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# Farmer's welfare in Telang's integrated independent city: lesson learned from migrant and local farmers in tidal land, South Sumatera

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Abstract. Telang's Independent Integrated City development is a model of tidal agricultural development through technological innovation to improve farmers' welfare. In this area, the diversity of origin of population is also suspected to have an impact on the achievement of success. The purpose of this study is to analyze and prove the hypothesis that farmers are able to prosper in tidal land by Telang's Independent Integrated City Program based on migrant and local farmers disaggregation. The research was conducted at Tanjung Lago District Banyuasin Regency, South Sumatra. The research method is survey with stratified simple random sampling. Data is processed by mathematics and statistics. Telang's Independent Integrated City is an area of rice production center development and rice industry. Since 2008, farmers have implemented rice cultivation innovations by the twice-cropping index. This program by utilization of tidal land proved that farmers have a great chance of success. Farmers have succeeded in breaking the myth that has been growing in the food agriculture sector, that farmers cannot prosper only with food crops. Both Farmer's income has been above the necessities of life. Judging by the diversity of origin of population, the income of migrant is higher than local farmers.

#### 1. Introduction

One of the rural areas management models developed by the government in Indonesia is The Independent Integrated City Program. In Particularly, this program is intended to develop rural areas into integrated agricultural areas through exogenous and endogenous approaches. Exogenous approach or industrial modernization is implemented by introducing external investments or resources, requiring prerequisites for high quality labor guarantees, the adequacy of the cluster industry, the development of infrastructure (especially transportation facilities) and the appeal of useful industrial policies. While endogenous approach is implemented by utilizing the full potential of resources and capital, as well as paying attention to the environmental balance (Asriati<sup>[1]</sup>).

Independent Integrated  $\overline{City}$  is a village or a region that grows and develops as a centre of collection, processing, distribution and services of the Transmigrant Development are designed as a structured development direction of transmigration settlement units and surrounding villages within a single infrastructure network and regional as shown in Fig.1. The objective of Independent Integrated City development is to improve the ease of meeting the basic needs that enable the opening of socioeconomic growth opportunities of the transmigrant areas and to create centres of business activities that attract investors as an effort to foster the economic activities of transmigrants and surrounding



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communities. Function of Independent Integrated City as a place to live, as a place of agricultural activities to meet the needs of city dwellers (On Farm) and as a place of post-harvest business activities and service activities (Off Farm). The Centre of WPT is called Integrated City with the hierarchy of Order II City is the highest order in the scope of WPT Nas, <sup>[8]</sup>, Chiara <sup>[2]</sup>, Emilya K and T W Caesariadi <sup>[5]</sup>.

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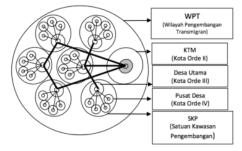


Figure 1. Hierarchy of Region Relations (Nas, [8])

Transmigration Development Policy is essentially an integral 12t of national and regional development in Indonesia, to accelerate agrizilture development and to improve the welfare 2 f the migrants and the surrounding communities especially in a remote area as well as. In fact, not all transmigration settlement units progressed well. Various problems occured and impacted the level of transmigrants' level of welfare. Transmigration has many challenges and obstacles in various sectors in several residential units, so in its development the government takes a strategic step in supporting and developing transmigratics programs, by implementing a program called New Urban Area/ Independ of Integrated City. Independent Integrated City is a holistic and comprehensive program designed to build an urban transmigration area, as an acceleration of rural economic development and the realization of an interpretent Transmigration Area. This new development paradigm of Transmigration Program is shaping the transmigration area to be the center of new growth so as to involve all stakeholders to become more participative, and sustainable as stated by Emilya K and T W Caesariadi, 2016<sup>[5]</sup>.

In South Sumatera Province, since 2008 the government has developed Telang's Independent Integrated City. Telang consists of 4 sub-districts, that is Muara Telang Sub-district, Tanjung Lago Sub-district, Bumber Marga Telang Sub-district, and Makarti Jaya Sub-district with 113,783 Ha of total Area. For the area of each sub-district included in the Independent Integrated City (KTM) Telang: (a) Tanjung Lago Sub-district 61.223 Ha or equivalent to 53, 81% (area with the largest area), (b) Muara Telang Sub-district 27,609 Ha or equivalent to 24.26%, (c) Sumber Marga Telang Subdistrict 22,297 Ha or equal to 19,60%, and (d) Makarti Jaya Sub-district 2,654 Ha or equal to 2,33% (area with smallest area).

