

## **GREEN ENTREPRENEURSHIP IN INCREASING INCOME OF FAMILY BUSINESS AT KERANGGAN ECOTOURISM**

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### **ABSTRACT**

This conceptual paper discusses about green entrepreneurship which will be developed at Keranggan ecotourism in South Tangerang, which has an impact to increase their income for family business. The example for family business is a cassava chips industry that able to produce 30 kg/day. If the selling price is IDR 40,000/kg, and the production cost is IDR 25,000/kg, then the profit is IDR 450,000/day (IDR 13,500,000/month). Whereas previously their average income is IDR 50,000/day. Thus, there is a significant increase in income. Development of ecotourism using green entrepreneurship concept is in line with the national development focus in 2018 such as: manufacturing sector (industry), agriculture and tourism. Based on data, in 2013 the poverty rate in Keranggan is still very high. So, the aims of this research are: to find the way to increase income for family business through green entrepreneurship, how to encourage the community and implement green entrepreneurship as well.

**Keywords:** Green Entrepreneurship, Ecotourism, Increase, Income

### **PROEM**

Keranggan is a beautiful village in Setu District, South Tangerang City in Banten Province, Indonesia. The location is around Cisadane river which looks so natural and beauty. Based on data, in 2013 the poverty rate in Keranggan is still very high. It was assessed from infrastructure, life expectancy, drop out and other factors. Keranggan Village is the biggest contributor to the poverty rate in South Tangerang of its population of about 4 thousand people, 10 percent of them are poor citizens (Elvita Fitriani, Satelit News, September 6, 2013).

Keranggan has been visited by many tourists from various countries such as: China, Korea and Germany. In Keranggan they also have a lot of event such as: fishing, photography competition, local culture creations, and so on. And for family business they have 10 tons peanuts productions per week. Cassava chips production

per day spend 1 tons, and banana spend 2 tons per day to make chips. Besides that, there are 10 kindergartens that will educate about nature each month in this place.

According to Ferry Payacun (Head of Industry at “Disperindag” South Tangerang), tourist sector in South Tangerang is increase significantly. At this time the village of Keranggan, became one of the tourist industry village that could be an alternative option to explore the youngest city in Banten province. Keranggan is a tourism industry village supported by 107 traditional snack products, such as banana chips, cassava chips, roasted beans and others. Consumers will not only buy the product at Keranggan. They will also get a 'bonus' in the form of direct visits to the workshop and invited to directly observe the production process (Bisnis Jakarta, December 7<sup>th</sup>, 2017).

According to Airin Rachmi Diany (South Tangerang Mayor), the potential of Keranggan should be explored seriously and need to work with various parties, community, academia, society and government. If all activities are well established then it can be growth rapidly. In order to develop Keranggan as well, in the future this collaboration should be optimized (Detak Tangsel, December 7, 2017).

The term green entrepreneurship has a big obstacle and it's that many companies associate it with a high costs. There are some steps that can be taken to reduce pollution and reduce costs at the same time, for instance recycling and reusing paper. In this case, a sheet of paper that was previously just used on one side now has to be used on both sides, something that will reduce in about 50% the consumption of paper.

At the time, one of green entrepreneurship implementation obstacle is many people are unconcerned about the benefits of green entrepreneurship and their awareness is very poor. The problem between the concept of green entrepreneurship which can make money or reduce cost and the fact that the implementation is not running properly, even though green entrepreneurship implementation can make money and there are a lot of poor citizen, but the awareness to run still very poor. So, in accordance with the concept/theory need to be proven whether it is true. Especially, considering the statistical data in 2013 that Keranggan community have the lowest income compare to another village in South Tangerang, the author eager to do the research to make an improvement.

## THEORETIC

Entrepreneurs are self-employed or people who start a new business, regardless of the type of business (David and Christina, 2015). In the history of entrepreneurship can be divided into five, which are: French School, German School, Austrian School, American School and England School. French School figures such as Richard Cantillon and Nicholas Baudeau. Cantillon divides individual roles in the classical economy into landowners, entrepreneurs and rented people. Entrepreneurs are people who are involved in exchange for profits and who make business decisions on uncertain conditions. Nicholas Baudeau adds that the entrepreneur is an innovator. German School figure, Johann Heinrich von Thunen describe his understanding on how to calculate compensation for an entrepreneur. Austrian School figure, Carl Menger introduces the concept of a conjoin clause process. American School figure, Amasa Walker recognizes the role of entrepreneur as the creator of prosperity. The entrepreneurial understanding of the England School's perspectives can be learned from Adam Smith. Smith's concept of motivation to be a prosperity creator greatly affects the concept of entrepreneurship. Smith focuses more on the profit earned (David and Christina, 2015).

