The Role of Organizational Commitment as Mediator of Organizational Culture and Employees’ Competencies on Employees’ Performances (A Study on Irrigation Area Management in Southeast Sulawesi)

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Abstract
This study aims to analyze and explain the role of organizational commitment and organizational culture as mediator of employees’ competencies on employees’ performances of Irrigation Area Management in Southeast Sulawesi. The analysis in this study is Structural Equation Modeling (SEM), the results of this study is on the relationship between the variables which does not affect significantly. The employees’ competencies on employees’ performances means that the employees’ competencies of Irrigation Area Management in Southeast Sulawesi province does not have an impact on employees’ performance improvement, so in order to increase employees’ performances, it is needed an improvement on organizational commitment. The study also considers at organizational commitment as mediation is able to strengthen organizational culture on performance improvement.

1. Introduction
High performance for public organizations can be achieved with the support of several variables, one of them is organizational culture. Organizational culture is values perceived by organization member, which largely determines the function and identity of the organization in maintaining the alignment of organizational culture (Chuang et al., 2004), with organization culture, it is expected to create a whole culture of high satisfaction, strong commitment and good performance within an organization's environment. Regarding with the performance of an organization, then as an agricultural country, Indonesia has the agricultural land potential that can still be developed to meet national food requirements. The With the support of wide land and sufficient labor availability, and the construction of irrigation facilities and infrastructure to support the production of food crops, hence the importance of performance of Irrigation Area Management is very significant in supporting government programs in the fields of food crops. 

Irrigation has an important role in supporting the success of agricultural development policy and is a very strategic Government regulation in the national economy growth and to support the government's surplus of 10 million tons of rice in 2014 (Decree of the Cabinet Meeting dated on 6 September 2011). Rice production is planned at 79.41 million tons in 2014 (DG Agriculture Infrastructure 2012). In order to improve the productivity of farming, intensification is required with the utilization of water resources in order to preserve food security and increasing farmers’ income. Therefore, optimum use of water resources that can be done is through the allocation of irrigation water effectively and efficiently.

Irrigation, according to Government Regulation No. 20 Year 2006 on Irrigation, is the business of providing, arranging and draining the irrigation to support the kind of agriculture which are irrigated surface, swamp, underground water, pumps, and pond. To drain the water to the irrigation of rice field area, irrigation system is needed, so it can be said that agricultural activities cannot be separated from the water. According to Mawardi and Memed (2004) that irrigation is as taking water from the source for agricultural purposes, by feeding and distributing water on a regular basis in an effort to use water to irrigate crops. Thus the purpose of irrigation is to drain water regularly according to crops needs when groundwater supplies are not sufficient to support the growth of crops, so they can grow normally. (PP, No.20/2006). Irrigation system is irrigation infrastructure consisting essentially of the buildings and canal irrigation and equipment providers, and based on management known as major irrigation and tertiary irrigation network. The main irrigation system includes dams, canals, including the primary and secondary main pipelines and equipment, bearer pipeline and waster pipeline. Dams work so that the river water level can rise, and it can drain water through the intake door to the bearer pipeline. The separating
building functions to divide the water so that it can be distributed along the channel carriers into cropping land through secondary and tertiary pipelines (PP. 20/2006).

Southeast Sulawesi Province possesses land area of 38,139 km2. Statistics show that the majority of the population in Southeast livelihood as farmers, amounted to 57%. This condition is due to the potential of existing agricultural land that is large enough; 350,000 hectares consisting of 768 Technical, Semi-Technical and Irrigation Village of Irrigation Area (DI). The potential of the existing rice fields that have been developed for is 129,926 hectares. Agricultural areas in Southeast Sulawesi have tremendous potencies if it can be developed optimally. One of the considerable potential irrigation area and the largest in Southeast Sulawesi is a region with a land area of Irrigation Potential Wawotobi 18,000 hectares. Wawotobi irrigation area was built in 1976 and completed in 1980.

