

An Analysis of dolly red-light district closure impact: 10-year post-transformation study on the psychological and economic vulnerability of susceptible women groups

Jefri Setyawan¹, Joshi Maharani Wibowo^{1*}, and Ken Fitria Indrawardani²

¹Universitas Surabaya, Surabaya, 60292 East Java, Indonesia

²Badan Riset dan Inovasi Nasional, Yogyakarta, 55281 Special Region Yogyakarta, Indonesia

Abstract. The Dolly area, known as a former red-light district in Surabaya City, is closed, as instructed by local government policy in 2014. This transformation negatively impacted the psychological and economic of vulnerable community groups in the surrounding area, especially women. This research is conducted to revisit the impact of Dolly area closure instruction and policy after ten years. The research is done qualitatively in the Former Dolly red-light district, Surabaya City, by obtaining the primary data through focus group discussions (FGD) in 2023. The analysis method used is TNA (thematic network approach), which is processed and visualized using NVIVO 12 pro. Feminist Standpoint Theory (FST) is used as a theoretical framework to ensure that the knowledge produced involves the participation of individuals who experience it directly. The results show the majority of former sex workers' lives, mainly women, rarely experience a decent life of living after 10 years of Former Dolly red-light district closure. There are three main obstacles (theme) causing this, which is: social, economic and administrative. The poor welfare of this community group leads to discrimination and stigmatization of former Dolly sex workers, and they become more psychologically vulnerable, marginalized and rarely considered as strategic development subjects. Apart from that, excessive social problems such as discrimination and stigmatization affect their economic activity. They lost the freedom to enter a legal sector as labour. Instead, they were forced to enter the shadow economy sectors, such as returning as sexual workers illegally.

1 Introduction

The former red-light district area in Surabaya City, previously known as the biggest prostitution area in Southeast Asia underwent a significant transformation that aimed to change their image and economic activity after being closed by the local government in 2024 [1]. This initiative reflects a broader ambition to eradicate the negative image of the area and replace it with a positive, sustainable economic image. For example, by converting a former prostitution hostel into the biggest craft production MSME (Micro, Small Medium Enterprise) in Surabaya City namely Dolly Saiki Point Iswadi, et al. [2], and Setyawan et al. [3]. The “Dolly Saiki Point” represents their effort to leave out the dark past, supported by governance with a collaboration of related stakeholders such as “Dolly Bangkit” community development programs trying to overcome various addressed post-closure conflicts and challenges [4]. By doing various empowering programs that target former sex workers through fender, economy, and religious approaches to help them integrate with new economic activities [5].

The UN Trafficking Protocol involves two aspects. The first aspect is the forced or involuntary entry of women and children into commercial sex. The second aspect is the solicitation of children (under 18 years of

age) to engage in sexual activity. As with the first context, the second dimension indicates whether children engaged in commercial sex are believed to be “trafficked” and whether they have agreed to engage in commercial sex [6], [7]. As we know the mainstreaming of prostitution in legitimate business and occupational categories in tourism, hospitality, health and entertainment establishments which are integral to development policies of governments [8].

However, efforts to change city structures need to be in line with the needs of local people. In reference to Sustainable Development Goals (SDGs) universal value principle two: Leave no one behind, the urban transformation that occurred in Surabaya City also needs to create a comprehensive system that supports vulnerable groups including women [9]. Dolly red-light district closure still leaves various unfinished businesses in the economy, social, and psychological sectors. A previous study by Rahman, et al. [10] and Puspaningtyas, et al. [11] highlighted the negative impact, including the increase in psychological and economic vulnerability, as well as the limitation of reproductive and marital health knowledge in the surrounding area.

Another previous study on related objects also found that the negative social stigma towards them is as strong as ever, even after leaving the prostitution activity itself.

* Corresponding author: joshiwibowo@staff.ubaya.ac.id

They often receive humiliating treatment such as verbal and physical abuse and prostitute labels. Moreover, this humiliation is being normalized in today's era. The impact of this treatment is to increase the emergence of shame which often leads to acts of discrimination. Based on an economic perspective, prostitution activity can be controlled through rehabilitation, social empowerment, and compensation towards sex workers [12]. But, another question is raised, how to ensure every affected individual gets their right completely and transparently?

The Dolly Red-Light District in Surabaya, Indonesia, has been the focus of various studies that investigate the socio-economic and cultural implications of red-light district closures. Research has often centered around the broader context of sex work in Indonesia, examining issues such as the vulnerabilities faced by sex workers, community responses to the closure, and the interplay of local policies on urban regulation and public health. One prominent study by Kanto et al. [13] discusses the socio-economic fallout following the closure of the Dolly Red-Light District, particularly highlighting how sex workers were displaced into precarious living and working conditions. They note that many sex workers experienced heightened stigmatization and a lack of access to social services following the district's closure.

Another significant contribution is provided by Mulya [14], who explore the cultural perceptions of sex work in Indonesia and how these perceptions influence local policies. Their research indicates that the closure of red-light districts is often framed within a moral discourse, which can fail to recognize the complexities surrounding sex work as a livelihood choice. According by Supriyanto, et al. [4] to improve the development of MSMEs without localization under the auspices of Dolly red-light district, several improvements are needed, especially in cooperation between stakeholders. This allows for duplication in the implementation of empowerment, for example academic empowerment and community empowerment. Because there is a concern that these actors can cause confusion in the authorization process due to almost the same role in its implementation.

