

METHODS OF RESEARCH IN PARTICIPATORY RURAL APRAISSAL

Kuswarini Sulandjari

Program Study Agribisnis Fakultas Pertanian Universitas Singaperbangsa Karawang
kuswarini.sulandjari@staff.unsika.ac.id

Introduction

The research an activity is important in science and technology to the life of man and the environment of nature. The object of research can be in the form of natural reality, as well as social reality. According to American Dictionary, research is a detailed study of a subject, especially to find out information or reach an understanding, research is the study or collection of information that is accurate and organized on topics specific. Study is an activity that is intended to investigate a state of, a reason, and its consequences to a set of circumstances particular, could be a phenomenon or variable (Nazir, 2014). Research is one way that used to me 'm getting the truth. Although the research is not the only way of obtaining the truth, because it is still no way of another example, through : the experience , authority , a way of thinking deductive and inductive , will but research is considered the efforts most effectively to find something that is new to humans (Nurdin, 2019).

In research, discovery or finding information about the phenomenon, circumstances, facts, variable form of the data using a method scientifically. Research is a way of for the development of science knowledge's technology. By because the methodology of research that is applied must be constantly adapted to the science of knowledge that became the parent (Soekanto, 2010). Explains that research in science - the science of social and humanity are all activities based on the discipline of scientific to collect, analyze and interpret facts and relationships that fact of nature, society, behavior and spiritual human being in order to find the principles principles of research and methods new to respond (Kuntjaraningrat, 1997).

There are various problems in society both issues of economic, social and environmental, among others : poverty, unemployment, population, education, health and the environment both in urban and in rural areas. Commission on Human Resources Development of the Economic and Social Commission for Asia and the Pacific since 1999 recommending the importance of strategy of empowering the community in a participatory in implementing the agenda of development sosialm (Agustina, 2020). In Law No. 25 Year 2000 National Development Program (PROPENAS) Year 2000-2004 stated that the purpose of empowering the community is increasing empowerment of communities through the strengthening of institutions and organization of public local , alleviation of poverty and the protection of social communities, increase in public area in order to help people to improve the lives of the economy, social and political ". Law number 6 of 2014 concerning Villages mandates the principles of empowerment,

Empowering society is a process that develops and strengthens the ability of communities to continue to be involved in the process of development that takes place in a dynamic so that the community can resolve the problems that faced and can take decisions in a independent and independent (Oakley, 1991) and (Fetterman DM, 2005). The process of empowerment of the community is an effort to help people to develop the ability to own so free and able to address the issue and take a decision as independently. According (Sumodiningrat, 1999), that the empowerment of the community is an effort to through the embodiment of potential ability that they have empowerment of people executed is a business together that focus to what are becoming the need of society (Yasa, 2018). By involving the community in the program process. Program it would be more appropriate to the needs of society and the level of awareness of society in running the program / development policy will be high (Nurdin, 2019). Participatory Rural Appraisal is a approach participatory which is getting a lot of use in some areas of development of rural, and regional urban in the context of the particular, to the empowerment of communities as widely as well as areas of particular.

The Concept Of Participatory Rural Appraisal

PRA is a process of learning together are oriented in a community that aims to achieve the goal together. It uses various visualization tools to facilitate the exchange of information. Knowledge communities locally appreciated equal importance with expertise scientific. The knowledge of the local community becomes the starting point for developing an action plan (Calub, 2003). Concept Assessment Rural Participatory according (Narayanasamy, 2009) : 1) PRA did not use the technique of interview structured but using technique interview semi- structured, provide many opportunities for people outside to explore and learn in a progressive. 2) PRA is a process of interactive, people outside interact , share information to organize learning along with the community local on the condition of nature and the situation they are thus able to learn, improve knowledge and

capability analysis of society. 3) PRA provides flexibility in choosing the method. PRA practitioners have the freedom to improvise discovering new methods of participatory learning as well as interaction and action. PRA seeks to empower the weak and the marginalized, to enable them to analyze, discuss, and consider the conditions they are, so are competent to take decisions. 5) Methods PRA can be adjusted, practitioners are free to modify the method in order to conform with the conditions and situation of the local. All principles are equally important because they are interrelated, mutually supportive and mutually reinforcing, stated based on trials, findings on causes of failure and success and practice in the field. PRA is a discipline of science that is evolving, its strength lies in its practice in the field. 6) PRA can be implemented with either if the character of the main PRA implemented and emphasized on the attitudes and behavior of researchers. The validity and reliability of PRA results are highly dependent on discipline and adherence to PRA principles.

