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The Effect of Social Capital on the Welfare of Coastal Populations of Rokan Hilir Riau Indonesia

Pengaruh Modal Sosial terhadap Kesejahteraan Penduduk Pesisir Rokan Hilir Riau Indonesia

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ABSTRACT

This study aimed to analyze the effect of social capital on the welfare of the coastal population of Rokan Hilir Regency. This study used a survey method with a quantitative approach. Welfare indicators include income, family expenditure, health and access to health services, housing conditions and facilities, education, and access to transportation. Meanwhile, the indicators of social capital include network participation variables, reciprocal relations, trust, social norms, social values and proactiveness. The results of this study showed that six variables of social capital had a positive influence on the increase in coastal people welfare. These variables contribute at the level of 64.0% in terms of welfare improvement. The network participation variable (PN) affects more effectively than other variables, where an increase of one unit of the network participation index (PN) will increase the welfare level index (Y) to 0.451. Furthermore, the reciprocity (RC) and proactive (PR) variables have an equal effect on welfare, where an increase of one unit will increase the welfare index (Y) by 0.120 - 0.124 units with a significant level of 0.1. Finally, the variables of trust (TR), norm (SN) and value (SV) have an equal effect on welfare (Y) of 0.9 - 0.112, meaning that if one or all the three variables increase by one unit index, the welfare (Y) will increase between 0.9 - 0.112 index units.

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh modal sosial terhadap kesejahteraan penduduk pesisir Kabupaten Rokan Hilir. Penelitiannya menggunakan metode survei dengan pendekatan kuantitatif. Indikator kesejahteraan meliputi pendapatan, pengeluaran keluarga, kesehatan dan akses terhadap pelayanan kesehatan, kondisi dan fasilitas perumahan, pendidikan dan akses transportasi, sedangkan indikator modal sosial meliputi variabel partisipasi jaringan, hubungan timbal balik, kepercayaan, norma sosial dan proaktif. Hasil penelitian ini menunjukkan enam variabel modal sosial berpengaruh positif terhadap peningkatan kesejahteraan masyarakat pesisir. Variabel-variabel tersebut memberikan kontribusi sebesar 64,0% dalam hal peningkatan kesejahteraan. Variabel partisipasi jaringan (PN) berpengaruh lebih efektif dibandingkan variabel lainnya, peningkatan satu satuan indeks tingkat kesejahteraan (Y) menjadi 0,451. Selanjutnya variabel resiprositas (RC) dan proaktif

(PR) memiliki pengaruh yang sama terhadap kesejahteraan, kenaikan satu satuan akan meningkatkan indeks kesejahteraan (Y) sebesar 0,120 – 0,124 satuan dengan tingkat signifikansi 0,1. Terakhir, variabel kepercayaan (TR), norma (SN) dan nilai (SV) memiliki pengaruh yang sama terhadap kesejahteraan (Y) sebesar 0,9 – 0,112, artinya jika salah satu atau ketiga variabel tersebut naik satu satuan indeks, kesejahteraan (Y) akan meningkat antara 0,9 – 0,112 unit indeks.

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Introduction

Rokan Hilir is one of the coastal areas of the East Coast of Sumatra in Riau Province, located 1^o14'-2^o30' of the North Latitude and 100^o16'-101^o21' of the East Longitude. The population of this area is ethnically diverse, with various occupations and a diverse culture. This diversity forms social capital in the form of network participation (people's participation in a network system), reciprocity, trust, social norms, social values, and proactiveness. This social capital has become a social capital asset for coastal residents. According to Nenadovic and Epstein (2016), social capital plays a role in the participation of fishermen in governance and multi-level governance. Within the development process of the area, social capital is seen as an important asset in determining economic growth. Social capital assets can also contribute to the economic development of the population. Social capital has a positive influence on the welfare of fishermen. By increasing the quality of social capital, it will increase the level of welfare. (Carera, 2017; Rosni, 2017; and Kusumayanti, et al., 2018). The question arises: are the social capital assets of the coastal population of Rokan Hilir Regency, Riau related to the welfare of the population? Therefore, research on the relationship between social capital assets and the welfare of the population is needed.