Despite the important findings from previous studies, several gaps indicate a need for further research into the closure of the Dolly Red-Light District in Surabaya:

1. **Insufficient Longitudinal Perspectives:** Most existing literature tends to provide a snapshot of the effects immediately following the closure. There is a notable absence of longitudinal studies that track the experiences of displaced sex workers, which could provide deeper insights into their long-term socio-economic and psychological outcomes.
2. **Limited Focus on Male Sex Workers:** Many studies predominantly address female sex workers while largely neglecting the experiences of male sex workers and other gender non-conforming individuals who may be equally affected by the closure. Given the increasing visibility of male sex work in urban regions, understanding their specific challenges and vulnerabilities is crucial.

3. **Community Dynamics Underexplored:** Existing literature often overlooks the perspectives of community members and local business owners who have been directly impacted by the closure. Understanding how these stakeholders perceive the closure and its aftermath can shed light on the broader social dynamics within Surabaya.

4. **Health and Safety Considerations:** Although some research touches upon public health implications, there is a lack of comprehensive studies analyzing the health outcomes for displaced sex workers, particularly regarding access to health services, mental health issues, and rates of sexually transmitted infections (STIs). This aspect is critical, especially given the vulnerabilities typically faced by sex workers in transitional periods.

5. **Policy Efficacy Analysis:** Evaluations of the governmental policies that led to the closure are sparse. There is a need for a critical analysis of the effectiveness of these regulations, including their intended and unintended consequences on the lives of sex workers and on public safety within Surabaya.

This compensation is combined with various skill training to empower the former social worker in particular women with entrepreneurship skills. Even though the local government is making efforts to promote economic independence through various programs such as skills training and asset development, show that challenges still exist Rahma et al [10], Andyarini et al [15]. A study by Rahma et al [10] found women who switched to the MSME sector faced marketing and business difficulties. Inconsistent with Tsai [16] finding that highlighting the former sex worker as the main source of income in their family impacted their financial stability. Ultimately various social programs are not effective, and a lot of them are returning as sex workers after finishing the rehabilitation program. This phenomenon shows the need for a more comprehensive and integrated policy approach [17].

Besides economic and social concerns, health concerns are starting to arise towards former sex workers that are known to have a limited knowledge of reproductive health and can't fully access medical facilities, and highly affect public health negatively [18]. Mastrocola [19] finding shows that women involved with prostitution usually have poor access to medical services in the long term. On the other hand, the local government of Surabaya City needs to fulfill this need for former sex workers affected by the closure of the former Dolly red-light district. This condition also raises various questions regarding the women's vulnerability that still has not become the priority in mitigating group empowerment and transforming human development.

There are also an opinion from various leaders that view the Dolly Bangkit community as sceptical and recognize it as a positive change but also lack government effort, community involvement, and equity [20]. A discussion regarding sex workers often forgetting the challenges individuals after leaving the profession. Former sex workers need to receive protection, despite the stigma attached to this profession

which is often associated with vulnerability. There is also the multidimensional nature of prostitution in Indonesia that needs to be considered such as economic hardship, social stigma, and failed marriages. It emphasizes the need for a more subtle and supportive approach to address the needs of sex workers and reduce the negative impacts of closing sex work areas [21]. This indicates the importance of exploring their experience in the framework of self-regulation and their rights. By illustrating women as affected parties in a broader context is able to capture various complexity and perspectives that arise after the closure of the Former Dolly red-light district. The role of former sex workers must be acknowledged as a part of a vulnerable group that needs a government effort to be improved and empowered.

The research tries to highlight the challenges faced by women after the closure of the former Dolly red-light district in the past 10 years since 2014. By aiming to explore the challenge of women affected by the closure of Dolly red-light district and the social realities they face after 10 years. By addressing primary issues as follows:

1. **Socio-Economic Challenges:** Former sex workers face substantial difficulties in securing alternative sources of income, leading to increased poverty and economic instability. The abrupt removal of their primary livelihood without adequate transition plans exacerbates their vulnerability.
2. **Inadequacies of Support Systems:** Current support systems for displaced sex workers are often insufficient. There is a lack of comprehensive programs addressing immediate needs and long-term reintegration, which further compounds the difficulties faced by these individuals.
3. **Marginalization and Stigmatization:** The closure has intensified the marginalization of sex workers, who often experience stigmatization and social exclusion, making it challenging for them to access resources and opportunities for recovery.

The feminist standpoint theory (FST) approach is used to ensure the knowledge produced in the research involves the participation of the experienced individual, both personally and in the context of their community. This approach provides a more sensitive understanding of women's challenges as well as alternative epistemology to give a better understanding of social issues, including the complex issue of the sex worker, by emphasizing the importance of marginal perspective to produce the knowledge [22].