The green entrepreneurship defined as taking responsibility to create the world we want. A green entrepreneur, or "ecopreneur", can be anyone who wants to successfully earn a living while striving to solve environmental problems (Robert Hall, 2013). Green Entrepreneurship is one of those concepts that every manager, every top executive and every entrepreneur should know by heart and apply to their daily and business life. Green entrepreneurs are oriented towards environmental concerns and continuously continue their actions to create a green economy in the future. Green entrepreneurs, or so-called Ecopreneurs, also create large-scale jobs for many people around them, providing an opportunity for many to participate in preserving the environment in their Business (John & Stephanie, 2006).

Ecotourism is: "Responsible travel to natural areas that conserves the environment and improves the well-being of local people." (The International Ecotourism Society /TIES, 1990). Eco-Industrial Park is a set of industries located at a place where the small busines in it work together to improve their environmental, economic and social performance (Surna Tjahja Djajadiningrat, et.all., 2014).

According to the definition above, Keranggan can call as an Ecotourism or Eco-Industrial Park.

Family business is the engine of the economy for many countries. In Indonesia, more than 95 percent of companies are owned by families and they employ millions of people and they have a very important role in creating jobs and in boosting economic growth (Chris Razook, IFC Corporate Governance Lead for East Asia and the Pacific, 2015). According to PricewaterhouseCoopers (PwC) Survey in 2014: “Family businesses in Indonesia grow stronger and see professionalism the business as key concern” stated that: In Indonesia, 83% of family businesses grew in the last financial year, compared with 65% globally. Optimism and ambition for the future is high with 96% aiming for growth over the next 5 years, compared with optimism for only 65% globally. From the survey, 30% of Indonesian family businesses are still young and ambitious under 20 years of age and most businesses (27%) still have \$5-10 million (60 – 129 bio IDR) turnover annually. Within the steady economic growth in Indonesia, it is expected that these young businesses will triple or even quadruple their growth in the next 5 to 10 years.

According to journal with the title: “Sustainability: solar energy is the way forward” by Surendra S. Yadav in 2015 stated that: Sustainable development wherein 3Ps (profit, people and planet) have to be given due importance by all who matter in decision making is no longer a fashionable word, but has become a necessity today. With minor variations between different countries, the largest percentage of power is produced in thermal form using fossil fuels. The alternate sources are hydroelectric, biomass, wind, geothermal and solar. Of these, the solar energy can be harnessed to meet the energy needs of the world as a whole. In course of time, it may not even be necessary to give higher price to solar power produced by rooftop panels and fed to the grid. The price would reduce automatically when the solar power is generated on a wider scale. For example, in India, Delhi, the capital city, can shift to solar rooftops and has a potential to generate much more solar power than its current need for power, which is about 6,000 MW. According to article with the title: “Realizing Energy Independence Beginning from the Village in Bali” by Anton Muhajir, on 12 January 2017 stated that: For I Gusti Ngurah Agung Putradhyana (Gung Kayon), converting the sun's heat into electrical energy is no

longer a dream. He uses it from personal and household scale. His dream is big, Indonesia is abundant sunlight which can be self-sufficient renewable energy. In his home with Balinese architecture, Gung Kayon suffices almost all of its electrical energy needs with solar power. To get solar energy at home, Gung Kayon put a dozen solar panels on the yard, roof, or other parts. The collected solar energy is then converted into heat, light, and motion through various household appliances.

