	5,40	17,47	3.5	1.0	*	*
1998	42,10	49,50	4,60	24,23	3.5	-1.3	*	*
1999	34,12	47,97	3,70	23,43	2.8	2.2	180,881	25,867
2000	32,09	38,70	3,50	19,14	2.4	1.9	*	*
2001	29,27	37,90	3,20	18,41	2.8	3.3	*	*
2002	28,20	38,40	3,00	18,20	2.9	3.4	207,680	29,346
2003	29,00	37,30	3,10	17,42	2.5	3.8	*	*
2004	26,10	36,10	2,80	16,66	6.3	2.8	*	*
2005	23,65	35,10	2,50	15,97	5.2	2.7	219,004	30,146
2006	21,48	39,30	2,30	17,75	5.0	3.4	229,942	31,158
2007	14,79	37,17	1,60	16,58	3.7	3.4	238,439	32,226
2008	*	34,96	*	15,42	5.4	4.8	251,292	33,762
2009	*	32,53	*	14,15	4.2	3.0	261,757	34,775

\* = not yet obtain the data

Sources: BPS (2010), NSBC, World bank, FAO Statistical Yearbook 2010

However, for Indonesia is little different where agriculture became a central role in development and economic development and certainly also for the alleviation of rural poverty in this case can be seen in the image below in the different periods from 1994 - 2007 scale development of agriculture GDP is still above 10% even greater than this percentage is china also were dictated by Harris (2003). The agricultural sector plays an important role in the Indonesian economy. In 2000, agriculture accounted for around 17% of GDP. Most agricultural industries are labor intensive and the sector accounts for about 40% of total employment. Indonesian agriculture is primarily composed of small-scale subsistence farms which account for around 87% of cultivated land.

The data above shows how the relationship between poverty reduction performance and agricultural development growth which presented by indicator Agriculture annual growth (%) and Agricultural GDP with the main indicator of poverty level of a Country with indicators Number of Poor People and Percentage of Poor People in China and Indonesia. There are differences in the number of poor people in China and Indonesia are significant enough where the latest data in China in 2007 may have a relatively poor population is much less than with Indonesia only 14.79 million people as a poor with 1.6% Indonesia has a total population while the number is still much

with the number of poor people reached 37.17 million 16.58% of the population. With annual agricultural growth is a relatively equal greater china Agricultural GDP is small but has a relatively much larger with a significant difference almost 7 times more than Indonesia.

There is an interesting phenomenon from the above data on poverty in China in relation to agricultural development can be seen in the period 1978 - 1987 was a reduction of poverty is significantly close to half of the previous amount of 250 million people to 125 million people a very prestigious achievement for a Country in alleviating poverty. If the premises is associated with indicators of agricultural development where agricultural growth in the same period in 1984 still reached 12% even if there is a minus figure in the previous period i.e. in 1980, but it indicates how the role of the agricultural sector can also contribute positively to poverty in China. Between the year of 1997 and 1998 Indonesia's population increased from a total of 34.01 million people to 49.50 million people due to the economic and financial crisis that made many people lose their jobs and be poor, while in China the opposite occurs in a drastic reduction of poor population year to year with the percentage decreasing to 4.6% in the same period. This is directly proportional to the growth of agricultural development during this period decreased drastically for Indonesia with agriculture marked a minus annual growth of -1.3 in 1998 could certainly interrelated relationship between agricultural development in Indonesia with a population of rural poor. While in China also shows the same thing because of poor agricultural growth diminishing course toward a better show.

### **3.5. Contribution of agriculture to international trade in China and Indonesia**

Agricultural development of a Country cannot be separated from the influence of international trade involving agricultural production in order to support GDP in both countries. Surely the role of international trade has influenced the pace of agricultural development that much support either demand or supply to communities in China and Indonesia. We cannot rule out the role of international trade simply because of the success indicator of the rate of agricultural development in particular several strategic product for a country highly dependent on the total exports and imports of these countries towards a particular product.

Development of agricultural growth is the best way to alleviate poverty in developing countries and the role of international trade for agricultural commodities is also very closely related and has a direct impact on the welfare of rural communities with a lots example of countries exporting agricultural commodities. Countries that export agricultural commodities have important global alignments would have to be able to contribution revenue to countries and to the farmers' for international and domestic needs. Extensive exporters and intensive exporter's countries make international trade in give national income mainly from agricultural production so the country can be covered at all and certainly a positive relative to the welfare of farmers as producers who are receiving the benefits of international trade.

