

# Analysis of Improvement of the Agrarise Sector For the Tourism Village Industry Using Causal Loop Diagram (CLD)

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**ABSTRACT:** This study aims to analyze the efforts that have to do in increasing the potential of agrarian through the current method, namely the agricultural sector based on tourism villages. The research method used is descriptive qualitative. The theoretical basis in this research is the system thinking theory, which is to understand a change in a complex environment. The method of analysis in this system is the Causal Loop Diagram (CLD). The results of the CLD analysis show that in order to increase the agricultural sector towards tourism villages, the first is the government's effort to promote the regional base as a potential resource. The second is education, as an effort to educate or equip the community with scientific and creative methods. The third is execution, which means the government launches a program then ratified by a Decree related to the ease of administering the funds needed by the community for investment. The problems faced in increasing the agricultural sector to tourism villages are on three lines, namely the government, the community, and other factors. These problems include complicated regulations, quality, funding, community laziness, competitiveness, mastery of technology, infrastructure, strategic locations, weather/climate.

**KEYWORD:** Agrarian Tourism Village, System Thinking, Causal Loop Diagram (CLD).

## I. INTRODUCE

Economic development is economic growth followed by changes in the pattern and structure of the economy. In other words, the term economic development does not only refer to real national income but also economic modernization, for example, the overhaul of the traditional agricultural sector, the problem of accelerating economic growth, and the problem of the income distribution (Sukirno, 2011).

Indonesia has experienced massive economic development in the New Order era. At that time, Indonesia experienced very significant changes in every sector, such as economic growth, infrastructure development, and the development of the agricultural sectors. One of the extraordinary achievements that Indonesia has achieved in the agricultural sector is that it can change the status of a rice importing country to become the largest rice exporting country in the world and achieve food self-sufficiency in the 1980s (Kompasiana, 2015). Indonesia was also known internationally as the Asian tiger.

Indeed, Indonesia can repeat past glory. As a country with abundant natural resources, Indonesia is often predictable to become one of the developed countries in the future. Energy observer Kurtubi said that the estimated value of proven reserves is from oil, gas, coal, copper, gold, nickel, silver, and so on, assuming no new backups found anymore. That is what is stored in the bowels of the earth. Its current value is around Rp. 200 thousand trillion (Praditya, 2014). Not to mention wealth generated by biodiversity, that includes plantations, agriculture, fisheries, and agricultural forest products.

In the field of human resources, Indonesia is no less extraordinary. One of the many creative and innovations is the largest popular culture festival in Asia called Popcon Asia 2015 which took place at the Jakarta Convention Center (JCC), Senayan, Jakarta. This event aims to enable creators in the creative industry to compete internationally and globalize their works (Jawa Pos Detection, 2015). That is proof that Indonesian human resources are qualified in terms of industrial creativity and deserve to be taken into account.

History is not only the past but also a lesson for the present. Extraordinary development under the second president of the Republic of Indonesia emphasized the agricultural sector as the priority indicator of economic and political stability. That is proof that optimizing the mostly run sectors by the community is can boost economic development and achieve prosperity.

In the current era of the ASEAN Economic Community (AEC), Indonesia's potential must be touched by creativity and innovation. Technology and information are necessary to optimize mostly run sectors of society, such as MSMEs and biodiversity. It is not impossible in this way that Indonesia will achieve the glory of development in the frame of modernization in the form of creative industries. Therefore, we are highly optimistic that Indonesia will be able to build a massive economy and be able to become self-reliant for the wider community.

## II. LITERATUR REVIEW

### 2.1. Building the Economy from the Bottom and Its Obstacles

The role of the government in seeking the realization of national development is very vital. In recent years many government programs have been running for the success of national development through the creative industry, but there are still many people who do not know about it. Therefore, the government needs to use proper management so that all people know the government's commitment.

Viewed from the point of view of globalization, the government can involve all elements of society to enter the creative industry. The government's efforts that need to be optimized are promotion, education, and execution. First, promotion is the government's effort to introduce the potential base of resources owned by the state. Promotion can be done through television, radio, or internet media. However, it can also be done by direct socialization, such as official visits, seminars on campus, demonstrations, or workshops.

