

Community-Based Development in the Project of Clean Water Networks in West Papua: Comparative Case Study

Dwiningtyas Padmaningrum¹, Miftah Faridl Widhagdha², Ravik Karsidi³,
Dodi Yapsenang⁴, Dyah Putri Utami⁵

¹Department of Agricultural Extension & Communication, Sebelas Maret University
(dwiningtyas._p@staff.uns.ac.id)

²Department of Extension Development/Community Development, Sebelas Maret University
(miftah.widhagdha@student.uns.ac.id)

³Department of Education Sociology, Sebelas Maret University (ravik@staff.uns.ac.id)

⁴Department of CSR, PT Kilang Pertamina Internasional (dodi.yapsenang@pertamina.com)

⁵Department of Education Sociology, Prospect Institute (dyah.utami@arjunawijaya.co)

ABSTRACT. Access to clean water is a basic right for the community, but the fulfillment of this basic right is often constrained by difficult geographical conditions. The existence of community development programs through CSR can be an entry point in fulfilling access to clean water, especially in remote locations. This research is a comparative case study between the practice of implementing the CSR Program in providing access to clean water which is carried out by 2 companies located in the same location, namely between company X which is engaged in oil and gas exploration and company Y which is engaged in oil processing. The study was conducted using a qualitative descriptive method with data collection carried out through in-depth observation by researchers and direct interviews in the period March to November 2021. As a result, the community-based development approach carried out by company Y was more successful and was able to increase community participation in program management. In addition, community participation is also able to increase the involvement of local communities with their customs in managing the sustainability of the program.

KEYWORDS: Community-Based Development; Local Community; Community Development; Case Study

1 INTRODUCTION

Klayas Village is one of the remote villages in the Seget District, Sorong Regency, West Papua Province with a population of around 74 families (KK) or about 280 people. Klayas Village is approximately 95.5 km or 3 hours by road from the center of Sorong City. Apart from being quite far away, Klayas village is also a remote area with limited access to transportation and basic infrastructure. Until 2018, there was no access to electricity and clean water that entered the Klayas village, this certainly made it more difficult for the Klayas people to improve their welfare. One of the most basic problems for the Klayas village community is access to clean water, which the community does not have. The people of Klayas village have difficulty getting clean water because of their inability to use technology such as drilled wells and sea water treatment, besides that the community also has difficulty distributing water from springs such as lakes whose access is very difficult because they are located in forest areas (Kasim, KPI, 2021). This limited access to clean water brings derivative problems such as poor sanitation and public health due to the absence of clean water. Stunting and malnutrition are common health problems experienced by the children of Kampung Klayas. Sanitation is a fundamental problem experienced by almost all of the population in Klayas Village.

This condition is certainly concerning because the "Bird's Head" area in West Papua, especially Sorong Regency is known as an area with rich natural resources, this is proven by the presence of oil and gas companies around the Sorong area such as PT X which explores oil and gas. and PT Y which operates a petroleum processing refinery in the Sorong area. The existence of a number of oil and gas exploration

and processing companies is actually not without their contribution, the companies always carry out social responsibility programs around their operational areas, especially those related to basic community infrastructure such as residential construction, road access construction to school construction. These programs are initiated by the company on the recommendation of the local government which has determined the development objects that must be carried out by the company. The development model initiated by those with power such as companies and the government is known as the top-down development model. The top-down model has the characteristic of being designed by professionals from external parties of the community in planning, implementing and evaluating development (McDonald, 1995).



Figure 1: Water Reservoir that is not used by the Klayas Village Community (Source: Author, 2022)

One of the development programs implemented by one of the companies, namely P X, is the provision of reservoirs (water storage tanks) that can accommodate more than 15,000 liters of water from springs which are channeled using pump and pipe infrastructure built by Petrogas (Basin) Kasim in Kampung Kasim. This reservoir was built in 2018 and is expected to meet the needs of clean water for the community in Klayas Village. According to calculations, the reservoir capacity of 15000 liters of water is sufficient for clean water needs for 74 families, but in reality, people still do not use clean water for their daily needs (Kasim, KPI, 2021). The people of Kampung Klayas, the majority of whom are Mooi Tribe, still do not use clean water because there is no direct access to their homes and culturally, people are not used to taking water and bringing it home. This is certainly an obstacle in community development efforts targeted at the Klayas Village community.

2 METHODOLOGY

The research method in this research is descriptive qualitative. Researchers conducted in-depth observations and interviews with the local community during March to November 2021. The resource persons in this study were 8 local people and local leaders who were considered to know the social conditions and background of the case being studied.