Agriculture has rolled in international trade increases the income of the country regularly by production some primary commodity. Whether agriculture trade liberalization increases, long-term economic growth and countries that are more open achieve higher growth than other countries because of international trade. The developing countries as a group will benefit from liberalization but that those benefits will be uneven. Some countries will lose out. If poverty reduction is the main goal, trade policy cannot be a main vehicle for improving the situation of the poor.

The comparison of agriculture in international trade to China and Indonesia of some indicators. On the Net indicator of total trade value of exports - Imports (U.S. \$ million) china shows a very impressive figure very high increase from year 1994 to 2007 from 5427 U.S. \$ million and in 2007 could reach U.S. \$ 266.541 million a quite fantastic figure for a countries, Indonesia showed the numbers tend to be unstable where the increase from year 1994 - 2006 from U.S. \$ 6581 million to U.S. \$ 39 612 million but declined in 2007 to 25,236 and a less significant increase compared with

China, this is because Indonesia is still dependent of the agricultural sector by exporting natural resources, while China is the largest exporter of Country we can see in almost all countries there are products - products from china and of course industry and service sector that has been developed. On the net agricultural trade indicator value exports - Imports (U.S. \$ million) figures show that China actually not very good and tend to the greater lack of exports compared with imports which in the year 1994 to 1996 shows the number -6417 U.S. \$ million and the drastic fall in 2007 amounted to U.S. \$ -27 075 million exactly Indonesia showed good achievements in the agricultural sector where the balance between exports and imports are positive and tend to rise each year, although cannot say drastically.

Share of agricultural imports in total imports and exports (%) indicator show that in general Indonesia much higher than China of course this is because nationally Indonesia still imports many goods from abroad than with china whereas china otherwise very much export goods out is shown by a fairly small number in 2007 only 3.8%. However, in Indonesia there is a tendency to decrease the data import from 11.6% to 9.3% in 1994 to 2007. for parameter Share of agricultural exports in total Imports and exports (%) is similar to the indicator import china has become separated from agricultural sector contributor to Indonesia's GDP, while still large enough even to reach 15%.

The share of agriculture, fishery and forestry Imports in GDP (%) in China and Indonesia are not too high value can be compared to the variable share of agriculture, fishery and forestry exports in GDP (%) for China's import value in 2007 only 2.3% and exports 1.2 % while Indonesia showed a better rate of 2.9 % imports and 6.1 % exports Share of food in agricultural Imports (%). In China tend to fluctuate because the number of food crop production in Indonesia. Fluctuates every year due to increased percentage of food crop production being unable to meet the needs of the population rate is also much more rapidly it is seen from the data showed in the year 1994 – 1996 only amounted to 64.9 % increased to 70.9% in 2007. The indicator Share of food in agricultural exports (%) figures show that China actually better than Indonesia which in 2007 was 72.4%, and Indonesia just 62.1%.

The performance of agriculture in managed open trade policy has caused the Indonesian agricultural sector to become more open [Timmer \(2005\)](#). The agricultural sector is more export oriented during 2006-2008 and agricultural trade openness increased during this period. Indonesia was able to export around 12.86 percent of its output in 2006 and 16.12 percent in 2008. However, the attraction of agricultural exports creates concerns about the availability of agricultural products in the domestic market. Even though the agricultural sector is more open to imports in terms of lowering average import tariffs, the fluctuations in agriculture, livestock, forestry, and fisheries value of production follows a similar seasonal pattern. It tended to increase at the beginning of the first until the third quarter and tended to descend at the fourth quarter during 2005-2008. This pattern was maintained even when external pressure of the food crisis haunted Indonesia. The world food crisis and rising international commodity prices do not seem to have significantly changed the value of production in the agricultural sector. It appears that domestic prices were insulated from 8 international price rises. In fact, the role of agriculture in the economy fell during the commodity price hike. The agricultural sector contributed to around 15 percent on average of the overall economic activity in Indonesia during 2004-2009, but shares of agriculture diminished in every quarter during 2004-2009. The main reason for this is that Indonesia's agriculture was open to international competition during 2004-2005.