Second, efforts that need to be carried out by the government are through education. Education is an effort to educate or equip the community with scientific and creative methods. Generally, this program is carried out in the world of education by including subjects, courses, or materials related to entrepreneurship. In this way, they have been given from an early on how to become entrepreneurs, seize opportunities, and business management strategies, for another way, namely competitions on business plans, writings, economic debates, all of which are held to include the educational side.

It's not just schools or colleges that can enjoy education. Other educational targets include farmer groups, fishermen groups, or PKK women. Education for farmers is usually carried out through agricultural demonstrations, conducting upgrading, or training. The material taught is agricultural modernization, because this is very important in the context of (1) meeting domestic needs, especially food, (2) growing and developing agribusiness that produces various export commodities (Siagian, 2007). All of this exceptionally affects the level of efficiency and effectiveness for farmers.

However, not all farmers get the opportunity, so for the selected farmers to follow, their knowledge will be shared with other farmers. It is expected that in the future the farmers will be familiar with agricultural technology. Then for fishers, education is necessary for them to know how to create new value from the marine products they get, such as how to produce canned fish. For PKK mothers, education is necessary for them to gain knowledge of creativity. Products produced from creativity can be completed at home, so apart from being housewives, they also add value. Likewise, with those who have not worked, the creativity that is taught will be very important.

Third, the execution here means a real government effort to launch a program which is then ratified by a decree. The program in question is the convenience of the government in organizing the funds needed by the community for investment. Several efforts to facilitate funding that have been running include the People's

Business Credit (KUR) program, Food, and Energy Security Credit (KKPE), the National Independent Community Empowerment Program (PNPM Mandiri), the Village Fund program, and so on. The funds can also convert into equipment as a means of support. That program is a form of commitment from the government to develop the Indonesian economy, especially the creative industry or creative economy.

At first glance, it is known that the program currently targets the middle and lower classes of society. Dr. Ir. Mohammad Rudy Salahuddin, Deputy for Coordination of the Creative Economy, Entrepreneurship, and Competitiveness of Cooperatives and SMEs at the Coordinating Ministry for Economic Affairs in his keynote speech that the government will continue to hold on to its commitment to developing the creative economy. This was done because the government realized the potential of the creative economy to contribute to gross domestic product (GDP), employment, and export value.

From 2017 until now, Indonesia is still in the third position in the world as the country with the largest creative economy contribution to GDP, after the United States and South Korea. Its total contribution reached 7.28 percent to GDP. Based on data from Opus Creative Economy Outlook 2020, Indonesia's creative economy sector is estimated to be able to generate up to Rp1,100 trillion for Indonesia's Gross Domestic Product (GDP). The biggest contribution comes from the three sub-sectors of the creative economy industry, namely fashion, culinary, and crafts. In 2017 each contributed to GDP by 41.4% of the fashion sub-sector, then 17.6% of culinary, and almost 15% of handicrafts. The era of the commodity boom has finally created an opportunity as well as a challenge for the development of the creative economy (Good News, 2020).

Overall, the contribution of the creative economy can be seen from the results of the following performance achievements in 2019, where the creative economy was able to contribute 7.28% to the National GDP and absorb 19.01 million workers.

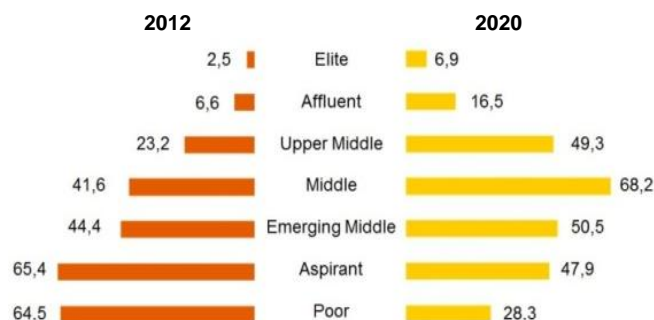
**Tabel 1 The Results of the 2019 Creative Economy Agency's Performance Achievements**

No.	Strategic Target	Strategic Target Performance Indicators	Target	Realization	Achievements (%)
1.	Creative Economy Growth	Creative Economy GDP Growth (%)	5,3	5,10	96,23
2.	Employment	Labor Absorption (million people)	17,20	19,01	110,52
3.	Creative Product Export Value	Gross Export Value (Billion USD)	21,50	22,07	102,65