3 DISCUSSION

The failure of the reservoir development program for the Klayas Village community can be analyzed from the development model used. When viewed from the construction process, the reservoir built by the company was designed and built by the company without accommodating the aspirations of the local community. This development was designed due to local government demands for the lack of basic infrastructure available in Klayas.

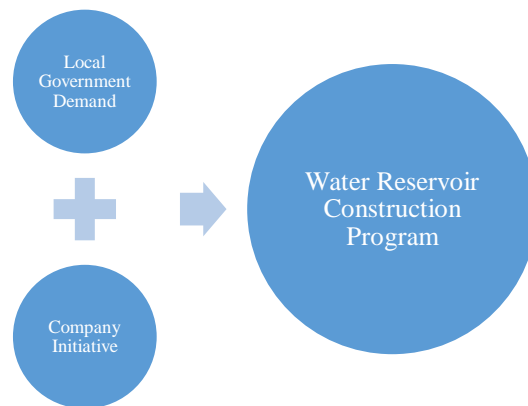


Figure 2: Top Down Model from PT X (Source: Author, 2022)

Development Goals and Change Agents

Actually, the top-down development model has advantages, including: program design is designed by professionals who have qualified technical capabilities and all costs required for development programs are fully borne by donors, but this model does not take into account the development target, namely the Mooi Tribe indigenous community who have high collectivism and high adherence to customary institutions. This is in accordance with the indications of the weakness of the top-down development model, which only places the community as an object of development with a low level of participation, so that it does not result in community empowerment to ensure the program can run independently at the initiative of the community (Mardikanto, 2014). In fact, in community development there is a main paradigm, namely community empowerment and participation (Korten & Klauss, 1984) which is clearly not fulfilled from the implementation of the clean water reservoir program built by the company.

The development model implemented by the company also does not take into account the cultural values of the indigenous Mooi Tribe community who have a very strong level of adherence to traditional leaders or local leaders. In fact, in the implementation of development, the presence of development agents is often a key factor in the success of development, especially in communities that still have strong kinship and cohesiveness. The Mooi Tribe as one of the indigenous tribes in West Papua has a high respect for traditional elders, so it is very important to involve traditional elders along with local leaders who play a role in group decision making in accordance with the function of the community perspective (Hirokawa & Gouran, 2009).

From the explanation above, it can be concluded that the failure of the water reservoir program built by PT X for the people of Kampung Klayas is due to their inability to implement development goals that place the community as the object of development without paying attention to the characteristics and habits of the community and the absence of the right development agency in supporting the community. their development program.

Extension Planning and Evaluation Design

To increase community participation and empowerment to suit the community development paradigm, the authors propose a mixed development model, namely bottom-up development supported by professional expertise and budgetary and technological support from above in order to produce effective and impactful community development programs. This model is expected to be able to adapt development programs to the characteristics of the community so that interventions carried out in

development programs are not considered as one-way interventions from companies or the government but also consider and provide space for community aspirations.

The bottom-up development model is expected to increase community participation more comprehensively, increase local community motivation, expand learning opportunities, increase community capacity in managing local resources, and increase community capacity as agents of change (Mardikanto, 2014). This model allows a wider and equal space for the community to express their aspirations about the clean water supply model needed by the community based on a needs assessment (Need Assessment). Community participation in providing an assessment of what is really needed can also be better absorbed if the analysis uses the Participatory Rural Appraisal (PRA) model. If the collection of aspirations from the community can be done by increasing community participation, it is hoped that it will encourage community participation in managing and maintaining the development program that will be carried out so that this is considered to make the community as the subject of development on an equal footing with the government and companies that will provide the program budget.

In addition, the involvement of development agents such as local leaders in the Mooi Tribe indigenous community is also considered to be able to increase public acceptance of program designs designed jointly by the company and the community. The cultural approach in development programs also has an important value because elements of culture and local wisdom are a concern for companies in developing programs. This is in accordance with the concept of Geertz & Pacanowsky (2009) on Cultural Approaches to Organizations which emphasizes the importance of involving local cultural values in community-based development programs.

This development model was then carried out by PT Y as one of the petroleum processing companies operating in Sorong by developing a participatory development model. This development model is able to accommodate local cultural values by placing indigenous community leaders as agents of development and positioning the community as a subject in development targets allowing the birth of a circular model in development planning and evaluation, especially in the case being discussed in this paper is the provision of clean water networks for the community. Klays Village. The company as one of the development subjects that has social and environmental responsibilities provides space for the community, especially the Mooi Tribe community to give aspirations about what the community actually needs and the potential of the community in order to provide a sustainable livelihood.

