

THE ENVIRONMENTAL FRIENDLY ECONOMIC CREATIVE MODEL TOWARDS THE PEOPLE AROUND THE RESERVOIRS OF CIRATA THE PROVINCE WEST JAVA INDONESIA

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Abstract: *Cirata which has been operated since 27 September 1987 and has a priority towards goals as the main support means electrical energy supplier for Java and Bali, It still leaves some issues that have not been completely resolved. Issues include environmental degradation, socioeconomic, policy and regulation, as well as coordination between the relevant parties.*

The problems that occur in Cirata were caused by industrial and economic activities around the dam which caused serious pollution, and also by the destruction of the Watershed (DAS) upstream Citarum impact on reducing the quality and quantity of water due to erosion and sedimentation processes.

The study of the management of public enterprises around the reservoir, including the cultivation of fish (KJA), agriculture, animal husbandry, and tourism, are known to still conventional and not integrated with each other. This makes the local economy does not show significant improvement and uncontrolled environmental conditions. To overcome these problems required creative eco-friendly economic model.

Creative economic model that is environmental friendly business activities that is concentrated in aquatic weeds, agrosilvopastural, and ecotourism is expected to be able to overcome economic problems of society. Finally, the network model of the environmental friendly creative economic system, water quality, and quantity issues Cirata can be solved.

Keywords: *creative eco-friendly economic model, economic growth, and the quality and quantity of water reservoirs.*

1. INTRODUCTION

Development is essentially to improve the welfare of the people, which in practice always involves both environmental physical and social environment. This means that the approach to development must be holistic, ie: a blend of economic, social, and cultural. In physical terms, involves the development of land resources on which the life of the population, and socio-economic terms that involve the

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construction workforce and the population as a recipient object impacts, while in terms of cultural development will have an impact on the values espoused locals.

The construction of reservoirs (dams) can not be separated from social issues, culture, and economics. Land compensation issues, the loss of people's livelihood can not be avoided from the dam. The communities affected by the construction of reservoirs increasingly bold in expressing his attitude to the environment. Cirata which has been in operation since 27 September 1987 and has a priority goal as the primary means of sustaining the national electricity still leaves some issues unresolved completely. In Cirata Management Master Plan (2012) has identified the complexity of the problems that threaten the sustainability of the reservoir function. The problems include issues of environmental degradation and chemical biophysical, socio-economic, policy and regulation, management and coordination between the parties, assets and infrastructure.

The problems that occur in the environment of Cirata are caused by internal and external environmental reservoirs. Internal environmental reservoirs such as industrial and economic activities affected pose serious pollution. While the external environment is by the destruction of the Watershed (DAS) Citarum the upstream water quality due to erosion and sedimentation processes are very high.

In addition, the presence of landfill, which is known as Sarimukti landfill, the pollution of water reservoir would be increased by the inclusion of organic matter and nutrients.

Another development is no less important is the growing population Keramba cage (KJA) has reached 53 031 units by the number of active cages as much as 48 591 units or approximately 91.63% of the total number KJA. In according to Governor of West Java's decree 41st, 2002, KJA meet Cirata carrying capacity is 12,000 units. This will provide additional pollution load large enough for Cirata reservoirs.

Increasing development around the reservoir Cirata population has also contributed to the destruction of greenbelt area and inundation. This is evident from the high number of peasant land reservoirs Cirata involving land use, conservation of land into cultivation. Unfortunately again, the practice of community land uses environmentally unfriendly (Masterplan Cirata; 2012).

The above issues can not be separated from the socio-economic problems of communities around the reservoir, so that the dependence on resource reservoirs will be very high. As a solution to overcome the problems associated closely with the communities around the dam is to build a creative economy environmentally friendly. According to Howkins (2001) creative economy is an economic activity in which the input and output is the idea. Therefore, the creative economy concept is an environmental friendly business activities or industries which are based on

sustainability. Eco-friendly creative economy based on the idea that a renewable resource. The hope is that the creative economy can be eco-friendly right model in the management of the reservoir and the surrounding area.

Based on the description above, this paper focuses on the creative economy model of environmentally friendly, which formed the idea of a variety of business activities around the reservoir Cirata community.

2. PROBLEM DESCRIPTION

- a) What creative economic activities that can be developed for communities around the reservoir Cirata?
- b) Is the creative economy network model is built based on eco-friendly and holistic approach is able to increase incomes and environmental sustainability Cirata?

