Strategy for reducing environmental disaster based on social capital (A case study in Indonesia)

A Wibowo*, R Karsidi, B Sudardi and M Wijaya
Universitas Sebelas Maret, Jl. Ir. Sutami 36 A Surakarta 57126, Jawa Tengah Indonesia.

Corresponding author: agungwibowo@staff.uns.ac.id

Abstract. Social capital is the main resource in developing strategies to overcome natural disasters as well as to mobilize community participation in preserving environmental based-local wisdom. Social capital is the ability of individual and communities to represent their own resources and transgenerational solidarity driven by high trust and shared values to achieve goals through established social relations. This paper is intended to explore why the social capital are able to build communities’ behaviour that minimize the occurrence of environmental degradation. The study was conducted in Wonosobo Regency, Central Java Province. Historically, the region was the first place for bottled water production in Indonesia. However, the source of the spring water of the region remain sustainable up until now. The study’s results show that the strength of social capital in local communities contributes to the effectiveness of building collective action for environmental conservation. The strength of social capital also accelerates capacity building and transformation process of local institutions in order to reduce environmental degradation. More specifically, social capital entities that play an important role are participation in a network, trust, reciprocity, solidarity, togetherness and mutual cooperation.

1. Introduction
Kleden [1] outlines sustainable development as a development referring to both natural and human resources at optimum level and maintaining optimum balance among the demands on the sources. There are two points at stake, comprising carrying capacity of the resources and transgenerational solidarity, implying that we can maintain and stop destructing the existing resources. Meanwhile, Salim [2] views sustainable development as an improvement process optimizing the utilization of both natural and human resources, by putting natural resources and human in harmony in the development. Gardiner and Gardiner [3] argue that sustainable development is a balance among all production factors that enable improvement of sustainable human prosperity in all social and economic groups by minimizing the negative effects on physical and social environments.

Rio+20 summit focuses on debates about sustainable development, namely: (1) green economy and (2) efforts to formulate institutional framework for sustainable development. The debate is about how the transition into green economy is. Developed countries point out their economic policies to a road map to aim at a transition of green economy, however, developing countries worry that the strategy retards their economic development [4]. Poerbo [5] emphasizes the relationship between ecology and economic growth as a base for implementing sustainable development. On his opinion, economic development is conceptualized as the result of a public system capability to aggregately manage
resources and utilization of the sources to support life and way of life. Natural resources utilization management is an activity dealing with the interests of stakeholders in development, and hence, behaviour is the target of management: how human make use of resources for normative needs. Meanwhile, management of resources is how resources are managed to support the needs.

Haris [6] maps sustainable concept into the aspects of understanding, including: (a) economic sustainability, which is defined as a development that is able to produce goods and services continuously to maintain government sustainability and avoid sectorial imbalance which can damage agricultural and industrial production, (b) environmental sustainability, an environmental sustainable system that should be able to maintain stable natural resources, preventing exploitation of natural resources and the function of environmental absorption, and this concept is also related to the maintenance of biodiversity, airspace stability, and other functions of ecosystem which do not belong to economic sources category, and (c) social sustainability, denoting a system which is able to achieve equality, provide social services including healthcare, gender education and political accountability.

Social capital as social resource is regarded as an investment to obtain new resources in society. Thus, social capital is believed as one of main components in driving togetherness, idea mobility, mutual belief and mutual benefit for achieving mutual advancement. In relation to that, Pautman, et.al. [7] also explains that social capital is a social organization performance, including beliefs, norms (reciprocity), and networks (of social association) which can improve public efficiency by facilitating with coordination and cooperation for mutual benefits. Hamdan et al [8] and Coleman [9] defines social capital as an entity variance, consisting of some social structures which facilitate actions of the agents to create various social responsibilities, build mutual belief, bring about information networks and determine social norms and sanctions for the members. Further, Vipriyanti [10] formulates that social capital is an individual’s trust and capability to develop working networks and obedience to existing norms in surrounding group or society in which the capital provides benefits for accessing other capitals and facilitating cooperation in and among groups of society. Siisiainen [11] and Burt [12] conceptualizes “Social Capital is the trust, reciprocity and mutuality that inheres to social relationship”. In other words, social capital is a set of relationships among people, supported with trust and cooperation for mutual virtue [13]. Meanwhile, Bourdieu [14] conceptualizes rather different definition, which is more likely influenced by Marxist sociology, that social capital takes three forms. First, economic capital is related to money or properties, goods and other relevant things which are believed and used for investments. Second, institutionalized cultural capital takes the form of educational qualification. Third, social capital consists of social obligations and some of them are institutionalized in the form of integrity and nobility [15].