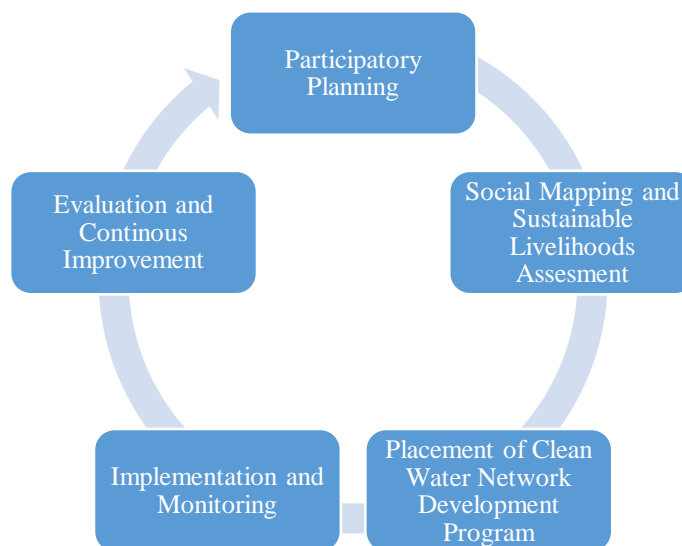


Figure 3: Participatory Development Model in Clean Water Development Program (Source: Author, 2022)

From the implementation of the participatory development model, it is hoped that the company and the community can collaborate in the construction of clean water networks by utilizing existing local potential so that they can solve problems more independently and support sustainable livelihoods for the Mooi Tribe indigenous community in Klayas Village. This model starts from participatory planning

by involving the community, especially considering the existence of local figures as opinion leaders. Then, mapping problems and potentials based on a sustainable livelihoods approach that identifies five main capitals, namely Financial Capital, Natural Capital, Physical Capital, Human Capital and Social Capital. These five main assets are important not only to focus on the problems experienced by the community, but also the potential possessed by the community. From this mapping, it was found that the community owns a water reservoir that was previously built by the company PT X as the Physical Capital it already owns. In addition, the indigenous Mooi Tribe is also known as a community with a very high collectivism so that social actions such as gotong royong are still very strong in the culture of the community, this is seen as Social Capital owned by the community. The existence of this social capital is then managed to be developed as the basis for the formation of a Water Council which is tasked with managing the water filtration unit built by the company and building a water distribution system directly to people's homes. The existence of the Water Council as a water management institution also involves the approval of traditional leaders so that the existence of this institution is accepted by other indigenous peoples and has full social legitimacy.



Figure 4: Clean Water Network Development Program by PT Y (Source: Author, 2022)

The next step is to establish a clean water network development program which is carried out jointly by the company and the local community. The implementation of this program is that the community has been able to manage the filtration unit and distribute clean water through the piped connection to 74 houses. In addition to infrastructure, the establishment of the Water Council Institution also ensures that this program can be carried out independently by local communities, so that they can utilize local resources such as the existence of a reservoir that has been stagnant since 2018, now starting in 2021, the reservoir can be reused and utilized to provide and supply clean water to people's homes. The implementation of this program has been going well from 2021 until now. This proves that a more participatory program design can work well with the involvement of local communities as the subject of empowering development. From this success, an evaluation was carried out for continuous improvement so that this program can run independently even without assistance from the company in the future. The company's strategy to release program management (Exit Strategy) has also been prepared for five years, so it is hoped that by 2025, the community will actually be able to independently manage the existing clean water network for the needs of local communities.

4 CONCLUSION

The failure of the top-down development model initially carried out by PT X can be concluded because the top-down approach is considered to ignore development goals, namely the community is only placed as an object of development and the traditional leaders of the Mooi Tribe Community are not involved as development agents in the development program. water reservoir so that the program that has been built is not utilized by the community. While the development model carried out by PT Y which uses a mixed development model involving community participation as a development target and placing local leaders as development agents is considered the right strategy so that it can increase community empowerment in managing local resources to manage clean water network development programs for the community. community in Klayas Village. This success can be seen from the availability of access to clean water which currently reaches 74 families, increasing public awareness of Clean and Healthy Life Behavior (PHBS) and improving sanitation and in general increasing community well-being.

