

#### RESEARCH ARTICLE

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# **Effects of Social Capital on The Development of Dasolin**

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### **ABSTRACT**

Dasolin (*Dana Sosial Ibu Bersalin*, or Social Fund for Pregnant Women) is the fund collected from the community voluntarily based on the principle of mutual cooperation in accordance with the collective agreement with the aim of helping finance pregnant women's antenatal care, labor and emergency. Social capital is an element capable of fostering the development of Dasolin for success. The purpose of this study was to determine the effects of social capital, which includes trust, reciprocity, member participation, social values and social norms either partially or simultaneously, on the development of Dasolin in Mlaras, Sumobito Subdistrict, Jombang Regency. The subject of the present study was 213 pregnant women in Mlaras. Data were collected by using questionnaires. The multiple linear regression was used for statistical analysis. Results showed that social capital, which includes trust, reciprocity, member participation, social values and social norms, had a significant effect on the development of Dasolin in Mlaras, Sumobito Sub-district, Jombang Regency.

Keywords: Dasolin, Social Fund, Pregnant Women, Social capital

# INTRODUCTION

Social capital remains rarely studied in Indonesia, whereas internationally there evolves an understanding that social capital constitutes one of the decisive factors in economic development. Fukuyama (1995) believes that social capital has an important role in the success of (social, cultural, economic, and political) development. To discuss social capital is to study how a community works together to build a network to achieve the common goal of improving the quality of life. The main dimension of a study of social capital is how a community forms patterns of interaction among individuals in a group and among groups with a focus on inter-individual social networks, norms, values and beliefs born of a group.

An interview with one of pregnant women in Mlaras, Sumobito Sub-district, Jombang Regency, East Java Province, Indonesia on February 17<sup>th</sup>, 2017 revealed that the problem with Dasolin in the village was the lack of socialization, mutual cooperation, trust in village apparatuses and sources of fund. This phenomenon showed a reduced trust among pregnant women. Therefore, village apparatuses and health personnel should further increase social capital among the member farmers and the board. This high trust constitutes a crucial foundation on which to perform collective activities relating to the development of Dasolin.

Against the above backdrop, the present study was aimed at investigating more deeply how social capital was capitalized on in Dasolin. Therefore, the present study is entitled "Effects of Social Capital on the Development of Dasolin". The purpose of this study was to analyze the effects of trust, reciprocity, participation, social values and social norms on the development of Dasolin in Mlaras, Sumobito Subdistrict, Jombang Regency.

Social capital is defined in terms of institutional dimensions, relationships established, and norms shaping the quality and quantity of social relations within a community. It is defined not only as a number of institutions and social groups that support it, but also the social glue that holds together members of a group as a whole (Mateju, 2002). Social capital can be characterized as an individual's willingness to give a priority to community decisions. This willingness would lead to cumulative interactions that result in social values-laden performance.

Putnam (1995) defines social capital as "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit". Dasolin (Dana Sosial Ibu Bersalin, or Social Fund for Pregnant Women) is the fund collected from and by people high social responsibility towards women who are going to give birth, especially those of poor families. However, the fund can also be used to pay others' health costs when required, provided that it is agreed by the villagers. The Dasolin fund can be derived from contributions of households or families, pregnant women, kampung (RT/RW [Neighborhood/Community Association]) money, village money, village organization (PKK [family empowerment and welfare], and village water vending association, pedicab drivers' association and others) money (Delivery planning and complication prevention program (P4K), Health Office of East Java Province, 2011).

Dasolin is for couples of childbearing age and women with under-five children are also encouraged to save their money in order to finance their subsequent pregnancies. Tabulin (Tabungan Ibu Bersalin, or pregnant women's saving scheme) is for pregnant women only. Dasolin is the fund collected from the community voluntarily based on the principle of mutual cooperation in accordance with the collective agreement with the aim of helping finance pregnant women's antenatal care, labor and emergency. Dasolin is an effort to maintain the community health by and for the community which is organized based on the joint-effort and familial principles. It adopts the pre-effort financing scheme and aims to improve the community health, especially pregnant women. Dasolin is characterized by the funds originating from the community in the form of money or capital and objects managed by the community for the benefit of community health, especially pregnant women.

