

## **SIJORI: Equal Partnership in Unequal Actor (The Case of Batam)**

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### **Introduction**

In order to increase per capita income and faster economic growth, the trend in the world today is making an economic cooperation between countries or just between the subregion. One of the subregional economic cooperation that becomes the topic of this paper is SIJORI Growth Triangle.

The SIJORI (Singapore Johor Riau) Growth Triangle first initiated as the result of the discussion between Indonesia and Singapore to make a cooperative development of Batam. With the purpose to relocate their labour-intensive industries, Singapore agrees to invest in Batam, while Batam lighten most of the requirement of investment.

Based on the research in Batam, this empirical paper basically reveal one of the case in developing countries where new technologies and open market make the demand for skilled workers is high, leaving behind the workers with limited skills, where the wage, benefit and demand will naturally be lower for workers with the limited skills.

The arrangement of this paper is as follows, the first section of this paper discussed the purpose of economic integration and the historical side of SIJORI Growth Triangle as one of subregional integration in Southeast Asia. The second section described the result of the research in Batam, particularly about the level of income of local people, the cost of everyday living, and their perception about the SIJORI Growth Triangle. The third section discussed

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about the less attention to the education for the local people that make them workers with low skills and can't take part on this economic cooperation. Finally, the last section gave the conclusion and suggestion.

## **1. SIJORI as an Economic Integration**

Increasing in per capita income and faster economic growth is what every government wants to happened to the economic condition of their country. A few nations can get together, forming integration, to be together in achieving these goals. In Europe they formed the EU (European Union) and in Asia they formed ASEAN (Association of South East Asian Nation), APEC (Asia Pacific Economic Cooperation), to name a few of economic integration that already exist.

Beside the economic integration among entire nations, there are also smaller scale subregional integrations through the concept of growth triangle. The integration happened among villages and provinces. This kind of cooperation is quite informal in their administration and basically consists of working groups to make decision of production and labor.

Growth Triangles are also referred to as subregional economic zones because the economic integration happened not among entire nations but just the subregion. Kakazu (1997) defined growth triangles as “transnational economic zones spread over well-defined, as geographically proximate areas covering three or more countries where differences in factor endowments are exploited to promote external trade and investment”. Growth Triangles as a subregional economic integration also referred to as natural economic territories or extended metropolitan regions.

In the growth triangles region, before this region become isolated with each other as the border of each countries, historically may be there used to be traditional trade activity in that region. This is because they are close to each other geographically, so the region is naturally economic territories, as the case of SIJORI Growth Triangle. With the faster economic growth in the related region especially the border area, that geographically far from the capital city of a country, there is hope that the region will develop and become a new metropolitan region that will prevent the migration to the capital of the country.



According to Kakazu (1997) the growth triangles have the following merits compared to other on-going regional cooperation such as the EU and NAFTA:

1. The Growth triangle approach involves only contiguous part of countries.
2. Growth triangle can be established at much lower cost and in a shorter period of time.
3. The approach of growth triangles will be useful to initiate the trade liberalization of a country.
4. Growth Triangle approach is consistent with the GATT (WTO) principles of non-exclusional character of open regionalism. That is to say, the markets created by growth triangles are open to everybody.
5. Growth Triangle method and process can also be useful to cope with the emerging and deteriorating environmental problems in Asia through cross border cooperative effort and sub regional participation.
6. Growth triangle concept can be effectively applied to develop remote, peripheral areas where economic complementarities and adequate infrastructure with the neighboring national borders exist.

The SIJORI (Singapore Johor Riau) Triangle is one of the growth triangles in Southeast Asia beside the IMT-GT, BIMP-EAGA, Eastern Quadrangle and the Golden Quadrangle. This subregion economic integration initiated in 1988 by Suharto and Lee Kuan Yew the head of the states of Indonesia and Singapore at that time. This agreement on cooperation declared after Indonesia agreed to improve foreign investment regulation in Batam and the prime minister of Singapore announced Singapore's intention to buy water from Indonesia. The new foreign investment regulation in Batam including allowing 100% foreign equity ownership, quick process of investment application because it can be made in Batam without having to go to Jakarta and allowing the private companies to set up industrial estates in Batam. Based on the last foreign investment regulation has led the Indonesian private sector and Singapore's state owned enterprises to established the Batam Industrial Park. Before this improvement in foreign investment regulation, according to Chia (1996) Batam is not attractive to Singaporean and other foreign investors. The idea of Habibie (Indonesian minister) to make a cooperative development of Batam with Singapore did not receive any enthusiastic respons.