Development of a Country cannot be separated from international trade, which of course can increase the revenue of the Country to be able to build their nation. On the table 11 the above shows the value of International Trade (exports and imports) in China and Indonesia in essential commodities, especially for food. Total Value of agricultural Imports and exports in China and Indonesia showed a quite different figure in China in 1994-1996 showed the figure for imports of

26.7 million U.S. \$ and to export 20.3 million U.S. \$ while Indonesia shows the figures for imports 4, 5 million US \$ and to export 5.4 million U.S. \$. Getting up from year to year both import and export of both countries so that in 2007 China imported 59.2 million U.S. reached \$ 32.2 million and the export figures of U.S. \$ for Indonesia, which imported 8.6 million U.S. \$ and to export 17, 7 million U.S. \$. This is shows the performance of the agricultural sector of both countries in international trade of agricultural products sufficient to contribute significantly to rural development. The phenomenon is interesting from these data is the number of Chinese imports is much greater than the export figures for the agricultural sector, while Indonesia is the opposite number of agricultural product exports are much higher than imports. Many things that cause this include population growth rate china is much higher is not accompanied with a growth rate of agriculture sector and government projections for the development of China is no longer in the agricultural sector but in other sectors.

Indonesia's agricultural export value has grown on average almost 9 percent annually, from a base of nearly \$900 million in 1975 to nearly \$18 billion in 2007 Uphoff (1999). Growth has been driven by increases in tropical perennial crops, such as rubber, cocoa, coffee, and palm oil. As of 2008, Indonesia was the second largest exporter of palm oil and the fourth largest exporter of coffee. While growth was evident in palm oil and rubber following Indonesia's move toward industrialization in the mid-1980s, growth was exponential following the economy's recovery after the Asian financial crisis. Between 1975 and 2007, palm oil and rubber accounted for nearly half of total export value, with rubber's share alone nearing a third. Between 2000 and 2007, shares associated with palm oil and rubber switched, with palm oil representing nearly 33 percent of total export value. Despite growth in agricultural production, population and income growth have contributed to Indonesia's agricultural import increases. Indonesia's agricultural import value grew from over \$650 million in 1975 to over \$8.5 billion in 2007, an 8-percent average annual increase, to meet the needs of a swelling population that increased from less than 100 million in 1961 to nearly 230 million in 2009. In addition to the overall growth in imports to meet expanding food demand, Indonesian food import trends reflect food preferences and lifestyle changes of an increasingly educated, urban, and wealthy consumer. Cereals, which accounted for over 60 percent of total imports in 1975, have accounted for only about a quarter of agricultural imports since 1991. Instead, imports of feed and fodder to meet the needs of the growing poultry sector and foods to satisfy Indonesia's newly discerning consumers have risen. For example, feed and fodder import value increased an average 34 percent each year between 1967 and 2007. Similarly, soybean (food item) import value increased an average 12.

**Table 4: Comparison of agriculture to international trade in china and Indonesia**

<b>COUNTRIES / INDICATOR</b>	<b>1994-1996</b>	<b>1999-2001</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Net total trade value (exports - imports) (US\$ million)					
China	5,427	29,652	106,17	183,825	266,54
Indonesia	6,582	26,210	27,959	39,612	25,236
net agricultural trade value (exports - imports) (US\$ million)					
China	-6,417	-6,896	-18,621	-21,306	-27,075
Indonesia	868	523	5,747	8,321	9,046
Share of agricultural imports in total imports and exports (%)					
China	6.5	4.5	3.7	3.6	3.8
Indonesia	11.6	15.0	9.0	9.7	9.3
Share of agricultural exports in total imports and exports (%)					
China	4.9	3.0	1.9	1.7	1.8
Indonesia	12.0	8.8	12.8	14.2	15.0
Share of agriculture ,fishery and forestry imports in GDP (%)					

China	4.3	2.7	2.6	2.4	2.3
Indonesia	3.5	4.5	2.9	2.6	2.9
Share of agriculture ,fishery and forestry exports in GDP (%)					
China	2.8	1.5	1.3	1.2	1.2
Indonesia	6.0	7.5	6.3	6.1	6.1
Share of food in agricultural imports (%)					
China	57.9	63.6	61.3	56.5	64.2
Indonesia	64.9	63.9	67.5	69.4	70.9
Share of food in agricultural exports (%)					
China	57.9	64.5	69.5	70.7	72.4
Indonesia	64.9	60.3	61.3	55.3	62.1
Share of top four commodities in value of agricultural imports (%)					
China	22.7	24.5	37.3	39.5	39.3
Indonesia	55.5	47.5	42.6	38.1	40.0
Share of top four commodities in value of agricultural exports (%)					
China	32.4	26.6	23.2	21.5	20.9
Indonesia	48.8	53.1	67.8	72.6	69.9

percent per year between 1975 and 2007.