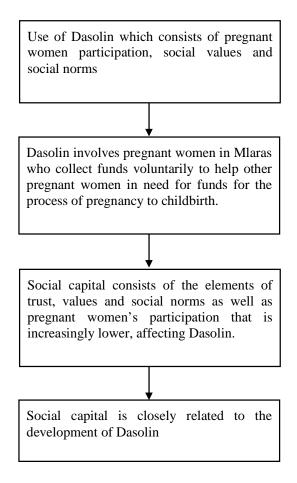


Figure 1. Theoretical framework

Previous studies, The study by Anggoro (2009) entitled *Effects of Social Capital, Empowerment, and Social Assistance* on Business Resilience showed that the effects of social capital, community empowerment and social assistance on business reliance was 59.9%, larger than the effects of other variables of 40.1%. This means that the major hypothesis, the effects of social capital, community empowerment and social assistance on business resilience is demonstrated or there are significant relationships between the predictor variables and the criterion variables. Yuliarmi (2012), in her study entitled *Role of Social Capital* in the Empowerment of the Craft Industry in Bali Province, indicated that social capital was incapable of directly increasing the empowerment of the craft industry in Bali Province.

On the contrary, however, Thobias (2013) in his study entitled Effects of Social Capital on Entrepreneurial Behavior (a Study of Micro-, Small- and Medium-Business Actors in Kabaruan Subdistrict of Kepulauan Talaud Regency) indicated that social capitalwas closely related to entrepreneurial behavior. In line with Thobias, Sedana (2013) in his dissertation entitled Social Capital in the Development of Agribusiness Farmers of Balinese Subak System concluded that social capital strongly affected the development of agribusiness farmers of Subak system. Social capital in Subak consists of beliefs, social norms and social networks among member farmers, the board of Subak and the cooperative.

### **METHODS**

The present study was an explanatory research using the quantitative approach. The it employed the multiple regression analysis showing the magnitude of the effects of social capital (X1), which has subvariables of Member Participation (X1.1), Reciprocity (X1.2), Trust (X1.3), Social Norms (X1.4), and Social Values (X1.5), which were the independent variables. The development of Dasolin (Y) was the dependent variable. The present study was conducted in Mlaras, Sumobito Sub-district, Jombang Regency, East Java Province, Indonesia. The object of the study was social capital among pregnant women, the village apparatuses and health personnel with regard to Dasolin.

Population was all the pregnant women in Mlaras. The population size was 560. Sample size was 213, selected by simple random sampling technique. Data were collected by means of documentation, interviews and questionnaires. Questionnaires were distributed to pregnant women. The instrument of the study was questionnaire, the items of which were drawn up by the author. Respondents responded the items of questionnaire on a 5-point Likert scale.

Test validity was used to measure the validity of the instrument. Each item was tested for validity using the Pearson's product-moment correlation:

RXY = correlation coefficient of variables X and Y

X = score

 $\Sigma XY$  = sum of multiplication of X and Y

 $\Sigma X2$  = sum of squared X score  $\Sigma Y2$  = sum of squared Y score N = number of subjects.

Validity of the instrument can be determined by comparison of  $r_{count}$  (coefficient validity/Pearson coefficient) with  $r_{table}$ . Test reliability was used to determine the reliability of instrument items by means of the Alpha formula:  $\Sigma$ 

$$\mathrm{rXY} = \frac{\mathrm{N}\,\Sigma\mathrm{XY} - (\Sigma\mathrm{X})(\Sigma)}{\sqrt{\{\mathrm{Nx2} - (\Sigma\mathrm{X})2\}\{\mathrm{N}\Sigma\mathrm{Y2} - (\Sigma\mathrm{Y})2\}}}$$

RXY = correlation coefficient of variables X and Y

X = score

 $\Sigma XY$  = sum of multiplication of X and Y

 $\Sigma X2$  = sum of squared X score  $\Sigma Y2$  = sum of squared Y score N = number of subjects.

