

REVIEW ARTICLE

## Successful Community Empowerment Strategies Related to Environmental Issues in Indonesia

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### INTRODUCTION

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#### Abstract

Several community empowerment programs related to environmental topics have been reported in Indonesia. Various programs have been carried out. Several studies report the success and failure of these programs. This article aims to summarize the strategies reported to support the success of the future empowerment program. This literature review can contribute to the field of environmental science, community empowerment, and other relevant studies. The success strategy topic was chosen based on the results of a bibliometric analysis using Harzing's Publish or Perish application and VOSviewer. A total of 20 relevant articles were then selected through Google Scholar and analyzed descriptively. The results show that 10 strategies are needed to support the success of community empowerment programs addressing environmental issues.

**Keywords:** bibliometrics, community empowerment program, community empowerment study, environmental science, literature review

Payne states that empowerment is the strengthening of community power to reach decisions regarding capacity building [1]. We often hear about many empowerment programs, but it cannot be denied that many are implemented solely for one-sided interests. Ultimately, empowerment is successful, but its sustainability is questionable. One example: a study by Gupta et al. found that a lack of monitoring and evaluation led to poor compliance and outcomes [2]. To address these challenges, it is recommended to integrate monitoring and evaluation mechanisms into empowerment strategies to track progress, make necessary adjustments, and assess sustainability [2][3].

Specifically, Environmental empowerment in Indonesia has also seen less progress than empowerment in other areas, such as the economy. This is shown in the results of the pre-search we conducted using the Harzing Publish or Perish software, which indicates that the quantity of environmental empowerment is lower than that of economic empowerment. This is despite environmental issues being global and, to date, not having been comprehensively addressed [4][5]. In most environmental cases in Indonesia, the level of damage has reached very critical conditions, and empowerment is one of the few potential keys to tackle the urgent problems. However, due to slow development, with low quantity and no follow-up monitoring, it is felt that a review is necessary to serve as a reference, ensuring that community empowerment activities for the environment in Indonesia truly achieve their primary objectives.

This article provides an overview of successful strategies for empowering environmental communities in Indonesia. These strategies are derived from reports previously published in national journals. It is hoped that this article will contribute to environmental science, empowerment, and other relevant disciplines.

### MATERIAL AND METHOD

Identification of topics related to empowerment is carried out using the VOSviewer application, as described by Tupan and Wardhana [6][7]. Harzing's Publish or Perish 8 application was also used to determine the number of articles related to the topic under study. Next, a Google Scholar article search was conducted. We use the time range from 2012 to 2022. The keyword used was "community empowerment

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related to the environment" in Indonesia. We use Indonesian keywords because empowerment programs are recognized and required in higher education institutions in Indonesia. These programs typically take the form of community service initiatives led by lecturers and students. Another reason is that the most widespread publication of journals on community service is in Indonesia, and they are generally written in Indonesian. Therefore, we believe that using keywords in Indonesian will enrich the information and provide greater benefits. Twenty articles relevant to the topic were selected and analyzed descriptively, referring to Asy'ari [8]. The 20 articles are listed in Table 1.

