

Policy Scenario for Acceleration of Village Performance System

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Abstract—The objective of study was to create policy scenarios to acceleration the village performance based on systems dynamic. This action is important to do, especially in the digital era. The information system should be back up by accurate data. This can be done through research based on systems thinking approach. This study was uses a system dynamics method, with a location in Dringu Village, Probolinggo Regency, East Java. Scenarios are generated from simulation stages by finding leverage first, previously, it is preceded by a qualitative data collection stage. Then quantified using scoring. The result show that the leverages is central government and public service element. Thus, the effectiveness of village performance was influenced by those elements. However, these elements cannot be applied in all villages in Indonesia, but must be adapted to the structure of the village government system. It is influenced by many factors, especially the characteristics of the village. Thus, in the era of revolution 4.0, leverage must be known so that villages can maximize their performance and the central government can detect which villages must be intervened with the same or different treatment in the context of the welfare of the village community through policy robust in the future.

Keywords—systems dynamics; local village government; public administration

I. INTRODUCTION

The Fourth Industrial Revolution according Schawab explains that industrial revolution 4.0 has fundamentally changed human life and work [1]. Unlike the previous industrial revolution, the 4th generation industrial revolution has a wider scale, scope and complexity [2]. Influence all scientific, including governance and government disciplines.

In governance, the impact of revolution 4.0 is inevitable, one of which is the use of quantum computer technology and information systems based on internet. This technology will help policy makers to make decision, as well as policies about the Village. The future of villages in Indonesia depends on how policy makers are good at selecting and using the data. Mapping information about village potential as well as village characteristics will greatly diminish the government in making innovative breakthroughs in the context of village community welfare. One of them is to create a scenario related to accelerating the effectiveness of village government. A scenario is not forecast or an intention to describe a certain future state, but it is intended to provide a possible set of future condition. A scenario can present future conditions in two different ways. It can describe a snapshot in time, that is conditions at some particular instant in the future. Alternatively, a scenario can describe the evolution of events from now to some point of time in the future.

Therefore this study aims to create a policy scenario for accelerating village performance with computer-based. It is expected to help policy makers to make decisions and produce recommendation for policy robust on village.

II. METHODS

A. Research Design

The design of this research is mix between hard system as a part of systems thinking approach and qualitative based on "the dominant-less dominant design" [3]. In this design the researcher presents the study within a single dominant approach with one small component of the overall study drown from the alternative. The dominant approach is post positivist deductive non linier but one small component using qualitative approach.

B. Data Analysis

This research has combine analysis between quantitative and qualitative. Before conducting a qualitative analysis, the steps taken are to collect data according to research questions, as follow: Data collected through five procedures, interviews, focus group discussions, questionnaire, observations and documentation. Relations between these methods are complementary. The first stage is find the key informant. The key information this village is one of the elder village leaders. He is a former village government official. Based on his information the researcher go to the Dringu village government official interview with the head of village, staff of public service, some of village apparaturs such us government division, general affairs and the head of gandean hamlet. After that the interview was expanded through the snowball sampling mechanism such us head of Dringu sub district, some of village apparatus: especially division of welfare, government, financial and general services division in Dringu village, head of Prima Bhakti as village organization, member of BPD; community, chief of hamlet, staff of village apparatus; members of PKK, head of PAUD Kartika and Sriwijaya kindegarten, bidan desa,



head of *Puskesmas*, staff of BPMPD (*Badan Pemberdayaan Masyarakat dan Pemerintahan Desa*), member of policeman and army as *Babinkamtibmas*, also member of *Komunitas Pemuda Pribumi* as NGO in Probolinggo city.