Fukuyama [16] emphasizes on wider dimension that social capital is everything that makes people aligned to achieve mutual objectives based on togetherness and bound with growing and obeyed values and norms. Social capital is not built merely by an individual, but by the tendency of a group to socialize as an essential part of the existing values [17]. The core of social capital lies on the capability of people in an entity or a group to work together building a network in order to achieve mutual objectives. The cooperation is influenced by an interrelation pattern, that is mutual and reciprocal, and build for the sake of trust, supported with positive and strong social norms and values [15]. Social capital dimension is inherent in the structures of social relation and social networks in a society which create various social obligations, build mutual belief, bring about information networks and determine social norms and sanctions for the members. However, Fukuyama strongly states that it does not guarantee that mutual norms and values as the bases for the people to take position, act, and behave automatically belong to social capital. However, it is only mutual norm and value that is awakened by a trust. Trust symbolizes expectation or hope of order, honesty, and cooperation emerging in a social community based on norms believed by all members. The norms can contain statements on the values of glory (generosity) and justice.

Social capital is important to be developed since it is the ability of community or group to work together and build a trust among the members and with other people, which in turns becomes a huge power to cooperate with other people and build their trust. If people cooperate and believe each other
based on the existing universal values, there won’t be any distrust, interception and other evil behaviours, in order to minimize a gap between the poor and the have. Moreover, strong local government (village government) with reliable capital will facilitate cooperative networks with other parties.

The roles of social capital are as essential as the roles of other economic infrastructures, and therefore, people should give more priorities to the development of social capital. Social capital can contribute to economic development because networks, norms, and trust contained in it are social collaborations of mutual interests. The aspect of trust is very essential element in creating social capital for this is the core of social capital [18]. Social capital in human life is potentially developed and considered as mutual interest. This will encourage people to act together, for putting effort directly to the improvement of the quality of life and creating public infrastructures and facilities. Value is one of the elements to take into account in utilizing social resources. Value held in a society serves as the orientation of action and behaviour of the people, including those for development [19]. The use of social capital will improve management efficiency of activities, including development program [20]. The problem statement is why the social capital are able to build communities’ behaviour that minimize the occurrence of environmental degradation?

2. Methods
This study focuses on society, as the target of Corporate Social Responsibility (CSR) implementation by PT Tirta Investama AQUA Lestari in Mojo Tengah Sub-district and Wonosobo Sub-district, located Wonosobo Regency. The locations and research objects were selected under the consideration that the areas occupy high social capital values which are able to preserve existing springs, and the first mineral water in Indonesia was produced in those areas. This study applies qualitative method focus on investigation of people’s strategies to ascertain the significance of their social life and make an effort to explore subjective desire, motivation and experience. According to Daymon and Immy [21] qualitative method has more tendencies to be connected subjectively to social reality, so that this method is able to create understanding from the perspective of stakeholders and allow researchers to observe various phenomena as seen by the agents. This research belongs to explanatory case study, in which distinguishing the types of research, according to Yin [22] and Moleong [23] is by observing the identification of the types of research questions delivered in the beginning. Within this research, the research questions include “how” and “why”, and therefore, the case study goes to explanatory type. The questions of “how” and “why” deal with operational relations demanding certain time tracking, instead of frequency or appearance.

According to Yin [22], a case study is an empirical enquiry, which investigates phenomena in real-life context, if the limits between phenomena and contexts are not clear, and multisource evidences are used. Case study is suitable if the subject matter of a research deals with “how” and “why”, if researcher only has small opportunity to control observed events and if the focus of the research is contemporary phenomenon in real-life contexts. Meanwhile, Creswell [24] mentions that a case study is a qualitative approach, in which the researcher explores limited system (case) or some limited systems from time to time, in details, when collecting involving various sources of information (for examples are observation, interview, audio visual material, document, and report) and descriptive case-based report and theme-based report.