The key principles of PRA according to (Calub, 2003):

1. Changes in attitude and behavior be listening, observing, guiding, do not interrupt, do not dominate, not patronizing, using the tools of PRA with sensitivity to the community and the situation they are .
2. Study on in and with the community, the life of the countryside "through the eyes of the people".
3. Ignorance optimal, ie approaching people with a mind open, put aside biases and prejudices personal
4. Inaccuracy is that right, it means feeling comfortable with what that roughly right rather than trying too precise.
5. Realizing the mistake, the point becomes critical to the self itself, admit mistakes and learn from them .
6. Let " them " to do so, to encourage people to do , the task of facilitator only initiate and guide the process.
7. Triangulation or examination of the cross to check the reliability of information from at least three sources of different using methods differ. Planning and preparing before PRA as a team, plan the possible processes, topics and methods that will be used during the fieldwork.

Methods And Techniques In Participatory Rural Apraissal

PRA is a group of approaches or methods that enable village communities to share, improve, and analyze their knowledge of village conditions and life , as well as make concrete plans and actions (Raut, 2020). Many methods and techniques or tools are available that can be used to collect data and information and analyze it on PRA. The methods of this can be practiced with various kinds of audiences for flexible, interactive, semi-structured, visual. According (Narayanasamy, 2009). PRA is located on pluralism methodological . The combination of the use of methods are flexible and innovative in fact enrich the process and the results of the study. By because it is, researchers and workers field who are interested in using the tool PRA should prepare themselves be adequate before using the methods mentioned in the field. The use of the method is tentative and flexible , but must still be in accordance with the basic principles of PRA. Methods that have adapted to the situation and condition including a device communication in the area tersebu. There are two types of main PRA depends on the focus and depth of analysis that is required . Exploratory PRA focuses on information that aims to have an initial understanding of the community and to find development directions. In exploratory include : Introduction to the problem and potential and awareness; Formulation of problems and setting priorities; Identification of alternative problem solving; Selection of alternative problem solving ; Planning the implementation of ideas; Presentation of activity plans. Implementation of organizing; Monitoring and directing activities; Evaluation and follow - up plan (Pratiwi, 2007)(Pratiwi, 2007). On the side of the other, PRA topical limited on concern particular instance conservation of resources the power of nature, is pleased with the layout space , temporal, institutional, aspects of the economic and currency livelihood , aspects of society, certain technical aspectsfor example: health, agriculture, such as about pests and diseases. To examine the issue, problem or situation, team and facilitators are required to determine the selection of the method that will be used in the field. For this reason, the PRA team needs to prepare a basic framework for the methodology for using PRA tools. Here's a chart of the PRA method.

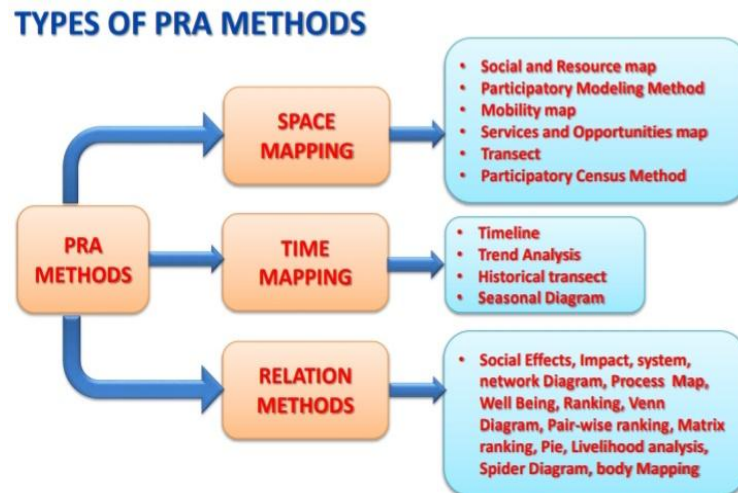


Figure 1. Types of PRA Methodes Source : Sandeep Kumar Raut

The PRA method is described in operational techniques with community involvement in all activities. Techniques are developed and sorted in accordance with the intent and the purpose of the application of methods of PRA. Ordering assist in follow principles such as learning with rapid and progressive and triangulation of information and the triangulation of data. The framework of the basic PRA namely: 1. The main theme or problem of the study; 2. Sub- theme or research problem; 3. Requirements of data or information that is required to answer the sub- themes and issues; 4. What methods are used to collect the required data and information; 5. The order of use of the method. T eknik on methods PRA, among them are:

1. Participatory Mapping, drawing a map of the community in on paper or in the field. Benefits questions include: source of communication are extremely effective, be used as a tool that dynamically to learn, to cross generations, increasing the cohesion of the community and the actualization of self (Alcorn, 2000), provides a framework of work, discussion, the focus of interest in discussions about the source of power, basis of comparison, arouses the presentation visuals can be understood all those, make evaluation changes, basis for the analysis of the impact of or for the monitoring and evaluation (Mascarenhas, 1992).

The following are examples of social maps and agro-ecosystem maps.



Figure 2. Social Mapping Figure 3. Agro Ecosystem Mapp
Source : Participatory Rural Appraisal
www slideshare net

2. Participatory Modeling, is a visual model of three dimensions that capture and integrate the knowledge society and information spatially.
3. Transects, is traveling together in the village through the locations of interest, together with a group of residents of the village for the observation and study the conditions of social, infrastructure, sources of power, technology, soil and vegetation, the practice of agriculture, problems and opportunities as well as modeling. Usefulness of the information that is obtained: Provides an overview of the condition commonly a community; As an activity

early to prepare a variety of maps and transects; Help check the information in a cross which was obtained by using a tool other. The following is an example of agricultural and irrigation tracing transects.



Figure 4. Transects
Source: Samsudin , AM

4. Mobility Map, is a map that explores and describes the pattern of roads that can be taken or the movement of an individual, group or community to obtain resources, services, facilities, seek livelihood opportunities and others.
5. Venn Diagrams, also known as institutional diagrams, are visual representations of key institutions, organizations and individuals and their relationships with local communities or other groups.
6. Flow Diagrams, describe the flow and relationships between elements in a system. Diagram flow is used to analyze the various problems are systematic.
7. Timeline, is a list of important events, changes, and the past, presented in chronological order.
8. Trend Analysis, study the record time ago regarding the structure of the social, agricultural, systems eyes livelihood, the pattern of employment, education, style of living, culture and others.
9. Seasonal Calendar, an illustration of the schedule of various activities of the house stairs, events, variables agriculture, conditions of climate, the activities of agriculture, the trend of events major, problems and opportunities eye livelihood.
10. Daily Schedule, describe and study work patterns and other activities. Used to determine the various types of work are carried out by individuals or groups in a day, the distribution of the burden of work throughout the day and comparing schedules daily from individuals or groups are different.
11. Wealth or Well-being Ranking, is a stratified comparison of the wealth of people in the community.
12. Pair-wise Ranking, is one of the methods or tools that can help prioritize problems and needs of the community reveal the problems most important .
13. Ranking and Scoring Matrix, a ranking and exercise assessment is one of the tools that is commonly practiced in almost all contexts in under the PRA.
14. Force field analysis, this technique was developed by sociologist Kurt Lewin. FFA used in PRA with the purpose of principal set objectives based on the analysis of the situation when this.
15. Strength, Weakness, Opportunity, and Threat (SWOT) Analysis is a tool planning strategically that is used to evaluate the strengths, weaknesses, opportunities and threats in a project or venture business.
16. Pie Diagram, is a simple schematic device that presents information in visual form based on factual data. To help develop consensus and communication between people and disciplines of science , also for the community local.
17. Body Mapping, is a visual method to describe the location of body organs and body functions. Can be used as a means of collecting the data health, as well as to learn about issues that relate to health and gender.
18. Interviewing and Dialogue, is one of the main methods for data collection.
19. Focus Group Discussion on basically is the interview group. Moderator guide the interview while the group of small discusses a topic that raised the interviewer. (Morgan 1998).
20. Brainstorming, Interest main bulk idea is to increase the creativity of the group, using the insights of participants to obtain a solution of a problem right time (Paul, 2006).

