

# ***E-VILLAGE AND COMMUNICATION NETWORK IN RURAL DEVELOPMENT***

*(a case from e-village Budgeting Banyuwangi)*

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**Abstract—** Rural development should be done in line with the Law Village Act No. 6 of 2014, followed by Government Regulation No. 43 of 2014. One of the mandates or regulations is a special allocation fund received by the village. It is estimated that the number could reach about Rp 103,6 trillion. Second mandate Law, is the carrying capacity of the village; with the support of substantial funds, the villagers are demanded to be more capable of organizing themselves. The aims are to strengthen the village officials in terms of development planning, accountability, performance to produce effective, transparent, clean and trustworthy. With this fund, the village is expected to be able to build communication and information networks that are connected to each other to facilitate the flow of information and communication. One of the communications network is being built in one village in Indonesia is an e-village budgeting in Banyuwangi. This is the case discussed in this paper. It is interesting to examined further, how network-based communication in rural development by utilizing cyber media or internet. The method used in this paper is literature review by examining the information gathered from journals, scholarly paper, related book, etc. The result shows that e-village is still need to be reviewed due to the literacy rate in village, the accessibility of the community, the network or signal and so on. Thus this program triggers the efficiency and transparency of local government and also to strengthen the community participation in rural development.

**Keywords:** *internet, e-village, rural development, communication network*

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## I. INTRODUCTION

### 1.1 Background

Rural development should be done in line with the Law Village Act No. 6 of 2014 on the village, followed by Government Regulation No. 43 of 2014 for its implementing on regulations. One of the messages in the Act is very clear,

that is about the village fund. There will be Special Allocation Fund accepted by the village. It is estimated that the number could reach about Rp103,6 trillion. The amount will be divided into 74 thousand villages across Indonesia, so that each village is expected to receive about 1.4 billion per year. So with that big amount of village funds, it is expected there will be a significant change in the village as well as strengthening internal organizational for village administration into more effective, professional, transparent and accountable.

It aims to improve the economy and the development of key sectors in the countryside.

The second mandate Law, is the carrying capacity of the village; with the support of substantial funds, the villagers are demanded to be more capable of organizing themselves. They are expected to strengthen the village officials in terms of development planning, accountability, performance to produce effective, transparent, clean and trustworthy. Without the assistance and training initiated either from NGOs or the government, it could be less than optimal carrying capacity of the village. In carrying capacity of the village, it is needed to note, that one village has significant different from another villager. The differences that exist with its own characteristics and uniqueness as well as the indigenous-owned of a village, so that the government must be more observant draw local potential, following its development. For instance, the village on the border requires a different approach; which is usually the problem of infrastructure is the main thing. Another thing that needs to be addressed is the role of the State. Countries should be able to be facilitators in doing to uplift the village. State rural development approach is not only as an object, but as a subject so that the "voice" from the village can be heard as the village needs.

In realizing the above, in the presence of village funds, is expected to change the development paradigm by utilizing information and communication technology. So in the end, the village can establish communication and information networks that are connected to each other to facilitate the flow of information and communication. One example of a communications network that is being built in one village in Indonesia is an e-village budgeting in Banyuwangi. This case

is discussed in this paper. It is interesting to be examined further, how network-based communication in rural development by utilizing cyber or internet media.

**1.2 Problem Formulation**

Based on the description of the background above, the problems underlying on this paper is: how e-village communication network as a pilot project budgeting Banyuwangi can build countryside through new rural development paradigm?

**2. Purpose of the paper writing**

Based on the formulation of the problem above, this paper aims to describe the communication network generates in a rural village with the case e-village budgeting Banyuwangi.

**II. METHOD**

To answer the problems outlined, the method of this paper is to study literature or literature review to analyze theoretically of the communication network and e-village. Literature study was conducted by collecting reading materials related to the topic and the case that are discussed in books, scholarly journals and others related to the theme of the paper.

**III. LITERATURE REVIEW**

**3.1 Communication Networks**

The communications network is a special type of network, where the bond that connects one point to another in the network is a communication process (Agusyanto, 2007). Rogers and Kincaid (1981: 82) defines a communication network: "A communication network consist of interconnected individuals who are linked by patterns of communication flows." According to Rogers (1975) in his article titled Networks Analysis of the Diffusion of Innovation, that the entire communication network in the society formed by individuals through the patterns of information flow. These individuals will each affect the behavior of network members in it. Another notion of the communication network is a depiction of "how say to whom" (who's talking to whom) in a social system.