2 Methode

This research is done in the former Dolly red-light district Putat Jaya Ward, Sawahan Sub District, Surabaya City. The choice of sample location is based on research needs and aims. First, Dolly red-light district previously known as the biggest redlight district in Southeast Asia (<https://www.bbc.com/news/world-asia-27903426>), which makes it suitable as sample in this research. Second, the closure of the Dolly red light district has been done 10 years ago, but the uncertainty

of the ex-sex worker well-being red light districts closure continued, as promised previously.

The data used in this research is primary and secondary data obtained through FGD (Focus Group Discussion), documentation, observation, and literature review. The analysis method used in this research is TNA (thematic network approach) processed and visualized using NVIVO 12 pro. First of all, primary data is collected from 10 respondent through FGD activity. Then, it was continued using NVIVO 12 pro with a process of coding that was done by identifying the themes. From this coding process was aimed to identify the words representing the respondent condition. Word cloud is generated to visualize the important words that would represent the content of a document in a condensed way. Thus, the words that carried meanings would tell specific information about how the narrators carried internalized system of disposition and schema into their stories [23].

Focus Group Discussions (FGD), documentation, and observations each play a crucial role in providing a comprehensive understanding of the issues within the Feminist Standpoint Theory (FST) framework. FGDs facilitate the sharing of lived experiences among marginalized women, allowing researchers to capture diverse perspectives and the nuances of their social realities [24]. This method ensures that the voices of those systematically oppressed are heard directly, fostering an inclusive dialogue that uncovers unique forms of disadvantage and resistance [25], [26]. Documentation provides a tangible record of these discussions and the context in which they occur, aiding in the preservation and detailed examination of data. Observations complement these methods by enabling researchers to witness interactions and behaviors in real time, offering an additional layer of context that might not be fully captured through verbal accounts alone.

The validation meeting, conducted at the end of data collection, is pivotal as it brings researchers and participants together to review and clarify the knowledge constructed from the research. This process ensures that the findings accurately reflect the participants' experiences and interpretations, addressing any potential misunderstandings or biases that may have arisen during data collection. The reflexive stance in this validation meeting is essential to avoid the risks of tokenization, co-optation, and essentialization, thereby solidifying the credibility and authenticity of the research outcomes [25].

Qualitative based on the feminist standpoint theory (FST) approach is chosen to give a better understanding of social phenomena without any possibility of being manipulated [27]. Meanwhile, TNA is used to identify, clarify, and analyze the perception of a project/policy towards the related stakeholders, in particular, former sex workers from former Dolly red-light district [28]

The respondent in this research is chosen based on a purposive sampling method based on the research needs [29]. The criteria for respondents in this research are residents that were affected by the closure or red-light district of Dolly and still live in the area. This research obtained 10 participants consisting of former sexual workers who also work as housewives, daily employees,

snack sellers, social workers, and boarding room (previously sex hostel) owners.

The sample size of 10 participants in this research is considered adequate for achieving the study's objectives due to the qualitative nature of the study, which prioritizes depth over breadth [24]. The purposive sampling method ensures that the selected respondents are directly affected by the closure of the Dolly red-light district and still reside in the area, thereby providing relevant and specific insights into the psychological and economic vulnerability of these women [29]. While the sample size may seem small, it is sufficient to reach saturation, especially given the homogeneity of the group and the narrowly focused research aim [26]. Moreover, the robustness of the research design and the rigorous data collection methods, including triangulation and validation meetings, help mitigate the limitations associated with a small sample size by enhancing the validity and reliability of the findings [30]. However, it is important to acknowledge that this sample size may not capture the full diversity of perspectives within the broader affected population, which could be a limitation when aiming to understand more heterogeneous groups [31]. The findings from this study, while meaningful and insightful, may thus serve as a foundation for future research to explore emerging themes in greater detail and with larger, more diverse samples to ensure broader representativeness and credibility.

The variety of participants, encompassing former sex workers, housewives, snack sellers, social workers, and proprietors of boarding facilities (formerly known as sex hostels), enriches the comprehension of the

subject by presenting diverse viewpoints on the psychological and financial susceptibilities experienced by women impacted by the cessation of operations in the Dolly red-light district. Former sex workers and homemakers offer perspectives on the shift from sex work to domestic responsibilities or other ways to survive. In contrast, vendors, who often depend on local connections and small-scale business initiatives, demonstrate the economic adaptability and creativity that arise in reaction to such socio-economic disturbances. Social workers contribute an understanding of the wider community dynamics and the available support systems for these women, underscoring the necessity of social services and interventions to tackle their vulnerabilities. Boarding facility owners, who have had to redefine their business strategies, provide insight into the broader economic changes and the reorganization of communal spaces and economies. This assortment guarantees a thorough examination of the interconnected economic, social, and psychological repercussions, thereby enhancing the conclusions of the research study.

The TNA and FST synergistically capture marginalized former sex workers' voices and offer nuanced comprehension. TNA categorizes qualitative data into themes and patterns for structured analysis. FST ensures that analysis is rooted in firsthand experiences, shedding light on distinct perspectives. The study combines TNA's methodology and FST's focus on marginalized voices to reveal multifaceted vulnerabilities. The study ensures that former sex workers' narratives are central, generating a holistic insight into their realities.