Source: Creative Economy Agency Performance Report, 2019. (processed by researchers)

Presidential Regulation Number 72 of 2015 concerning amendments to Presidential Regulation Number 6 of 2015 concerning the Creative Economy Agency has reclassified the creative industry sub-sector from 15 sub-sectors to 16 sub-sectors, namely architecture; design interior; visual communication design; product design; films, animations, and videos; photography; craft; culinary; music; fashion; application and game developers; publishing; advertising; television and radio; performing Arts; and fine arts. The contribution of 15 creative industry sub-sectors to the proportion of GDP in 2014, which shows that the culinary industry is the sub-sector with the largest GDP contribution, which is 32% (Coordinating Ministry for Economic Affairs, 2015).

The culinary industry is very easy to find anywhere. There are various forms there are restaurants, warungs, street snacks, and so on. The thing that causes the culinary industry to thrive is very simple that is everyone always needs to eat. The culinary industry is an opportunity for MSMEs for most people. With cooking skills, easily available ingredients, and abundant consumers, most people, especially the lower middle class, have taken the initiative to establish these industries, because the risks they face are not too big.



**Fig. 1. Indonesia's Population Growth by Economic Class 2012-2020**

Source : [www.bppk.kemenkeu.go.id](http://www.bppk.kemenkeu.go.id)

It is appropriate, considering that Indonesia is a developing country with an agricultural and maritime base so that it can provide culinary ingredients. Minister of Finance (Menkeu) Sri Mulyani Indrawati explained that currently more than 50 million Indonesians belong to the upper-middle class and 120 million people are the aspiring middle class, namely groups that are no longer poor and are moving towards a more established middle class. With the development of the middle class, the creative industry has become extraordinary, the potential of the creative industry in line with the lifestyle of the middle class. The middle class will have an impact on the Indonesian economy, especially on the demand side.

In addition, developing countries are synonymous with large populations, the majority of which are the lower middle class. So, it is very clear that the lower middle class is the target of facilitating funding because that is where the majority of farmers, fishers, and MSME actors are. What needs to be underlined is that the SME or MSME sector is able to create 5.4 million "creative industries" in 2013 (very likely to increase drastically in the future) and absorb 11% of the total national workforce, so that economic actors among the middle and lower classes can be taken into account in national economic development. Based on data from the 2018 Central Statistics Agency, it has been able to absorb 14.28% of the National workforce through 8.2 million businesses in the creative industry sector which is dominated by culinary, fashion, and craft.

As we all know, optimizing the potential for creativity and innovation is very important, especially the potential in the regions. If MSMEs spread in each region, more and more creative industries will be created. If reviewing Law number 22 of 1999 concerning Regional Government and Law number 25 of 1999 concerning Financial Balance between the Center and the Regions, efforts to realize the economic independence of the people and regions are very likely to be realized considering that each region in Indonesia has its own uniqueness that has the potential to create new value (Siregar, 2002).

However, there are bound to be obstacles. It is the same with the process of Indonesia's economic development through the creative industry. For the lower middle class who often encounter various obstacles. It could be factors from the government related to subsidy regulations that are not fully understood by the public, low-interest loans that have not been fully socialized, and so on. Factors from the community are high levels of laziness, lack of courage to compete, product quality, and technological stuttering. And other factors that become obstacles are inadequate infrastructure, strategic locations, and uncertain weather/climate.

## 2.2. System Thinking

Systems thinking is an approach to thinking that looks at the problem as a whole where the events in it interact with each other (Muhammadi, 2001). Paradigm is a way of thinking about describing dynamic relationships that affect behavioral systems; the language used in systems thinking: as a language, system thinking is equipped with tools to understand complexity and dynamic decision making, while the methodology, in this case, is a set of modeling and learning technologies used in System Thinking. Modeling will be used to understand the structure of a system, the interconnections between components, and show how changes in one area will affect the entire system and all its constituents over time.

