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# THE EFFECTS OF SOCIAL CAPITAL FOR THE MANAGEMENT OF ENVIRONMENT CLEANLINESS IN ADIPURA PROGRAMME

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## Abstract

Social capital is a decisive factor in the management of environment cleanliness in Adipura Programme. Tenggarong City in achieving clean city has attempted various strategies, including by considering the community social capital factor. Adipura Award for Tenggarong City is unsustainable, indicating that the role of community social capital is not yet optimized. This research aims to analyse the effects of social capital for the management of environmental cleanliness. The instrument used is the questionnaire. The sampling collection technique uses the simple random sampling method, with the sample of 100 respondents. The analysis instrument used to test the hypotheses is Product Statistics and Service Solution (SPSS) Program version 13.0 for windows. The research result shows that community social capital positively and significantly affects the management of environmental cleanliness. Trust element positively and significantly affects the management of environment cleanliness. Cooperation and social norm elements positively but not significantly affect the management of environment cleanliness. It is recommended to Kutai Kertanegara Government to always optimize the active role of community. Community Social Capital should be used optimally.

**Keywords:** social capital, environment cleanliness, Adipura programme.

## I. INTRODUCTION

Cleanliness is the base of health, so is the adage that has been understood by the community. A healthy community is one of the indicators of people's welfare. To that end, the management of urban environmental cleanliness becomes one of the government programs that continue to be encouraged. The issues of a city are indeed very complex, including the environmental cleanliness issue. The government, through the Ministry of Environment, is always attempting to improve the performance of urban environmental management, known as Adipura Programme. Adipura will succeed depends on community participation.

Tenggarong City is one of the cities that once won an Adipura Award. Tenggarong City community is expecting the award to be sustainable, so the city is clean, comfortable, and at ease which in the end able to push for the achievement of public welfare. Managing environmental cleanliness is determined by various factors. One that determines the successful management of environmental cleanliness is a factor of community social capital. Community social capital has been shown to contribute to the management of environmental cleanliness, as the research result of Yuanjaya (2015). As explained by the Regulation of the Ministry of Environment Number 6 of 2014 on the Guidelines of Adipura Programme, Chapter II Article 2 that Adipura Programme aims to build active community participation.

The fact shows that Adipura Award obtained by Tenggarong City is unsustainable. Adipura Award obtained by Tenggarong City, namely in 1994, 1995, 1996, and 2014. The expectation of obtaining Adipura Award in 2016 was not met. To realize a clean city for Adipura Programme, various strategies have been pursued, including by considering the

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factor of community social capital.

The issues of social capital that include an element of trust, cooperation, and social norms have a very big role in managing environmental cleanliness. Mutual assistance, which is a routine activity of Tenggarong City community, has begun to diminish. Based on the objective circumstance, it appears that confidence (trust), cooperation, and cleanliness norm as the elements of social capital have been reduced. To that end, community social capital to carry out various environmental activities needs to be developed. Based on the above explanation, needed an in-depth study on the effect of social capital on the management of environmental cleanliness in Tenggarong City. Furthermore, the research questions are (1) how is the influence of social capital (trust, cooperation, and norms) for the management of environmental cleanliness? (2) how is the influence of trust in the management of environmental cleanliness? (3) how is the influence of cooperation on the management of environmental cleanliness? and (4) how is the influence of norms on the management of environmental cleanliness?

Social capital according to Putnam in Winarni (2011) is defined to refer to the characteristics of social organization such as trust, norms, and networks that can improve the efficiency of a community by facilitating coordinated actions. To put it simply, it can be stated that social capital is a characteristic of a social organization that facilitates coordination and cooperation for mutual benefit.

Furthermore, according to Coleman, social capital depicts the value of social relationships, trust, and norms of mutual reciprocity between the individual and society. Social relation is an important element in the social capital and is a resource (Kitchen, *et al.*, 2012).

According to Fujiwara and Kawachi in Thobias, et al. (2103) Social capital is the resources that are accessed by individuals and groups in a social structure, which facilitates cooperation, collective action, and maintenance of norms.