Communication networks describe interpersonal communication, where there are leaders of opinion and mutual followers have communication links on a given topic, which occurs in a social system such as a village, an organization, or a company (Gonzales, 1993). Knoke and Kuklinski (1982) see the communication network as a kind of relationship that specifically stringing individuals, objects and events.

The communications network is one approach which studies human behavior based on approach to the converging communications model. Main problem in communication networks is the man to whom to communicate and what the effect of the communication process as the culprit. One way to understand human behavior is to observe or understand the social relationships that are created for their interpersonal communication process (Setiawan in Rangkuti 2011). Of the various terms mentioned above, which meant the

communications network is a set of relationships among individuals as a result of the exchange of information, so as to form patterns or models of a particular communications network; and according to Gilchrist (2009), people are connected with others in the forms of:

- ▶ *community of identity (to share cultural activities and experiences);*
- ▶ *community of interest or passion (to pursue or resist shared fates);*
- ▶ *community of purpose (to achieve a common goal);*
- ▶ *community of inquiry (to collectively investigate an issue);*
- ▶ *community of support (to provide mutual aid and encouragement);*
- ▶ *community of circumstance (to deal with temporary, sometimes unplanned, situations).*

It is an important part of the network concept, among others: (1) the actor and the action is seen as a form of interdependence not as something independent or autonomous units, (2) the relationship or the relationship between the actors is a channel for transferring or flow of good resources material and non-material, (3) network model that focuses on individuals perceive environmental network structure as an opportunity given or restrictions for individual actions, and (4) the network model conceptualizes structure (social, economic, political and so on) as the pattern length of the relation between actors (Wasserman and Faust, 1994). Aside from the communication network, people also create social networks (social network). Element of this network is a social agents (individual, group, organization, wide society) and connect with the community (van Dijk, 2006). Then van Dijk (2006) states, when the network is filled with symbols and information to connect between people, the sender and recipient, they become what is called network media (media networks). So that what is called a social network, supported by the media network at every level subsystem of society; as illustrated below:

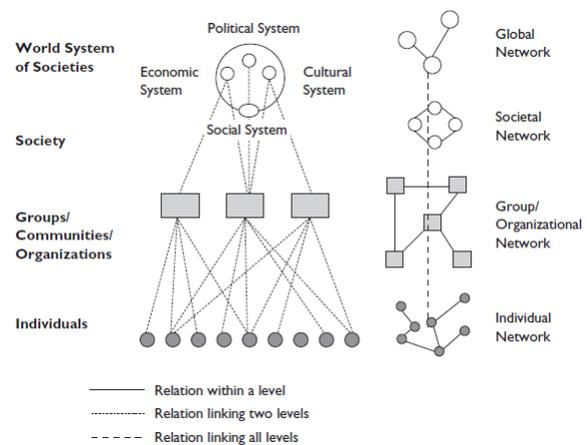


Figure 1. Four units of social and levels connected by a network (van Dijk, 2006)

From the picture, it appears that there is connectivity from the individual level to the global network. This then, makes it possible to utilize communication technologies in networking with other individuals.

**3.2 Development**

The development is participatory by all audiences; including rural development. Development is done not by the needs of government but it depends on what the community needs for the realization of common prosperity. According to Todaro (2000 in Harjanto, 2011), development is interpreted as a multidimensional process that includes changes in the social structure, a change in the attitude of living and changes in national institutions. In addition, the development also includes changes in the rate of economic growth, the reduction of national income and the eradication of poverty. In order to achieve the desired goals in development, the development of a country can be directed at three main points, namely to increase the availability and distribution of basic needs for the people and improve the ability of communities to access both the economic activity and social activities in his life.

Meanwhile, Siagian (1994 in Harjanto, 2011) defines development as "an undertaking or a series of business growth and change that is planned and carried out consciously by a nation, state, and government, to modernity in order to develop the nation (nation building)". While Gina Kartasmita (1994 in Harjanto, 2011) defines development as a process of change for the better through the efforts of a planned manner. "

From the definition of experts, it can be concluded that the development of a conscious and planned with a view to the realization of the people's welfare. When it is traced, development paradigms have changed over time and regarding to the economic growth, as shown in the table below:

Table 1. Comparison of the Three Characteristics Development Paradigm (source: Transparency David Korten, in Harjanto, 2011).

