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ENHANCING COMMUNITY GROUNDWATER GOVERNANCE (CGG) MODEL TOWARDS INNOVATION VIA GOOD GOVERNANCE ACTORS' PARTNERSHIP (GGAP)

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1. INTRODUCTION

Water or groundwater governance is essential to a modern state in securing and catering to the growing populations, water functions, and water usage which have extended greatly from the traditional age (Saad & Harun, 2017; Conti & Gupta, 2016; Wahid & Hooi, 2015). However, until today, there are places with no water supply coverage especially in the remote and rural area communities (Ahmed et al., 2014; See & Ma, 2018). Despite the effort to improve water supply and services through privatisation, the water supply coverage issue is still happening (See & Ma, 2018) due to the remoteness and connectivity of the locality. As a solution, remote and rural communities require groundwater community as a source of potable water which is governed by the community itself (Schweizer, 2013). Community governance is also referred to as community participation, engagement, and decision-making in public matters (Totikidis et al., 2005). But the main issue with community governance is the lack of community involvement and the need for further clarification on the concept and its application (Adams & Zulu, 2015; Schweizer, 2013; Totikidis et al., 2005).

Besides that, the issue of sustainable community groundwater facility development needs to be addressed (O'Reilly & Dhanju, 2012). Professional and expert contribution is vital as groundwater is subjected to pollution due to uncontrolled development and human activities (Shamsuddin et al., 2016). The involvement of Good Governance Actors namely the state, firm, and civil society to form a partnership in the sustainable development of the community groundwater process ensures the efficiency of the development and its initiative (UNDP, 2006). Soon after the post-development of the community groundwater, it will be handed over to the community for their governance, management, operation, maintenance, and enforcement. This study aims to further enhance the degree of understanding of the concept of community governance and its practical application (Adams & Zulu, 2015; Schweizer, 2013; Totikidis et al., 2005), especially on the water and groundwater matters. Other than that, this study explores the potential of the concept of good governance actors' partnership (GGAP) in complimenting the community governance concept (Nations, 2000).

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2. METHODOLOGY

This study identified a few selected pieces of literature to be reviewed, which focused on the concepts of good governance and community governance on water and groundwater. The study presented a review of previous studies from two main journal databases, namely Scopus and Web of Science. Accordingly, the searching efforts resulted in a total of 15 articles that have been selected for review. Apart from that, websites of the organizations that conduct water and groundwater-related research were also searched to find related documents and reports. In addition, both electronic and non-electronic searches were also added by a network of colleagues who provided related literature and documents. In the literature review process, only documents written in English were considered. This study aims to enhance the understanding of the concepts and applications of community governance and good governance on water and groundwater matters. Lastly, the study presented the proposed innovation on the community groundwater governance (CGG) model via good governance actors' partnership (GGAP) for the reference of future scholars.

3. RESULTS AND DISCUSSION

This study is based on the information, findings, and evidence from the published literature that documented water and groundwater either at the local, regional or international level. Figure 1 is the proposed innovation on community governance and good governance and will be discussed further.

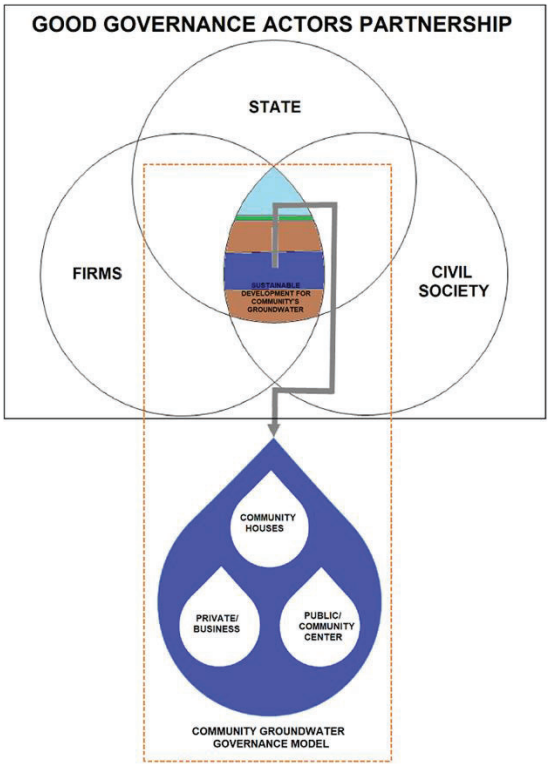

Figure 1: Community Groundwater Governance (CGG) Model via Good Governance Actors' Partnership (GGAP)

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The development of the CGG Model via GGAP is designed to cater to the unsolved issue of potable water in the community area especially in remote and rural areas with no water supply coverage. Via GGAP, the CGG Model can bring the realisation that the community will receive potable water supply directly to their house's water tab from the groundwater resources nearby. The targeted community will be equipped with sustainable, clean, quality, cheap, low supply disruption, and modernise water supply, which definitely will improve the quality of life, health, cleanliness, and the development of the individuals and the community as a whole. Besides that, the sustainability of water resources can be assured from the monitoring and controlling process and the community also will be benefited from the commercialisation initiative.

Apart from that, the CGG Model developed via GGAP has its uniqueness especially in terms of assisting the governments and authority bodies that are facing financial and expertise limitations in improving water supply coverage. Instead of having a large billion-dollar scale of water supply that involves the building of surface water dam, water treatments plant and water pipelines, the CGG Model developed via GGAP suggesting a cheaper yet sustainable, treated, quality, and modernize water supply to the community, especially in the rural and remote area.

Other than that, the CGG Model via GGAP is conducive for community groundwater sustainable development. This is because it provides an efficient alternative and robust method in developing water supply, especially to a rural and remote areas. It has huge potential in assisting not only citizens and communities who experience no water supply coverage, but also to help the governments and authority bodies to serve their responsibilities to the public and also to accelerate the process in achieving and upholding National Water Resources Policy (NWRP) (Abdullah et al., 2016) and also United Nation Sustainable Development Goal (UNSDG) 2030, item 6; water (Weststrate et al., 2019). The CGG Model developed via GGAP will be the blueprint for the sustainable development of the groundwater supply and system by using social responsibility or charity and good governance concepts that will positively benefit not only the community but also the nation and worldwide. Not only that, soon after the post-development, it may be handed over to the community while adopting the concept of the cooperative of management, maintenances, as a source of economic income and job opportunity for the community.

4. CONCLUSION

This study reviewed the literature that focused on various concepts of good governance and community governance specifically on water and groundwater. Subsequently, the proposed application of good governance and community governance were presented at the end of this research. The information, findings, and evidence are from the published literature that documented water and groundwater either at the local, regional, or international level. The proposed innovation of the Community Groundwater Governance (CGG) Model via Good Governance Actors Partnership (GGAP) is designed to cater to the unsolved issue of potable water in the community area especially in the remote and rural areas with no water supply coverage. The proposed model has benefits especially in terms of assisting the governments and authority bodies for sustainable, treated, quality, and modernize water supply to the community especially in the rural and remote areas. It is also conducive for community groundwater sustainable development and has huge potential in assisting to achieve the NWRP

and UNSDG 2030's targets. The proposed model is expected to be the blueprint to the nation and worldwide and as a reference to future scholars.

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