According to Hasbullah as quoted by Syafril Hadi (2014) that the point of social capital study lies in how the community ability in a group to work together to build a network to achieve a common goal. The cooperation is characterized by a pattern of the interrelation of reciprocity and mutual benefit and built on trust, supported by positive and strong norms and social values. Furthermore, Arsyad, et al. (2011) describes the elements of social capital are (1) the social fabric, (2) trust, (3) social reciprocity, (4) behaviour norm, and (5) of collective action.

Positive behaviour norm as one of the elements of social capital that are owned by the community of Tenggarong needs to be explored and developed in order to encourage local communities to manage the cleanliness of the environment. Hygienic behaviour can be manifested if public awareness towards the environment grows and develops. Environmental awareness according to Zen in Neolaka (2008) is an attempt to involve every citizen in growing and fostering awareness to preserve the environment based on the value, that is the value of the environment itself with the philosophy of living in peace with the natural environment. The awareness to manage environmental cleanliness cannot be separated from good waste management. Waste management is not solely carried out by the janitor alone. However, to optimize the social capital owned by Tenggarong community will be able to encourage the preservation of sustainable environmental cleanliness.

Various studies have shown that social capital is associated with prosperity or poverty, agribusiness development productivity, and performance. Social capital affects positively and significantly towards the welfare of the community as the results of research by Suandi (2007); Cahyono and Adhiatma (2012); and Rohmani, *et al.* (2015). Meanwhile, the research result of Pramono (2012) stated that that social capital does not significantly affect the household poverty. Research result of Winarni (2011) shows that social capital linkages with productivity are low. Social capital has a significant influence on the development of agribusiness (Sedana, 2013). According to research by Andrews (2011), the social capital of communities and organizations positively affects the performance of the government. Realizing the positive impact of social capital, it is advisable to make use of social capital in community and organization.

In addition to physical capital and skill or intelligence capital (human capital), the social capital of the community will be able to encourage the community to manage the cleanliness of the environment on an ongoing basis. As the study finding of Widodo (2014) that social capital has a role that is no less important to physical, skill or intelligence (human capital) capitals. Furthermore, the finding stated that social capital has a power that is able to encourage people to always keep the commitment and consistency to the sustainability of waste management, which has been running. the result of Trajuningsih study (2015) showed that the change of social capital consisting of elements of trust, norms, and networks has an impact on the waste management system.

Active involvement of all elements of the community (stakeholders) in the management of environmental cleanliness in Tenggarong City plays a very important role in Adipura Programme. In addition to the active role of the community, policy makers should consider the social capital of Tenggarong community which has long grown

and developed. The study result by Daluarti (2015) showed that neighbourhood parks and village parks, district parks, city parks, and non-physical components of public space affect the development of social capital.

Social capital has a very important role in environmental management. The result of the empirical study shows that social capital has a role and influence in environmental management, such as forest management, to preserve the customs, and so forth. The results of research on social capital in community related to environmental management as the research finding of Rijal and Noer (2013) stated that elements of social capital such as traditional values, norms, beliefs, and participation forms a bond in the indigenous community that is willing to cooperate proactively in order to maintain the tradition and local value. The research finding of Widjanarko (2016) stated that social capital in the form of social norms, beliefs, and the network is related to forest conservation. Good environmental management will produce a clean and healthy environment. In addition, social capital will also affect sustainable development, so that the Adipura Award expected by the people of Tenggarong can also be achieved in a sustainable manner. The research by Fotovvat, *et al.* (2014), who conducted research in Salmas City, Iran stated that the social capital that consists of three elements of cooperation, trust, and social cohesion affects positively and significantly towards sustainable development.

This study, besides having similarity with the previous study, which examines the social capital, also have differences. As for the difference, this study focuses on the management of environmental cleanliness for Adipura Programme, with the locus in Tenggarong City, Kutai Kertanegara, East Kalimantan. Furthermore, similarities and differences of the studies will be explained more detailed in the discussion.

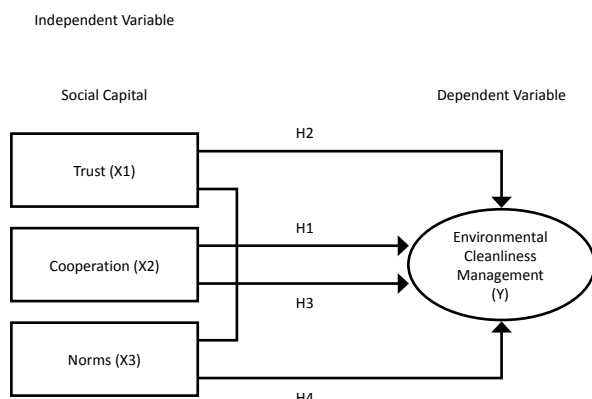Social capital based on empirical and theoretical

study influence the success of a development and are able to resolve urban problems, including affecting the management of environmental cleanliness. To reinforce the conceptual framework of this study can be seen as Figure 1.