**Table 1.** Reviewed Articles Related to Community and Environmental Empowerment in Indonesia

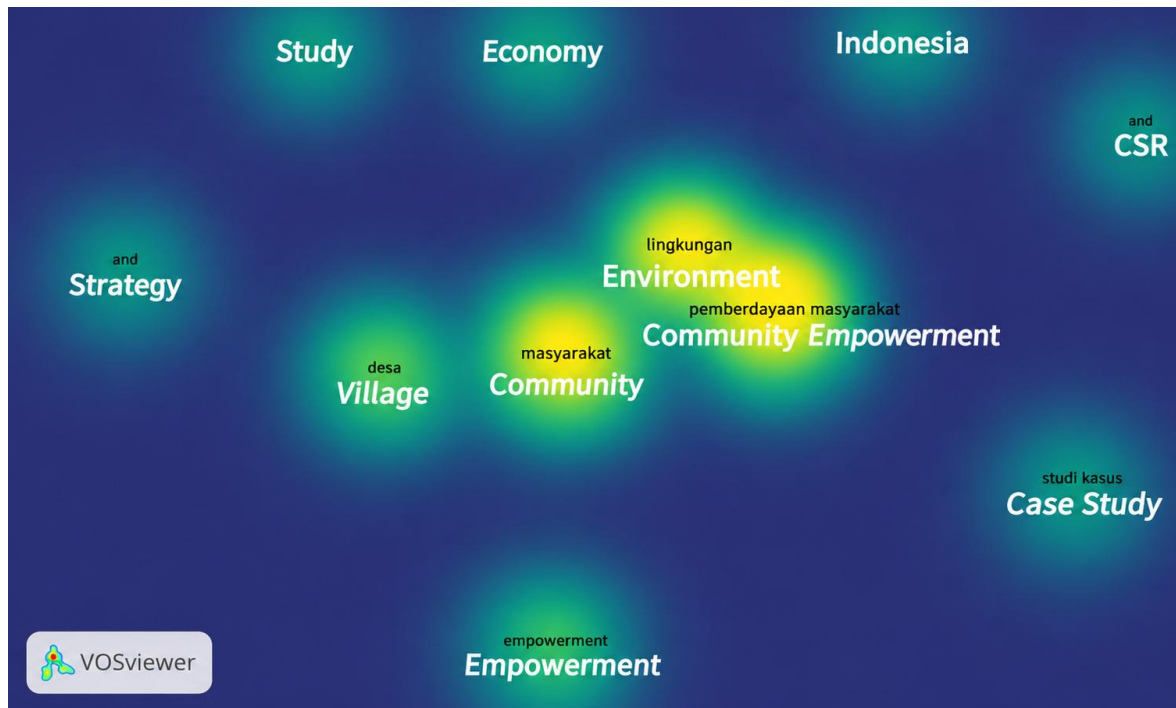
| No. | Article Title                                                                                                                                             | Author (year)                   |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 1   | Community Participation in Improving the Environmental Quality of the Ciliwung River Basin                                                                | Susilowati et al. (2012)        |
| 2   | A Study of the Implementation of Corporate Social Responsibility Activities in Mining Companies on Community and Environmental Empowerment                | Gumanti et al. (2016)           |
| 3   | Waste Management at the Smallest Scale and Community Empowerment as a Form of Environmental Care                                                          | Juniartini (2020)               |
| 4   | Corporate Social Responsibility (CSR) Policy as a Legal Strategy for Community Empowerment in Indonesia                                                   | Disemadi & Prananingtyas (2020) |
| 5   | Implications of Implementing Environmental Competitions to Increase Community Participation and Empowerment in the Development of Tempuran Village, Demak | Solikhatus & Kusumawati (2021)  |
| 6   | Issues of Corporate Social Responsibility (CSR) in the Context of Community Empowerment                                                                   | Retnaningsih (2015)             |
| 7   | Social Capital and Environmental Ethics in Community Empowerment Communities in the Citarum River Basin                                                   | Nurdiana (2021)                 |
| 8   | Realization of Sustainable Tourism Through Local Community Empowerment on Pahawang Island, Pesawaran, Lampung Province                                    | Nurhasanah et al. (2017)        |
| 9   | Community Empowerment of Neighborhood Association (RW) 12 in Environmental Greening Activities at the Independent Plots in Sei Pelunggut Village          | Pratiwi (2017)                  |
| 10  | Community Participation in Environmental Empowerment                                                                                                      | Yazid & Alhiyatillah (2017)     |
| 11  | The Role of Development Communication in Coastal Community Empowerment                                                                                    | Amanah (2010)                   |
| 12  | Community Participation in Waste Management in the Margaluyu Environment, Cicurug Village                                                                 | Sulistiyorini et al. (2015)     |
| 13  | Application of Used Cooking Oil Processing Technology into Dishwashing Soap for Pollution Control and Community Empowerment                               | Kusumaningtyas et al. (2018)    |
| 14  | Environment-Based Community Empowerment in Margalaksana Village, West Bandung Regency                                                                     | Subekti et al. (2018)           |
| 15  | SWOT Analysis of Community Empowerment Strategies for the Community Settlement Environmental Management Program in Suryatmajan Village, Yogyakarta City   | Shamadiyah (2017)               |
| 16  | Community Empowerment Process in Sitimulyo Village, Piyungan District, Bantul Regency, in Establishing an Independent Waste Management Group              | Sulistiyani & Wulandari (2017)  |
| 17  | Empowerment in Improving the Community Economy in the Sakti Fish Tourist Attraction, Sungai Jariah Kanagarian, Tabek Panjang, Baso District, Agam Regency | Yuliana et al. (2018)           |
| 18  | Waste Bank: An Effort to Empower Community Empowerment and Environmental Management                                                                       | Munawir (2015)                  |
| 19  | Community Empowerment in Environmental Conservation in Jerukwangi Village, Bangsri District, Jepara Regency                                               | Musfiroh & Sumarto (2014)       |
| 20  | Community Empowerment in Pesanggrahan District in the Economic and Environmental Sectors in Facing the Covid-19 Crisis                                    | Bustami et al. (2021)           |