Law No. 7 of 2004 on Water Resources and Irrigation District is divided into 3 (three) management authority, the Government authority with an area of 3,000 hectares, the authority of the Provincial Government with 1000-3000 hectares, and Regency / City Government under the 1,000 hectares. As the Decree of General Work Ministry No. 390/KPTS/M/2007 on Status Determination of Irrigation Area Managed on Authority and Responsibility of Government, Provincial Government and Regency / City Government. Irrigation areas under the authority of the central government are 2 (two) Irrigation Areas, the Provincial Government consists of 13 regional irrigation, the Irrigation Areas which are the authorities District and City Government consist of 68 Irrigation Areas, spread in 7 districts and two cities.

After the construction of Irrigation Areas facilities and infrastructure, it is continued with the implementation operation and maintenance. Operations and maintenance (management) will be needed to maintain and operate the irrigation infrastructure in order to function optimally. Functioning of irrigation infrastructure in addition will keep construction to a longer life, as well as to supply water to farmers in the rice field optimally in order to support rice production to the fullest. Operations and maintenance of irrigation are carried out by the management of irrigation areas, in accordance with the organizational structure established by Government Regulation No. 20 Year 2006 on Irrigation, which consists of: (1) Observer / Kemantrren, (2) Irrigation Interpreters, (3) Water Door Guard, (4) Dam Guard Door. The role of the manager of the irrigation pipelines needs to be improved (PP no. 20/2006).

Irrigation systems in Indonesia in 2009 based on data from the Irrigation Directorate General and General Directorate of Water Resources General Work Department, there is irrigation systems that are severely damaged caused due to age factor of buildings and natural disasters, while minor damage is due to lack of care in maintenance. As the data irrigation condition in Indonesia, the Southeast Sulawesi province also experienced the same thing, most of the damage, it is as an impact of the limited government budget Provincial and Regency/ City Government to perform the operation and maintenance of irrigation systems as their authorities and lack of commitment from staffs of irrigation areas management as part of its responsibility other than reducing performance in maintenance of irrigation systems. The impact of the damage will reduce rice production. Regarding to the role of irrigating areas management staffs, especially in Southeast Sulawesi province, and in order to improve organizational commitment and performance on the operation and maintenance of irrigation areas, it is important to do research for the study since based on pre research, it is assumed that the phenomenon is related to the variable Employees’ Competences, Organizational Culture, Organizational Commitment which affect on the Performance of Management, so that it can optimize the irrigation system, which in turn can increase production of food crops, which is rice.

Several empiric studies on these variables are Dirani (2009) which states that in organizational culture, employee job satisfaction and organizational commitment in the service sector, there is a positive and significant correlation. The weakness of this study is on variables chosen, there is no organizational competence. Furthermore, McKinnon et al., (2003) extends that there is a strong positive relationship between organizational culture (i.e. respect for others, innovation, stability and aggressiveness) with employees’ response (i.e. organizational commitment, job satisfaction, propensity to remain in the organization and conduct information sharing). This shows the important influence of organizational culture on the employees’ condition (outcome). Based on the previous studies with variables used, this study attempts to complete the previous variables to be more comprehensive by using variable of Organizational Culture, Employees’ Competence, Organizational Commitment and Employees’ Performance. Competence is essentially a reflection of the one's expertise values in carrying out his work field. In this concern, the more complex business development occurred will directly affect the of employees’ behavior in carrying out their work field. This happens because of the emergence of new values brought by technological work change in the business world. Therefore, employees should adjust to the new values to be interpreted on innovation and creativity activities that can be developed in their work field. Regarding to these developments, Daft (2008) indicates that there are dramatic fundamental transformation the managers’ job. Transformation happened reflects a paradigm shift from the old paradigm (characterized by old workplace) to the new paradigm (characterized by a new workplace). The changes occurred are influencing the organization’s characteristics, the organization's strengths and competencies in organizational management.
Furthermore, organizational commitment can be seen as an emotional response to a positive assessment in work environment. Organizational commitment has generally been defined as an attachment or identification with the organization (Mathieu, et al. 1990). Such of that attachment may be considered as an emotional response, particularly when individuals feel very certain about the organization’s goals and values and/or show a strong desire to maintain membership in the organization. Meyer, et al. (1997) use the term “affective” to describe the attachment, which comes from the desire of employees to commit, not because of their obligation or financial needs. The result of this commitment is a coping intention that attempts to meet outcome expectation continuously. In this case, trying harder to satisfy the customers can be regarded as an anticipation objective. Along with the increased commitment, the effort to satisfy the customers may increase if the employees have identified themselves with the organization’s goals or values. Furthermore, this behavior can be improved if the organization membership is affected by the achievement of targets.