Based on the conceptual framework, then formulated a hypothesis as follows.

H1  Social capital (trust, cooperation, and norms) significantly influence the management of environmental cleanliness.

H2  Trust has a significant effect on the management of environmental cleanliness.

H3  Cooperation has a significant effect on the management of environmental cleanliness.

H4  Norms have a significant effect on the management of environmental cleanliness.

The purpose of this study is to obtain a comprehensive picture of community social capital in Tenggarong City that serves as a strategy to manage the cleanliness of the environment so that the Adipura Award can be achieved sustainably. In more detail, the purpose of this study is (1) to analyse the influence of social capital (trust, cooperation, and norms) towards the management of environmental cleanliness in Tenggarong City, (2) to analyse the effect of confidence towards the management of environmental cleanliness, (3) to analyse the influence of cooperation towards the management of environmental cleanliness, and (4) to analyse the influence of norms towards the management of environmental cleanliness.

## II.  METHOD

This study uses a quantitative research design and the method used is survey method. The study was conducted in Tenggarong City, Kutai Kertanegara Regency that includes Timbau, Loa Ipuh, Jahab, Blue Hill, Panji, New, Malay, Mangkurawang and Sukarame Villages. The study population is the population over the age of twenty-one years old or married. The number of the study population is 82,821 people. The number of samples taken by the Slovin formula (Sedarmayanti and Hidayat, 2002) with the level of sampling error (e) of 10 percent in order to obtain 100 respondents. The sampling collection of respondents is conducted by simple random sampling method.

The testing of the instrument validity and reliability was carried out through SPSS 13.0 computer program, showed that the questions are valid, in which the correlation coefficient of each of the questions is above 0.3. Similarly, instrument reliability tests were conducted using 30 respondents as a pre-survey, obtained the correlation coefficient of 0.858. The correlation coefficient, after being put into the formula Spearman Brown (Sugiyono, 2012), obtained results of 0.924. Thus, the reliability of research instrument was 0.924 and it was concluded

Independent Variable



**Figure 1.** Concept Framework of Independent Variable Effect on Detpendent Variable

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that the instrument can be stated as reliable.

The data used in this study are primary and secondary data. Primary data was collected by the researcher and assisted by enumerators. Data processing was aided by a computer based on a model of analysis using SPSS 13.0. The data analysis technique was based on the principles of descriptive statistics and inferential statistical approach. Model analysis used to test the proposed hypothesis is the model of Multiple Regression Linear, which is to determine the effect of independent variable, which consists of trust (X1), cooperation (X2), and norms (X3) on dependent variable, which is the management of environmental cleanliness (Y) (Supranto, 2001). In testing the hypothesis, used an F test to prove whether the independent variable has a simultaneous effect on the dependent variable. Furthermore, to test the significance of each independent variable on the dependent variable, the t test was used.

## III. Result and Discussion

### A. General Description of the Region of the Study

Tenggarong City is one of the districts in Kutai Kertanegara Regency. Kutai Kertanegara Regency is geographically located between 115°26'28"E to 117°36'43"E and 1°28'21"N up to 1°08'06"S. Kutai Kertanegara Regency is adjacent to Bulungan Regency, East Kutai, and Bontang City on the side of the north, in the east with Makassar Strait, in the south is adjacent to Balikpapan City and North Penajam Paser Regency, and in the west is adjacent to West Kutai Regency. Kutai Kertanegara Regency has a total land area of 27,263.10 $km^2$, while the water territorial is 4,097 $km^2$. Administratively, Kutai Kertanegara Regency consists of 18 districts and 227 villages and urban villages.