3. THEORITICAL FRAMEWORK

(a) The concept of Creative Economy

Creative economy is a new concept in economic civilization in Indonesia. The concept originated from the creative economy creative industries (CI) that starts from Australia. According to Space (2012) emergence of the creative industries in Australia in connection with proposals for radical reform in the field of justification and funding mechanisms related to the policy in the arts and culture sector. However, this term became widely known as the creative industries developed by the UK Government. Furthermore Space outlining the 1980s, Britain experienced a number persoalan.yaitu: decline in industrial activity, high unemployment, and a reduction in the contribution of government funding for the arts and culture. Then it was introduced a concept, named culturisation of industry. Through this concept, art and culture are no longer seen as the sectors that are always in need of subsidies, but also designed to support economic growth and policies related to the development of innovation.

Another reason creative industries developed by the UK Government and other developed countries because it is not possible to build large-scale industry. Environmental issues and land constraints in developed countries so the main consideration.

Based on the above description, then that becomes the question What is the creative economy and creative economy is the same whether the creative industries?. Through the Department of Media, Culter and Sport (DCMS) (in Space), that is the Creative Industries (CI) is as follows: "those activities roomates have their origin in individual creativity, skill and talent, and the which have a potential

for wealth and job creation through the generation and exploitation of intellectual property and content “.

Creative industries in France is defined as a series of activities in the field of economics that combines the concept of cultural creation and production sectors with large-scale manufacturing industry functions and commercialization of cultural products. While in Indonesia does not use the term creative industries, but the term Creative Economy (KE). Creative economy in Presidential Instruction 6 of 2009 is an economic activity based on the creativity, skills, and talents of individuals to create the creativity and inventiveness of individuals that have economic value and affect the welfare of the Indonesian people.

According to the Working Group on Design of Power Ministry of Trade, the Indonesian Creative Economic Development 2010-2014 (in Suryana: 2013) suggests “the creative economy is a new economic era that promotes creativity by relying on the information and ideas and knowledge (stock of knowledge) of human resources as the main production factor in economic activity. It is the same with John Howkins term that has been chronicled in advance.

Opinions Affif (2012) is a phenomenon of the creative economy and the trend of alternative options, especially in contributing to global economic growth in the third millennium.

According Suryana (2013) is essentially a creative economy economic activity that promotes the creative thinking to create something new and different that has value and commercial nature. Meanwhile, according to the UNCTAD Creative Economy Report (2008) “Creativity in this context refers to the formulation of new ideas and to the application of these ideas to produce original works of art and cultural products, functional creations, scientific inventions and technological innovations. Thus there is an economic aspect to creativity, observable in the way it contributes to entrepreneurship, foster innovation, productivity enhances and promotes economic growth”

Noting the definition of the creative industries and the creative economy, researchers found both that sense there is no fundamental difference. To further research in this paper uses the term creative economy. In accordance with the policy that has been rolled out by the government.

(b) Sustainable Creative Economy

Creative economy is environmentally friendly ideas and individuals or groups that have the potential to increase economic growth by taking into account the surrounding environment. Eco-friendly creative economy is an idea that can significantly increase economic growth by considering the natural resources that can be updated with care, efficiently and effectively. Creative economy is an

innovation eco-friendly individuals or groups to increase revenue by taking into account the environmental ethic based falsapah friendly with the natural surroundings.

Based on the description of the meaning of the creative economy, it can be seen that the keyword of these definitions, are: idea and ideas, economic value, and environmental sustainability. According to economist Paul Romer (1993), the idea is a very important economic goods, is more important than the object that is emphasized in most economic models. He further said, In this world with physical limitations, the discovery of great ideas along with the discovery of millions of small ideas that caused the economy to keep growing. The idea is to combine the instruction that makes our physical resources are limited preparation becomes more valuable. Romer also found a poor country because people do not have access to the ideas used in the national industry to produce economic value. So right once that new ideas and will have a positive impact on the increase in per capita individuals and groups. Good ideas those are not destructive to the ecosystem of the natural environment in which individuals and groups that organize economic activity.

(c) Stakeholders of Creative Economy

Three stakeholders in the creative economy, namely: government, corporate, and community, is presented in the figure below.