The appraisal of Irrigation Area Management in Southeast Sulawesi organizationally, can be affected by several factors, so it is necessary to explore some previous studies to support this research. Several previous studies can be synthesized to obtain a conceptual framework by concerning at some previous studies as basis thought in this dissertation.

Research conducted by Dirani (2009) conveys that the study aims only to identify the relationship between organizational learning culture, employees’ job satisfaction and organizational commitment in the banking sector which are associated with social relationships yet the respondents do not involve the community, while the research that will be done is associating with the employees’ performance so that all of the respondents are employees. Furthermore, this previous study also emphasizes more on organizational learning associated with organizational culture and commitment, while this study more emphasize on employees’ competencies and employees’ performance and in addition this research to be conducted in public organizations, therefore the variable employees’ job satisfaction is not used in this research.

Research conducted by Chen (2004) explores the relationship of employees’ behavior on transactional and transformational leadership and its correlation with organizational culture and organizational commitment, whereby the results of this study states the relationship between transformational leadership behaviors with organizational culture is influenced by the organizational culture. The context of this previous research emphasizes the relationship of organizational culture and organizational commitment, whereas the research to be conducted is emphasizing on employees’ competencies that can affect performance so that it is more comprehensive in comprehending the organization. While an object of this research is management staff at low level so that the leadership variable is not used in this research.

The reasons and considerations above are interesting to be studied, particularly on constructs of organizational behavior, which are, in this case, employees’ competence, organizational culture, organizational commitment and employees’ performance with research object is public sector organizations, in this case, the Irrigation Area Management in Southeast Sulawesi Province, which is expected to maximize the performance of public sector organizations or local government there. Furthermore, by referring to previous studies, this study completes some weaknesses of previous researches by using variables of competence, organizational culture, organizational commitment and employees’ performance in order to be more complex and comprehensive. Based on the explanation above, the researcher considers that it is important to investigate further about the role of Organizational Commitment as mediator of Organizational Culture and Employees’ Competencies on Employees’ Performance of Irrigation Area Management in Southeast Sulawesi Province.

2. Methodology

Employees chosen as the population are the Irrigation Area Management Southeast Sulawesi Province. They are spread on 7 districts and 2 cities amounted at 392 people as population in this study.

Systematic sampling is used in the sampling method. In determining the sample amount, Slovin formula is used (in Umar, 2008) and resulting 112 people. Questionnaires distribution uses proportional simple random sampling which is spread by distributing the questionnaires simply and randomly to determine the employees work section as sample. The respondents are defined by the researchers by calculating the employees who are observers, the interpreters, water-gate guides, and dam-gate guides. When determining the water-gate guides and the dam-gate guides, it is trusted to the respective observers to choose their members in filling the questionnaires as the amount decided by doing lottery on the employees. To keep the number of questionnaires returned on desired amount, so that each district is given extra 2 up to 5 questionnaires. Measurement scales used in this study are based on questionnaire 5 (five) points Likert scale and is designed in such a way as to allow the respondent to answer based on gradual answer scales available. In this study, before the research instrument is used as a media in collecting data at the field, the researcher is going to do try out of instrument study on 30 respondents.