Pawito [25] suggests that in a case study, the researcher collects, organizes and analyses data on certain cases dealing with phenomena attractive to the researcher, and then compares and interrelates the data (for more than one case) by considering holistic and contextual principles. In this study, the researchers aim at understanding potential social behaviours in the activities of relationship among individuals in a society, particularly dealing with the extent of macroscopic structures and norms influence the relationship among individuals. Social behaviour for further investigation includes the potential of people who receive the benefits of CSR program and stakeholders in CSR implementation.
The primary data sources of qualitative research are words and actions, the rests are secondary data including documents and others [23]. The data collecting techniques include in-depth interview, observation, focus group discussion, and document analysis. In each case, analysis process will be performed using interactive analysis model [26]. There are three analysis components in this model: data reduction, data presentation and data verification.

3. Results and discussion

3.1. Sources of social capital and its roles in inspiring environmental preservation matting the title

3.1.1. Religion: teaching about environmental preservation. The majority of people in Dieng plateau are Islam followers. The teachings of Islam provide opportunity to people to learn and understand Sunatullah (recommended but not obligatory prayer to Allah), taking form of natural norms in surrounding environment, and assert human responsibilities, both to human and natural environment. Islamic lessons do teach human to take advantage of available natural resources and to be responsible to the regulations in managing and making use of natural resources for sustainable mutual prosperity as the completely expected targets. Religion teaches that each member of society has the right to take benefits of mutual natural resources to meet his or her needs as far as he or she does not break, violate, or prevent other people’s rights. Utilization of scarce and limited natural resources should be controlled and protected. Protection refers to conservation (protection) and rehabilitation (renewal) efforts. This can be achieved if human realize their duties to save the Earth. The followings are Koranic verses related to environmental preservation.

Surah Ar Rum (30) verses 41–42, about prohibition to cause any destruction on the Earth, mentions that “corruption has appeared throughout the land and sea by reason of what the hands of people have earned, so Allah may let them taste part of the consequence of what they have done that perhaps they will return to righteousness. Say (O Muhammad): Travel through the land and observe how was the end of those before. Most of them are associators of others with Allah.” Human are created to worship to Allah, as well as to be calipmates on the Earth. As calipmates, humans have the responsibilities to make use, manage and maintain the universe. Allah created the universe for the purposes and prosperity of all creatures, mainly human. Greediness and bad behaviours to nature can cause human to live in misery. Landslide, flood, drought, unpattern layout/land and polluted air and water are the results of human’s behaviours, which hurt human and other living things. Islam teaches human to keep environment. In order to keep and preserve environment, Dieng people have conducted many efforts, for examples, natural resources rehabilitation and improve the quality of land and water. Forest, land and water saving program in this environment should be continued and improved.

Surah Al A’raf (7) verses 56–58, on concern about environment, mentions that “And cause not corruption upon the earth after its reformation. And invite Allah in fear and aspiration. Indeed, the mercy of Allah is near to the doers of good. And it is Allah who sends the winds as good tidings before the mercy until, when they have carried heavy rainclouds, we drive them to a dead land and We send down rain therein and bring forth thereby (some) of all the fruits. Thus, will We bring forth the dead; perhaps you may be reminded. And the good land—its vegetation emerges by permission of its Lord; but that which is bad—nothing emerges except sparsely, with difficulty. Thus, do We diversify the signs for a people who are grateful.” The messages of the verses are that the Earth, in which human and other Allah’s creatures reside and live was created by Allah with the Mercy. Mountains, valleys, rivers, seas, lands, and others were also created by Allah for people to be managed and used as best they could, instead of to be destroyed and devastated. However, some people destroy the Earth. They destroy materials or things and have poor attitude, shameful behaviour or sins, and other dishonourable manners. Nevertheless, in order to conceal the disgraceful conducts, they often consider themselves the agents who make betterment for this world, though in fact, they are those who destroy the Earth. Allah the Most Holy and the Most High prevents human to cause any damage to the Earth since God created them to be calipmates.
The prohibition covers all aspects of life, including behaviors (muamalah), like disturbing livelihood and other people’s sources of life (see Surah Al Qasas:4). Allah emphasizes that one of the greatest favours of God conferring to all servants (people) is moving the wind signalizing the pouring of the blessings. The wind bringing heavy clouds is driven away to dry land and damaged plants due to drought, wells become dry for rain does not pour, and people get hungry and thirstier. Then Allah pours heavy rain on the land so that the land, which is almost vanished, becomes fertile and has plentiful of water. Thus, Allah awakens people and gives a good life and abundant crops.