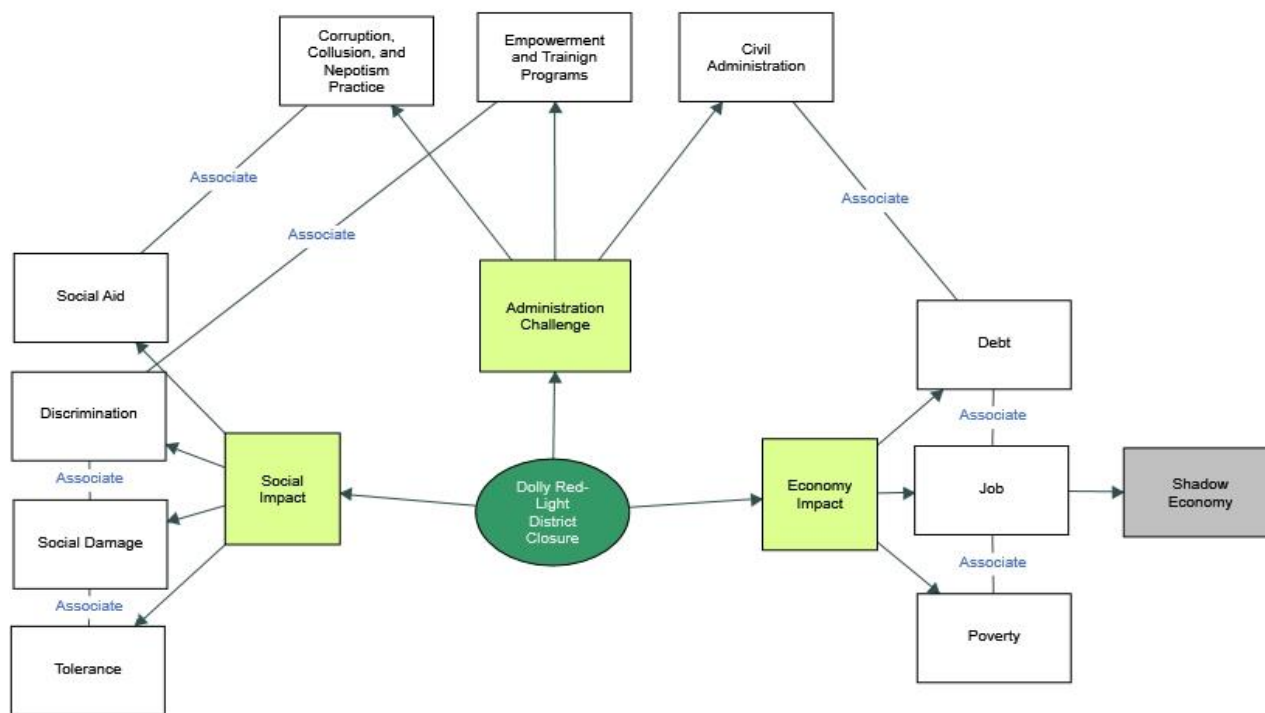


Fig. 1. TNA Result.

Source: Processed Data, 2024.

3 Result and discussion

3.1 Result

The closure of Dolly red-light district is aimed at eradicating every negative impact related to sex trafficking, including social and health problems. However, the effectiveness raises unexpected challenges and consequences. Based on the data processing activity, it led to persistent marginalization and psychological distress, further exacerbating their vulnerability and limiting their access to legal employment opportunities (Fig. 1). This sector will heavily impact their livelihood in the long term if the problem is not addressed under targeted policies that were previously promised by the Indonesian government.

3.2 Social impact

A discrimination practice to distribute social aid and transparent administration records during the Dolly closure harmed the minority group, which only benefits specific parties, highlighting the systematic problem and low accountability of social assistance at regional and local levels. Such practice not only reflects the unfairness of power dynamics but also the social injustice faced by seasonal residents. Systemic problems in social assistance administration become apparent as distribution practices are marred by discrimination, favouring certain parties while marginalizing minority groups and seasonal residents. This inequitable distribution reflects deeper issues of power dynamics and low accountability in social assistance programs at the regional and local levels [32]. Through the FST approach, the result highlighted the importance of including the minority group opinion to support the construction of knowledge and reality. It shows the importance of seasonal residents as valuable insight into increasing social assistance programme accountability and equity during the process [26]). Additionally, the discrimination phenomenon from the external and internal parties can be analyzed using the same approach to get a better understanding of power relations and cultural values that shape the minority group experience and behavior [33]. Discrimination is highly contributed towards marginalism and social injustice to overcome the problem [34]. The closure has also led to significant social changes, including shifts in community relations and the emergence of new social norms. Still, more than these changes are needed to address the underlying issues of discrimination and social injustice [32].

The other problem is the vulnerability and discrimination faced by former Dolly red-light district workers that heavily impacted the psychology. A lot of negative stigma is forced on them by their surrounding people. Today, they are forced to accept the label as sex workers. Social discrimination is given in the form of bad words towards the individual such as shown in Fig. 2, such as ‘lonte’ and ‘balon’ (whore woman). The evidence is stated by one of the respondents, Bunga.