Tenggarong City is a district that became the capital of Kutai Kertanegara Regency. Tenggarong District with an area of 398 $km^2$ is located between 116°47'E-117°04'E and 0°21'S-0°34'S. The northern district bordering is Sebulu District, in the south bordering is Loa Kulu District, in the east is bordering with Tenggarong Seberang District, and in the west is bordering with Sebulu District. In 2014, Tenggarong District had a population of about 94,890 people, made up of 47,122 men and 47,768 women (BPS of Kutai Kertanegara, 2015). With the existence of development and regional expansion, right now Tenggarong District consists of 14 villages and urban villages covering Jahab, Bukit Biru, Timbau, Melayu, Loa Ipuh, Maluhu, Panji, Sukarame, Baru, Mangkurawang, Loa Cane, Rapak Lambur, Loa Ipuh Army, Bendang Kingdom. As for the point of Adipura assessment includes the villages of Timbau, Loa Ipuh, Jahab, Bukit Biru, Panji, Baru, Mangkurawang, Melayu, and Sukarame.

### B. Description of the Study Variable

Human is the main actor to produce a clean and healthy environment. However, the attempt to create a clean and healthy environment has not fully materialized. It is also realized that environmental

**Table 1.**
Descriptive Statistics of Environmental Cleanliness Variable (Y), 2016

| Statement | | Score | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Y1: Family has been keeping the environment well | F | 0 | 0 | 5 | 4 | 60 | 31 | 100 |
| | % | 0 | 0 | 5 | 4 | 60 | 31 | 100 |
| Y2: Community has been keeping the environment | F | 2 | 5 | 17 | 14 | 47 | 15 | 100 |
| | % | 2 | 5 | 17 | 14 | 47 | 15 | 100 |
| Y3: There has been coherence between institutions | F | 3 | 1 | 26 | 19 | 33 | 18 | 100 |
| | % | 3 | 1 | 26 | 19 | 33 | 18 | 100 |
| Y4: Environmental/Health NGOs have a great influence | F | 2 | 2 | 27 | 17 | 32 | 20 | 100 |
| | % | 2 | 2 | 27 | 17 | 32 | 20 | 100 |
| Y5: Rules that exist in the community have been supportive | F | 0 | 3 | 24 | 21 | 40 | 12 | 100 |
| | % | 0 | 3 | 24 | 21 | 40 | 12 | 100 |
| Y6: The speed and the accuracy of information | F | 0 | 4 | 22 | 23 | 41 | 10 | 100 |
| | % | 0 | 4 | 22 | 23 | 41 | 10 | 100 |

*Source: Result of Primary Data Processing by Researchers.*

**Table 2.**
Descriptive Statistics of Trust Variable ($X_1$), 2016

| Statement | | Score | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| $X_{11}$: Building trust among citizens is crucial | F | 1 | 0 | 2 | 3 | 56 | 38 | 100 |
| | % | 1 | 0 | 2 | 3 | 56 | 38 | 100 |
| $X_{12}$: The legal system (local regulation) can be trusted | F | 3 | 9 | 32 | 13 | 35 | 8 | 100 |
| | % | 3 | 9 | 32 | 13 | 35 | 8 | 100 |
| $X_{13}$: Head of Neighborhood can be trusted | F | 1 | 0 | 3 | 11 | 57 | 28 | 100 |
| | % | 1 | 0 | 3 | 11 | 57 | 28 | 100 |
| $X_{14}$: Head of Urban-Villages and staffs can be trusted | F | 1 | 1 | 9 | 12 | 56 | 21 | 100 |
| | % | 1 | 1 | 9 | 12 | 56 | 21 | 100 |
| $X_{15}$: Government (BLHD) can be trusted | F | 0 | 2 | 11 | 14 | 47 | 26 | 100 |
| | % | 0 | 2 | 11 | 14 | 47 | 26 | 100 |
| $X_{16}$: Adipura can be maintained sustainably | F | 1 | 3 | 17 | 5 | 37 | 37 | 100 |
| | % | 1 | 3 | 17 | 5 | 37 | 37 | 100 |

*Source: Result of Primary Data Processing by Researchers*

quality has declined. the decline of environmental quality will threaten the survival of mankind itself and other creatures. Kutai Kertanegara Regency, which is part of the lungs of the world, is also faced with environmental issues. Forest quality degradation and less wise mining activities have some contribution to the problem. As described in Law No 32 of 2009 concerning the protection and management of the environment Article 65 paragraph (1) that everyone is entitled to a good and healthy environment as part of human rights. To that end, various environmental conservation programs have been conducted, one of which is Adipura Programme.