The second stage is focus group discussion. Participants in the focus group discussions purposively set of different groups of relevant actors in with members of NGO "Prima Bhakti", villagers, some of village apparatus, members of PKK, head of hamlet, head and member of *BPD*, *ketua RT* and *RW*, village apparatus, member of *Lembaga Keswadayaan Desa* (LKD). Third stage is observation, the third stage is actually done on the sidelines of the interview and FGD. Nevertheless, researchers also used a special time to observe Dringu villages in relation to agricultural activities, infrastructure, village performance and village life although not profound due to time and energy constraints. Fourth is giving questionnaire on public service. Fifth is documentation. Type of documentations are documents and figures related to research problems in Dringu. Quantitative data analysis using scoring to interpret qualitative data, then formulated in Causal Loop Diagram (CLD) model dan Stock Flow Diagram (SFD). Furthermore, followed by simulation of power sim computer program and intervention with small value (+1,5) to get leverage. Previously, required model of village government system [4], and giving scoring, then simulate it. The scenarios produced from leverages.

III. RESULTS AND DISCUSSION

Based on its characteristics, the village of Dringu is a heterogeneous village with adequate geographical conditions, and infrastructure, and high level of cultural acculturation. This creates the depletion of local wisdom and reduces the sense of village security. Both in the sense of physical security and substance that is distrust of the performance of village government. Dringu village has a transitional community characteristic. The performance of the village into one measure a sense of satisfaction / comfort and safety.

	LO CAL G O VERNIMENT	÷	сомминту	÷	V ILLA GE DE VELOPIMENT	÷	VILLAGE GOVERNMENT		VILLAGE PERFORMANCE	•	NGO +		MEAN SOFT N TERVENTION
COMMUNITY EMPOWERING	541	541	49	49	45	499.Z	67	703,25	652	872,38	536	536	52,14667
CENTRAL GOVERNMENT	541	1050	49	49	45	45	67	657	652	652	526	1025	163 L1
LOCA LORGAN IZATION	541	541	49	49	45	68,5	67	579	652	761	536	536	60,25
LOCALWISDOM	541	541		156,25	45	529,5	67	660	652	679	536	536	35,625
COOPERATION	541	740	49	49	45	455	67	657	652	652	536	634	49,5
PROSPEROUS COMMUNITIES	541	516	49	49	45	455	6 7	886	652	652	536	536	37,33333
PU BUC SBRVICE	541	541	4	49	45	505,22	67	810 88	652	1116,06	536	536	128,6367 12
VILLAGE COUNCIL	541	541	49	49	45	45	67	1112,69	652	652	536	536	75,94883
VILLAGE FINA NCE	541	541	49	49	45	85,19	67	686,25	652	810,88	536	536	98,38667
VILLAGE GEOG RAPHYCAL	541	541	49	49	45	38	67	70	652	771	536	536	16,5
A CULTURATION OF CULTURE	541	541	-5	181,63	45	51,5	67	661	652	687,5	536	536	45,06333
COMPLAN	541	541	49	49	45	530	67	734	652	942	536	536	74
ECONOMIC ACTIVITIES	541	541	49	49	45	608	67	677,5	652	748,25	536	536	52,43883
H UMA N RESO URCES	541	541	49	49	45	45	67	1023,88	652	652	536	536	61,14667
A 55 5 TA NCE	541	69	49	49	45	45	67	657	652	652	536	752,5	55,75
POVERTY	541	541	49	49	45	545,38	67	749,38	652	576,81	516	536	84,92853
SELFRELIANCE	541	541	49	49	45	455	67	865,5	652	652	536	536	34,41667
VILLAGE APPARATUS	541	541	5	49	45	455	67	1074,65	652	652	536	536	69,605
VILLAGE IN FRA STRUCTURE	541	541	5	49	45	719,65	67	694,5	652	808,75	536	536	76,81333
VILLAGE SECURITY	541	541	49	118,19	45	466 B	67	658,5	652	666,25	516	536	21,47

Fig. 1. Test of sensitivity for dringu village performance system.