“I believe my life is so lovely, but the other people are confused to see it... They usually bad mounting me as lonte. I was so confused...and just leave it alone.”
(Bunga, mother with a child)



Fig 2. Word Cloud Sub Theme “Discrimination” (Diskriminasi).

Source: Processed Data, 2024.

The social damage received after red-light district closure becomes a significant issue. The interaction and adaptation of red-light district workers that are sporadically distributed can disrupt the relationship between the neighbors and create an unstable social environment. It increases the competition between women due to the limitation of sexual space and activity that potentially raises social tension between individuals or the sex worker community. Their past still continues to affect their lives today, the evidence is prostitution that persists in the online market as a shadow of the past by adapting to new technology and communication patterns [35].

Battles for sex equity by women's developments have sought to provide lawful acknowledgment to sex correspondence at both national and worldwide levels. Be that as it may, such society-wide objectives may have small reverberations within the lives of personal men and ladies in settings where a culture of personal rights is frail or lost and the stretch is on the ethical economy of family relationship and community. Whereas strengthening captures the horde ways in which expecting and unintended changes can improve the capacity of person ladies to work out more prominent control over their possess lives, it does not fundamentally lead to their engagement in collective battles for sexual orientation equity [36].

3.3 Administration challenges

Another finding relates to administrative challenges as shown in Fig. 3, faced by former sex workers. Most former sex workers and other affected women in the

concluded that various training programs such as digital marketing are used for wrongdoing things during the implementation.

Moreover, they are also faced with social problems that decrease the possibility to enter legal economic sectors. It includes problems of tolerance, social damage, discrimination, and social aid, which lead to the practice of Corruption, Collusion, and Nepotism. The identified respondents state they still received the negative stigma of the closure of Dolly red-light district since 2014. As expressed by one of them during FGD.

"Yeah, black does not always mean a filthy thing, white also does not always mean sacred things. So, an individual that insults other people, doesn't mean they are a good and respectable person," (Yuyun, victim of human trafficking)

This statement indicates that a lot of former Dolly workers still received bad treatment from the surroundings, and were treated as workers from the red-light district area. It becomes important evidence that there is still an individual who has a social vulnerability in the form of discrimination after 10 years. A lot of them still being unemployed or don't have a permanent income, despite the government effort to change the profession and local business in the surrounding area is still not fully accepted and may potentially cause further problems in the future [48]. This phenomenon also happens because of the lack of confidence of internal and third parties that red-light district Dolly will be able to earn a similar income that they previously obtained through a legal economy activity.

Whatever the reason, a lot of them are driven to enter the shadow economy sector to ensure their livelihood necessities are fulfilled. The resistance of online prostitution posts the closure shows that every related stakeholder needs a more inclusive and sustainable solution to overcome the economic and social challenges faced by society [35]. This result also in line with Tran [49] studies. The government has failed to restore and improve the economy and social glory of the ex-Dolly red-light district after 10 years.

Another important thing to discuss is ex Dolly public and civil administration challenges, First, the lack of transparency in the distribution of compensation money shows that there is injustice in resolving financial rights for former sex workers. A woman affected by the closure of Dolly red-light district describe

"Previously, during the red-light district closure, everyone was being recorded. But after that, not everyone got the compensation. Even though it was recorded every Monday, every Wednesday at first, maybe about 4 times. But when I got there my data was unknown. I don't know who is using it, either," (Sonya, community leader and snack seller).

If a compensation provider fails to see the vulnerability of a particular group, it may increase the possibility of social aid being misappropriated by a particular person or group. The evidence is stated by Linda who states the compensation fee is not transparent and not as promised previously.

"Previously, they promised to give a compensation of 5 million rupiahs for each person, but during the

distribution, they only gave about 3 million rupiahs." (Linda, housewives and freelancer)

The example FGD result reflect broader systemic issues that are not directly addressed in the existing context but are in line with the general challenges of ensuring fair treatment and protection for vulnerable groups after the closure, as previously state by Akhsaniyah [35]. This becomes an indication the system itself is vulnerable to abuse or a lack of adequate regulation to protect the rights of civil society. Even though the local government has the authority and responsibility to encourage transparency and accountability in their jurisdiction [50]. Second, disparity in legal training and employment is needed for a more inclusive and sustainable system for providing skills and economic opportunities towards vulnerable groups. The training that has been held previously is unsustainable and underscores, it becomes more challenging to create effective and sustainable training that meets labor market needs and developments. This situation shows a gap in the alignment of training programs with the actual needs of the labor market and the development of sustainable economic models for aimed individuals [38]. Third, administrative barriers in applying for civil registration, such as domicile, which are very important for accessing basic services and welfare rights, have not been explicitly addressed in this context. However, the overall narrative points out the possibility of broader problems regarding administrative inefficiency and the need for administrative reform to simplify processes towards vulnerable groups [13]. Ultimately, vulnerable individuals and groups need to use expensive broker services to meet their necessities, which becomes an extra financial burden that worsens the economic condition and challenges faced by this community [51].