21. Observation, mean look at it systematically about the phenomenon specific to the system the way that is appropriate in order to collect the data for the purpose of lodging a study specific .
22. Secondary Data, in PRA, is useful for village assessments. Objective assessment of villages that main is to help people recognize the potential resource of natural and the source of the power of human in the region. For researchers and facilitators of village assessments, it is possible to develop programs made by the community (Muchsin, A., Nafisah, L., Siswanti, 2014).

Implementation Method

On paper it presented application method of research on a study of the Air j The title: Community-Based Poverty Alleviation stretcher Participatory Rural Appraisal, by (Muhsin Ahmad, Darpito Surpiko Hapsoro, 2018). Interest to get a model of empowerment of the community that the right target and the extracted directly from people targeted program is in the village of Srimulyo, District of Piyungan, Regency of Bantul, Special Region of Yogyakarta Indonesia. Method of research: an instrument in the form and tools write to record the data activities. Research materials include: Plano, papers to record the results of activities. The data used are primary data and secondary data. Primary data was obtained directly from observations of the objects that exist in Srimulyo both conditions of society as well as geographical. Secondary data were obtained from the Srimulyo Village Government and BPS. Intake of the sample using the technique of purposive sampling is women in the village Srimulyo, which are divided into several groups . Foreigners each group discussion to collect the data in accordance with techniques that are used and the results are presented to be approved together, so the conclusion is the decision together. Data results of the study were analyzed by qualitative. To find out the problem and its development, the SWOT method is used.

PRA techniques used: 1. Village data creation , through FGDs to determine the differences in the roles of men and women ; 2. Tracing the History of the Village to find out the chronology of the formation of the village ; 3. Work chart , to find out the potential of the village in an effort to become an independent village and become an example in other places in Yogyakarta ; 4. Seasonal Calendar , to find out land use ; 5. Village Sketch , to identify topography and land potential ; 6. Institutional Review , to find out the existing institutions in the village ; 7. Identify Problem , in terms of various aspects of observation , which is done in meeting the group using the techniques of participatory rural appraisal. Potentials and problems were disclosed in each group and agreed by all groups.

Results of the research : The potential that can be developed in the village of Srimujlyo among other land area , the results of agricultural and plantation , the potential of nature , industry, and the related . Problems of her is the lack of a source of power humans are educated, the limitations of the technology, media promotion, innovation, and the protection of the law. The solution of the problems that are cultivate land to strengthen the production of business, take advantage of the potential of nature for tourism and bring in customers and investors, utilizing the services of IT sub-district for the media campaign , in cooperation with the parties related to the training and mentoring , as well as in cooperation with universities high for the procurement of agriculture , technology plantation product processing and business management .

Results And Discussion

(Kartono, 1990) Methods of research is how to think and act that with good to conduct research and to achieve the purpose of research. The research method is the procedure for how a research is carried out (Hasan, 2002). Understanding other than the method of research is the way that is used by researchers in collecting the data research, such as interviews, observation, testing and documentation (Arikunto, 2000). The method of research is a whole step science that is used to find the solution on a problem(Ulber, 2009). The method of research is a procedure that is used to reach the destination end (Sulistyo, 2006). (Sugiyono, 2017) explains that the method of research is a way of science in getting the data for the purpose and usefulness of certain. How scientific means the activities of research that is based on the characteristics of science, namely the rational, empirical, and systematic. Rational because the data obtained and analyzed by using a reasonable and affordable by human reasoning. Empirical because the ways that are done can be observed by the human senses, so that others can observe the methods used. The systematic process carried out in the study uses certain logical steps.

The collection of data is one of the engineering studies are the most important. Mechanical collection of data is the method of collecting the data, ie techniques or methods that can be used by researchers to collect the data (Riduwan, 2010). Collecting the data in the study of scientific is the procedure systematically to obtain the data required. Technique is a means of measuring that is necessary in carrying out an investigation. Data is something that is collected by researchers in the form of empirical facts that are used to solve problems or answer research questions. Research data

are all facts and figures that can be used as material for compiling an information. Criteria of data according valid, reliable, and objective . Valid is the degree of accuracy between the data that actually occurs on the object and the data collected by the researcher. Reliable according dictionary Indonesian Carries or bring the same results in each experiment succeeded, believed, Objective, according to the Cambridge Dictionary, is based on facts and not influenced by personal beliefs or feelings.