The scenario is a set of possibilities that can be used as a tool to manage the uncertainty of a condition in order to take a decision in the future. a levers will be adapted to the problems of the village government system in Dringu village. Based on the sensitivity test result, the scenario that can be given to Dringu village government is first "Focusing on village performance through accelerating public services by applying a minimum public service standard and back up with adequate apparatus resources, by (1) placing local government personnel in the village or (2) recruiting professional local people. The second step has been implemented in Dringu Village government by recruiting local villagers with expertise in service administration and mastery of computer skills. The second step also has been implemented by the central government by issuing Permendagri No 2/2017 on Standar Pelavanan Minimal Desa (Minimum Standards of Village Service), but until now there has been no explanation and implementation. Both the second and the first way should be strictly regulated by the central central government, actually on Source: Powersim simulation.

salary / incentives and welfare for outsourch. This is because it has no status and work protection.

Focus on rural performancet with improvement the public service and still maintain the village geographical condition. Improvements in public service delivery are mainly village administration and health services. Both of these are important, given that village services are closely related to public trust. If community services use the principles of good governance then it will restore public confidence. This is called the minimum service standard. The principle can only be done with adequate human resource infrastructure. Therefore, Pemdes Dringu has appropriately appointed new employees, especially handling public services, because the condition of the village apparatus is low in its ability to provide public services. But this is only short term. The long term is to apply minimum service standards.

Many alternative assumptions can be developed to underlie the scenario in order to accelerate the performance of village government, depending on the priorities and objectives to be achieved. These scenarios can be used for villages with similar characteristics with the research location.

The second option is: "Focusing on village performance through poverty alleviation by giving (1) assistance and cooperation network with NGO based on community, (2) optimalization village potency in agriculture and goods production in Usaha Kecil Menengah (UKM) and Industri Kecil Menengah (IKM); (3) forming village co-operatives without usury; (4) accommodate youth dropouts / unemployment in the workshop" This option especially number 1 has been done before and still continues by PKBM Prima Bhakti as a NGO community based, and the way number 2 has execute by local government (Dinas Koperasi, Dinas Perdagangan also BAPEMAS (Badan Pemberdayaan Masyarakat Desa); the third has been established and currently is still running but still convensional bank, in the future should be changed based on sharia. Moreover, the fourth way has also been initiated by the village government by building youth work post and equipment, but it is unclear at this time. This is combining policy between local and village government.

The third option is: "Focus on Village Government Support through increasing the role and resources of village council and apparatus. For village apparatus by (1) placing local government personnel in the village or (2) recruiting professional local people ". While for village council recruit from (1) informal leader (villager) appointed by head of village; (2) profesional villagers based on competency and representatife of community (selected by selection); and (3) informal leader or local community based on village community election. If the consideration is effective and efficient (structural efficiency model) as the main objective then to get the highest support of the village government especially apparatus is the first choice, i.e. placing the civil servants in the village government structure, mainly public service apparatus. By placing the civil servant, the consequences are already trained, the salary is already owned so that the government does not need to spend more money (again) and the village either. However, it gives rise to jealousy at the village apparatus level.

Furthermore, if prioritize democracy model, the second choice most appropriate. This option is the highest democratic value by recruiting professional staff from the local population as a public service staff. The consequences are, the village government must pay for salaries or fees; both the Central Government and local governments must prepare regulations to protect their rights and obligations as well as their status positions, ASN (Apparatus of Civil State) or non ASN or private. This choice is most democratic but too costly.

Next, to fill the position of the village council, if the consideration of structural efficiency then the most appropriate choice is the first choice by appointed. Then followed by the second option. However, if prioritize the democracy model, the third most appropriate choice, where the highest democracy value is to conduct general elections to fill the village council based on community preferency. With sufficient academic qualification records. But for isolated villages and low resources it is difficult to fulfill. So the first choice is most

likely, while the third option is for the advanced villages. The fourth option is easy for village government actors, especially community.