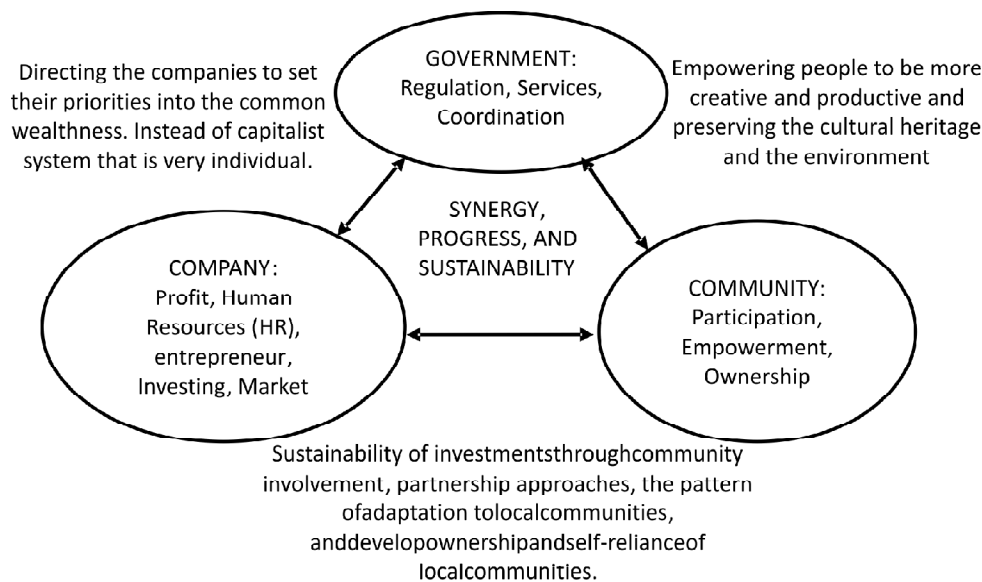


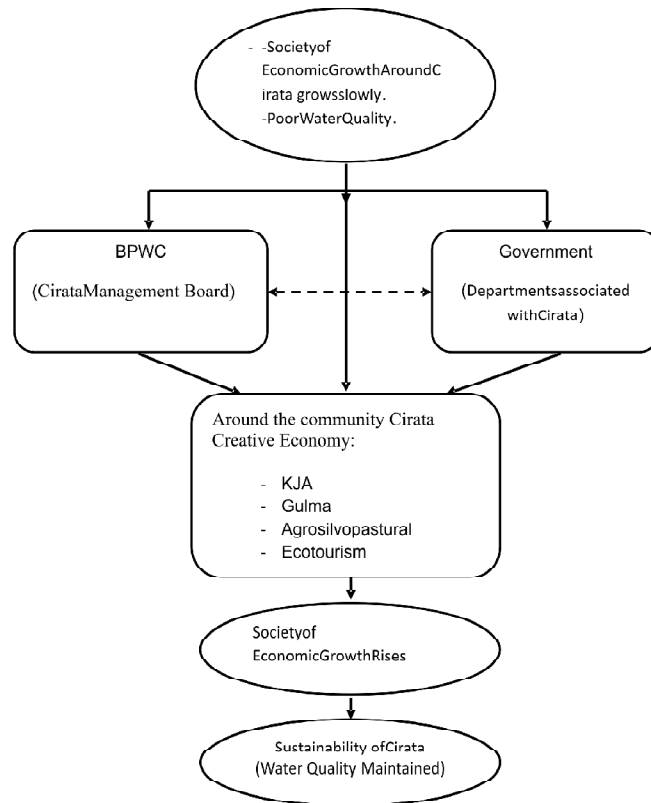
Figure 1: Creative economy stakeholders (Source: Department of Commerce, Economic Development Creative Indonesia in 2025, Business Incubator, ITB; Creative Industries for the Welfare of the Nation, ITB, 2008)

(d) Factors Sustainable Development of Creative Economy

- Policy incentives, government policy on protection products include, tax, fund development, marketing and promotional facilities, to the growth of domestic and international markets.
- Creating a comprehensive program, the program is to drive the creative industries through education, training, and marketing.
- Protection of the law, giving a patent to an invention.
- Improving the quality of services, including: licensing services, market information, and the provision of capital.
- Build partnerships, partnerships with State Owned Enterprises (SOEs) Regional Enterprise or by private companies.

4. RESEARCH MODEL AND METHODOLOGY FOR RESEARCH MODEL

(a) Research Model



Picture 2: Model of Research

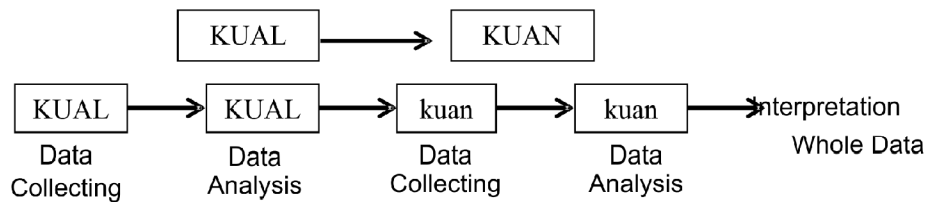
(b) Object Model and Research Methodology

- Object of Research

The scope of the study area is Cirata activities and the surrounding environment. The study was conducted in BPWC, Related Departments, and communities around Cirata residing in Cianjur district, West Bandung Regency, and Purwakarta.