Adipura aims to encourage the government of districts/cities and build active community participation for the creation of a good environment and the improvement of people's welfare (Regulation of the Minister of Environment Article 2 No 6 of 2014). Active participation is reflected in community social capital to manage the clean and healthy environment, for the sake of Adipura Programme.

The measurements of each variable using Likert scale are (1) disagree, (2) do not agree, (3) undecided, (4) quite agree, (5) agree, and (6) strongly agree. Based on the data obtained from the respondents' answers, it indicates that the social capital of Tenggarong City community tends to be positive, the majority answered agree and strongly agree that social capital is crucial in the management of clean environment for Adipura Programme. The tendency of a positive answer to

environmental cleanliness management is shown by trust, both the levels of family and community have been keeping the environment clean. In addition, cooperation between institutions associated with the maintenance of a clean and healthy environment in a sustainable manner also showed a positive trend. Another factor is the role of Environment Non-Governmental Organization (NGO) and Health NGO, supported by the legislation, both in the form of laws or local regulations (Perda) along with the sanctions to encourage the community to always keep the environment clean.

The elements of community social capital that affect environmental cleanliness management in Tenggarong City for Adipura covers trust, cooperation, and norms. The result shows that public trust tends to be positive. As shown in Table 2. Building trust between people in managing environmental cleanliness is very important, which is supported by their local regulations on environmental cleanliness accompanied by the clear application of sanctions. The existence of trust in Head of Neighbourhood, Head of Urban-Village, and the government, in this case, the Regional Environmental Agency (BLHD), encourages the community of Tenggarong City to improve the management of environmental cleanliness, which ultimately materialized the success of sustainable Adipura Programme.

Table 3 shows the result of respondents' answers about community cooperation in managing environmental cleanliness in Tenggarong City. Respondents' response tends to be clustered in

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**Table 3.**
Descriptive Statistics of Cooperation Variable ($X_2$), 2016

| Statement | | Score | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| $X_{21}$: Jointly maintain the cleanliness of the environment | F | 0 | 2 | 1 | 3 | 39 | 57 | 100 |
| | % | 0 | 2 | 1 | 3 | 39 | 57 | 100 |
| $X_{22}$: Mutual cooperation is conducted | F | 0 | 1 | 0 | 4 | 42 | 52 | 100 |
| | % | 0 | 1 | 0 | 4 | 42 | 52 | 100 |
| $X_{23}$: Mutual cooperation is conducted for Adipura Programme | F | 0 | 4 | 2 | 8 | 60 | 26 | 100 |
| | % | 0 | 4 | 2 | 8 | 60 | 26 | 100 |
| $X_{24}$: There is technical assistance from the Government | F | 2 | 3 | 11 | 11 | 49 | 24 | 100 |
| | % | 2 | 3 | 11 | 11 | 49 | 24 | 100 |
| $X_{25}$: Collaborate with environmental NGOs | F | 3 | 4 | 31 | 17 | 32 | 13 | 100 |
| | % | 3 | 4 | 31 | 17 | 32 | 13 | 100 |
| $X_{26}$: There are mutual benefits from mutual cooperation | F | 0 | 0 | 1 | 4 | 51 | 44 | 100 |
| | % | 0 | 0 | 1 | 4 | 51 | 44 | 100 |

*Source: Result of Primary Data Processing by Researchers*

a positive answer. The tendency of the positive response shown by their togetherness in maintaining the cleanliness of the environment. Maintaining environmental cleanliness in Tenggarong City for Adipura Programme is done with the cooperation between citizens through mutual cooperation. Similarly, cooperation is done by NGOs working in the field of environment and health. The partnership produces sustainable management of environmental cleanliness.