Stock	Local	NGO's	Community	Village	Village	Village	Leverage	Policy
	Government	Role	Support	Government	Development	Performance		
Element	Support			(2)		(1)		
	(3)							
1	Central	Central	Aculturation	Village	Village	Public	Central	Combination
	Government	Government	of Culture	Council	Finance	Service	Government	policy
2	MOU	Assistance	Local	Village	Village	Poverty	Public	Single policy
			Wisdom	Apparatus	infrastructure		Service	

Fig. 2. Scenario for acceleration of dringu village performance system.

By looking at the options above it is not wrong the first leverage is on central government elements. The central must provide legal umbrella or regulation for the developed villages. The regulation mainly contains the minimum service standards in the village and the village (official) government. Currently through Law No 6/2014 on Village, the village heads are allowed to recruit local community to assist the performance of the village administration. But in fact they are not protected by law and its status is not clear. This choice is difficult for village government, because it depends on central and local government regulations.

Therefore it is necessary for the government to ensure and issue technical guidance related to the implementation of Permendagri no 2/2017 on minimum standards of village services. Second, issuing regulations that protect local staff from non-village apparatus; the third, revised Law No. 6/2014 on the Village because it is less in line with the progress of the advance village's which prioritizes public service satisfaction and transparency. The demand similar with local governance. This is the ultimate scenario for the first leverage, but difficult to implementation by village government only central government has authority. That's why not the first option. Fourth option is: Focusing on community support by bringing back local wisdom such us siskamling and implemented of religion culture to block negatif impact from aculturation of culture.

Village development focus as stated on law No 6/2014 less suitable for type of village Dringu. This is because the infrastructure has been adequate and more widely used for physical development that less meet the needs of the community. Thus the village funds used are less productive. The use of village funds should be diverted for other activities that are more productive in order to improve the communities income, especially in coastal areas and inland villages dringu. Empowering the community through household industries based on the the village potential and local wisdom can be more promising. It is call Village Innovative.

Today, Law No 6/2014 on Village more emphasize to village development and tend closer to the villages left behind. Law No. 6/2014 on Village is closer to villages with similar characteristics to isolated village, and it is commonly located in Eastern Indonesia. This is not surprising, given the academic script of Law No 6/2014 on Village formulated by obtaining information from NGO's who have conducted research in several areas, especially in the eastern part of Indonesia by obtaining grants from AUSAID through the ACCES Program.



Thus it can be concluded that Law No 6/2014 on Village suitable to applied one particular condition and characteristic but not to others different. Many alternative assumptions can be developed to underlie the scenario in order to accelerate the performance of village government, depend on the priorities and objectives to be achieved. These assumptions and scenarios can be used for villages with similar characteristics with this research location. All the models and scenario based on systems thinking well not easy if the political system is not stable. The digital era is characterized by technology which increases the speed and breadth of knowledge turnover within the economy and society [5]. Furthermore, in this digital era requires technological support to strengthen the village government system. This can be applied in the financial, staffing and village development planning systems. Considering that in the future the village must also renew its organization. Vulnerable traditional organizations are lagging behind.

IV. CONCLUSION

The strength of this research is to be able produce policy scenario alternative for promoting development of village government. In this case only for the villages which is same characteristic with Dringu, i.e.: heterogeneous community, with good geographical conditions, and infrastructure, and also high level of cultural aculturation.

The policy recommendation are: (1) focusing on village performance through accelerating public services by applying a minimum public service or standart operating procedures (2) focusing on village government support through increasing the role and resources of village apparatus and council. If the structural efficiency model approach is chosen, placing local government apparatus with civil servant status in the village government structure is giving high performance, but if local democratic models is the first choice, recruiting professional local villagers is more democratic rater than civil servant. For the first and second recommendation, The central government is leverage and the center of policy change, because the village does not have local autonomy, (3) focusing on village performance through poverty alleviation.

This scenario still require local policy support, not only village government. Central government still required and combining policy (local and village government) to be first choice for promoting development of village government through accelaration of village performance system.

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