- The method used

The methodology used in this study is a mixed method with sequential exploratory strategy. According to Creswell (2012) Mixed Method is research that involves philosophical assumptions, application of qualitative approaches and quantitative, and mixing (mixing) both approaches in a single study. The sequential exploratory strategy according to Creswell (2012) is the strategy adopted by the collection and analysis of qualitative data in the first stage followed by the collection and analysis of quantitative data on the second stage which is built based on preliminary results qualitatively. This model is shown in the figure below:



Picture 3 : Sequential exploratory strategies

Source: Creswell (2012)

- Data collection techniques

Desk Studies, Observation, Discussion, and Focus Group Discussion (FGD). In accordance with the sequential approach to exploratory qualitative data was done first by using an open interview (FGD). To quantitatively performed using questionnaires in obtaining primary data. Especially for weed quantitative data obtained through inventory types, content, and quality of aquatic weeds (laboratory testing).

- Analysis of data

For the qualitative approach, the validity of the data is done by triangulation of data and triangulation methods. As for the quantitative use validity and reliability of the instrument, and then processed through the standard deviation. Special laboratory tests to weed, to menginvetarisasi type, content, and quantity of aquatic weeds.

(c) Creative Economic Activity Guide Community Around Cirata.

Reservoir space utilization by communities prioritized for communities affected by the construction of dams. In West Java Governor Decree Number 41 Year 2002 on General perairan Utilization Development, Agricultural Land and Cirata Region, stated that the right to conduct aquaculture activities in the area of inundation Cirata are residents who live around the reservoir which is expressed in writing by the Head of the Village and known by the local sub-district. The distribution was 80% for communities around the dam and 20% allocated to the business world. So if the population is allowed to exist in KJA Cirata was 12,000 plots, 9600 plots intended for the local community Cirata.

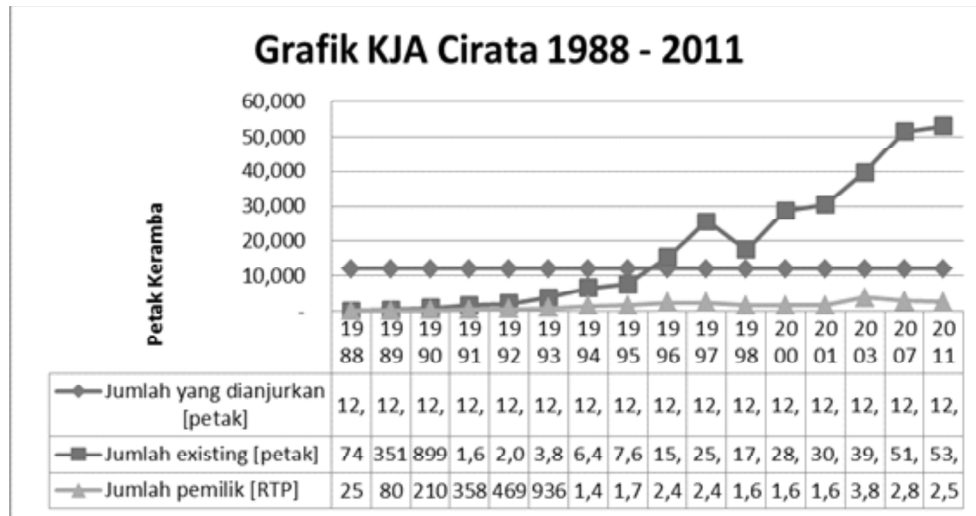
Current conditions management Keramba cage (KJA) over the carrying capacity Cirata waters, and majority owner of KJA local communities around the reservoir is not affected. Surutan land use by local farmers and business development KJA has exceeded 53,031 units, far in excess of the amount recommended by UPTD Cianjur, which is 6200 units and the Governor SK 12,000 plots, affect the degradation of water quality and quantity of waste generated as a result of reservoir. The high sedimentation rate disebabkan by the breakdown conditions and KJA Citarum average of 7.30 million m³/year has exceeded the design assumption that only 5.67 m³/year (KAK Cirata Management Master Plan 2012). For more KJA increasing problem, presented in the figure below:



Picture 4 : Floating NetCages

KJA attention to the growing population and its impact on water quality Cirata, it is necessary to control and efforts to develop new ideas or breakthrough in aquaculture conducted communities around the reservoir.