The agreement of SIJORI subregional economic cooperation between Indonesia and Malaysia officially signed on June 1990, later on, on the forth ASEAN summit in 1992, this subregional



economic cooperation endorsed by the Prime Minister of Malaysia at that time, that is Mahatir Muhammad.

The characteristics of each three countries involved in this SIJORI subregional economic cooperation is quite different, but historical and cultural bonds linked these three area and especially for Johor and Singapore there is also kinship bonds among them. Some researchers believe that with their differences in economic development and factor endowments make them complementary rather than competitive, but some does not believe this. Singapore with high quality human capital and well developed infrastructure, Johor has land and semi-skilled labor and Riau that has land also with low cost labor. Other researchers believe that because Riau and Johor are similarly endowed, they appear to be more competitive rather than complementary with each other.

Singapore with high rates of economic growth, according to Lee (1991) has led to high cost of doing business because of the shortages land and labor, restricting further expansion especially the firm with labor intensive operation. To invite foreign worker is also another problem because of high foreign levy. As the result, this kind of firm in Singapore has to think of relocated their firm to the nearby area (cheaper transaction cost), where the land and labor is also cheaper. The SIJORI growth triangle can facilitate this relocation with the availability of land and labor from Johor and Riau.

The size of land in Riau is five times larger than Singapore and the cost of labor in Riau is five times cheaper than Singapore, so, it is suitable for Singapore to relocate their labor intensive industry to Indonesia in order to absorb its labor force. Beside that, of the three countries, Indonesia has the least skilled labor with the lowest resulting labor cost, whereas Malaysian labor is in the middle before Singapore.

However, according to Kamil, Pangestu and Fredericks (1991) Malaysia is against inviting the labour-intensive industries to Johor, because what they want is high-tech manufacturing, heavy industries, high volume tourism and services. They don't want to promote its role in the Triangle as being one of middle-level technology or semi-skilled industries. They believe that the level of industrialization not that far behind Singapore. Even without the growth Triangle, Johor and Singapore are already cooperating, they believe that because of strong historical ties, their relationship is more substantive and has existed for much longer.



## **2. The Impact of SIJORI Growth Triangle on Batam**

Riau is one of province in Indonesia that rich in natural resources such as minerals (oil, coal and natural gas), plantation, marine and forest. Lately, Riau experience higher economic growth 4.67% in 2004 and gross domestic product regional as high as 13.2 million Rupiah. Export from Riau increase from US\$ 8.997 million in 2001 to US\$ 9.895 million 2003. However, this macroeconomic indicator is not a guarantee that their populations is not in the poor condition. About 40.05% the populations in Riau or 5.5 million is considering as poor. Riau then become the second poorest province in Indonesia after Aceh. The education condition is also worst because only 64.67 % of the populations graduate from basic school (sekolah dasar). This condition shows that most of the economic benefit that Riau have, is not meant for welfare of all level of their society.

As in the case of the development of Riau/Batam through SIJORI Growth Triangle Pospos (1996) called it as 'not local people friendly'. Based on our research in the peripheral area of Batam we also find that the development is nothing to do with welfare of this community.

One of the impacts of Sijori Growth Triangle is the higher prices and inflation in Batam. The higher price is the result of rapid growth and partly because of the Singaporean spending in Batam. The income of local population in Batam is considered low compare to the level of inflation. This is means that although there is increasing in their income, it is still can not be an advantage for the local population, because inflation make higher prices of consumable goods.

The average income of 105 respondents before SIJORI Growth Triangle in Batam is Rp 242.733 and after the SIJORI cooperation the average income increase to Rp 279.485 (15.14%), using t-test this increase found not significant (refer to Table 1.) . However, the side income find significantly increase after the SIJORI Growth Triangle. The side income before SIJORI Growth Triangle on average is Rp 179.381, after SIJORI Growth Triangle increase to Rp 353.152 (82.69%). If we add the income with the side income, the average total income is Rp. 441.191 before SIJORI economic cooperation and significantly increases to Rp. 583.828 or 32.33% after that cooperation. This condition basically show that the income of population increase after the SIJORI Growth Triangle.