Method

The method used in this research was a survey with a quantitative approach (Kirlinger, 2002). The research was conducted in two sub-districts, namely Limau Pasir Kapas and Sinaboi in the coastal area of Rokan Hilir. The primary data collected included the indicators of social capital with its variables namely: participation in a network, reciprocity, trust, social norms, social values, and proactiveness (proactive action). According to (Hasbullah, 2006; and Hauberer, 2011) social capital assets can be defined as a collection of actual resources associated with a certain network. According to the Central Bureau of Statistics (BPS, 2021) welfare indicators include several variables namely population, health and nutrition, education, employment, consumption levels and patterns, housing and environment, poverty, and other social capital. Meanwhile, the secondary data included population structure, maps, occupations of the population, educational levels, facilities, and infrastructure. The sample for the research was selected by random sampling spread over the two sub-districts.

To analyze the survey data retrieved from the questionnaires, the social capital assets were measured by the 1-3 scales (Daniel, 1989) using the Likert-scale approach (Singarimbun and Sofyan, 2000). The scores were analyzed using SPSS software (*Statistical Package for the Social Sciences*) (Santoso, 2003) to achieve a multivariable regression equation is as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + e.$$

The model was modified into

$$Y = b_0 + b_1.PN + b_2.RC + b_3.TR + b_4.SN + b_5.SV + b_6.PR + e$$

Y = welfare, PN = participation in network, RS = *reciprocity*, TR = *trust*, SN = *social norm*, SV = *value*, PR = *proactive action* and b_0 = interception, $b_1, b_2, b_3, b_4, b_5, b_6$ = coefficient indicators (Walpole, R., 1989). The result was analyzed and the conclusion was drawn.

Results and Discussion

The total population of the district is 637,161 people, where the population structure consists of local residents and migrants (8%-14%) consisting of Malays, Javanese, Minang, Batak, and Bugis ethnics. Most of the population's occupations are in informal sectors. For example, the head of the family and the family members work in fisheries such as catching, processing, and trading (fish, garden products, building materials). They also work in small-scale industries; shipbuilding, agriculture, and other small-scale business sectors such as, barbers, wood processing, welding production, sewing, shopkeeper, housemaids, and dock workers. The dependency ratio is 56.2, meaning that every 100 people who work feeds 56 - 57 people of unproductive age (BPS, 2021). The working hours were 50%-62%, or less than 40 hours/week. Mothers generally do not work. Mostly, they only work to help their husbands when the catch is abundant, where some women work as fish product roaming sellers. In addition, in terms of educational level, 61% - 65% of the population are elementary or secondary school graduates, as stated in the Central Bureau of Statistics report (2021), which states that the educational level of the population where the people were not elementary school graduates, elementary school graduates, and junior high school graduates were 64.45%. Furthermore, in 2020 the value of the human development index (Human Development Index) was 70, classified as moderate, and the morbidity rate was 13.83%.

Welfare

Income. The findings revealed that the population's monthly income ranged from Rp. 2,700,000 to Rp. 4,750,800 per family, with an average of Rp. 3,789,473 per family.

If there are three to four family members to care for, the per capita income is Rp 1,263,157 per month. The primary sources of family income are the earnings of the father, mother, children, and other family members, who work mostly in the informal economy. According to Rangga et al. (2020), this income is higher than the income of the fishing community in Pasir Limau Kapas District. Based on the scale measurement, the income of the population is classified as "medium". Sundaram et al. (2011) found social capital to have a large impact on the income and welfare of the poor.