The respondents' response to norms is clustered in both categories, as shown in Table 4. The norms that exist in Tenggarong City community in managing environmental cleanliness have been

**Table 4.**
Descriptive Statistics of Norms Variable ($X_3$), 2016

| Statement | | Score | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| $X_{31}$: Deliberation is conducted | F | 3 | 4 | 3 | 9 | 51 | 30 | 100 |
| | % | 3 | 4 | 3 | 9 | 51 | 30 | 100 |
| $X_{32}$: The frequency of deliberation for mutual cooperation is often conducted | F | 0 | 8 | 20 | 28 | 32 | 12 | 100 |
| | % | 0 | 8 | 20 | 28 | 32 | 12 | 100 |
| $X_{33}$: There is local regulation/regulation related to environmental cleanliness | F | 0 | 1 | 21 | 16 | 43 | 19 | 100 |
| | % | 0 | 1 | 21 | 16 | 43 | 19 | 100 |
| $X_{34}$: There is a custom to maintain cleanliness | F | 0 | 2 | 10 | 15 | 43 | 30 | 100 |
| | % | 0 | 2 | 10 | 15 | 43 | 30 | 100 |
| $X_{35}$: Knowing there is religious guidance that teaches cleanliness | F | 2 | 0 | 1 | 5 | 37 | 55 | 100 |
| | % | 2 | 0 | 1 | 5 | 37 | 55 | 100 |
| $X_{36}$: Implementing the religious guidance about environmental cleanliness | F | 0 | 0 | 5 | 9 | 47 | 39 | 100 |
| | % | 0 | 0 | 5 | 9 | 47 | 39 | 100 |

*Source: Result of Primary Data Processing by Researchers*

realized since before. The norm is the custom for deliberation before conducting mutual cooperation activity. The frequency of deliberation, especially for mutual cooperation, is relatively frequent. In addition, Tenggarong City community has always complied with government regulations and religious community. The religious community is shown by the harmony among fellow adherents of religions and beliefs, as well as between religions and beliefs so that through the teachings of their respective religions, people always manage the cleanliness of the environment.

## C. The Effect of Social Capital to Environmental Cleanliness Management

To analyse the effect of social capital on the management of environmental cleanliness, conducted quantitative analysis and inferential statistical approach. Statistical analysis begins with the classic econometrics test requirement, to obtain multiple linear regression models that are appropriate and meets the standards, including tests for normality, autocorrelation, multicollinearity, and heteroscedasticity test. The test result shows that the classical assumption of multiple regression models has been met.

Hypothesis testing and analysis model used to test the hypothesis is multiple linear regression models of 95 percent confidence level ($\alpha = 0.05$). With the assistance of SPSS version 13.0, obtained a result as summarized in Table 5.

$$Y = 3.58 + 0.27X_1 + 0.19X_2 + 0.19X_3$$

Furthermore, with reference to the result presented in Table 5, the regression equation is as follows.

Based on the regression equation, few things can be understood, namely (a) a constant value of 3.58 states that if there is no community social capital, the management of Tenggarong City's environmental cleanliness for Adipura Programme is of 3.58 units, (b) the regression coefficient for trust variable (X1) of 0.27 states that any additions by one activity related to public trust will improve the management of environmental cleanliness by 0.27 units, (c) the regression coefficients for cooperation variable of 0.19 states that each change per activity related to cooperation will improve the management of environmental cleanliness of 0.19 units, and (d) the regression coefficients for norm variable of 0.19 states that each change per activity related to norms will improve the management of

**Table 5.**
Summary of Multiple Linear Regression Analysis Result of the Effect of Social Capital on Environmental Cleanliness Management, 2016

| Variable | Coefficient | $t$ Value | Sig. |
|---|---|---|---|
| Trust (X₁) | 0.27 (rounded off) | 2.58 (rounded off) | 0.01 |
| Cooperation (X₂) | 0.19 (rounded off) | 1.83 (rounded off) | 0.07 |
| Norms (X₃) | 0.19 (rounded off) | 1.69 (rounded off) | 0.10 |
| Constants = 3.58 R = 0.518 | $R_2 = 0.268$ $t_{tabel} = 1.98$ | $F_{hit} = 11.74$ $F_{tabel} = 2.72$ | Sig. = 0.00 |

*Source: Result of Primary Data Processing by Researchers*

environmental cleanliness in Tenggarong City for Adipura Programme of 0.19 units.

Based on the statistical test result, obtained the result that R value of 0.518 (Table 5) which implies that social capital is measured through the variables of trust, cooperation, and norms have a mediocre relationship on the management of environmental cleanliness in Tenggarong City. the value of R square (R2) of 0.268 (Table 5) which implies that social capital is able to explain its effect on the management of Tenggarong City environmental cleanliness for Adipura Programme is only by 26.8 percent, included in low category (Sugiyono, 2012), while the rest of 73.2 percent is explained by other factors not included in the model.