Beside the income side of the local population, the respondent also asked about their cost of living. The cost that has been asked are the cost of food, health, education (school and books), house rent, land rent, motorcycle, rent of the shop, entertain, computer and telephone. The cost for food increase very significant with probability value of 0.00 after the SIJORI Growth Triangle. The development of Batam also increase to cost of health from on average Rp 28.448 before SIJORI Growth Triangle to Rp 57.495 after the SIJORI Growth Triangle, making a significant huge increase of more than 100%. SIJORI Growth Triangle also significantly increases the cost of education (school and books) from Rp 61.286 to Rp 66.476. The cost of house rent for the respondents that do not have their own house is also increase significantly after SIJORI Growth Triangle (refer to Table 2.). For the respondent who does not have their own land and shop, they have to rent it, the cost of land rent and shop rent also increase significantly after SIJORI Growth Triangle. Motorcycle is now still considered as an important but expensive vehicle for the local people in Batam. Before SIJORI the cost of motorcycle is between Rp 50.000 to Rp 150.000 but after that the cost of motorcycle almost Rp 500.000 per month, this increase is found significant as it is shown by Table 2. Other costs such as the cost for computer telephone and entertain also increase. As can be expected, the only cost that does not increase significantly is the cost for entertainment; this is because they don't think the entertainment is something prioritized in everyday life. However, the cost of the telephone increase significantly from Rp 3.810 to Rp 13.333 and the cost of telephone also increase significantly from Rp 425.238 to Rp 676.761 or 59.15%.

Table 1: The Result of T-Test on Respondent Income Before and After SIJORI

The Respondent data	Mean	t	N	Sig (2-tailed)
Income before and after SIJORO GT	26288.46	.820	105	.414
Side income before and after SIJORI GT	17377.43	3.421	105	.001
Total income before and after SIJORI GT	181466.67	3.087	105	.003

Source: Based on our research in 2004



Table 2: The Result of T-Test on Cost of Living of Respondent Before and After SIJORI

The Respondent Data	Mean	t	N	Sig
Cost of food before and after SIJORI GT	60523.80	8.214	105	.000
Cost of health before and after SIJORI GT	29047.61	5.215	105	.000
Cost of education before and after SIJORI GT	5190.47	2.772	105	.007
Cost of rent house before and after SIJORI GT	4000.00	2.527	105	.013
Cost of land rate before and after SIJORI GT	8904.76	2.348	105	.021
Cost of motorcycle before and after SIJORI GT	25714.28	2.361	105	0.20
Cost of rent of shop before and after SIJORI GT	5769.23	2.768	105	0.07

*Source: Based on our research in 2004*

The above data of cost basically shows that although the income increase to 32.33% after the SIJORI Growth Triangle cooperation, the cost of every item examined in this research except for the cost of entertainment also increase significantly. The increase of cost of certain item such as health can be seen as intolerable because it is more than 100%. From 105 respondents 79 of them (70%) admit that they can't afford to cover all of everyday cost with their income.

It is can't be deny that the development of the SIJORI growth triangle in Batam has turn Batam into the city with quite complete infrastructure. Unfortunately, almost all of infrastructure, even the bridge as a facilitation for transportation viewed by the local people as not meant for them but for the advantage of investor only. There are 82 out of 105 respondent believe that the infrastructure has less benefit for them compare to investor.

The developments of Batam with SIJORI Growth Triangle suppose to increase the opportunity to find a job for local people. However, because of the low skill of local people that used to be a fisherman or farmer, they can't compete with the worker from other region. There are 70 out of 105 respondent believe that they loss their land and fishing area because of the development of SIJORI Growth Triangle which make them loose their income.

Most of the local people believe that the policy of development of their government is significantly different before and after the SIJORI Growth Triangle. Almost all the respondent



believe that the policy of development now intervene by foreign interest and they felt that there government has lack bargaining power.