Validity of the instrument can be determined by comparison of  $r_{count}$  (coefficient validity/Pearson coefficient) with  $r_{table}$ .

Furthermore, the test reliability was used to determine the reliability of the instrument. It used is the alpha formula:

$$r_{11} = \begin{bmatrix} k \\ (k-1) \end{bmatrix} \begin{bmatrix} 1 & \sum \sigma_b^2 \\ 0 & \sigma_t^2 \end{bmatrix}$$

 $r_{11}$  = instrument reliability k = number of items  $\Sigma \sigma 2b$  = amount of item variance

 $\Sigma \sigma 2t$  = total variance

The criteria of reliability are as follows:

A Cronbach's alpha of > 0.60 means that the item is reliable and a Cronbach's alpha of < 0.60 means that the item is not reliable. Data were analyzed using the descriptive statistic technique with multiple regression analysis to determine the relationship between the independent variables (X) and the dependent variable (Y). The present study also used the classical assumption tests (normality test, heteroscedasticity, multicolinearity, linearity and hypothesis testing).

### **RESULTS**

The classical assumption test with the normality test showed that the Asymp.Sig. (2-tailed) was 0.828 (greater than 0.05). Thus, data were normally distributed and could be used for the study. Multicollinearity could be tested by determining the value of VIF (variance inflation factor). Results showed that all the independent variables (X) of the study, from X1 to X5, had VIF values of <10.

Table 1. The result of classical assumption test

Model _	Unstandardized Coeficient				Colinearity Statistic	
	В	Std.error	T	Sig.	Tolerance	VIF
1 (Constant)	0.221	0.329	0.672	0.503		
Trust (X1)	0.194	0.009	20339	0.000	0.986	1.014
Reciprocity (X2)	0.209	0.013	16389	0.000	0.986	1.014
Participation of pregnant women (X3)	0.196	0.008	23892	0.000	0.994	1.006
Social Values (X4)	0.190	0.014	13,665	0.000	0.990	1.010
Social Norms (X5)	0.197	0.013	14.939	0.000	0.989	1.011

Dependent Variable: Development of Dasolin (Y)

The heteroscedasticity test showed that all the independent variables (X) of the study, from X1 to X5, had Sig. (2-tailed) values of > 0.05. This means that the regression model does not contain an unequal variance of residuals of one observation to another or free of heteroscedasticity. Thus, all the independent variables (X) can be used for the study.

Linearity can be tested by means of the Durbin-Watson test in order to determine whether there is an autocorrelation or not in the model. The criterion is that if 0 < DW < Dl, then there is a positive autocorrelation. The output above shows the DW value of 2.086, and the table of Durbin-Watson's critical values for k = 5 and n = 213 indicates that Dl is 1.718. Since D-W (2.086)> Dl (1.718), then on the basis of the criteria, it can be said that a positive autocorrelation does not occur in the regression model.

In conclusion, the specification (linear) of the regression model above is correct. Multiple Regression Test, The effects of the variables Trust (X1), Reciprocity (X2), Participation of Pregnant Women (X3), Social Values (X4), and Social Norms (X5) on the Development of Dasolin (Y) can be determined by using the Multiple linear regression analytical technique. The results could be used to construct multiple linear regression equation model as follows:

$$Y = 0.221 + 0.194 X1 + 0.209 X2 + 0.196 X3 + 0.190 X4 + 0.197 X5$$

The multiple linear regression equation above shows that:

- a) The constant was 0.221 (positive). When the variables X1, X2, X3, X4, X5 is 0, then the development of Dasolinis 0.221.
- b) The regression coefficient for Trust (X1) was 0.194. The positive coefficient indicates that when the variable Trust increases by 1%, then the score of the variable Development of Dasolin (Y) would increase by 0.194 units on the assumption that other independent variables were constant.