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In this study, data analysis is done in two stages, which are Quantitative Analysis by using Structural Equation Modeling (SEM) and Descriptive Statistic Analysis which is used to interpret or describe the measured respondents’ characteristics asked on a number of indicators (questionnaire) of each variable. The study also collects data by using in depth interview techniques with in-depth interviews with respondents.

3. Results

The results of goodness of fit overall model indicates that the value of $\text{RMSEA}$ and $\text{CMIN/ DF}$ has met the cut off, so that the model is considered fit and valid to be used for testing the hypotheses. In the structural model, essentially, it tests the hypotheses in this study. Hypotheses testing are done directly by doing t-test on each direct influence path partially.

The results of hypotheses testing can be described as follows:

a. The Influence of Organizational Culture on Organizational Commitment

The result of the analysis shows that there is sufficient evidence to suggest that there is significant and positive influence between Organizational Culture on Organizational Commitment. This indicates that the higher Organizational Cultural, will result the higher Organizational Commitment. These results state that the Organizational Cultural of the Irrigation Area Management in Southeast Sulawesi Province has run quite well, so that working conditions show that the organization has run pretty solid and has been together with other organizations in creating high working culture. This shows that Innovative indicator as the loading factor, simply reflects organizational culture variable of Irrigation Area Management in Southeast Sulawesi Province. Innovative indicator as the loading factor shows that:

a) The organization of Irrigation Area Management in Southeast Sulawesi Province promotes creativity in performing their duties. Creativity has been formed and strengthened innovative indicator. Creativity can also be seen from the work they do in serving farmers every day, perform maintenance irrigation well and tirelessly.

b) The organization of Irrigation Area Management in Southeast Sulawesi Province works with results-oriented. As the workers’ activities, then the work done by Irrigation Area Management is ensuring the water flows according to the farmers’ needs that have been set out in the Annual Planting Plan and water needs according to the age of the plant.

c) Irrigation Area Management in Southeast Sulawesi Province has also carried out work in their respective working areas and prioritized a challenging work environment. This is what captured from the scope width and responsibility area of each worker, which serves hundreds of farmers in the region.
b. The Influence of Organizational Culture on Employees’ Performance

Based on the results of the analysis, it shows that there is sufficient evidence to suggest that there are some significant and positive effects between Organizational Culture on Employees’ Performance. This means that the higher the Organizational Culture, will lead to the higher employees’ performance. These results indicate that Organizational Culture of Irrigation Area Management in Southeast Sulawesi Province has run well, so that working conditions created shows a quite solid organization and with other organizations, it has created high working culture. This shows that the Innovative indicator as loading factor, simply reflects the Organizational adaptability should be included as a mechanism that is able to explain the relevance of high performance work dynamic increasing values in competitive environment, it is found that the measurement of employees’ systems on firm competitiveness. High performance work systems affect performance through their impact on the flexibility of human resources in the company.

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c) Irrigation Area Management in Southeast Sulawesi Province has also carried out work in their respective working areas and prioritized a challenging work environment. This is what captured from the scope width and responsibility area of each worker, which serves hundreds of farmers in the region. These results support the researches from Moynihan, Donald P. and Pandey (2007), Marthin et al. (2008) which indicate that the mediator variable of work systems performance and organizational performance is high. In dynamic increasing values in competitive environment, it is found that the measurement of employees’ adaptability should be included as a mechanism that is able to explain the relevance of high performance work systems on firm competitiveness. High performance work systems affect performance through their impact on the flexibility of human resources in the company.