3.6 Policy recommendation

Based on data analysis and discussion of research result there a few recommendations to improve the vulnerable condition of ex dolly red light district community as follows:

1. Implementing and supervising inclusive policies within social assistance programs that encompass women-minority perspectives is imperative to addressing discrimination. The primary goal is to guarantee equitable access and transparency in the formulation and execution of these programs.
2. Support programs are required for former Dolly red-light district workers. These programs focus on counseling, vocational training, and social reintegration to provide sustainable livelihoods and reduce social stigma.
3. The government of Surabaya should collaborate with NGOs and community-based groups, which is essential for the economic empowerment of women in marginalized communities. Focusing on sustainable solutions to social and economic challenges can enhance political participation and address issues like online prostitution and the socio-economic impacts of the Dolly district closure.

4. The government of Surabaya needs to have central and integrated data on vulnerable groups that is updated continuously. This is important to establish transparent and accountable mechanisms crucial for distributing compensation and social aid. Communication of eligibility criteria, public reporting on fund allocation, and an accessible grievance redressal system are also important.
5. The government should provide a communication channel for residents who report discrepancies in compensation distribution. Ensuring transparency is essential to rebuilding trust and preventing fund misappropriation. By creating and introducing an integrated user friendly online website system, to ensure their civil documents are processed regardless of their origin and negative social stigma.

4 Conclusion

This research found that the red-light district Dolly workers still have not achieved a decent life after 10 years, since 2014. In general, there are three main challenges namely economy, social, and administration. Various social problems that emerge during the process are low tolerance from an external party, social damage, high discrimination, and injustice in social aid that raise other problems towards corruption, collusion, and nepotism. The poor welfare of this community makes them more marginalized and become unemployed. A lot of them are in shadow economic activity because the local government is incapable of providing decent and sustainable jobs, environment, and livelihood.

The social challenge affected the livelihoods of sex workers and other individuals who depended on the district for their income. There was an increase in the number of unemployed individuals and a corresponding rise in social welfare claims. A majority of respondent expressed concern over the displacement of sex workers, that potentially the emergence of shadow economy in particular hidden prostitution and online. They also met legal challenges from business owners and workers, who argued that the closure infringing on their rights. Legal proceedings delayed the process and created administrative complexities.

The findings contribute to a broader understanding of the long-term impacts of closing red-light districts and similar initiatives elsewhere. They highlight the need for comprehensive and sustained support mechanisms to prevent the marginalization of affected populations. The study provides insights into the complex interplay of economic, social, and administrative factors that must be addressed to achieve successful reintegration and improve the quality of life for those affected. Specific recommendations for policymakers, local government, and social services should be in economic interventions such as job creation programs to develop targeted and initiatives focused on providing sustainable employment opportunities for former workers of the Dolly district.

This research has limitations and research period in the study area. The study underscores the need for ongoing research and data collection on the long-term

outcomes of such closures to keep in track of the development or the implementation of empowerment program. It also recommended for the further research to increase the sample size or using different methodology to reflect any potential biases that might have influenced the study's outcomes. Some potential areas for future research i.e Long-Term Mental Health Impacts; Effectiveness of Government Programs; Shadow Economy Participation; Comparative Studies; Social Integration and Community Support.

Ethical Considerations: The research has obtained permission from the Institutional Ethics Committee of the University of Surabaya with the number 90/KE/III/2023.

The author expresses gratitude towards every respondent that supports this research. Herewith, we also declare there no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

References

1. Rosyidah A., Setyaningsih E.P., Ediati R., Kurniawan R.Y., *Determination of nutrition contents based on raw seaweed: economic improvement efforts in Dolly ex-prostitution area*, IOP Conf Ser Earth Environ Sci, **649**, 1, 012024, (2021), doi: 10.1088/1755-1315/649/1/012024
2. Setyawan J., Amelia H., Cintya B., Wibowo J.M., *Persepsi Stakeholder dan Produsen UMKM Tentang Rebranding: Studi Kasus Penciptaan Logo 'Dolly Saiki Point'*, Jurnal Abdimas Bina Bangsa, **4**, 1, 863–869, (2023), doi: 10.46306/jabb.v4i1
3. Iswadi H., Setyawan J., Cintya H.A.B., Wibowo J.M., *Optimalisasi UMKM sebagai Pendukung Transformasi Urban Tata Kelola Pemerintah: Studi Kasus Ejs Lokalisasi Dolly*, Jurnal Pengabdian Kepada Masyarakat, **29**, 2, 445–451, (2023)
4. Supriyanto S., Iskandar F., *Implementasi Kolaborasi Model Pentahelix Dalam Rangka Meningkatkan Pemberdayaan Umkm Ex Lokalisasi Dolly Pada Masa Pandemi Covid 19 (Studi Kasus DS.Point)*, Governance, JKMP (Governance, Jurnal Kebijakan & Manajemen Publik), **12**, 1, 71–91, (2022), doi: 10.38156/governancejkmp.v12i1.64
5. Hasanah N., *Kontribusi Pendekatan Gender Dan Ekonomi Dolly*, Paradigma, **3**, 3, 1–6, (2015)
6. George A., Sabarwal S., *Sex trafficking, physical and sexual violence, and HIV risk among young female sex workers in Andhra Pradesh, India*, International Journal of Gynecology & Obstetrics, **120**, 2, 119–123, (2013), doi: 10.1016/j.ijgo.2012.08.019
7. Cimino A.N., *Sex Work and Adult Prostitution: From Entry to Exit, in Handbook of Behavioral Criminology*, Cham: Springer International Publishing, 239–255, (2017), doi: 10.1007/978-3-319-61625-4_14