The results of the discussion in the form of a Focus Group Discussion (FGD) with groups/farmers KJA (informants), as follows: Group / KJA farmers still expect business KJA still maintained. KJA group also agreed that there should be control of the BPWC and related agencies. The agreement shall include: (1) In all regions



Picture 5: Growth Charts KJA

Source: SurveyTeamPPPSDAL

must form a legal group KJA (2) Agree to not increase the number of KJA (3) All group KJA farmers should be concerned about the preservation of the environment (4) Settling KJA layout for easy transport (5) obey the laws / regulations in force (6) there should be regular monitoring of the authorities (7) the existence of cooperation with the government and companies such as SOE (8) the existence of firmness of law (9) All of the participants agreed with the plan will be the creation of groups / networks.

The interviews with key informants in this case the BPWC and agencies associated with the expert team of ubuntu on KJA problems, it is necessary to reduce the number of KJA. According to the key informants is necessary to control the amount of KJA manner: (1) To the Regional Regulation 7 of 2001 have consistently and continuously (2) Establish a task force (task force) KJA control consisting of farmers, BPWC, fisheries agencies, departments nexus and the police are in charge of coordinating and monitoring the KJA is not active and does not have permission (3) the increase in levy in accordance with applicable regulations (4) Increasing the role of the village head who is in control of its territory KJA (5) Enhancing cooperation with agencies related.

According to researchers KJA case should be gradually reduced and eventually none at all. Why is that? because of the existence of economically not able to increase revenue KJA communities around the dam, nearly 75% of businesses owned by entrepreneurs KJA already outside the reservoir Cirata. Communities around the reservoir just so labor alone. In addition, a major contributor to the increasing number KJA sedimentation in waters Cirata.

In lieu of business KJA, BPWC assisted by consultants can offer an alternative other business activities. Creative economy is an environmentally friendly solution to overcome the above problems. Includes any business activity?. Business activities include: management of aquatic weeds, agrosilvopastural, and eco tourism. More details about the third alternative replacement for the community efforts around the reservoir will be described below:

Water weeds (water hyacinth)

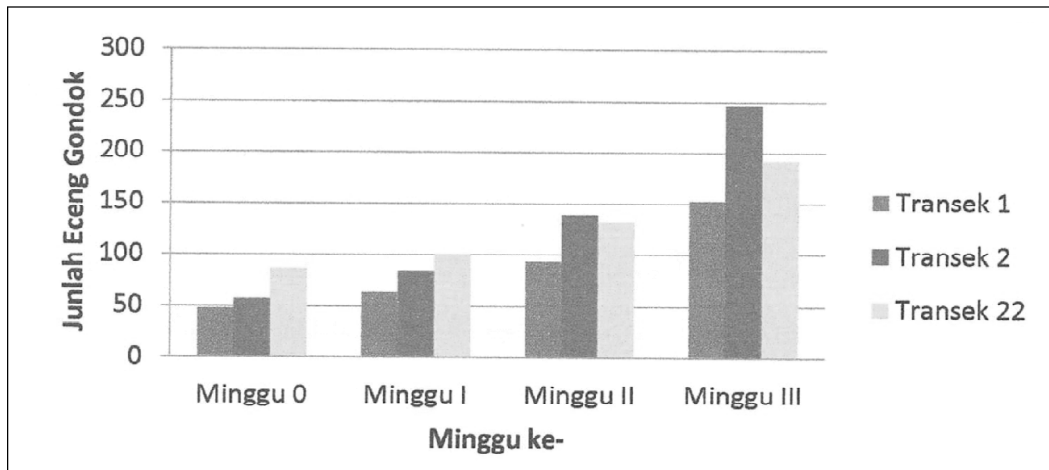
Aquatic weeds such as water hyacinth is very common in almost all regions Cirata puddle, spread over the edge and middle of the reservoir. Populations of aquatic weeds in some areas such as in the intake area, Leuwijurig, and Maniis are very large. Image of aquatic weeds is presented below:



Picture 6 : Gulma on the Intake of Cirata

Results of the research team of experts from PPSDAL-ubuntu (2013), in terms of its morphology, aquatic weeds (water hyacinth) contained in the puddle Cirata generally has a height of less than 40 cm. The average number of added water hyacinth stalks 2-3 per day. By using a simple ratio calculation, obtained a long time dibutuhkan by weeds (water hyacinth) to be able to multiply itself (doubling time) was 16 days. Weeds also have the ability as a water plant with high tolerance to unfavorable environment. Furthermore, the research team of experts, found that the weeds are able to absorb and accumulate heavy metals (plants hiperakumulator) that his life is in place. Graph the growth of aquatic weeds, is presented below:

High water weed growth is an opportunity for the local community Cirata. Weeds as water hyacinth has a high potential to be used as the products of high economic value, such as: crafts, hands, briquettes, and paper. Creative economy for weeds (water hyacinth) is recommended in composting and animal feed or crafts may be processed aquatic weeds. The result of the discussion through the



Picture 7 : Growth of Water Gulma

Source: Tim Peneliti PPPSDAL-UNPAD

FGD with artisans around the dam that was built by PT. PJB BPWC consisting of 15 people, it can be seen that the processing of aquatic weeds has been done by making processed products such as mats and bags. But it's been processed activity decreased. This is because the quality of aquatic weeds that are in the current Cirata less support for products used as raw materials kerajinan (described above high-water weed size). Indeed there are still processing this weed into a bag with small size products. The challenge is in marketing craftsmen refined products and mat bag is marketing.

The results of the survey research team LPPM UNP PPPSDAL-AD (2013) that treatment of aquatic weeds among the public about Cirata, in addition to landing the PT group. PJB BPWC, that is until today only is individual. Some people have personally been doing weed into penggebur processing plant, only pegolahannya still very traditional.

Efforts to overcome the problem of aquatic weeds, ubuntu PPPSDAL research team (2013) convey ideas and concepts to make organic fertilizer and fermented cattle feed. Laboratory tests have been conducted in order to determine the quality of products produced to conform to established standards.

This idea is a form of cooperation between PT. PJB BPWC with PPPSDAL-LPPM UNPAD agrosilvopastoral program. Organic fertilizer is produced for the media agrosilvopastoral land farmer groups. Meanwhile, feed, to feed the cows and goats are cultivated by farmers who are also incorporated into the program agrosilvopastoral. It is expected that with the new ideas and the rate of water weed population residing in Cirata can be controlled.

Training composting and animal feed using the basic ingredients of aquatic weeds has been done, and got a good reception from the community of farmers and ranchers about Cirata. This is one model of eco-friendly creative economy.

Agrosilvopastural

Problems faced in the management of other Cirata is the greenbelt land use by people who do not pay attention to the affected soil and water conservation, which will result in the construction of hydropower Cirata threaten functions as a power provider and PuloPulo Java Bali. Observations Agrosilvopastural Expert Team (2013) Patterns of current land use is more dominant with seasonal crops (horticultural) and aquaculture without conservation principles, so that the potential of resulting in erosion, landslides, high sedimentation, and pollution of water resources. One root of the problem is the high population pressure in the surrounding reservoir.

Further described the population pressure on the land is a style that encourages farmers to expand their land without regard to the principles of conservation land. Increasing the number of residents who use the land around Cirata both for farming and raising cattle need to be controlled, as it will accelerate the environmental damage the reservoir.

Based on the above problems, the idea or ideas agrosilvopastural propose a model-based local keraifan is the right solution. Agrosilvopastural in PPSDAL-LPPM UNPAD study (2013) is the concept of commodity-based agricultural land management, forestry, and animal husbandry. On this occasion creative eco-friendly economic model for surrounding communities Cirata will be focused on dairy farms.

Existing condition of cattle ranchers activities surrounding communities Cirata, precisely in Kampung Babakan Garut District of Ciranjang Kertajaya Village and Village Ciroyom Cianjur Regency West Bandung District of Cipeundeuy. Observations agrosilovastural team are outlined below.

Existing condition of cattle ranchers in the village of Kampung Babakan Garut Kertajaya:

1. Cages submerged and had to be removed
2. Plant elephant grass is very needed for cattle feed also submerged
3. Cattle market demand will be low

Conditions eksisting cattle farmers in the village CiroyomCipeundeuy the District, as follows:

1. Manure waste in the waste reservoir to Citara
2. Cattle market demand will be low.

3. Yet exploited cow dung
4. Coordination with local government (township and village) has not been effective.

The result of the discussion through FGDs with cattle farmers in the two villages, it is known that (1) that the quality of fattening cows considered less adequate, as shown by the members of the management and the chairman of the group, that of the 10 cows assistance from Green Buana Sejahtera Foundation (YBHS) BPWC partner stated only 2 good tail, (2) low quality of the additional feed (concentrate), so that cattle are not stimulated to eat the extra feed, (3) location distant grass requires additional time and costs, and (4) Maintenance cow and the cage can not be implemented optimally.