c. The Influence of Employees’ Competency on Organizational Commitment

From the analysis shows that there is sufficient evidence to suggest that there is significant and positive relationship between Employees’ Competencies on Organizational Commitment. This indicates that the higher the Employees’ Competencies, will result in the higher Organizational Commitment. These results indicate that the variable competence of the employees in Irrigation Area Management in Southeast Sulawesi has good potencies in affecting the Organizational Commitment. This is shown by the skills indicator as loading factor of Employees’ Competencies variable meaning that the skills indicator is as the strongest indicators in reflecting Employees’ Competencies variable. Employees’ Competency indicator is formed by several items, which are:

a) Employees are able to work well with co-workers, this condition indicates that Irrigation Area Management organization has run well, which has been created excellent collaboration among employees, in order to create good teamwork that supports and develops high skills in activities on every working level.

b) Employees are able to solve problems that occur on the job, this condition indicates that Irrigation Area Management organization has been able to work with Main Objectives and Regulation and can resolve the problems in a job well. This condition is also strongly supported by the first item where the workers can work well with other workers.

c) The greater burden of the tasks assigned to employees, the greater responsibilities received, this condition indicates that Irrigation Area Managers organization feels that the current workload is quite heavy and they are quite ready to carry out such work. Heavy responsibility for the workers is to serve
farmers day and night, as needed. Maintaining irrigation in order to function properly, with good conditions irrigation systems, they can perform the task smoothly in serving the farmers. These three items build the indicator skills, so it is needed to pay attention and to improve and strengthen these items in order to get better, to support skill indicators to reflect strongly the Employees’ Competencies variable. Increasing Employees’ Competencies is improving Organizational Commitment. These results also support studies Wu (2008) who conveys that the company continuously needs to improve the technical competence of the professionals in the area of development. This study uses the practical application in exploring competencies. Other studies are Furuya, et al. (2007) that the company's human resources policies and practices affects the global transfer of competencies acquired through a foreign decree. Competence in Human Resources policies of the company in workforce categorizing affects the transfer of global competence significantly.

d. The Influence of Employees’ Performance on Employees’ Competencies.
From the analysis shows that there is not sufficient evidence to suggest that there is a significant and positive relationship between Employees’ Competencies on Employees’ Performance. The results of this study do not support the research done by Furuya, et al. (2007) and Wu (2008). They believe that the company continuously needs to improve competence. Furthermore, the competence of the Human Resources policy in workforce categorizing influences global competency transfer significantly. Previous studies of Reio and Sutton (2006), states that job competencies and workplace adaptation on the performance show strong positive results. The findings in this study indicate the need for the technical program, with work competency and adaptability in the workplace explains that HRD professionals have a strong influence on the employees’ performance by facilitating increasing competence through training.

- Skill indicator cannot reflect strongly to affect the performance, where this condition is along with the job of Irrigation Area Management which technically does not need particular skills. The job of them is routinely done and the job is exact and the manual direction standards of operation systems and irrigation area maintenance have been made, so that in implementing the Irrigation Area Management, it only needs simple training.

- Knowledge indicator has not reflected strongly in influencing performance, in which the education needed by Irrigation Area Management does not have to be from particular engineering education so that the managers’ performances are not determined by the level of education, especially for the research object.

- Attitude indicator also has not reflected competence variable to affect the performance, it indicates that the activities of Irrigation Area Management is a job that takes time, willingness and attitude with high loyalty, known that the managers’ job is almost timeless. Employees must be ready to perform any required tasks according to each task.