In Telang's Independent Integrated City, there are 34 village units, with 24 ex-transmigration settlements, which are devided 24 definitive villages and 10 local villages. Thus, there are differences in socio-cultural characteristics between the two sites groups. Several research results indicate differences in socioeconomic characteristics could affect the difference in achievement in welfare. Therefore, it is expected that the differences in farmers' the characteristics could affect their responses, although the aims to improve their welfare is the same.

Every development program, physical or non-physical, ai 3 to increase the welfare of society, as well as the development of a g ndependent Integrated City. Nevertheless, several problems also are found within the execution of program, such as the location of transmigration or with the participants themselves. While the environment and society undergoes change, a review of program impact must be done in order to achieve maximum results. The synergy of change brings a variety of effects such as the segregation of culture, environmental order and a new rule of order.

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During this time, the tidal area of Telang's Independent Integrated City is an tidal area with the characteristics of land that is highly dependent on nature. Farming activities are not optimal to do. Therefore, Independent Integrated City program is expected to address these issues. From research aspect, research on the socio-economic condition of the community in this region has been done a lot. However, studies on the impact of the program in improving Telang's Independent Integrated City socio-economic conditions, both local and migrant farmers are still limited. This study analyzes the welfare of farmers on the of both local and migrant farmers, especially related to their activity on the tidal area of Telang's Independent Integrated City.

#### 2. Research Method

This research was carried out in Tanjung Lago District Banyuasin Regency as shown in Fig.2. This research was carried out in February 2017. The research method was survey methods, in which the sample are (1) local from Tanjung Lago Village ard (2) migrant farmers from Telang Sari Village. Sampling no thods were simple random sampling. In total, 120 farmers were selected at two sample categories. Data collection is done through interviews using questionnaire method. In addition, data collection was conducted with a quick survey for migrant data collection, in-depth interviews in terviewing informants; community leaders, village officials, village forum members and officers. Data obtained in the field processed in tabulations, calculated mathematically and descriptive quantitatively. To analyzes the welfare of farmers on the of both local and migrant farmers, especially related to their activity on the tidal area of Telang's Independent Integrated City, we calculate the structure of income source on both of them. We divided structure of income source into (1) on-farm income (rice and non-rice income) and (2) off farm income. To analyze household welfare, we compared their income with the Decend Living Standards of South Sumatera Province in 2016. If their income covered the Decend Living Standards, we concluded that the household's farmers are welfare.

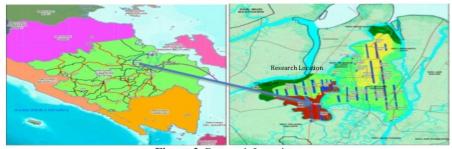


Figure 2. Research Location

#### 3. Results and Discussion

Central Bureau of Statistics data of 2016 shows the number of population in Telang's Independent Integrated City scattered in 4 (four) District of 94.232 person (24,666 KK) consisting of residents in transmigration settlements area of 68,754 person (72.96%) with 18,692 households (75.78%) and local villagers as many as 25,478 person (27.04%) with 5,974 families (24.22%). Details for population structure can be seen in Fig. 3.

Farmers in the Telang Area are mostly transmigration residents who come from Java Island, but there are also Bugis tribe and local people of South Sumatra. The migrant's population were mostly occupied as rice farmers, while the occupation of the Bugis were farmers (especially coconut plants) and traders. The occupation of local people is generally traders, and only a little occupied as farmers and fishermen.

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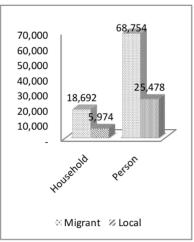


Figure 3. Population Structure at Telang's Independent Integrated City, 2016

For migrant farmers, rice from on-farm income is the biggest income compared to the income of non-rice (corn, beans, vegetables livestock) and off-farm. This is because rice farming is done on vast land with an average of more than 2 ha although only one season planting. As for the corn farming is lower than rice farming when planted on the same land area, because corn farming needs much attention itself very much. In addition, the production and price of corn is lower than rice farming. For off-farm activities of farming actually has lowest level of income, but because not all farmers who seek outside activities farming as seen in Table 1.

Table 1. Income structure for migrant and local farmers in Telang's Independent Integrated City, 2017

No	Income Structure	Income (IDR/year)	Percentage (%)
	MIGRANT FARMERS		
1.	On-farm (rice)	34.087.121	50.10
2.	On-farm (corns, beans, vegetables, livestocks)	9.406.252	13.80
3.	Off-Farm	24.480.556	36.00
	Total	67.973.929	100.00
	LOCAL FARMERS		
1	On-farm (rice)	12,320,818	30.98
2	On-farm (corns, beans, vegetables, livestocks)	1,439,999	3.62
3	Off-Farm	26,014,667	65.40
	Total	39,775,484	100.00

Table 1 showed the income structure for migrant and local farmers in Telang's Independent Integrated City. Based on Table 1 can be concluded that the contribution of rice farming to the total income of migrant farmers is the largest contribution of 50.10 percent. For the total income of corns, beans, vegetables, livestocks farming has the smallest contribution to the three types of sources of income, which is 13.80 percent and for off-farm income has a contribution of 36.00 percent.