These factors cumulatively bendampak to the low efficiency of the business as a result of low productivity, high cost of production, and low acceptance. To solve this problem it is necessary efforts. Agrosilvopastural specifically for cattle attempted to overcome these factors.

Agrosilvopastural for groups of cattle ranchers cows addressed to the selection, care, cages, feed, manure utilization for both konpos and biogas.

In the implementation of the pilot project specifically for cattle, a team of experts agrosilvopastural has made the manufacture of environmentally friendly enclosure, use dirt for a pilot project for cattle, as follows:



Picture 8 : Cows and Biogas

Environmental friendly economic model through agrosilvopastural expected to create farms with communities around the reservoir, awakening the compost as a fertilizer source of farming development, and the establishment of renewable energy sources in Jangkang long time. Finally, the main target of this agrosilvopastural is able to increase the income of local communities and environmental reservoirs Cirata awake.

Ecotourism

The next creative economic model is ecotourism. Eco-tourism or eco-tourism is one of the environmentally sound tourism activities, with priority on the conservation of natural, cultural aspects of social empowerment, economic empowerment of local communities as well as aspects of education (id.Wikipedia. Org / wiki / Ecotourism). Tourism activities in Cirata are not well ordered and not environmentally friendly. Environmentally friendly economic model through environmental system to sound tourism (ecotourism) is the one alternative to overcome the problems Cirata tourism. Existing condition of tourism activities, shown in the image below:



Picture 9 : Travel location in Cirata

Tourism management Cirata is still conventional. This can be seen in the arrangement of a floating restaurant, which has not noticed the concepts of ecotourism. Security tourist / visitor has not been considered, for example in the boat is not equipped with floats and sometimes over capacity. Prostitution allegedly took place in several locations of tourism. Cirata tourism management are not effective feared a negative impact on the environment, its impact on the local culture are not controlled, and reduced the role of the local community and business competition. Some tourism business comes from outside the affected community development Cirata.

Efforts to address the above issues, ecotourism activities in Cirata should be concentrated on: Adventure Travel, types of cross-country and surfing activities. Tourism research, its activities are: the study of nature damage, logging species, water quality and conservation research. Social tourism, reforestation, and education, for example: general palitas development, reforestation of deforested, education and human resource development in ecotourism attraction

An integrated tourism development should also agrosilvopastoral activities, aquatic weeds, and KJA. There is a correlation between economic models with

Environmental friendly creative community efforts to increase incomes and also a very important purpose, namely the preservation of water quality Cirata. In the implementation of ecotourism activities is of course necessary guidance and pendampingan of the BPWC, universities, and local and provincial Tourism Department. This is consistent with the theory of the creative economy stakeholders, namely governments, companies, and communities.

(d) Sustainable Creative Economy Model in Increasing Revenue and Community Sustainability Cirata

The linkage between groups was built in order to establish cooperation relationship mutually beneficial business internally. These relationships can be built through the fulfillment of production inputs and outputs each other need each other, so that the process in this system goes into a cycle that is not interrupted or partial run. If the linkage between groups / sub model goes well it will bear a large force in the model and a relationship or association with the external Environmental outside the system.

Linkages between groups / sub-models that can be developed include:

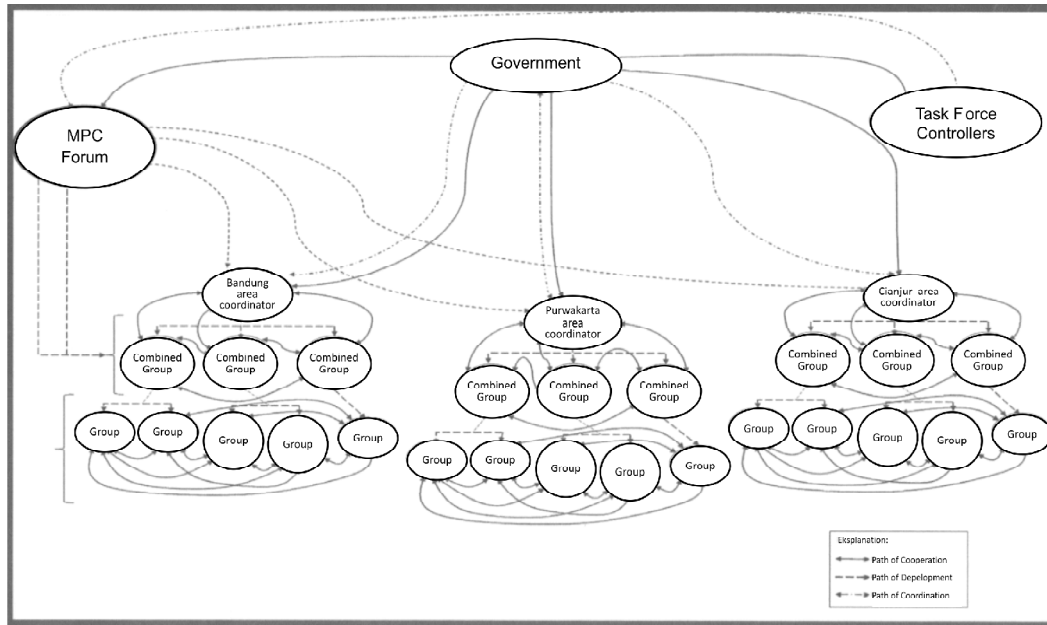
- KJA with ecotourism groups: utilization of fish, cage and boat tours.
- Group surutan land with weeds groups: utilization of compost.
- Group of ecotourism with a group of weeds: boat rental services.
- Group by group agrosilvopasturalsurutan land: utilization of manure.
- Group agrosilvopastural with weeds groups: utilization of compost.