CSR program in cooperation with PT. TIV Wonosobo brings the concept of environmental sustainability. The targeted aspects include the followings: In Bumirejo village, particularly in the areas of Kongsi, there is one of conservation village initiations performed by young people. They belong to the Kongsi Youth Community. The activities focus on river restoration. Since 2012, the young people facilitated by Institute for Rural Technology Development of Surakarta have performed conservational activities. For examples: bedding hard plant nursery, planting alongside river bottom, and providing seeds for local people of Bumirejo. Approximately 20 young people actively participate in this program. The results show that some river bottoms/beds vulnerable to landside are managed, flood in the upstream starts to reduce, and green open spaces are improved.

In Kalibeber village, there has been Bank Sampah (Waste Banks) since 2012. The focus of activities is sorting and maintaining housing areas of Kalibeber clean from rubbish, those reasonable to sell and throw. This is in a compliance with the principles of waste management of 3R (Reduce, Reuse and Recycle). Together with some schools, they process inorganic waste, plastics, to which waste managers are familiar. There exists waste management of distillation (changing plastics into oil/fuel). Together with MTS or Madrasah Tengah Sawah (A Madrassa of the Centre of Rice Feld) community, people have understood integrated waste management.

In Kejiwan village, the focus of assistance program is initiation of MSMEs (Micro Small Medium Enterprises). The target of management is local commodities, including carica, cassava, and fruits. Usaha Mikro Kecil Menengah (UMKM) or Micro, Small, and Medium Scale Enterprises (MSMEs) have existed since 2012. They develop and enter markets at Central Java province. There are 10 enterprises exist and keep fulfilling the demands of domestic consumers and those outside Wonosobo.

3.1. Religion: teaching about environmental preservation. Based on the research findings, there is a ritual of cutting unkempt hair in Dieng. The intention of the ritual is to express gratitude to God and pray for safety of Dieng people, at specific level, and Indonesian people, at general level. The value learned from the ceremony is keeping the balance of human’s relationship with God, human, and surrounding environment.

3.2. Entity of social capital and the roles in coping with environmental disasters

3.2.1. The use of network to deal with environmental disasters. Rudito and Famiola [27] describes social network as a box containing various types of networks. There are two types of social networks, attributive and transactional networks. It is said “networks among individuals in a community have been determined based on attributes attached to each individual in a community, for instances, gender, social attribute and family. Any changes in community is like ‘barter’, seen because of attributes attached on each individual.

Transactional dimension, as the second social network in this model, focuses on types and forms of exchanges among individuals in a community. For examples, exchange of certain information, exchange of goods or services, and efforts to influence other people, and so on. Discussions about network in social capital are so-called bonding social capital and bridging social capital. The term bonding social capital is used to describe intra-community bond. It emphasizes on a strong tie among family and members of community in order to produce similarities in identity and purposes. Bridging social capital, on the other hands, explains the bond of inter-community or social group, based on
religion, class (economy), ethnic, gender and socio-economic condition. Within the second social capital, inter-community bond reflects similar identity. Leadership is an important factor in social capital. Good figure of leader can create internal harmony of people and external environment. In relation to intra-community, the role of local leadership in a society is to create conformity and harmony by motivating people to be more active to make an effort and find solution for the problems in society. In community, there is a custom of “kumpul-kumpul”. The custom is multifunctional. One of the functions is to tighten intra-community relationship, including the relationship with the leader. According to a figure in local community, problems arising in society can be overcome through “kumpul-kumpul”. This also reflects ample benefits and high efficiency of collective problem-solving process in informal situation before discussed in formal forum, if required. Leaders play important roles in creating conformity and harmony in villages. Factor driving people to obey all instructions is leader’s confidence. Local figure said that, “who will people trust if it is not the leader”. Leader’s confidence is also considered ‘a truth’.