F test results as presented in Table 5. The significant level is 0.00 less than the significant standard of 0.05 ($\alpha = 0.05$). Furthermore, of F count is obtained the result of 11.74 larger than F table. Based on these data, it indicates that the hypothesis (H1), in which social capital consisting of elements of trust, cooperation, and norms affect positively and significantly to the management of Tenggarong City environmental cleanliness for Adipura Programme is accepted. Keeping the environment clean is the mirror of one's behavior and community groups. Clean and healthy behaviour becomes the living purpose of the community so that the goal of achieving prosperity can be realized. The study's finding that social capital positively and significantly affects the management of environmental cleanliness in Tenggarong City is in line with Thobias, et al. (2013) that the role of social capital in economic development is not less important than another economic infrastructure. Management of environmental cleanliness in Tenggarong City cannot be separated from the improvement of waste management. With better waste management, then it will affect the sustainable environmental cleanliness. To that end, community

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social capital significantly affects the management of cleanliness is in line with the research finding of Widodo (2014) that social capital has a power that is able to encourage people to always keep the commitment and consistency to the sustainability of waste management that has been running. Similarly, the finding of this study agrees with the results of research by Trajuningsih (2015), which shows that the change of social capital consisting of elements of trust, norms, and networks have an impact on the waste management system.

Tenggarong City's cleanliness management is an integral part of the development of Kutai Kertanegara Regency as set out in the King's Gate II Grand Strategy. For that, the research finding is in line with the research finding by Fotovvat, et al.. (2014) that social capital, which consists of three elements, namely cooperation, trust, and social cohesion, positively and significantly affect sustainable development. The finding of this study is also in line with research finding by Widodo (2014) and Trajuningsih (2015) that changes in social capital, consisting of trust, norms and networks elements, has an impact on the waste management system. The study's finding also concurs with the finding of the study by Daluarti (2015); Yuanjaya (2015); and Widjanarko (2016) that social capital relates to environmental management and forest conservation.

### D. The Effect of Trust on Environmental Cleanliness Management

Furthermore, to test the significance of the trust variable partially on environmental cleanliness management variable, used t test, which means comparing the value of t count to t table at significant level of 0.05 or at a 95 percent trust with a degree of trust (dk) by n-k (sample size - number of variable). Based on the results of statistical calculation for variables obtained t count equal trust of 2.58 and a significance level of 0.01, as shown in the summary results of the analysis of Table 5. If t count is consulted with t table shows that t count is greater than t table (t count> t table). The data that implies Trust positively and significantly affects the management of environmental cleanliness (second hypothesis) is acceptable.

Based on the study's findings that social capital element of trust (Trust) Tenggarong City community in a positive and significant impact on the management of environmental hygiene in order Adipura, can further discuss some of the following. Trusting fellow citizens, especially on the activities of mutual assistance in order to manage the cleanliness of the environment is a hallmark Tenggarong City community. The spirit of togetherness and mutual trust their fellow citizens is a phenomenon that grows from the bottom. The existence of legislation including local regulations governing the management of environmental cleanliness has to be believed by the public. This is shown by the public awareness that has grown to dispose of waste in the space provided. Tenggarong City community trust towards the head of Neighborhood, towards the village chief and the government has grown and evolved since before, making it easier to direct people to manage the cleanliness of the environment. The finding of this study is consistent with that proposed by Arsyad, et al. (2011) that social capital is a phenomenon that grows from the bottom based on the principles of mutual trust and the spirit of togetherness reflected by the culture of mutual cooperation. In addition, public trust in local regulations and other legislation on environmental cleanliness following sanctions applied in Tenggarong City will facilitate the implementation of Adipura Programme sustainably. The existence of trust shows that in managing environmental cleanliness, Tenggarong City has become a condition of mutual support among citizens. This is in line with the opinion of Putnam in Lubis (2011) which stated a trust is a form of a desire to take an action in social relations based on the feeling of assurance that others will do something as expected.