Source: FAO Statistical Yearbook, 2009

## 4. CONCLUSION AND RECOMMENDATIONS

### 4.1. Conclusion

China and Indonesia have significant economic growth from the agricultural sector before the era of 90 'but the growth of agriculture sector is quite different between China and Indonesia. which in China after 90's period is moved away not depend on the agricultural sector we can saw from variable Agriculture GDP share in Total GDP after 2000 less than 10 %, but in Indonesia in the same period still in 14 %. and also we can saw also in the other indicator that is Agricultural GDP countries of Agricultural population showed Indonesia still more higher than China that's way the of agriculture growth and rural development in Indonesia have a good strategic rule for poverty reduction and China agriculture sector for support the other sector for growth.

Policy of agricultural development strategy in China and Indonesia has implications and implementation for agricultural development economically active especially in rural areas are Contribute to poverty reduction have fundamental differences on several critical points, but especially in the period 1990-2000 in which Indonesia is experiencing financial and economic crisis that changes the direction of policy drastically and causes of poverty.

Many different policies in both countries that became fundamental differences policy in China and Indonesia are centralization in china and decentralization in Indonesia that makes crucial decisions in agricultural development has a direct impact on the welfare and poverty. Various policies centralization in china brings significant changes despite the risk of development inequities between the regions but a drastic impact on agricultural development and national poverty. However, in Indonesia it is different with how the transition process decentralization policy that takes time gradually to make good implementation to the target but have some important points especially in empowering the community in a participatory and optimizing use of existing resources in each region into a force in creating jobs and reducing poverty.

China and Indonesia is a large country in Asia is an example of success in agricultural development and poverty reduction. There is little equality policies in both countries in agricultural

policy, especially in primary commodity production base at the beginning of its development, where rice is a top priority in both countries as a food staple. This policy indicates that the role of staple foods in agricultural policy into a national policy which contributes to rural poverty in both countries. In addition, there are policies to provide incentives to existing agricultural inputs either for subsidy fertilizer or for other agricultural production facilities with a significant contribution in rural development.

Poverty alleviation in China and Indonesia, many depend on agriculture in rural development that was actively able to provide a significant contribution to development in both countries. From the data on agricultural policy in China have a determinant factor for a successful policy of agricultural development policy in rural China with base on a target of poverty reduction is also the Rural Agricultural Market - oriented policies which can create the smallest unit in an area into a private sector enterprise that is able to contribute substantial economic impact in rural China with the creation of more business opportunities and create jobs that many farms in each activity. This policy can be adopted in Indonesia into one single national policy in the contribution of poverty alleviation at the national level.

#### **4.2. Recommendations**

Recommendation for further research is: Need to do a thorough research and observation integration between the agricultural sector and other sectors in relation to poverty reduction and also in the overall Development of the various aspects in China and in Indonesia and Critical review focus and deeply on the comparative strengths and weaknesses significantly between poverty alleviation program in the agricultural sector both in two country with implementation and real impact to the welfare of society and implication for other sector if there are real effect for development process.

Some recommendations on policies related to agricultural development that is directly related to poverty alleviation, are: Remain a priority in the policy of agricultural production that could increase farmers' income from the start and spread of agricultural technology improvements to create clear market certainty in terms of social, economic, and governmental interference in the market tackle failures. Policies based on agricultural production is certainly of major commodities in each region have their advantages – which can each contribute to an area to be able to create added value and great business opportunities in rural communities.

Expanding investment policies in agriculture by seeking diversification of products and their derivatives through the private sector for the support from the government that will create more employment opportunities and expanded access of farmers to the banking system also can provide capital for farming, especially in rural areas. This policy is certainly a pro with the empowerment of people through effective and efficient so that it can be implemented well with the capital that is owned mainly from the banking sector. Develop agribusiness in agricultural primary actors also became one alternative in creating the economic conditions in rural areas which would affect poverty.

The policy for protects a major agricultural commodity prices in the country by restricting the import policy must still be a central role for farmers and rural communities can enjoy a stable price that will create a better situation in rural and agribusiness community welfare could significantly reduce rural poverty.

Need integration between agricultural policy with the policy of poverty reduction with the combination between the roles of central and local governments that provide access, contributing to shape the programs implemented with clear stages of directed and measurable to create a sustainable development policy development and creating equality in every area. Need to increase cooperation between the two countries in the exchange of information and technology in

the agricultural sector not only trades in general, the existing container with CAFTA (China – ASEAN Free Trade Agreement) so that the product and technology particularly in the agricultural sector capable of contributing to the development of both countries and regional.

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