Characteristics	Development Paradigm		
	Growth	Welfare	<i>People-centered</i>
Focus	Industry	Services	Human
Value	Centre on industry	Human orientation	Focusing on human
Economic Indicator	Macro-economic	Social indicator	Human relations with its reseouces
The government's role	Entrepreneur	Services	Capabilities/f acilitators
The main source	Capital	The administrative capabilities	Creativity and commitment

		and the budget	
Problems	Concentration and marginalization	Budget limitations and incompetence apparatus	Structures and procedures that do not support

Shifting in the paradigm of production-centered development towards people-centered development implicate for the emergence of a new construction management, known as Local Resource Management or community-based resource management. So, it changes the role of the government bureaucracy to plan and carry out development for the people, be creating conditions that lead to the ability for people to develop themselves. There are three characteristics of the development of new management, among others:

1. Construction of the community; development as a product of the initiative and creativity of the community.
2. Management of the community (community management); existing resources based on management of local resources by unit decisions concerning system of national resources.
3. The process of social learning (social learning); the process of social interaction between members of the community with existing institutions that aim to develop their skills through problem-solving activities through trial and error.
4. Strategic Management; seeks to develop an organization that is able to adapt to its environment, respond to the demands of the environment.

Development of management characteristics mentioned above, it is expected that the construction can be run in accordance with what was expected and planned in order to achieve prosperity and welfare of the community.

**3.3 Rural Development**

Development does not just happen in urban areas but also in rural areas. Rural development objective is to improve the social, economic and cultural of the society. Hence, according to Korten (1988 in Harjanto, 2011), stakeholders who play a major role and equal (equal) in rural development are the government and society. Adisasmita (2006 in Harjanto, 2011) says that the development of rural communities are all activities that take place in the village and covers all aspects of society, and implemented in an integrated manner to develop self-help mutual assistance; with the aim to improve the welfare of rural communities based on the capabilities and potential of natural resources (SDA) by improving the quality of life, skills and community initiatives.

Accordingly, Vice President Jusuf Kalla said that the rural development paradigm has now changed. First paradigm is regents and the governor who built the village. Now, the village carries out the construction (VIVA.co.id, 2016). This means, it requires the active participation of the communities

to realize a better life together. Direct community involvement, will affect the speed of development and the public will no longer be the object of development. Furthermore, according to Jusuf Kalla, rural development through a new paradigm, will improve the ability of self-reliance and initiative as well as building the village with village funds that have been prepared. To push for the independence of this country it is necessary to 'minimize' the rule to be difficult. But he stressed the need for rules remain good. As the quotation from VIVA.co.id, "Therefore when we read back in Act No. 6 of 2014 concerning the village. Of course the goal is how do we strengthen the country, promote independence, and how democracy works well," (VIVA.co.id ., 2016). Then Jusuf Kalla argued, democracy in the countryside could walk if prosperity is established; and prosperity will improve the whole system and keep the life in the village. Jusuf Kalla also explains, it seems that there is a paradigm change in the Development of the countryside from the top down and the bottom up into the active role of the whole society. Rural development should apply the following principles: transparency, participation, can be enjoyed by the public, accountable (accountability) and (sustainable). So that rural development is done with a multisectoral approach (holistic), participatory, based on a spirit of independence, environmentally sound and sustainable.

There are three basic principles of rural development according to Adisasmita (2006 in Harjanto, 2011):

1. The policies and measures in each village development refers to the achievement of development goals is based on the trilogy of development: (a) the distribution of development; (b) a relatively high economic growth; (c) a healthy and dynamic stability.
2. Rural development implemented with the principles of sustainable development
3. Improving the efficiency through a policy of deregulation, de-bureaucratization and decentralization as well as possible.

Later, rural development must be implemented in accordance with the problems encountered, potentials, and aspirations of the community and rural development priorities that have been set. Rural development should be appropriate to the context: (1) as an effort to accelerate rural development through the provision of infrastructure and facilities development to empower people, and (2) as an effort to accelerate and strengthen the region's economic development in a broad sense to effectively and sturdiness (Harjanto, 2011). Rural development with this new paradigm, must involve community participation. Increased community participation as one of its community empowerment is oriented form on the achievement of development results conducted rural communities.