The systems thinking approach here uses the CLD model. The CLD model is a model that is widely used in problem-solving with a systems approach that considers the dynamic complexity of the system or supports a dynamic system approach. This model emphasizes attention to cause-and-effect relationships between system components which are depicted in a diagram in the form of curved lines ending in arrows that connect one system component to another. The advantages of the CLD model approach are that it can see the problem as a whole, the description of the causal chain is more explicit, the effectiveness of communication can run, it helps the exploration of policy alternatives, and allows the existence of a good position to make decisions.

### **III. RESEARCH METHODS**

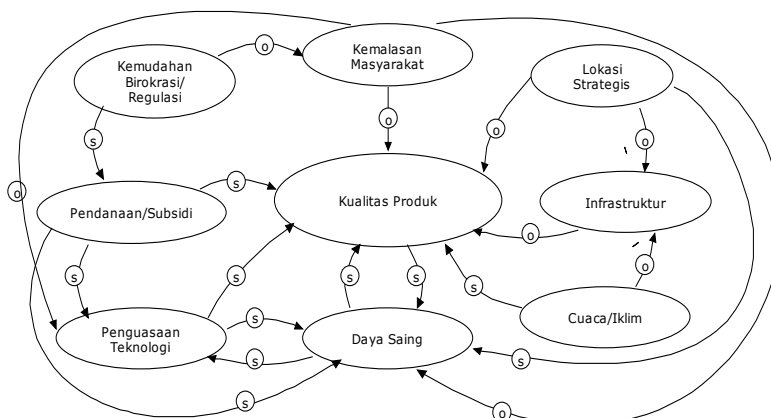
The approach in this paper is in the form of library research (Library Research) research in collecting data and information from various sources of literature such as journals, articles, publishing news on the websites of related institutions, and qualitative inspiration according to experts or experts, books, magazines. Literature study can also come from reference books as well as the results of similar previous studies which are useful for getting a theoretical basis for the problem to be studied with data collection techniques by conducting a review of books, literature, notes, and various reports related to the problem to be solved. or a theoretical study, references and other scientific literature related to the culture, values and norms that develop in the social situation under study (Mirzaqon & Purwoko, 2018) This research uses data collection techniques through documentation by reviewing and / or exploring several journals, books, and documents (both printed and electronic) as well as data sources and or other information deemed relevant to the research or study. (Supriyadi, 2017).

### **IV. RESULT OR DISCUSSION**

Efforts to increase the agricultural sector into a tourist village industry is very important. Policymaking based on existing problems is a factor for the sustainability of the expected process to create and add value. Problem-solving requires thinking that pays attention, considers, and decides on many factors systematically hope that improving the agrarian sector into a tourist village industry, the relationship can be clearly and complexly known. Based on literature studies, thoughts, experiences, and discussions with local related parties as business actors, some actual things that need to be considered in a cause-and-effect relationship are:

- a. Regulation/Bureaucracy
- b. Goods Distribution
- c. Funding
- d. Society's laziness
- e. competitiveness
- f. Penguasaan teknologi
- g. Technology mastery
- h. Market Location
- i. Weather/Climate

From some of the things above, each unit has a significant role, so if a causal relationship model is formed or marked "S" and "O" it can be seen in the following model or pattern.



**Fig. 2. The CLD Model System Approach For The Improvement Of The Agrarian Sector**

**Table 2 The Power of Cause-and-Effect Relationships**

Mark S	Mark O
1. Ease of regulation/bureaucracy of funding/subsidies	1. Ease of bureaucracy/regulation of public laziness
2. Funding for Competitiveness, product quality, and mastery of technology	2. Strategic location on product quality and infrastructure
3. Mastery of technology on competitiveness and product quality	3. Infrastructure on product quality
4. Product quality on competitiveness	4. Weather/climate on infrastructure
5. Competitiveness of product quality and mastery of technology	5. People's laziness towards product quality, mastery of technology, and product quality
6. Strategic location to competitiveness	
7. Climate weather on product quality	

### V. CONCLUSIONS

Economic development is not an easy matter. The indicators that must be achieved include increasing national income, modernizing the economy, accelerating economic growth, and distributing income. That is all achievable when the government strives through various actions involving the wider community. As for the actions that can be taken based on the CLD system approach above are: (1) Introducing assets owned by the state, explaining that the community is important to empower them all; (2) Providing education for the community with ability-oriented materials to utilize everything with technology, creativity, and innovation; (3) Facilitate funding for efficient communities.