8. Huda S., *Sex trafficking in South Asia*, International Journal of Gynecology & Obstetrics, **94**, 3, 374–381, (2006), doi: 10.1016/j.ijgo.2006.04.027
9. UNSDG, *Universal Value Principal Two: Leave No One Behind*, (2023)
10. Rahma R.A., Rasyad A., Zulkarnain Z., Sumintono B., *Local Community Economic Independence in The Ex-Prostitution Area: The Effect of Dolly Closure*, Journal of Nonformal Education, **8**, 2, 229–236, (2022), doi: 10.15294/jne.v8i2.35594
11. Puspaningtyas D.I., Demartoto A., Murti B., *The Representation of Social, Economic, Psychological, and Reproductive Health Condition of the Commercial Sex Workers Post-closing of the Dolly Complex in Surabaya*, Journal of Health Promotion and Behaviour, **2**, 1, 77–87, (2017)
12. Faidah M., Wilujeng B.Y., Rahayu I.A.T., *Social Economic Empowerment for Ex-prostitutes and the Impacted Residents after Dolly and Jarak Closures*, in Proceedings of the 1st International Conference on Social, Applied Science and Technology in Home Economics (ICONHOMECES 2017), Paris, France: Atlantis Press, (2018), doi: 10.2991/iconhomecs-17.2018.53
13. Kanto S., Wisadirana D., Sholih M., *Post-Closure Prostitution and The Adaptation Strategy of Sex Workers: Case Study of Dolly Prostitution Community*, Surabaya Indonesia, International Journal of West Asian Studies, **10**, 1, 13–22, (2018)
14. Mulya T.W., *Envisaging a Critical Sexuality Education in Indonesia: A Poststructuralist Offer*, 213–227, (2023), doi: 10.1007/978-981-99-1878-2_12
15. Andyarini E.N., Oktorina S., Rosidi H., *Strengthening Self Capacity of red-light district of Prostitution Community at Bangunsari Surabaya for Economic Independence through Asset Based Community-Driven Development (ABCD) Approach*, Engagement: Jurnal Pengabdian kepada Masyarakat, **4**, 2, 278–297, (2020)
16. Tsai L.C., *Family financial roles assumed by sex trafficking survivors upon community re-entry: Findings from a financial diaries study in the Philippines*, J Hum Behav Soc Environ, **27**, 4, 334–345, (2017), doi: 10.1080/10911359.2017.1288193
17. Destrianti F., Harnani Y., *Studi Kualitatif Pekerja Seks Komersial (PSK) di Daerah Jondul Kota Pekanbaru Tahun 2016*, Jurnal Endurance, **3**, 2, 302, (2018), doi: 10.22216/jen.v3i2.1021
18. Artaria M.D., Kinasih S.E., *Sex-workers in a Country of Largest Muslim Population*, Asian Soc Sci, **13**, 6, 31, (2017), doi: 10.5539/ass.v13n6p31
19. Mastrocola E.L., Taylor A.K., *Chew-Graham C., Access to healthcare for long-term conditions in women involved in street-based prostitution: a qualitative study*, BMC Fam Pract, **16**, 1, 118, (2015), doi: 10.1186/s12875-015-0331-9
20. Wiyanto C.C., Krisdinanto N., *Manipulating Image and Communication Issues in the Dolly Ex-Prostitution District Community Development Program*, Mediator: Jurnal Komunikasi, **15**, 2, 219–235, (2023), doi: 10.29313/mediator.v15i2.10355
21. Mahardika E., Garduño L.R., Nasser M.F.D., *Regulate or Prohibit: a Review of Hidden Prostitution Law Enforcement Policies in Indonesia*, Supremasi Hukum: Jurnal Kajian Ilmu Hukum, **12**, 1, 73–90, (2023), doi: 10.14421/sh.v12i1.2969
22. Retno M. L.A., Umam K., *Dukuhseti Pati in Literature and Social Reality: A Perception About Women*, E3S Web of Conferences, **202**, 07027, (2020), doi: 10.1051/e3sconf/202020207027
23. Nuswantara K., Savitri E.D., *Portraying Literacy in Dolly Lane, a Red Light District (RDL): Qualitative Content Analysis on the Narratives Produced by Dolly Teenagers*, Mozaik Humaniora, **18**, 1, 93–104, (2018)
24. Hartsock N.C.M., *The Feminist Standpoint, in Feminist Theory Reader*, Fifth edition. | New York, NY: Routledge, 267–277, (2020), doi: 10.4324/9781003001201-33
25. Friesen P., Goldstein J., *Standpoint Theory and the Psy Sciences: Can Marginalization and Critical Engagement Lead to an Epistemic Advantage?*, Hypatia, **37**, 4, 659–687, (2022), doi: 10.1017/hyp.2022.58
26. Suehn M., Kassin A., Russell-Mayhew S., Callaghan T., Cohen J., *Perspective Chapter: Feminist Standpoint Theory – A Lens for Counseling Psychology Research and Practice*, in Feminism - Corporeality, Materialism, and Beyond, IntechOpen, (2023), doi: 10.5772/intechopen.110554.
27. Sarosa S., *Penelitian Kualitatif Dasar-Dasar*, 2nd ed., Jakarta: Indeks, (2017)
28. Rambaree K., Sundström A., Wang Z., Wright S.A.I., *Qualitative stakeholder analysis for a swedish regional biogas development: A thematic network approach, Sustainability (Switzerland)*, **13**, 14, (2021), doi: 10.3390/su13148003
29. Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, 2nd ed., Bandung: Alfabeta, (2020)
30. Belanovskiy S., *Representativeness of Qualitative Surveys*, Inter, **15**, 1, 69–94, (2023), doi: 10.19181/inter.2023.15.1.4
31. Daniela R.M., *Determining The Sample Size In Qualitative Research*, International Multidisciplinary Scientific Conferences on the Dialogue between Sciences & Arts, Religion &