High and significant mutual trust among citizens and public confidence in the institutions will increase public participation in managing environmental cleanliness, especially in overcoming the problem of waste in Tenggarong City. The study's finding concurs with the study result of Lusiyana, et al. (2014) which states that the government and the community affect Adipura Programme the most in Bandar Lampung City. Similarly, the findings of this study agree with Sidik (2011) which states that the role of the community is a very important element in the management of urban solid waste.

### E. The Effect of Cooperation on Environmental Cleanliness Management

The result of statistical calculations for cooperation variable is obtained t counted of 1.83 and a significance level of 0.07 (Table 5). This implies that there are significant and positive relationship, but not significant between the variables of cooperation and the management of environmental cleanliness. Most researchers of social capital claim that social capital has a positive impact on the welfare of society and sustainable development. The formation of social capital is able to solve urban issues. Cooperation is a component of social capital that can be defined as the ability of Tenggarong City community to cooperate in solving the problems of environmental cleanliness, especially the issues of waste, together. The awareness on the importance

of cooperation will encourage the growth and development of cooperation efforts. However, when awareness on the importance of cooperation does not exist, it will be difficult for the occurrence of cooperation.

The study's finding is that the influence of cooperation on the management of environmental cleanliness is not significant, which means the testing of the third hypothesis is rejected at the 0.05 significant level. The third hypothesis of this study is rejected, which can be interpreted that the cooperation in managing environmental cleanliness together in the form of mutual cooperation, technical assistance provided by the government, and the fabric of the agreement made with environmental NGOs which have been running at this time does not have a significant impact on the management of environmental cleanliness for Adipura Programme in Tenggarong City. Although it is understood that togetherness in mutual assistance provides common benefits. If the environment is clean, then it will produce a healthy and comfortable environment that ultimately let people work quietly so that prosperity will be realized. However, the awareness is not yet able to give a significant influence in managing environmental cleanliness. The study's finding is not consistent with the research finding of Putri and Hidayat (2011) that there is cooperation between the group members and the collaboration went so well that the integrity of the group can be maintained. Similarly, this research is not in line with research finding of Cahyani (2014) which states that through cooperation between the Government (BLHD), Companies and NGOs will improve waste management for Adipura Programme.

### F. The Effect of Norms on Environmental Cleanliness Management

The results of statistical calculations for norm element is obtained t count of 1.69 and a significance level of 0.10 (Table 5). This implies that there is a significant and positive relationship, but not significant between norm variable and environmental cleanliness management in Tenggarong City for Adipura Programme.

The concept of social capital is an important component in addressing urban issues, including environmental cleanliness issue. One of the components of social capital according to Putnam in Thobias, et al. (2013) is norms. Norms determine what is good and what is bad. Social norms developed in the community of Tenggarong City, among others, are (1) the existence of deliberations in any decision-making, for example, deliberations if there will be a mutual cooperation on environmental cleanliness, (2) a habit to cooperate has been there a long time, (3) local regulation on environmental cleanliness, and (4) the norms outlined by religious teachings.

The fourth hypothesis testing in this study shows that the effect of norms on the management of environmental cleanliness is not significant at 0.05 significance level (the fourth hypothesis is rejected). Norms developed in Tenggarong City community, on the one hand, is able to encourage the community to manage the cleanliness of the environment to be better. However, on the other hand, it will hinder in managing environmental cleanliness. As stated by Coleman in Suandi (2007) that the social structure has various acts and rules that can be exploited by individuals and society, namely obligation and expectation, information, and norms that can inhibit and encourage the human behaviour. The study's finding does not agree with the study's finding by Pontoh (2010) that the actual values and norms can support the preservation of resources as a sustainable business capital. The study's finding also does not concur with those by Putri and Hidayat (2011) that there are norms of the group and it is running properly.

## IV. Conclusion

The finding of this study is that social capital positively and significantly affects the management of Tenggarong City environmental cleanliness for Adipura Programme. Trust positively and significantly affects the management of environmental cleanliness in Tenggarong City. Cooperation and social norms positively, but not significantly affect the management of environmental cleanliness.

Community social capital plays an important role in addressing the problem of cleanliness in the city. To that end, Kutai Kertanegara Regency government, through the Regional Environmental Agency, should always be able to optimize the active role of the community with the increase of clean Friday intensity and optimally utilize community trust in Neighbourhood, Village, government, and the rules that apply.

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