In PRA way to get the data by using a lot study PRA especially be seen (visual) form the state of the real, image, symbols, models, pieces of the picture, stones, seeds, sticks as a means or media discussion is verbally by the public about the state of the self as well as the environment. PRA techniques include: Body Mapping, Interviewing and Dialogue, Focus Group Discussion, Brainstorming, Observation, Secondary Data. Data dicatat and analyzed through reasoning or quantitative example analysis by Trend Analysis, Seasonal Calendar, Daily Schedule, Wealth or Well-being Ranking, Pair-wise Ranking, Matrix Ranking and Scoring, Force field analysis, SWOT Analysis, Pie Chart, Body Mapping, Interviewing and Dialogue, focus group discussion were then concluded.

Data retrieval is empirical because through observation of the senses of sight, hearing and the process can be seen by others. For example retrieval of data for participatory mapping, participatory modeling, transects, mobility map participatory mapping, participatory modeling, transects, mobility map is done through observation, discussion. Step- step retrieval of data and analyzes compiled in a systematic and logical, according a statement Narayanasamy (2009), techniques were developed and sorted in accordance with the intent and the purpose of the application of methods of PRA. One of the Principles of PRA is to riddle or cross- examination. Cross-check the reliability of information from at least three different sources using different methods. Planning and preparing before PRA As a team, plan the possible processes, topics and methods that will be used during the fieldwork. The cross- checking is an attempt to obtain the validity, reliability and objectivity of information and data from at least three different sources using different methods.

Research qualitative is procedure research that produces the data descriptive form of words written or spoken of people and behaviors that can be observed. The method of research qualitative is a method of research that is used to examine the condition of the object that is natural, where researchers are as instrument keys, a technique of collecting the data is done by triangulation, the analysis of the data that is inductive, and the results of research qualitatively more emphasizes the significance of the generalization (Sugiyono, 2017). It is in accordance with the principles of PRA. (Calub, 2003) at the top, which essentially searches the data on PRA conducted with the attitude and behavior of listening, observing, guiding, do not interrupt, do not dominate, do not patronize and use the tools of PRA with sensitivity to community and their situation. Techniques of Interviewing and Dialogue, Focus Group Discussion, Brainstorming show the application of qualitative methods to PRA.

According (Silaen, 2018) study of quantitative is procedure research that generates the data in the form of figures and generally analyzed by using statistic descriptive or inferential. In general, the notion of quantitative research methods is the activity of researchers to obtain knowledge or factual conclusions by using numerical data as the initial foundation for analyzing what will be known and understood . This understanding is the narrative. Argued about study quantitatively the approach of research that many use numbers, ranging from collecting the data, the interpretation of the data obtained, as well as the exposure result. In PRA, understanding of natural facts such as land conditions, topography, climate uses data in the form of numbers. Social reality data can also use numbers. The data in the PRA may be quantitative, Data regarding the condition of the reality of natural, human and source power of nature. Technical examples of quantitative analysis in PRA: Wealth or Well-being Ranking, Pair-wise Ranking, Matrix Ranking and Scoring and Matrix Ranking and Scoring.

According (Indriantoro, 2009) study applied a study which emphasizes on solving the problems of the practical. (Nazir, 2014) applied research can be defined as a careful, systematic, and continuous investigation of a problem with the aim of being used immediately for a particular purpose . Participatory Rural Appraisal is a combination of methods interactive which increases the ability of communities rural and agricultural to analyze and understand the situation they are holistic and empowered to plan and act for the sake of the progress of their (Chambers, 1992). PRA is a study of participatory in doing the analysis of the situation, potential and problems, which is done by the community itself. PRA is not be of interest, but the PRA is a stage that is the length of a process of transformation of social to improve the capabilities and believe themselves the community in identifying and analyzing the situation, the PRA is built on top of a number of principles basic that condition with the values or beliefs. (Syahid, 2005), 2015). By thus PRA included in the study applied.

Conclusions

Viewed from the research method, Participatory Rural Appraisal is a rational, empirical and systematic study method. PRA is intended to obtain valid data, reliable and objective as well as analysis by the approach of qualitative and quantitative. PRA is a research applied that enable people to mutually share, improve, and analyze the knowledge of them about the conditions and the life of the village, as well as make plans and act real, towards the transformation of the social to the direction which is good. In addition to the methods of research, PRA is also a medium of learning and media for growing and developing the participation of the community in recognizing problems, seeking solutions, plan, implement and evaluate activities to the condition that more good and helpless.