- c) The regression coefficient for Reciprocity (X2) was 0.209. The positive coefficient indicates that the variable Reciprocity increases by 1%, then the score of the variable Development of Dasolin (Y) would increase by 0.209 units on the assumption that other independent variables are constant.
- d) The regression coefficient for Member Participation (X3) was 0.196. The positive coefficient indicates that when the variable Member Participation increases by 1%, then the score of the variable Development of Dasolin (Y) would increase by 0.196 units on the assumption that other independent variables are constant.
- e) The regression coefficient for Social Values (X4) was 0.190. The positive coefficient indicates that when the variable Social Values increases by 1%, then the score of the variable Development of Dasolin (Y) would increase by 0.190 units on the assumption that other independent variables arreconstant. The regression coefficient for Social Norms (X5) was 0.197. The positive coefficient indicates that when the variable Social Norms increases by 1%, then the score of the variable Development of Dasolin (Y) would increase by 0.197 units with the assumption that other independent variables are constant. Results of the calculation of multiple correlation (R) in the table above show that the strength of the relationship between the independent variables (X1, X2, X3, X4, and X5) and the dependent variable (Y) is 0.947. According to Sugiyono (2009), this result indicates a very strong level of relationship. The positive sign indicates that the 5 independent variables have a direct relationship with the dependent variable. This means that an increase in the score of the independent variables would increase the score of the dependent variable. The score of multiple coefficient of determination (R<sup>2</sup>) indicates the effect of the independent variables (Trust, Reciprocity, Member Participation, Social Values and Social Norms) on the dependent variable (Development of Dasolin). The higher the score of  $R^2$  the better the model would be. The scores of  $R^2$  range from 0 to 1. The closer to 1 or 100% the better the ability of the variable to explain the dependent variable in the model would be. The score of multiple coefficient of determination of 0.896 means that 89.6% of changes in the variable development of Dasolin are affected by all the five independent variables (Trust, Reciprocity Participation of Pregnant Women, Social Values and Social Norms), while the remaining 10.4% are affected by other variables not included in this study.

#### DISCUSSION

Hypothesis testing, in order to verify the pregnant women's responses with regard to the effects of social capital (trust, reciprocity, member participation, social values and social norms) on the development of Dasolin in Mlaras, Sumobito Sub-district, Jombang Regency significantly, the F-test and t-test were used. The effect of Truston the Development of Dasolin can be partially determined by the t-test. Results showed that the score of  $t_{count}$  for the variable Trust (X1) was 20.399 and that of  $t_{table}$  was 1.960. Thus, trust had a dominant effect of 66.8% on the Development of Dasolin.

The effect of reciprocity on the Development of Dasolin was 16.389 and  $t_{table}$  of 1.960. This is consistent with the results of the study that Reciprocity had a significant effect (56.5%) on the Development of Dasolin. Participation of Pregnant Women had an effect of 23.892, larger than the  $t_{table}$  of 1.960, on the Development of Dasolin. This is consistent with the results of the study that Participation of Pregnant Women had a partial effect of 66.8% on the Development of Dasolin. Social Values had an effect of 47.4% on the Development of Dasolin. Results of the study showed that the score of  $t_{count}$  of the variable Social Values (X4) was 13.665, greater than that of  $t_{table}$  of 1.960. Social Norms had an effect of 51.9% on the Development of Dasolin. Results of the study showed that the score of  $t_{count}$  of the variable Social Norms (X5) was 14.939, greater than that of  $t_{table}$  of 1.960. Overall, all the elements of social capital are capable of reflecting the development of Dasolin. Dasolin can be developed by capitalizing on the elements of social capital and, with regard tothe Government's policy in favor of the welfare of pregnant women, it is expected that pregnant women increase social capitalin promoting the development of Dasolin, ultimately leading to their welfare.

Hypothesis testing shows that the score of  $F_{count}$  was 357.89 and  $F_{table}$  was 2.26. Comparison of  $F_{count}$  with  $F_{table}$  indicates that the score of  $F_{count}$  is greater than that of  $F_{table}$ . This means that the elements of social capital (Trust, Reciprocity, Participation of Pregnant Women, Social Values and Social Norms) simultaneously had a significant effect on the Development of Dasolin in Mlaras, Sumobito Sub-district, Jombang Regency. Thus, social capital is an element capable of fostering the development of Dasolin for success. The element of social capital that promote the development of Dasolin were trust, reciprocity, participation of pregnant women, social values, and social norms. Therefore, the elements of social capitalwere capable of promoting the development of Dasolin.