The opposite occurs in the structure income of local farmers. For local farmers, the largest income is derived from the off-farm sector (such as traders, drivers, and laborers). Then followed by income from rice and non-rice farming. For non-rice farming, almost all local farmers raise livestock and do not plant other commodities. Based on Table 1 can be concluded that the contribution of rice farming

to the total income of farm households is only 30.98 percent. For the total income of corns, beans, vegetables, and livestocks farming has the smallest contribution to the three types of sources of income, which is 3.63 percent and off-farm income has the biggest contribution of 65.40 percent.

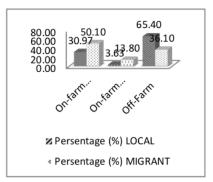


Figure 4. Comparison of Income Structure between migrant and local farmers in Telang's Independent Integrated City, 2017

If it is related to the ability of farmers to covered the decent living needs of South Sumatera Province in 2016 amounting to IDR 2,206,000 / month, it can be concluded that the income of both local and migrant farmers has been able to covered their decend living needs. In other words, both local and migrant farmers are welfare, especially related to their activity on the tidal area of Telang's Independent Integrated City. So, this research result is same with Murti (2012)<sup>[9]</sup>, there was positive impact from this program. The independent integrated city program has boosted household economic growth in this area. In general, this research result indicated a positive change that indicates there will be an economic acceleration after at all <sup>[3]</sup>.

There are some new finding in this research. As we know, the South Sumatera Government developed Telang's Independent Integrated City with agriculture as the main sector. Develop agriculture as the main sector in Telang's Independent Integrated City impacted on the main occupation in this area, that is as farmers. But, there some anomaly finding in this research result. Not both of local and migrant farmers have main occupation in agriculture now. The results of the analysis indicate that there has been a change in the structure of occupation for local farmers, who initially worked on-farm turned into off-farm. Limitations of on-farm activities are actually related to the smaller farming area owned. Local farmers only have 1.37 hectares of land, while farmers have 2.4 hectares. With a small land area, rice farming is not a lucrative option for local farmers in on-farm activities. This result is in accordance with the research findings in Micklethwait & Wooldridge <sup>[7]</sup>, human life and other species will experience difficulties due to contamination of various sources of life, thus disrupting the balance of nature and human life. In situations like this there will be a change of occupation or transition of work to the peasant community for the sake of survival.

The transformation of livelihoods pattern of local farmers is marked by very small agricultural income, the narrower land, the large production cost is not proportional to the sale value of agricultural products, the non-agricultural business opportunities are more open with considerable income, the younger local generation and the farmers are unwilling continue the agricultural work of his parents, and there is mobility of the population that can generate transactions of work between farmers as a party in need of employment with migrant communities as the party in need of labor. In addition there is also a perception among the younger local generation that agricultural work is considered less prestigious, impressed dirty, shabby, poor, less educated and provide no guarantee of a clear future. In the opinion of local farmers in the region, agricultural work is not the only type of income-generating job. Although agricultural work is dominant in rural areas, the facts show that the socio-economic life

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of farmers' societies is determined not only by the agricultural sector. Along with the increasing opening of information and changes to the nature of life among the community, the farmers also experienced changes in the way of learning and economic behavior in everyday life. The fulfillment of the necessities of life is not enough to be satisfied only by one type of work, but also to be supported by other work and a more productive social role.

Based on the results of this study, there has been social change, especially for local communities. If this social change continues to be left, in the future more and more groups will leave the agricultural sector. A number of suggestions were proposed by Hardika (2011)<sup>[6]</sup>, dan Qodir<sup>[10)</sup> regarding the transformation of livelihood patterns of farming communities in the transition areas, namely (1) the need to identify the needs and sources of as a material for the formulation of socio-economic empowerment programs of the community, and (2) it is necessary to develop non-farm business models relevant to the characteristics.

#### 4. Conclusion

Telang's Independent Integrated City is an area of rice production center development and rice industry. Telang's Independent Integrated City Program in tidal land proved to have a great chance of success due to various technological innovations that are available. Farmer's income has been able to covered their decend living needs, so the household are welfare. Judging by local and migrants farmers, the income of migrant farmers is higher than local farmers. From the income structure side, migrant farmers rely more on the livelihoods of the on-farm sector, while local farmers rely more on the livelihoods of the off-farm sector.

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