**Source:** Google Scholar by Harzing Publish or Perish

## RESULT AND DISCUSSION

Based on search results using Harzing's Publish or Perish application, between 2012 and 2022, there were 969 articles related to the keyword "environmental community empowerment" in the Indonesian language. Analysis using the VOSviewer application indicates that research on this topic has not yet focused

on strategy. This is evident from the faded color of the word "strategy" (Fig. 1). Therefore, this article aims to provide an overview of strategies for achieving successful environmental community empowerment.



**Figure 1.** Visualization of article publication topic density from the keyword community empowerment related to the environment in Indonesia

### Definite Regulation

Community involvement is considered suboptimal without oversight and enforcement of established regulations. Reports suggest that a combination of bottom-up and top-down strategies is needed to address environmental issues, such as the one applied in the Ciliwung Watershed [9]. However, this model appears weak because the author establishes a hierarchy that places the provincial government at the top. The Ciliwung River's problems cannot be viewed administratively, as the Ciliwung River Basin spans two provinces: Jakarta and West Java, as well as several cities and regencies. In this case, problems may also arise from the community's cultural diversity, which naturally yields varying local wisdom for resolving its problems, including environmental issues. Therefore, the national government should be the highest in the hierarchy to resolve conflicts arising from policy differences between the two provincial governments and across the regencies/cities through which the Ciliwung River Basin flows.

With clear, centralized, and comprehensive regulations, it seems possible to address these issues. This opinion is supported by research that reveals Presidential Regulation No. 15 of 2018, concerning the Acceleration of Pollution and Damage Control in the Citarum River Basin, can be a breath of fresh air for saving the Citarum River Basin. The results are evident, indicating that the Citarum River Basin is experiencing increasingly positive developments. However, challenges remain, specifically the need for social capital support to ensure the program's successful implementation [10]. Therefore, stakeholder cooperation is needed to address future challenges [9][11][12].

### CSR Programs, Environmental Issues, and Empowerment: How Successful Are They?

Programs that connect community empowerment with the environment may or may not include CSR initiatives. Several reports have revealed the success of elementary programs. Many simple things can be done. For example, as reported by Juniartini [13]. The 5R program (reuse, reduce, recycle, replace, and repair) for women in the family welfare movement, known as PKK (*Pemberdayaan Kesejahteraan Keluarga*), at the village level. This program not only provides knowledge about issues but also adds economic value through simple waste processing. The simple yet effective community service program, conducted by students and known as KKN (*Kuliah Kerja Nyata*), which synergizes empowerment, environmental, and economic issues, has also been reported as successful, as demonstrated by Bustami's program [14].

The interesting thing about economic added value is that programs whose benefits can be directly felt are generally reported as successful, as stated by Kusumaningtyas et al. [15] in their program, using cooking oil to make soap, and Sulistiyani & Wulandari [16] through a program to produce organic fertilizer that can be marketed. Furthermore, Subekti et al. [17] proposed a program to utilize the potential of the natural resources of the Cirata Reservoir to produce goods and services with market value, as did Yuliana et al. [16] regarding assistance to micro, small, and medium-sized enterprises.