Suggestion

Parties who are involved in the facilitation of the PRA needs to understand the principles of participatory PRA and principles of methods of research.

References

1. Alcorn, J. B. (2000). *Key to Unleash Mapping's Good Magic*. PLA Notes, 39:10–13.
2. Arikunto, S. (2000). *Research Procedure A Practical Approach Edition 5*. Jakarta. Indonesia: Rineka Cipta Publishing.
3. Calub, B. (2003). *Participatory Rural Appraisal Guide Book*. University of the Philippines Los Banos -Farming System and Soil Resources Institute and in Went Capacity Building International College Laguna Philippines.
4. Chambers. (1992). *Participatory Rural Appraisal*. Yogyakarta. Indonesia: Kanisius.
5. Fetterman DM, W. A. (2005). *Empowerment Evaluation Principles in Practice*. New York, London: The Guilford Press.
6. Hasan, M. I. (2002). *Main Contents of Statistics 1*. Jakarta: PT. Earth Literature.
7. Indriantoro, N. and B. S. (2009). *Business Research Methodology for Accounting & Management*. BPFE Yogyakarta.
8. Kartono, K. (1990). *Introduction to Social Research Methodology*. Bandung: Mandar Maju.
9. Kuntjaraningrat. (1997). *Community Research Methods*. Jakarta. Indonesia: Gramedia Pustaka Utama.
10. Mascarenhas, J. (1992). *Transects in PRA*. Bangalore: Myrada Press.
11. Muchsin, A., Nafisah, L., Siswanti, Y. (2014). *Participatory Rural Appraisal (PRA) for Corporate Responsibility (CSR)*. Yogyakarta. Indonesia: Depublish.
12. Muhsin Ahmad, Darpito Surpiko Hapsoro, S. Y. (2018). Community-Based Poverty Alleviation Using Participatory Rural Appraisal. *RJOAS*, 6(78), 891–898.
13. Narayanasamy. (2009). *Participatory Rural Appraisal Principles, Methods and Application*. New Delhi: Sage Publication.
14. Nazir, M. (2014). *Research Methods*. Jakarta. Indonesia: Ghalia Indonesia.
15. Nurdin, I. and S. H. (2019). *Social Research Methods*. Surabaya: Media Scholar's Friends.
16. Oakley, P. (1991). *The Concept Of Participation in Development. Landscape and Urban Planning*. Elsevier Science Publisher BV Amsterdam.
17. Paul. (2006). *Participatory Rural Appraisal (PRA) Manual . Food and Agriculture Organization of the United Nations*. London: LUCIA.
18. Pratiwi, W. (2007). *Participatory Rural Appraisal. 2007*.
19. Raut, S. K. (2020). *Methodology for Participatory Rural Appraisal*. India: Urban Affairs.
20. Riduwan. (2010). *Easy Learning Research for Teachers, Employees , and Beginner Researchers*. Bandung. Indonesia: Alfabeta Press.
21. Silaen, S. (2018). *Methods Penelitian Social for Penilisan Thesis and Thesis* (Media Pres). Bogor. Indonesia.
22. Soekanto, S. and S. . M. (2010). *Normative Legal Research*. Jakarta. Indonesia: Raja Grafindo Persada.
23. Sugiyono. (2017). *Research Methods Quantitative , Qualitative , and R&D*. Bandung. Indonesia: Alfabeta Press.
24. Sulisty. (2006). *Research Methods*. Jakarta. Indonesia: Wedatama Widya.
25. Sumodiningrat, G. (1999). *Community Empowerment and Social Safety*. Jakarta. Indonesia: Gramedia Pustaka Utama.
26. Syahid, N. (2005). *Assessment of Village By Participatory*. Jakarta. Indonesia: Gramedia Pustaka Utama.
27. Ulber, S. (2009). *Social Research Methods*. Bandung. Indonesia: Refika Aditama.
28. Yasa, I. G. D. & G. S. (2018). Implementation of Pakraman Village Policies in Community Empowerment. *In the Locus of the Scientific Magazine*, 9(01), 221–244. Retrieved from <https://ejournal.unipas.ac.id/index.php/LOCUS/article/view/75>