Today, many local people, particularly young generation, migrate to Jakarta, Surabaya, Bali and even Brunei. They keep maintaining agricultural activities by leaving their villages during slack season and come back during peak season. When agricultural activities become lower, they look for piecework outside their villages and go back in important season, like crop harvesting season. One of the consequences of both temporary and permanent migration is lacking of workforce for agricultural activities, particularly soil cultivation and harvesting. The intensity of workforce shortage requires in-depth interview in the other study.

Social capital is always influenced with the tendency to exchange kindness among individuals in a group of among groups. This pattern of exchange is not reciprocal as what appears in selling and purchasing process, but short-term and long-term combination in altruism nuance (the spirit to help and give priority to other people’s needs). An individual and people from a group are motivated to help other people without expecting rewards in return immediately. In the concept of Islam, this motivation is called sincerity, a spirit to help other people for the sake of their benefits. The rewards are not expected to be received immediately and without any specified deadline. In a society and certain social group, a strong reciprocity weight will result in a society with high social capital. This is also reflected from their high level of social awareness, cooperation and mutual respect. Within this society, it will be easier for them to build themselves, group and social environment and physical environment well.

The spirit to cooperate and help each other is high. Up to now, cooperation and honesty remain strong, for example, when a neighbor organizes a celebration (party), people will voluntarily help until it is finished. People also hold high simplicity and work ethic. Individuals in a group and among groups always help each other. The pattern is immediately reciprocal, like in selling and purchasing process. The reciprocity happens in both short-term and long-term. All the people act well to other people and other groups of people without expecting anything in return. In this case, doing favors to others touch ‘altruism’ dimension, a spirit of giving top priority to sacrifice themselves and family for the needs of other people. Helping each other, sambat-sinambat, does not monopolize local people. When somebody builds a house, all people will work together and help based on their abilities. They give assistance of energy to build the house and food to meet the needs of people who help. Men give cigarettes, sugar, rice and other food. Women also bring food (rice, sugar, and other types of food). Men donate their energy to build the house, while women help to prepare food for the men and all workers. This proves that people’s cooperation is high. This also happens in funeral ceremony.

Local people do not recognize the concept of employer and worker. The energy required for agricultural production is given traditionally. People take turn to help each other to raise their fields. The payment pattern in agriculture, particularly when farmers grow local rice varieties, is not familiar. To replace this system, they will borrow and lend workers, so that the payment is also replaced by energy (of workers). This mutual help lasts from the beginning of planting season until harvest time. For harvest time, workers will earn ‘wages’ in the form of bawon or crops. This model symbolizes a
form of social insurance of local people. When farmers’ households fail to harvest, they can use bawon from other households to replace the energy they already give.

After ‘planting together’ is introduced to cut the cycle of pests and diseases, bawon system is not the only way to pay workers. For example, wages in harvesting peanuts are paid cash. Reciprocal process among people can also be mediated through the activities of local organizations, for instances, group of arisan (a regular social gathering for women at which every participant contributes a certain amount of money) and muslimahan (female Muslim) activities, Pembinaan Kesejahteraan Keluarga (PKK) or Family Empowerment and Welfare, Rukan Tetangga (RT) or neighborhood association, savings and loan cooperation (KSP), and even village governmental apparatus. Without the involvement of those organizations, an individual will miss the opportunity to obtain information related to their village and the needs of the village. Moreover, being involved in those organizations means that an individual will be integrated to community at village level or below.

Trust is an attitude of believing each other in social life, being unified with other people and contributing to the improvement of social capital. There are two types of beliefs: belief to an individual we already recognize and belief to an individual we have not recognized before, but will be improved due to the comfort in social structure knowledge. Mutual belief (understanding) in a community is expected to contribute to environmental problem-solving.

Dynamics of the process to build public trust in the target area of CSR program is varied, instead of short and instant, starting from facilitators of Institute for Rural Technology Development of Surakarta organizing some stakeholders. Entering in a new community will need more energy to build mutual trust. The success of facilitators in creating stakeholders’ trust relates to the roles of facilitators to provide evidences. One of which is by performing experiments and trials to cope with problems. The other strategy is optimizing public participation, from planning, implementation, until conclusion of the program. People also synergize and work together to implement CSR program with PT. TIV for their needs and interests. The efforts resulted in mutual commitment to seek for alternative solution. Empirically, trust takes the forms of all learning media to learn in field free of any expenses. The contact is non-formal without any black on white (legal) agreement. Even, for further guarantee, people offer laboratory of experimental plot of village treasury to perform experiments and trials together and non-governmental investments, both energy and fund, to continue this program.