Economic development is not an easy matter. The indicators that must be achieved include increasing national income, modernizing the economy, accelerating economic growth, and distributing income. That is all achievable when the government strives through various actions involving the wider commuBecause the majority of the population is from the lower middle class to ensure that the focus of the optimization of the government is their profession, namely MSMEs and land cultivators. MSMEs were able to create 5.4 million creative industries and absorb 11% of the total national workforce in 2013 and is still increasing from year to year. The existence of technology and information is also able to generate creative ideas so that existing agrarian lands can be optimized into creative industries in the form of educational tours.

In essence, the government's commitment is very important for the MSME sector and the agrarian sector in the context of economic development. Optimizing both is the same as creating many creative industries. The tangible results that can later be felt are (1) The more workers are absorbed, the fewer the number of sending TKI abroad; (2) The large number of MSME outputs can increase the circulation of profits in the country and

especially when it becomes an export product, the higher the value obtained; (3) Optimization of agricultural land can increase crop yields so that the State has abundant food supplies and reduces dependence on imported foodstuffs; (4) Tax sector income increased; (5) Slowly increase exports and reduce the number of imported products; (6) The more people who have businesses, the greater the independence of the nation will be created.

## REFERENCES

### Books :

- [1] Badan Ekonomi Kreatif. (2020). Laporan Kinerja Badan Ekonomi Kreatif Tahun 2019. Menteri Pariwisata Dan Ekonomi Kreatif.
- [2] Muhammadiyah, *et.al.* (2001). *Analisis Sistem Dinamis; Lingkungan Hidup, Sosial, Ekonomi, Manajemen.* Jakarta: UMJ Press.
- [3] Siagian, Sondang P. (2007). *Administrasi Pembangunan.* Jakarta: Bumi Aksara.
- [4] Siregar, Doli D. (2002). *Optimalisasi Pemberdayaan: Harta Kekayaan Negara.* Jakarta: Gramedia Pustaka Utama.
- [5] Sukirno, Sadono. (2011). *Makroekonomi: Teori Pengantar.* Jakarta: Raja Grafindo Persada.

### Online Articles:

- [1] Good News From Indonesia. (2020). *Tahun 2020, Sektor Ekonomi Kreatif Akan Sumbang Rp1.100 Triliun ke PDB Indonesia.* Retrieved from <https://www.goodnewsfromindonesia.id/2020/08/31/tahun-2020-sektor-ekonomi-kreatif-akan-sumbang-rp1-100-triliun-ke-pdb-indonesia>.
- [2] Ilyas Istianur Praditya. (2014). *Indonesia Punya Kekayaan SDA Hingga Rp 200 ribu triliun,* Retrieved from <http://bisnis.liputan6.com/read/812149/indonesia-punya-kekayaan-sda-hingga-rp-200-ribu-triliun>.
- [3] Jawa Pos Deteksi. (2015). *Popcon Asia 2015.* Retrieved from <http://deteksi.jawapos.com/news/view/popcon-asia-2015-bukti-indonesia-makin-kreatif-555>
- [4] Kementerian Koordinator Bidang Perekonomian. (2015). *Ekonomi Berbasis Kreatifitas dan Inovasi sebagai Kekuatan Baru Indonesia.* Retrieved from <https://www.ekon.go.id/berita/print/ekonomi-berbasis-kreativitas.1659.html>.
- [5] Kompasiana. (2015). *Swasembada Beras Pada Masa Orde Baru: Sebuah perspektif dari sisi Enforcement Negara.* Retrieved from [http://www.kompasiana.com/nisarangkuti/swasembada-beras-pada-masa-orde-baru-sebuah-perspektif-dari-sisi-enforcement-negara\\_5500ae248133116619fa7b90](http://www.kompasiana.com/nisarangkuti/swasembada-beras-pada-masa-orde-baru-sebuah-perspektif-dari-sisi-enforcement-negara_5500ae248133116619fa7b90).
- [6] [www.bps.go.id](http://www.bps.go.id)