#### IV. DISCUSSION AND ANALYSIS OF CASES

##### 4.1 E-village Budgeting Banyuwangi

Technological developments should be harnessed for development. This then changed the development paradigm that is not only in the city but in the village. The development construction also takes advantage of the Internet as a means of communication and information. So that the village budget or funds received, should be utilized to the maximum, one of them with the use of technology. It is applied in Banyuwangi, called e-village budgeting Banyuwangi.

The use of instruments of information technology as a pillar supporting public services continues to be driven up to the Government of Banyuwangi village in administration. A total of 189 villages or entire villages in Banyuwangi has implemented a budgeting system, the village integrated in the network (online) or online alias named e-Village Budgeting (banyuwangikab.go.id, 2006).

As quoted on the government website Banyuwangi banyuwangikab.go.id, 2006), Banyuwangi regent Abdullah Azwar Anas said, "e -Village Budgeting is a program towards transparency of budgeting and monitoring of development in rural areas. This system will synergize future financial and development at the village level to district, so as to create harmony. The system is also to provide protection for the village in order to be effective in the utilization of the budget and within the rules". To realize the ability of authorities in using these technologies, training activities for deep understanding and utilizing the e-village Budgeting is held. The aim is to increase the capacity of village government officials, particularly in the management of financial administration. In practice later, it is expected that the government officials are able to use web-based applications ranging from planning, budgeting, financial administration, to reporting.

With the online network about budgeting or budget, it is hoped there will be transparency of funds so that the community has the opportunity to find out what has been, is and will be done by the village. This system will highlight the transparency of the budget, make sure builder program in villages based on community needs and ensure proper use of the budget target. As expressed by - the Minister of Rural, Rural Development and Transmigration Marwan Jafar, "Now the online era, of course we also modernize the system. In fact, we will know the name of the village heads, the village secretary and also the treasurer of the village," (indonesiaberinovasi.com, 2015).

From Marwan statement, it can be concluded that the change of paradigm of communication networks and rural development, ranging from the traditional to utilize online communication network. At the end, the expectation in development of new paradigm that is the active participation of the community will be realized. Furthermore, according to Banyuwangi regent Abdullah Azwar, "an online system that is applied in an effort to improve the quality of rural development as well as to welcome the Law 6/2014 of the village, where there is a budget allocation for the village is

quite large. With proper management, the fund is expected to affect optimal "(igi.fisipol.ugm.ac.id, 2014).

e-Village Budgeting (e-VB) is a rural financial system such as Financial Management Information System as in the district or city, but it applies to the village scale and connect directly with the District Development Planning Agency (*Bappekab*).

Meanwhile, Head of Community and Village Government Banyuwangi, Suyanto Waspo Tondo told Kompas.com, that there are three parts in the E-Village Budgeting: planning, governance, and evaluation. Suyanto also explained that, "there is no longer manually workmanship in the village so controlled disbursement. The fund dropped stay synchronized. It also anticipates corruption because if the program was not finished then it could not be cashed. Banyuwangi Regency Village Monitoring is also being prepared to strengthen oversight of the program. The system is enabled to oversee rural development programs in both physical and non-physical "(Rachmawati, 2016).

Case e-village Budgeting Banyuwangi, when viewed from the development of ICT, certainly has challenges and opportunities. This can be seen as follows:

a. Challenges:

- Due to fast population growth rate there is an urgent need to use some fast track strategy for development
- Extension of economic activities and benefits of development including remote villages
- Understand and utilize the fast developed models of best practices of knowledge based economics in other developing countries
- Localization -Web Contents in Local languages (possibility)\
- Enabling environments
- Partnerships and human networking.

b. Opportunities: The following opportunities will be initiated by the successful implantation of e-village

- Fast increasing teledensity
- Encouraging PC Growth rate
- Internet usage and growth of Internet-cafes even in remotes towns
- World class technical manpower having required skill sets in ICT
- Government commitment and available funds
- International focus on using Knowledge of ICT for development (UN top priority Agenda)

(adopted from Hussain & Qazi, 2010).

Basically, there are also some disadvantages to be the construction is being done with this e-village budgeting, among others: public accessibility, the literacy rate of literacy in general of society as well as media literacy. However, when

viewed from the paradigm and desire has been done by Banyuwangi, it is expected to enhance rural development and community participation in development.