3.2.2. The role of reciprocity in coping with environmental disasters. Behavior of social capital is directly depicted through norms, values and regulations in the society. The findings show that Javanese people hold various Javanese norms or Javanese concepts to manage their life. The concept of akhlak kang mulya, temuning jati diri iman lan taqwa is taught. The message of this concept is noble character/moral is obvious in identity, faith and devotion). Thus, students are accustomed to always improve their faith and devotion by deepening religious knowledge and improving their worship to God based on the lessons of their religion.

There is also the concept of karsaningsun memayu hayuning bawana, implying the desires, wishes and intentions are guided to natural welfare and beauty to improve the condition of the nature and human’s quality of life, as well as creating peace and cooperation among people in order to create a life with gemah ripah loh jinawi titi tentrem kerto rahrjo, depicting the Earth of Godness of Indonesia with abundant natural resources and peaceful life.

Dieng people’s habit of ngendong means gathering in the houses of relatives or neighbors while talking about a topic or discussing about something with relaxing but meaningful way. Javanese people also have numerous meaningful and good concepts, for instance, becik ketitik ala ketara, implying that good and bad behaviors will be noticed. If understood well, Javanese concepts will guide people to live in harmony, conformity and balance with environment.

3.2.3. The role of reciprocity in coping with environmental disasters. Solidarity is defined summarily as the feeling of togetherness. It is mutual sense of belonging, mutual understanding and cooperation. Topographically, CSR empowerment by PT. TIV Wonosobo is implemented rural area, belonging to a
region with Islamic nuance and Javanese culture. It is obvious that the people live with the principle of “guyup (harmonious)" and emphasize on cooperation. The CSR programs with PT. TIV Wonosobo were implemented in Kejiwan, Kalibeber, and Bumirejo villages. The areas are located in upper course. Dieng people consist of minimum new comers and belong to the same blood relations. The spirit is brought to all types of public activities. One of the most obvious activities is scheduled regular cooperative works to keep environment. Activities to clean environment together are scheduled twice a week and organized by local government. Some other programs are organized by AQUA, and it takes advantages from this social capital. Solidarity is intended to make a change together and prioritize local culture participation. It is sure that all the programs will not succeed without solidarity of the people. Since people are the subjects, they are the agents of change for themselves and concerned people.

One of strengths is solidarity or ownership. Co-facilitator seems to be quite sensitive to recognize this culture. Solidarity is a result of cooperation. This is obvious when creating learning materials together. This is obvious in the activities of creating learning media together. The first activity is carried out in the seed farm of Bumirejo village. People collectively build media for learning together, gather and dialogue to find out local knowledge. The next activity is done in Kalibeber village, with the presence of MTS or Madrasah Tengah Sawah (A Madrassa of the Center of Rice Feld) initiated by local leaders. Local leaders are considered initiators, organizers, and trusted local figures. People’s cooperation is also obvious in the efforts to create the institution of Usaha Mikro Kecil Menengah (UMKM) or Micro, Small, and Medium Scale Enterprises (MSMEs) institution. They are complementary to each other and interdependent without calculating profit and loss as the principles of economy in which they believe.

4. Conclusion
The strength of social capital in local communities contributes to the effectiveness of building collective action for environmental conservation. The strength of social capital also accelerates capacity building and transformation process of local institutions in order to reduce environmental degradation. More specifically, social capital entities that play an important role are participation in a network, trust, reciprocity, solidarity, togetherness and mutual cooperation.