## **METHOD**

This study use qualitative approach due to various reasons, including; The research which needs to be done cannot be conducted using mail questionnaires, surveys or brief interviews. Whereas traditional research in small business tried to discover why entrepreneurs do what they do, future research should focus on how they do it, and how others can be encouraged to succeed as well. How is business conducted in various environments? How do individuals from different cultures perceive opportunity? How can entrepreneurship be fostered in different environments? Wortman and Roberts (1982) suggest that whereas quantitative research designs typically answer why questions, “in employing the qualitative approach, the focus is on how (...) rather than why” (Dana, L. P., & Dana, T. E., 2005). Qualitative methodology is based on personal observation of situations, events, individuals, interactions and transactions, as well as document analysis (including quantitative records) and open-ended interviews yielding in-depth and oral testimonies. Qualitative data thus includes thick description (Leksono, 2013), and direct quotations from people about their attitudes, beliefs, thoughts, intentions, actions and experiences (Dana, L. P., & Dana, T. E., 2005). So in this research, the author take sample using judgment sampling and conducting interviews by involving key informants who are competent in their field. And for analysis and discussions, the author use descriptive method to explain the results of research and observation in the field.

## RESULT

In this research the author is focus on the production of cassava chips for the example of family business activities, which are the largest population of small business (SME/UMKM) in Keranggan. From this research the author got the result, Data Collection and Analysis as follows.

### 1. Data Collection

Based on the observation during research from June 2017 until February 2018, the author got the data about the whole production process and total cost of Cassava Chips industries as follows:

The production capacity reaches 100 kg of raw material (cassava) per day, which is processed into 30 kg of cassava chips with cost details below:

#### **Machine and Equipment (Investment):**

- a. Stove 2 pcs @ Rp250,000 with life time 3 years
- b. Gas cylinders 1 pcs @ Rp550,000 with life time 5 years
- c. Frying Pan 2 pcs @ Rp300,000 with life time 3 years
- d. Spatula 2 pcs @ Rp25,000 with life time 2 years
- e. Tray 2 pcs @ Rp40,000 with life time 2 years
- f. Basin 3 pcs @ Rp50,000 with life time 2 years
- g. Scales 1 pcs @ Rp160,000 with life time 5 years
- h. Knife 2 pcs @ Rp35,000 with life time 3 years
- i. Plastic Preserving Machine 1 pcs @ Rp250,000 with life time 5 years
- j. Big Bucket 2 pcs @ Rp60,000 with life time 2 years
- k. Small Basin 3 pcs @ Rp40,000 with life time 2 years
- l. Cassava Cutting Tool 2 @ Rp25,000 with life time 2 years

#### **Variable Cost/Day:**

Cassava 100 kg @ Rp5,000; Cooking Oil 5 lt @ Rp15,000; Spices 1 ls @ Rp25,000; Margarine 3 pcs @ Rp6,000; Plastic and Packaging 30 pcs Rp1,000; Gas (refill) 2 cyl/month @ Rp155,000

## 2. Analysis

Table 1. Production Cost Analysis of Cassava Chips in Keranggan Ecotourism, 2018

Description	Item	Cost/Unit	Total Cost
<b>1 Machine and Equipment (Investment)</b>			
a. Stove	2	Rp 250,000	Rp 500,000
b. Gas cylinders	1	Rp 550,000	Rp 550,000
c. Frying Pan	2	Rp 300,000	Rp 600,000
d. Spatula	2	Rp 25,000	Rp 50,000
e. Tray	2	Rp 40,000	Rp 80,000
f. Basin	3	Rp 50,000	Rp 150,000
g. Scales	1	Rp 160,000	Rp 160,000
h. Knife	2	Rp 35,000	Rp 70,000
i. Plastic Preserving Machine	1	Rp 250,000	Rp 250,000
j. Big Bucket	2	Rp 60,000	Rp 120,000
k. Small Basin	3	Rp 40,000	Rp 120,000
l. Cassava Cutting Tool	2	Rp 25,000	Rp 50,000
<b>Total Investment (1)</b>			<b>Rp 2,700,000</b>
<b>2 Fixed Cost:</b>			
a. Depreciation of Stove 1/36	0.03	Rp 500,000	Rp 13,889
b. Depreciation of Gas Cylinders 1/60	0.02	Rp 550,000	Rp 9,167
c. Depreciation of Frying Pan 1/36	0.03	Rp 600,000	Rp 16,667
d. Depreciation of Spatula 1/24	0.04	Rp 50,000	Rp 2,083
e. Depreciation of Tray 1/24	0.04	Rp 80,000	Rp 3,333
f. Depreciation of Basin 1/24	0.04	Rp 150,000	Rp 6,250
g. Depreciation of Scales 1/60	0.02	Rp 160,000	Rp 2,667
h. Depreciation of Knife 1/36	0.03	Rp 70,000	Rp 1,944
i. Depreciation of Plastic Preserving Machine 1/60	0.02	Rp 250,000	Rp 4,167
j. Depreciation of Big Bucket 1/24	0.04	Rp 120,000	Rp 5,000
k. Depreciation of Small Basin 1/24	0.04	Rp 120,000	Rp 5,000
l. Depreciation of Cassava Cutting Tool 1/24	0.04	Rp 50,000	Rp 2,083
<b>Total Fixed Cost (2)</b>			<b>Rp 72,250</b>
<b>3 Variable Cost:</b>			
a. Cassava x 30 days	100 kg	Rp 5,000	Rp 15,000,000
b. Cooking Oil x 30 days	5 lt	Rp 15,000	Rp 2,250,000
c. Spices x 30 days	1 ks	Rp 25,000	Rp 750,000
d. Margarine x 30 days	3 pes	Rp 6,000	Rp 540,000
e. Plastic and Packaging x 30 days	30 pes	Rp 1,000	Rp 900,000
f. Gas (refill) x 2/month	2 cyl	Rp 155,000	Rp 310,000
<b>Total Variable Cost (3)</b>			<b>Rp 19,750,000</b>
<b>Total Operational Cost (1+2+3)</b>			<b>Rp 22,522,250</b>
<b>Total Production</b>	30 kg	Rp 40,000	<b>Rp 36,000,000</b>
<b>Total Profit</b>			<b>Rp 13,477,750</b>