Expenditure. Food and non-food expenses make up the family's monthly daily spending. The spending data are then transformed into the monthly expenditure data on average. According to the study results, monthly family expenditure ranged from Rp 2.700.000 to 4.4750 per family, with an average of Rp 3,550,400 per family. Given the fact that a family mostly consists of 3-4 members (all are working), the average income is equivalent to Rp 1,183,466 per person. The income is mostly spent for food consumption (58.1%) and non-food consumption (51.9%). The results of this research are supported by the results of a study by BPS (2021), which states that the population's expenditure is Rp 1,107,995 per capita per month and Kamarni et al. (2019) state that 48.1% of the variables of social capital, human capital, land, and number of household members can explain the level of expenditure per capita (welfare) of coastal communities. Based on the scale measurement, the expenditure indicator is classified as 'medium'.

Health and Health Service Accessibility. These factors include the absence of sickness or illness, the distance to polyclinics or hospitals, the rate of medical expenses, the cost of medicines, and the availability of contraception and family planning services. The data indicated that over the previous month, 96.1% of the population did not suffer from disorders that may have hindered their production. In addition, the survey reveals that the average distance between people's homes and the nearest polyclinic or hospital was greater than 3 kilometers. Contraceptive and family planning services were difficult to obtain, and it was difficult to obtain health care services. On the basis of scale measurement, health and service indicators are categorized as inadequate (score 6-10).

Residential Conditions and Facilities. Roof, cubicles, walls, home size, and ownership status were deemed to be measuring components of the dwellings. A situation of residency with a score between 16 and 20 is defined as semi-permanent. In the meanwhile, the residential facilities that were evaluated included the availability of clean water sources, toilets, sources of lighting, cooking fuel, yard space, entertainment facilities, and air conditioning systems. As a consequence of the research conducted by Asri et al., it was determined that this indicator was superior to the circumstances and amenities for fishermen included in their findings (2020). Overall, the residential gain was given a score between 12 and 22, suggesting that it is inadequate.

Educational Services. These indicators include the affordability of the school fees, the distance from home to school and admission procedures. The indicator of school accessibility gained a score of 3-4, which was classified as low. This is because most of the junior and senior high school buildings are in the sub-district, 3-5 km away from their houses. The results of this study were also in accordance with BPS records (2021) stating that the education level of the population aged 15 years and over is 64.45%, where the people were not elementary school graduates, elementary school graduates, or junior high school graduates. Overall, the education service indicators are classified as 'difficult'.

Transportation Access. Transportation access accessibility indicators include transportation fees and costs, vehicle facilities, and vehicle ownership. The transportation access indicator showed a score of 7, meaning that transportation access is classified as 'easy'.

Based on the aforementioned six indicators, it can be simply concluded that the level of welfare of the population is measured at a score of 18, meaning that the level of welfare is classified as 'not high'. This is in line with the research of Cleaver (2004), who stated that social capital does not have a real impact on reducing poverty and improving welfare. The main cause of failure of the economic development that occurred in various parts of the world was the non-functioning of the social capital component, which ideally grew in the midst of society (Fukuyama, 2002).

Social Capital

Participation in a network. Participation in the network was measured by five variables, namely: activeness in giving ideas; taking time to interact; maintaining good relations; solving common problems; and sustaining mutual agreement in buying and selling things. The five variables were seen as associations or groups, and according to Nugroho (2021), the social structure of the coastal population is built on ethnic diversity that creates various social networks such as associations (*gemeinschaft*), religious-based networks, and women's groups. The results of the study showed that activeness in giving ideas was classified as 'good' (score 113); taking the time to interact was measured as 'very good' (score 135); maintaining good relations with fellow citizens was classified as 'very good' (score 147); solving common problems was classified as 'good' (score 115) and mutual agreement in buying and selling things was classified as 'very good' (score 126). Based on these five variables, the indicator of participation in the network was calculated with a total score of 636, meaning that the indicator of participation in the network (participation in a network) was classified as 'very good' (score 630-750). This research was supported by the result of research by Maas, et al., (2015), which states that social capital significantly affects governance through the development of social capital, which is the development the capacity to organize, to build a network of cooperation, and to participate in society.