The concept of a community group creative economy businesses are concerned about the development and management of Cirata sustainable manner, involving all components of the tangent and or have an interest either directly or indirectly to Cirata. This group consists of the elements present role and authority of each.

The elements forming the Society of Creative Economy Green Cirata, consisting of:

- Elements of policy makers, consisting of government ranging village to provincial levels.
- Implementing elements, consisting of business Cirata and Department / Government Technical Institute.
- Utilization element, namely members of the community / society that has activity in Cirata.

Structure Sustainable Community Creative Economy is a tangle of linkages between related components and an interest in improving the income of the people around the reservoir and preserve Cirata that can be utilized in a sustainable manner. Creative Flow Model Economic Community Eco-friendly can be developed are as follows:



Picture 10 : Dlow model of community creative economy

Information on flow model of community creative economy:

- Members of the public who have activities in the Area Cirata gathered into groups according to the type of activity or activities undertaken.
- The groups were then collected back in the container combined group, if this group has been combined into a self-developed micro-finance institutions.
- To facilitate the development of combinations of these groups coordinated by the coordinator wilayan established by the district.
- Environmental Control Task Force served as a supervisor and control of business activities around the community Cirata.
- As coordinator of the creative economy environmentally friendly society is BPWC. In addition, BPWC cooperate with the government and other parties such as universities and NGOs provide guidance to community creative economy.

Based on the above description, it is clear that the continuity of the functions of the reservoir must be very closely related to the activities of the local communities that intersect with the area around the reservoir. This means that little by little activity surrounding communities will have an impact on the sustainability of the primary functions of the reservoir in the future.

Creative economic model of environmentally friendly business activities include various community activities around the reservoir, such as aquatic weeds (water hyacinth), agrosilvopastural, and ecotourism dikat in a network model can help increase incomes, and that mainly function Cirata will still be maintained, sustainability Cirata well maintained.

6. CONCLUSIONS AND SUGGESTION

(a) Conclusions

Based on the discussion about creative eco-friendly economic model, it can be concluded as follows:

- Activities creative economy can be developed for local communities is Cirata aquatic weeds, agrosilvopastural, and ecotourism. Creative economy for the cultivation of aquatic weeds is focused on making compost and animal feed. As for the community agrosilvopastural cattle ranchers, cattle activities aimed at the selection, care, cages, feed, and better utilization of cow dung for compost and biogas. The creative economy model for ecotourism environmentally friendly, concentrated on adventure tours, research, and social travel.
- Model the creative economy environmentally friendly networking is done through a holistic and integrated approach between programs / models developed with regional development. Some programs in the areas of water management and land reservoirs, such as KJA, water weeds, agrosilvopastural, and ecotourism can run synergy and interconnectedness with each other even synergies in the overall regional development. Through this networking model of economic growth in the surrounding communities are expected to increase and Environmental reservoirs Cirata controlled effectively.

(b) Suggestions

Firstly, to be creative implementation of environmentally friendly economic activities to efficiently and effectively, Cirata Basin Management Board (BPWC) can implement:

- Guidance on surrounding communities Cirata involved in creative economic activities are environmentally friendly. Form of coaching, including: counseling, education, and training.
- Coordination and cooperation with related agencies, companies, and universities.
- Provide working capital loans for the people of creative eco-friendly economic actors with an interest rate, loan disbursement and repayment are efficient and fast.

- Establish a cooperative network of community groups that incorporated creative economy.
- Provide appropriate information technology in terms of cultivation and post-harvest and entrepreneurship development.
- Monitoring and control of business activity in Cirata.

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