Source: Observation Data, 2017

Beside the main product, the author encourage family business entrepreneur there to make an improvement process. As we know that cassava peel can be processed into other product such as chips, compost, bio ethanol, animal feed, and the other. In this research the author only analyzed the production cost of Cassava Peel Chips to get the profit as an income for them.

For Cassava Peel Chips within one day the production capacity reaches 10 kg of raw material, which is processed into 30 pieces (small packaging) of cassava peel chips with cost details (without investment, because they use the existing machine and equipment) below.

### Variable Cost/Day

Cassava Peel (reused/waste product) 10 kg for free, Cooking Oil 2 lt @ Rp15.000, Spices 1 ls @ Rp25.000, Plastic and Small Packaging 30 pcs @ Rp1.000, Gas (refill) x 1/month 1 cyl @ Rp155.000.

### And the production cost as follow:

Table 2. Production Cost Analysis of Cassava Peel Chips in Keranggan Ecotourism, 2018

Description	Item	Cost/Unit	Total Cost
<b>1 Machine and Equipment (Using Existing)</b>			
Total Investment (1)			Rp -
<b>2 Fixed Cost:</b>			
Total Fixed Cost (2)			Rp -
<b>3 Variable Cost:</b>			
a. Cassava Peel x 30 days (reused/waste product)	10 kg	Rp -	Rp -
b. Cooking Oil x 30 days	2 lt	Rp 15,000	Rp 900,000
c. Spices x 30 days	1 ls	Rp 25,000	Rp 750,000
e. Plastic and Small Packaging x 30 days	30 pcs	Rp 1,000	Rp 900,000
f. Gas (refill) x 1/month	1 cyl	Rp 155,000	Rp 155,000
Total Variable Cost (3)			Rp 2,705,000
Total Operational Cost (1+2+3)			Rp 2,705,000
Total Production	30 pcs	Rp 5,000	Rp 4,500,000
Total Profit			Rp 1,795,000

Source: Observation Data, 2017

From results of the research with cassava chips production as an example for family business that has been stated above, it is known that the production process of cassava chips shows the result as follows:

### Cassava Chips

- From the raw material 100 kg which have been processed become 30 kg cassava chips/day. It's mean that 900 kg/month.
- Total operational cost or total production cost is Rp22.522.250.
- With the selling price Rp.40.000/kg, they got total production Rp1.200.000/day. It's mean that Rp36.000.000/month.

### So the profit (gross) which they've got is.

$$\begin{aligned}\text{Profit} &= \text{Total Production} - \text{Total Operational Cost} \\ &= \text{Rp}36.000.000 - \text{Rp}22.522.250 = \text{Rp}13.477.750\end{aligned}$$

Form statistic data that stated on section 1, in 2013 Keranggan Village is the biggest contributor to the poverty rate in South Tangerang. So their income



approximately is about Rp50.000/day. It's mean that Rp1.500.000/month, which is less than regional minimum wage (Upah Minimum Regional/UMR).