Thus, from the above explanation, it appears that there is a challenge and opportunity in the use of Internet technology in development. At least it has changed the paradigm of rural development; where development in the countryside rarely use and take advantage of internet media, it is now becoming one of the internet media network of rural development. The aim is that the world is also aware of any development that may be accessed by others through the Internet.

Then, when it is mapped, construction budgeting e-village with development paradigm is as follows:

Characteristic	Development Paradigm: <i>people-centered</i>
	<i>People-centered</i>
Focus	Humans, by utilizing the Internet connection and network
Value	Centered on the human
Indicator	Human relationship with resources
The government's role	Coaching ability / facilitators
The main source	Creativity and commitment (not only at government level but also society itself)
Problems	Structural constraints and procedures that do not support (not maximized internet or network connectivity), high numbers of digital divide in rural communities and a lack of public accessibility to the internet.

Source: Adoption of Comparative Characteristics of Three Paradigm Development (source: Transparency David Kortan, in Harjanto, 2011).

In the end, the mapping of the foregoing, it can be concluded that the practice of good governance in development should be able to identify three (3) primary domain cantilever force rule, namely:

- a. Good government (central, provincial, district, sub-district and village administrations)
- b. Good private (economic actors at all levels both employers large-scale, medium-scale, and small-scale entrepreneurs )
- c. Good society, that society is the owner of a very large social capital (Yansen, 2014).

Of those three domains above, Grindle (1989 in Yansen, 2014) mentions that the Human Resources (HR) on all of the above domains should have the quality of a competent and professional if the good governance can be applied, so it will be associated with circuitry public services and quality development for interests of the community. In order to

achieve that goals, it really needs to be underlined is the "essence of development is to give complete confidence to the people; from the people, by the people, for the people. Because of all the problems of development located in the village, then the focus of development should start from the village "(Yansen, 2014).

#### 4.2 Role of Mass Media in Development

From the changing of communications network paradigm is by utilizing media or information technology, it can be concluded that the media play a role in development. As said by Schramm (Hadiyanto, 2014) that when construction or development is began, the function of communication or information had not been changed except the variety of information and communication facilities are used; as well as e-village budgeting pioneered by Banyuwangi.

There are three (3) function in the development of information, namely:

##### 1. Watchman Function;

The urban elite and the peasants in the villages alike began to realize that they are caring for each other. Elite in the city are increasingly aware that rural communities and what they do need to be modernized. Instead, the villagers also see that the city has everything they want so insight into the village grew with the flow of information.

##### 2. Policy Function

In addition to helping people to make individual decisions are difficult and important - to modernity, to transform their lives and beliefs- also be helped to accept the goals, attitudes, habits, and new responsibility. Dialogue should be extended to the involvement of all parties in deciding the change can be realized in accordance with the needs and desires with the community and the government can listen to the community leaders and the public opinion about their problems and development needs in their village.

##### 3. Teaching Function

Schramm suggests labor-power needed to be educated; adults who are illiterate should be taught to read; children must be educated; farmers must learn the ways of modern agriculture; and others. The point is to educate the function of information and communication is to open the door into the world of technical knowledge and the broader community affairs.

Referring to the three main functions of media in the development, Schramm (Yansen, 2014) argues that the mass media is as a watchman in development. The mass media as watchman can be explained as follows:

- a. Expanding the horizons of thought
- b. The ability to focus
- c. The ability to cultivate aspirations
- d. Being able to create an atmosphere of development

From the foregoing, it can be concluded that the existence of e-village budgeting Banyuwangi, it has changed the development paradigm by utilizing mass media. It can be said that the e-village Banyuwangi budgeting is a progressive step in the role of the mass media as watchman.

## V. CONCLUSION

The existence of communications technology is utilized in the construction of rural communication networks has changed the paradigm of rural development. Rural society also takes advantage of the media internet just as is done by e-village budgeting (e-vb) Banyuwangi. This is done so that people can participate in supervising the transparency of the budget for the development of their village. It is then referred to as a development trust completely to the people. Where during a very low state of development is community involvement, not identified the basic needs of the community and the government in controlling the magnitude domination with establishment in the village. So with the village funds, it is expected that the rural development paradigm shift from top-down to bottom-up with the use of the existing potential and supported by the utilization of existing technologies.

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