Environmental competitions have also been reported to have positive implications, as they can increase community participation and empowerment [18]. However, the study still has many unreported gaps. For example, there's no information on the extent to which empowerment programs, such as environmental competitions, can guarantee ecological sustainability. It is certainly undesirable if environmental sustainability is only guaranteed during the lead-up to the competition and ends after it is over. Therefore, in his study, Munawir [19] provided essential insights into empowerment activities, namely that the program should be carried out continuously.

### **Educational Environmental and Development Communication**

One of the keys to successful empowerment is communication. No matter how good a program is, if it isn't communicated effectively, its objectives will not be achieved. There are two interesting topics to discuss regarding community empowerment through effective communication. The first is environmental communication. Communities, as communicants or audiences, need to gain knowledge about the environment because the impact of ecological imbalance differs from the readily perceived economic impact. Therefore, persuasive messages are required. This can be delivered not only in the form of live lectures but also by leveraging technology, as demonstrated by Bustami et al. [14], through webinars featuring expert speakers. Besides being inexpensive, this activity has also been reported to be effective in persuading the public.

Second is development communication. This type of communication can be used to promote new ideas and concepts, including those related to environmental issues. Development communication is considered adequate because it is a dialogical approach. In other words, this communication allows the community to participate in the development process. Development communication also views the community as the primary subject, rather than an object that ultimately perpetuates inequality. Therefore, problems and solutions truly reflect the community's aspirations [20]. Educational values must drive both environmental and development communication. Educational values in communication help encourage active participation [14][15][21][22].

### **Successful Strategy for Community Empowerment Related to the Environment**

Based on a synthesis of 20 selected articles, ten key strategies were identified for achieving successful community empowerment in an environmental context. These fundamental strategies include establishing clear regulations as a legal basis, strengthening social capital to build trust and networks, and establishing effective community empowerment strategies [10][17][23], and creating close synergy between the goals of empowerment and environmental preservation [12][24][25]. Another essential principle is to place the community as an active subject in every process, rather than merely an object of the program [24][25].

At the implementation level, the program's success depends heavily on the right operational approach. This includes building good relationships and solid cooperation between all stakeholders [9][11][12], starting from the smallest and simplest things so that they are easy to understand and implement [13][14], [18][19][22][23][26], and implementing persuasive environmental communication [14][20] and an educational approach to encourage active community participation [14][15][21][22].

For empowerment programs to be sustainable, they require driving elements and long-term commitment. Strategies include building and highlighting the added economic value of each environmental activity [13]–[17][22][27], so that communities experience direct benefits. Equally crucial is ensuring that all programs are implemented continuously and sustainably [19], rather than incidentally, to foster permanent habits and behavioral changes.

### **CONCLUSION**

The larger the goal, the greater the challenges in achieving the success of an environmental community empowerment program in Indonesia. A larger scope also necessitates more comprehensive regulations to ensure mutual agreement and prevent conflicts of interest. The failure of ecological community empowerment programs has been due to the lack of integration between the empowerment and ecological

programs; in other words, each program still operates separately. Communities also generally have limited knowledge; therefore, an educational environmental and development communication strategy is needed to achieve active participation. Simple things are sometimes what communities need most, but some gaps do not address sustainability in depth. Based on this statement, environmental community empowerment should position the community as the subject, not merely the object. Empowerment must also be continuous, enabling monitoring and evaluation and ensuring flexibility and adaptability in response to current developments. Social capital support is essential; therefore, collaboration between stakeholders is critical.

The results of this review yield several recommendations for future research. First, there is a lack of suitable assessment methods and success indicators to evaluate the effectiveness of environmental community empowerment programs. Second, no study has reported on the sustainability of previously reported successful environmental community empowerment programs. Third, topics related to community empowerment and the environment are more frequently addressed in rural areas than in urban areas, even though environmental issues in urban areas are often more complex.

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