REFERENCES

- Boutilier, R. (2017). *A Measure Of The Social License to Operate for Infrastructure And Extractive Projects*.
- Wilson, M. (2003). *Corporate Sustainability: What is it and wheree does it come from?* Calgary: Ivey Business Journal March / April 2003.
- Alfian, T. H. (2021). Kohesifitas Aktor Non Negara dalam Tata Kelola Ekosistem Gambut Berkelanjutan. *Seminar Nasional Tata Kelola Ekosistem Gambut Berkelanjutan Berbasis Masyarakat* (pp. 1-10). Pekanbaru: Universitas Riau.
- Mirvis, P., Googins, B., & Kiser, C. (2012). *Corporate Social Innovation*. Massachussets: Babson College.
- Paunescu, C. (2014). Current Trends in Social Innovation Research: Social Capital, Corporate Social Responsibility, Impact Measurement. *Management & Marketing Challenges for the Knowledge Society Vol. 9 No. 2*, 105-118.
- Sutra, D. P., & Aban, A. (2021). Pengelolaan Wilayah Gambut melalui Pemberdayaan Ekonomi Masyarakat di Provinsi Riau. *Seminar Nasional Tata Kelola Ekosistem Gambut Berbasis Pemberdayaan Masyarakat* (pp. 24-29). Pekanbaru: UNRI.
- Siregar, E. S. (2021). Strategi Pengelolaan Lahan Gambut untuk Pengembangan Perekonomian Masyarakat. *Seminar Nasional Tata Kelola Ekosistem Gambut Berkelanjutan Berbasis Masyarakat* (pp. 30-40). Pekanbaru: UNRI.
- Manurung, P. (2021). Pemetaan Lahan Gambut Rawan Terbakar berbasis Pemberdayaan Masyarakat. *Seminar Nasional Tata Kelola Ekosistem Gambut Berkelanjutan Berbasis Masyarakat* (pp. 68-75). Pekanbaru: UNRI.
- Aditya, R., & Widhagdha, M. F. (2020). *Social Return on Investment (SROI): Konsep dan Praktik Valuasi Dampak Investasi Sosial*. Surakarta: Arjuna Wijaya Karya.
- Visser, W. (2014). *CSR 2.0 Transforming Corporate Sustainability and Responsibility*. London: Springer.
- Morrison, J. (2014). *The social license: How to keep your organization legitimate*. London: Palgrave Macmillan.
- Putri, S. M. (2008). Schema CSR. In H. B. Untung, *Corporate Social Responsibility* (pp. 6-7). Jakarta: Sinar Grafika.
- Meehan, D. N. (2016, February 29). Retrieved from Journal of Petroleum Technology: <https://jpt.spe.org/social-license-operate>
- Dale, A. P., Chapman, P., & McDonald, M. L. (1997). Social Impact Assesment in Queensland: Why Practice Lags Behind Legislative Opportunity. *Impact Assesment* 15:2, 159-179.
- Franks, D. M.-V. (2013). *Designing mining technology for social outcomes: Final Report of the Technology Futures Project*. Technology Futures Project.
- Thomson, I., & Boutilier, R. (2011). The social licence to operate. In P. (. Darling, *SME Mining Engineering Handbook. Society for Mining, Metallurgy, and Exploration* (pp. 673-390). Colorado: SME.
- Moffat, K., & Zhang, A. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy* 39, 61-70.

- Widhagdha, M. F., Wahyuni, H. I., & Sulhan, M. (2019). Bonding, Bridging and Linking Relationships of the CSR Target Communities of PT Pertamina Refinery Unit II Sungai Pakning. *Jurnal Komunikasi: Malaysian Journal of Communication* 35 (4), 470-483.
- Boutilier, R. G. (2014). Concepts and Emerging Ideas: Frequently asked questions about the social licence to operate. *Impact Assessment and Project Appraisal* Vol. 32, No. 4, 263–272.
- Boutilier, R. G., & Thomson, I. (2011). *Modelling and Measuring The Social License to Operate: Fruits of a Dialogue between Theory and Practice*. Retrieved from <https://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf>
- Harvey, B., & Bice, S. (2014). Social impact assessment, social development programmes and social licence to operate: tensions and contradictions in intent and practice in the extractive sector. *Impact Assessment and Project Appraisal*, 32:4, 327-335.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholders Approach*. Cambridge: Cambridge University Press.
- Widhagdha, M. F., Wahyuni, H. I., & Sulhan, M. (2019). Bonding, bridging and linking relationships of the csr target communities of PT pertamina refinery unit II sungai pakning. *Jurnal Komunikasi: Malaysian Journal of Communication*, 470-483.
- Mirvis, P., Googins, B., & Kiser, C. (2013). *Corporate Social Innovation*. Babson: Babson College.
- Wigboldus, S. (2016). *Ten types of Social Innovation: a Brief Discussion*. Wageningen: Wageningen Centre for Development Innovation.
- Supriyadi. (2013). Konsep dan Model Pengukuran Corporate Sustainability: Sebuah Kajian Literatur. *STAR: Study & Accounting Research* Vol. X No. 3, 13-28.
- Korten, D., & Klauss, R. (1984). *People Centered Development: Contributions toward Theory and Planning Framework*. West Hartford DC: Kumarian Press.
- Kasim, KPI. (2021). *Pemetaan Sosial Distrik Seget*. Sorong: Prospect Institute.