References
[1] Kleden I 1992 Pendahuluan Ke Arah Pembangunan Berkelanjutan di Indonesia (Introduction Towards Sustainable Development in Indonesia) (Jakarta: Gramedia Pustaka Utama cooperated with Yayasan SPES) p 15
[2] Salim E 1992 Pembangunan Berkelanjutan: Keperluan Penerapannya di Indonesia (Sustainable Development: The Need for Its Application in Indonesia) (Jakarta: Gramedia Pustaka Utama cooperated with Yayasan SPES) p 3
[3] Gardiner M O and Gardiner P 1992 Kependudukan dan Industrialisasi dalam Konteks Pembangunan Berkelanjutan di Luar Jawa (Population and Industrialization in the Context of Sustainable Development Outside Java) (Jakarta: Gramedia Pustaka Utama cooperated with Yayasan SPES) p 111
[4] Mangunjaya F 2006 Hidup Harmonis dengan Alam: Esai-Esai Pembangunan Lingkungan, Konservasi dan Keaneeragaman hayati Indonesia (Living in Harmony with Nature: Essays on Environmental Development, Conservation and Indonesian Biodiversity) (Jakarta: Yayasan Obor Indonesia) pp 127–8
[5] Poerbo H 1992 Ekologi dan Pertumbuhan Ekonomi (Ecology and Economic Growth) (Jakarta: Gramedia Pustaka Utama cooperated with Yayasan SPES) p 245–7
[6] Fauzi A 2004 Ekonomi Sumber Daya Alam dan Lingkungan: Teori dan Aplikasi (Natural Resource and Environmental Economics: Theory and Applications) (Jakarta: Gramedia Pustaka Utama)
[7] Soeharto E 2007 Modal Sosial dan Kebijakan Publik (Social Capital and Public Policy) (Bandung: Refika Aditama)
[8] Hamdan H, Yusof F and Marzukhi M A 2014 Procedia-Social and Behavioral Sciences 153 178
[9] Coleman J S 2000 Social Capital in the Creation of Human Capital. In Partha Dasgupta and Ismail Serageldin (Washington DC: World Bank)
[10] Vipriyanti N U 2011 Modal Sosial dan Pembangunan Wilayah: Mengkaji Sucess Story Pembangunan di Bali (Social Capital and Regional Development: Studying The Success Story of Development in Bali) (Malang: Universitas Brawijaya Press)
[11] Siisiainen M 2003 Int. J. Contemp. Sociol. 40 183–204
[12] Burt R S 2002 The Social Capital of Structural Holes (New York: Russell Sage Foundation) p 122
[13] Carroll 2001 Social Capital, Local Capacity Building and Poverty Reduction (Manila: The Asian Development Bank)
[14] Bourdieu P 1986 The Forms of Capital (New York: Greenwood) pp 241–58
[15] Hasbulloh J 2006 Social Capital: Menuju Keunggulan Budaya Manusia Indonesia (Social Capital: Towards Excellence in Indonesian Human Culture) (Jakarta: MR-United Press)
[16] Fukuyama F 1995 Foreign Aff. 74–89
[17] World Bank 2002 Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from the Social capital Initiative (Washington DC)
[18] Zubaedi 2007 Wacana Pembangunan Alternatif: Ragam Prespektif Pengembangan dan Pemberdayaan Masyarakat (Alternative Development Discourse; Various Perspectives on Community Development and Empowerment) (Yogyakarta: Ar-Ruzz Media)
[19] Soetomo 2006 Strategi-Strategi Pembangunan Masyarakat (Public Development Strategies) (Yogyakarta: Pustaka Pelajar)
[20] Badaruddin 2005 Modal Sosial dan Pemberdayaan Komunitas Nelayan (Social Capital and Empowerment of Fishermen Communities) (Yogyakarta: Pustaka Pelajar)
[21] Daymon C and Immy H 2008 Qualitative Research Methods in Public Relations and Marketing Communications (Yogyakarta: Penerbit Bentang) p 4
[22] Yin R K 1987 Case Study Research: Design and Methods (Beverly Hills, California: Sage Publication) p 118
[23] Moleong L J 2009 Quantitative Research Methodology (Bandung: PT Remaja Rosdakarya) p 112
[24] Creswell J W 2006 Qualitative Inquiry and Research Design: Choosing among Five Approaches (California: Sage) p 73
[25] Pawito 2007 Quantitative Communication Research (Yogyakarta: LKIS)
[26] Mile M B and Huberman A M 1992 Qualitative Data Analysis: A Sourcebook of New Methods (CA: Sage) p 16
[27] Rudito B and Famiola M 2007 Etika Bisnis dan Tanggung Jawab Sosial Perusahaan di Indonesia (Business Ethics and Corporate Social Responsibility in Indonesia) (Bandung: Rekayasa Sains)