e. The Influence of Organizational Commitment on Employees’ Performances
The results of the analysis show that there is sufficient evidence to suggest that the existence of a significant and positive relationship between Organizational Commitment on Employees’ Performance. This indicates that the higher the Organizational Commitment will lead to the higher Employees’ Performance. This analysis shows that Continuance indicator as loading factor is capable to reflect Organizational Commitment variable in affecting Employees’ Performance of Irrigation Area Management. Continuance indicator is established by item, employees feel lost on what he earned during his work if he does not continue his job in the organization because Irrigation Area Management organization needs him. Workers or employees who work as Irrigation Area Manager, on average, work in quite long duration, the condition strengthens the closeness between employees and organization, other factors comes from the location where they work, so the emotional attachment to the work that is very close with the farming community and be a part of their daily lives as a magnet for workers to love their job. The results are consistent with Chen's research (2004) which shows that the mediation efforts of organizational commitment in the relationship between work achievement in supportive culture and bureaucratic. Other study is done by Dirani (2009) and it states that there are positive and significant correlations on organizational learning culture, employees’ job satisfaction and organizational commitment. Zain, Ishak, and Ghani (2009) that all dimensions of corporate culture studied here were found to have a major influence in encouraging employees to have a high commitment to their organization.
f. The Influence of Organizational Culture on Employees’ Performances through Organizational Commitment.

Based on the results of the analysis, it indicates that the Organizational Culture possess sufficient evidence to suggest there is significant and positive influence between Organizational Culture on Employees’ Performance mediated by the Organizational Commitment. This means that the higher the Organizational Culture and the higher Organizational Commitment will lead to the higher employee performance. High innovation and the most dominant on Organizational Culture variable along with high employees’ continuity strongly influence on the increasing of employees’ performance of Irrigation Area Management in Southeast Sulawesi Province. The improving of high performance is indicated by the high work qualities of employees, which in turn has resulted in maximum performance in serving the needs for farmers to obtain water for irrigation as needed.

g. The Influence on Employees’ Competencies on Employees’ Performances through Organizational Commitment.

From the analysis shows that there is not sufficient evidence to suggest that there is a significant and positive relationship between Employees’ Competencies on Employees’ Performance, but with the mediation of high organizational commitment based on the analysis results show positive effect. These results suggest that however high competencies of the employees represent which are shown by the indicators of knowledge, skills and attitudes cannot directly influence the increase in performance, yet with higher Organizational Commitment mediation which is indicated by Continuance indicator, where employees feel having high responsibilities to stay in the organization and feel lost if they do not perform the duties as their responsibilities, has a significant effect in improving the Employees’ Performance of Irrigation Area Management in Southeast Sulawesi Province.

4. Conclusion

Organizational Culture if Irrigation Area Management in Southeast Sulawesi Province held generally is able to provide added value and impulsion to the improvement of Organizational Commitment, so it needs to be maintained properly. In addition, Organizational Culture can improve Employees’ Performances so with the better Organizational Culture will enhance Employees’ Performances. Furthermore, Employees’ Competencies in general can give rise Organizational Commitment, thereby increasing Employees’ Competencies is continuously needed, and nevertheless Employees’ Competencies has no impact or direct incentives to increase Employees’ Performances.

Organizational Commitment is a factor that strongly supports and encourages in improving performance of Irrigation Area Management in Southeast Sulawesi Province, Organizational Commitment is as mediation to strengthen Organizational Culture on performance improvement, so it is important for Organizational Commitment to be increased. The model findings developed is Employees’ Competencies will have no meaning without a high Organizational Commitment, to improve performance.

5. Suggestion

Irrigation Area Management, in order to improve the performance, is necessary to develop Organizational Commitment where employees will feel having high moral ties to sense of being needed by the organization so that they can work maximally with optimal results to serve farmers in obtaining water as needed. Furthermore, the head manager of Irrigation Area Management in Southeast Sulawesi Province, needs to increase high Organizational Culture Organizations so that employees have high innovations and Organizational Commitment, to improve Employee’ Performances of Irrigation Area Management in Southeast Sulawesi Province.

6. References


Cummings, T.G.1984.Trans Organizational Development, in B.Staw & L.Cummings, (Eds.), *Research in Organizational Behavior*.6, 367 -422


Peraturan Pemerintah Nomor 20 Tahun 2006, Tentang Irigasi.


Undang-Undang Nomor 7 Tahun 2004 Tentang Sumber Daya Air