The multiple linear regression analysis showed that the regression coefficient of each independent variable had a positive sign. This shows a direct relationship between the variables of social capital (Trust, Reciprocity, Participation of Pregnant Women, Social Values and Social Norms) and the Development of

Dasolin. In the present study, the variables of social capital (Trust, Reciprocity, Participation of Pregnant Women, Social Values and Social Norms) had a correlation coefficient of 0.896, falling within the interval of 0.80 to 1.00. It means that the variables of social capital had avery strong effect on, or a high level of relationship with, the development of Dasolin. Results also showed a multiple coefficient of determination  $(R^2)$  of 89.6%, meaning that that the development of Dasolin was influenced by the variables of social capital (Trust, Reciprocity, Participation of Pregnant Women, Social Values and Social Norms) and the remaining 10.4% was influenced by other variables beyond those used in this study.

## **CONCLUSION**

Results of the multiple linear regression of the effects of the independent variables on the dependent variable showed a significant simultaneous effectof the elements of social capital (Trust, Reciprocity, Participation of Pregnant Women, Social Values and Social Norms) on the development of Dasolin in Mlaras, Sumobito Sub-district, Jombang Regency.

Results of the present study indicate that trust and participation of pregnant women are the dominant factors affecting the development of Dasolin. Thus, the officials of Mlaras, Sumobito Sub-district, Jombang Regency are expected increase the levelsof trust and participation of pregnant women in order to further increase the development of Dasolin. In doing so, the village officials and health personnel shall continually be transparent in terms of funding and distribution of Dasolin. It can be carried out, for example, by reporting the financial report of Dasolin honestly and fairly, continually emphasizing deliberation in addressing problems related to Dasolin, and involving pregnant women in activities relating to Dasolin.

Social capital can be built by means of the Government's policy in favor of the welfare of pregnant women. Thus, it is expected that pregnant women can increase social capital in an effort to boost the development of Dasolin, ultimately leading to the welfare of pregnant women in accordance with the purpose of Dasolin.

#### REFERENCES

- Anggoro, D. A. (2009). Pengaruh modal sosial, pemberdayaan masyarakat, dan bantuan sosial terhadap ketahanan usaha (studi eksplanatif kuantitatif tentang pengaruh modal sosial, pemberdayaan masyarakat, dan bantuan sosial terhadap ketahanan usaha produsen makanan olahan di sentra industri makanan ringan Desa Gondangan, Kecamatan Jogonalan, Kabupaten Klaten). Skripsi. Surakarta: Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Sebelas Maret Surakarta.
- Dinkes Provinsi Jawa Timur. (2011). Program Perencanaan Persalinan dan Pencegahan Komplikasi. Surabaya: Dinas Kesehatan Provinsi Jawa Timur.
- Fukuyama, F. (1995), Trust: The Social virtues and the creation of Prosperity, New York: Free Press.
- Mateju, P. (2002). Social Capital: Problems of its conceptualization and measurement in transforming societies. OECD-ONS Conference on Social Capital Measurement, London.
- Putnam, R.D. (1995). Bowling alone: America's declining social capital. Journal of Democrazy, 6(1), 65-78.
- Sedana, G. (2013). Modal sosial dalam pengembangan agribisnis petani pada sistem subak di Bali. Disertasi. Denpasar: Prodi Ilmu Pertanian Pascasarjana, Universitas udayana.
- Sugiyono. 2012. Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R & D. Bandung: Alfabeta. Thobias, E. (2013). Pengaruh modal sosial terhadap perilaku kewirausahaan (suatu studi pada pelaku usaha mikro kecil menengah di Kecamatan Kabaruan Kabupaten Kepulauan Talaud). Jurnal Acta Diurna, 2
- Yuliarmi, N. (2012). Peran modal sosial dalam pemberdayaan industri kerajinan di Provinsi Bali. *Piramida*, 7(2).