Regarding to that data, it shows that their income are increase from Rp50.000/day to Rp449.258/day or from Rp1.500.000/month to Rp13.477.750/month if they did cassava chips production. So their income increase 7,99 times or rounded to 8 times, which is 799%.

Beside the main product they also got the profit from waste/reused material of cassava product. They used cassava peel for another creative product which they called it cassava peel chips. They also got the profit from reused material as follow: (a) From the 100 kg raw material, they have 10 kg cassava peel which has been processed become 30 pieces cassava peel chips/day (for small packaging). It's mean that 900 pieces/month. (b) Total operational cost is Rp2.705.000. Total operational cost looks very small because there is no investment. Instead of they buy new equipment, they take advantage of existing equipment. (c) With the selling price Rp.5.000/pcs, they got total production Rp150.000/day. It's mean that Rp4.500.000/month.

**So the profit (gross) which they've got is:**

$$\begin{aligned}\text{Profit} &= \text{Total Production} - \text{Total Operational Cost} \\ &= \text{Rp4.500.000} - \text{Rp2.705.000} = \text{Rp1.795.000}\end{aligned}$$

The results of this research support previous research, such as; Amasa Walker stated that “recognizes the role of entrepreneur as the creator of **prosperity**” (David & Christina, 2015). Adam Smith stated that “concept of motivation to be a prosperity creator greatly affects the concept of entrepreneurship and focuses more on the **profit earned**” (David & Christina, 2015). Gustav Berle (on (David & Christina, 2015) stated that “The Green Entrepreneur: Business Opportunities That Can Save The Earth And **Make You Money**”. Basically green entrepreneurship can make money. The important thing is how to reach that opportunity through process improvement, innovation and creativity. Harland (on Robert Hall, 2013) stated that “Obviously, we have to use machines to design but we **minimized waste as much as we can**”. This statement is suitable with this research which

encourages the community at Keranggan Ecotourism to use waste product and process it into another product.

## CONCLUSION

1. They can implement home industry like cassava chips production with green entrepreneurship concept, which is use the garbage to produce another product and make another profit/income.
2. Their incomes are **increase from Rp50.000/day to Rp449.258/day** or from Rp1.500.000/month to Rp13.477.750/month if they run cassava chips production. So their income increase 7,99 times, which is 799%. And if they also did the production of cassava peel chips, their income will be higher than before, **with additional Rp1.795.000/month** because of the profit from cassava peel chips. In the other word we can say that green entrepreneurship which will be implemented at Keranggan Ecotourism can increase their income significantly.
3. They can also get benefit from compost, animal feed, soap and others product which can be improved from waste/reused product base on their creativity.
4. Besides the involvement of government, they have to active in Cisadane Creative Village Community (Komunitas Kampung Kreatif Cisadane/K3C) and “Koperasi Cipta Boga” as an organization to accommodate their aspirations and needs.

## REFERENCES

- Dana, L. P. & Dana, T. E. 2005. *Expanding the scope of methodologies used in entrepreneurship research*. International Journal of Entrepreneurship and Small Business, 2(1), 79-88.
- David S. Kodrat & Christina, Wina. 2015. *Entrepreneurship Sebuah Ilmu*. Jakarta: Erlangga.
- John C. Allen & Stephanie A. Malin. 2006. *Green Entrepreneurship: A Method for Managing Natural Resources?*, USA: Utah State University.
- Kasmir. 2016. *Kewirausahaan*. Jakaarta: Raja Grafindo Persada.
- Leksono, Sonny. 2013. *Penelitian Kualitatif Ilmu Ekonomi: Dari Metodologi ke Metode*. Jakaarta: Rajawali Pers.
- Robert Hall. 2013. *The Enterprising Ecovillager Achieving Community Development through Innovative Green Entrepreneurship*. ISBN 978-609-8080-42-1, Lithuania.
- Surna Tjahja Djajadiningrat, Hendriani, Yeni & Famiola, Melia. 2014. *Green Economy (Ekonomi Hijau)*. Bandung: Rekayasa Sains.