Reciprocity. Reciprocity is a common way of creating and maintaining bonds between people, attitudes and caring for others. This indicator was measured by five variables: helping others, developing profitable corporations, and ensuring fairness in the trading system. The results showed that, based on the five variables, the indicator of reciprocity was calculated with a Likert scale and gained a total score of 604, meaning that the reciprocal relationship was classified as 'good' (score 510-629).

Trust. Trust was measured through the variables of trusting information spread within their community, trusting each other in terms of lending personal goods, trusting each other in terms of debt,

and trusting in taking care of each other's family members. The results showed that among the five variables where the indicator of trust was calculated with a Likert scale, it gained a total score of 558, meaning that the indicator of trust for the population was classified as 'good'. This is in line with Prayitno (2017), which states that social capital (trust) has a positive impact on community activities (path point 0,56).

Social norm. In this study, the social norm variable was measured using a Likert scale through the variables: reminding each other about spreading goodness; obeying community and government rules; and being involved in implementing group-based decisions. The results showed that the social norm gained a total score of 587, meaning that the social norm indicator of the population was classified as 'good'.

Social values. The value indicator was measured by the involvement of residents in implementing positive things in five variables: building solidarity, maintaining good relations, helping each other, and sustaining harmony in the family. The result was that this indicator was calculated at the score of 596, implying that the values developed in society were classified as 'good'. Social capital such as trust, norms, and networks can improve the efficiency of society by facilitating coordination (Pisani et al., 2020).

Proactive Action. This indicator was measured by the symptoms that appear in the community in the form of variables related to enthusiasm, commitment, and active participation in population activities. The proactive indicator gained a score of 573, meaning that the proactive attitude of the population was classified as 'good'.

The Effect of Social Capital on People's Welfare. The social capital of a population is not only connected to enhancing well-being, but also boosts the people's capacity to address issues. Increased wellbeing is contingent on the population's capacity to develop social capital. The greater social capital will have an effect on the improvement of wellbeing. The following study model demonstrates the influence of social capital on wellbeing:

$$Y = - 1.342 + 0,451 PN + 0,120 RC + 0,112 TR + 0,091 SN + 0,102 SV + 0,124 PR$$

$$R^2=0,640 \text{ (Coefficient determination)}$$

Based on the model, it was found that the six social capital variables had a positive influence on the increase in welfare. These variables have a contribution of 64.0% to improving welfare, while the other 36.0% is determined by other variables that are not included in the model. Variables that are not included in the model in question are human capital, financial or physical capital. The value of the slope ($b_0 = -1.342$) indicates a tendency to lower welfare if the social capital variable is very bad. The participation in network (PN) variable has a better influence than other variables, where an increase of one unit of the participation in network (PN) index will also increase the welfare level index (Y) by 0.451.

Furthermore, the reciprocity (RC) and proactive (PR) variables have an equal effect on welfare, meaning that if the variable increases by one unit, the welfare (Y) will also increase by 0.120 - 0.124 units, with a significant level of 0.1. Meanwhile, the variables trust (TR), norm (SN) and value (SV) have an equal effect on welfare (Y) of 0.9-0.112, meaning that if these three variables or one of them increases by one unit index, welfare (Y) will increase by 0.9-0.112 index units. According to Fide et al. (2021) social capital is significantly related to a fishermen's regular income.

Conclusion

The social capital has an influence on the welfare of the coastal population of Rokan Hilir; the participation in network variable has a stronger influence on welfare than other variables; and the order of influence of social capital on welfare, from the largest to the smallest, respectively: participation in network (PN), proactive (PR), reciprocity (RC), trust (TR), value (SV), and norm (SN).

It is critical to improve education and health facilities and infrastructure in coastal areas because education and health are regarded as the most essential ways to achieve the welfare of the population. Local government and stakeholders must develop and maintain existing social capital in coastal populations.

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