From the education aspect, the willingness of government to subsidies there education is also very low. There are 84 out of 105 respondent admit that they go through their education with there own money. This is make the education is expensive for them, compare to there income. Beside this, 79 of respondent believe that there is lack of teachers and books on there area. This is ironic, considering how rich is Batam at the time. The same opinion also found on the price of health care facility especially the cost of medicine.

Finally based on the opinion of the 50 respondent, it's believe that the SIJORI Growth Triangle is not increase there economic condition. The correlation between SIJORI Growth Triangle and income of the local population is found negative and 70 respondent not agreed that the live is depend on industrial activity. The also believe SIJORI is not improving there live and they thought that they will be better without SIJORI Growth Triangle because they still can have their own land and fishing area to fulfill their every day needs.

### **3. Economic Integration and Human Capital**

Based on the previous section, the research basically reveals that the subregion economic cooperation SIJORI Growth Triangle has brought almost no economic benefit for the respondents interviewed. The previous paper even believe that this subregion economic cooperation worsening the local people's welfare (Pospos, 1996).

The question then arise, should every economic integrations bring welfare to their society?. Rivera-Batiz and Xie (1992) review the economic integration among unequal. They examined the condition under which integration is expected to be growth-enhancing in particular countries. When two innovating countries of unequal size integrate, they show that integration through trade in goods alone not including the technology, the results is in a reduced growth rate for the initially faster-growing country and an increased growth rate for the slower-growing nation. Once they also open the door for diffusion of technology, however, integration is growth-enhancing for both innovating countries. This is basically shows that technology transfer is important in integration. Integration that allowing diffusion of technology in addition to the usual trade goods have shown that will increases per capita income. This is might be the reason why Malaysia refused to invite the labour-intensive





industries to Johor and what they want is high-tech manufacturing, heavy industries, high volume tourism and services.

In the case of highly asymmetric countries when one of the countries is not innovating under pre-integration conditions, Rivera-Batiz and Xie (1992) show that two sub cases arise. In one sub case, the non-innovating country is transformed into an innovating region after integration; they call this country 'newly innovating'. In the second sub case, the non-innovating country remains so after integration, they call this country 'chronically non-innovating'. In the second sub case the non-innovating remain the same after integration is because human capital endowments are too low compare to the country that become an innovating region after integration.

Based on the case of integration by Rivera-Batiz and Xie (1992) and the result of research in Batam, Riau as one of the area in the SIJORI subregional economic cooperation, can be categorized as the 'chronically non-innovating' area. Riau has a very low human capital endowments, and even now Riau still doesn't care about the education of their local people, the prove of this is as mention before, the expensive and worst condition of education, with only 64.67 % of the populations graduated from basic school (sekolah dasar).

Today, no one in this world would proud of the low skill and low cost labor. Malaysia really strict in this, as it mention before, they don't want to promote its role in the Triangle as being one of middle-level technology or semi-skilled industries. Rivera-Batiz and Xie (1992) even show that the migration of unskilled labor from the non-innovating to the innovating country is growth-reducing.

The local people problem in Batam is the classic case in developing countries where new technologies and increasing open market make the demand for skilled workers is high, leaving behind the workers with limited skills, where the wage, benefit and demand will naturally be lower for workers with the limited skills. No wonder they don't need and concern with the SIJORI Growth Triangle economic cooperation.

## **Conclusion and Suggestion**

1. The SIJORI subregional economic cooperation is basically the integration between a donor (innovating region/Singapore) with the recipient (non-innovating region/Riau)



- that believe as a good combination of subregional economic cooperation. This cooperation will be successful if Riau continually improve their human capital through education and training. However, the reality found that as the area that rich in mineral and certain-other (non renewable) natural resources, this province is not care for the education of their local population.
2. It has been proved elsewhere in this world that human capital is an important factor that improves the economic growth. Therefore, the economic policies must be designed to improve the educational levels, but it is also necessary to create an environment that permits assimilation and introduces technical progress. The less developed regions that create such and environment will be in a better position to move towards more developed regions (Martin and Herranz, 2004).
  3. Although human capital is not development's magic bullet, according to Birdsall (2001), unlike other assets, human capital does have a special property. Once acquired it cannot be sold or stolen, and growth of human capital as Schultz suggested, provide an escape from "hard, manual work and poverty".

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