- Education, **4**, 4, 181–187, (2020), doi: 10.26520/mcdsare.2020.4.181-187
32. Novaria R., Mulyati A., Pujiyanto A., *Changes of Social Pattern in Dolly Area from Prostitution Localisation to Tourism Village with Copreneurship Approach*, in Proceedings of the 1st Aceh Global Conference (AGC 2018), Paris, France: Atlantis Press, (2019), doi: 10.2991/agc-18.2019.34
33. Kusuma D.K., Asror F.M., *Feminist Standpoint Theory: An Analysis of Muslims Women Interaction in SHAFINA Ummida Jogokariyan*, PALASTREN: Jurnal Studi Gender, **15**, 1, 25, (2022), doi: 10.21043/palastren.v15i1.12244
34. Cabrera M.S., Belloso M.L., Prieto R.R., *The application of Feminist Standpoint Theory in social research*, Investigaciones Feministas, **11**, 2, 307–318, (2020), doi: 10.5209/inf.66034
35. Akhsaniyah A., *Pola Komunikasi Prostitusi Online Para Pedila di Dolly dan Kembang Kuning*, WACANA: Jurnal Ilmiah Ilmu Komunikasi, **21**, 2, 252–264, (2022), doi: 10.32509/wacana.v21i2.2158
36. Kabeer N., *Empowerment, Citizenship and Gender Justice: A Contribution to Locally Grounded Theories of Change in Women's Lives*, Ethics Soc Welf, **6**, 3, 216–232, (2012), doi: 10.1080/17496535.2012.704055
37. Cahyadi A., *Penerapan Good Governance dalam Pelayanan Publik (Studi Tentang Kualitas Pelayanan Elektronik Kartu Tanda Penduduk Berbasis Good) Governance Di Kecamatan Sukolilo Surabaya*, JPAP: Jurnal Penelitian Administrasi Publik, **2**, 02, (2016,) doi: 10.30996/jpap.v2i02.1004
38. Sufa S., Praratya A., Sumartias S., Ahmad J., *Empowering Residents of The Former Dolly's Prostitution Localization as an Effort of Government Economic Responsibility of Surabaya City*, in Proceedings of the Proceedings of the 1st Padjadjaran Communication Conference Series, PCCS 2019, 9 October 2019, Bandung, West Java, Indonesia, EAI, (2020), doi: 10.4108/eai.9-10-2019.2291101
39. Faidah M., Wilujeng B.Y., Rahayu I.A.T., *Social Economic Empowerment for Ex-prostitutes and the Impacted Residents after Dolly and Jarak Closures*, in Proceedings of the 1st International Conference on Social, Applied Science and Technology in Home Economics (ICONHOMECS 2017), Paris, France: Atlantis Press, (2018), doi: 10.2991/iconhomecs-17.2018.53
40. Medina L., Schneider F., *Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?*, (2018), Available: <http://www.econ.jku.at/schneider/>
41. Schneider F., *Restricting or Abolishing Cash: An Effective Instrument for Eliminating the Shadow Economy, Corruption and Terrorism?*, SUERF: Policy Note, **90**, 1–7, (2019), [Online]. Available: www.suerf.org/policynotes
42. Purnomo J., Damayanti R., Prastiwi J.H., *Kebijakan Sosial & Permasalahan Sosial Pada Perempuan dan Anak*, Malang: Media Nusa Creative, (2020)
43. Firmansyah M.R., *Manajemen Strategi Pemberdayaan Warga Terdampak Penutupan Lokalisasi Dolly (Studi Badan Pemberdayaan Masyarakat dan Keluarga Berencana Kota Surabaya)*, Journal Publika, **3**, 6, (2015)
44. Elvin-Nowak Y.M.S., Backman-Enelius M.M., Jonas W.C., Eriksson J.A., Åhlund D.S., Barimani M.M., *Intimate partner violence and negative health consequences: A cross-sectional study among women in a regional sample in Sweden*, Scand J Public Health, **51**, 4, 636–643, (2023), doi: 10.1177/14034948221148056
45. Christianna A., Wibowo M., Nilasari P.F., *Representation of the Social Dynamics of Ex-Localization Communities in Doll's Batik, Surabaya*, KnE Social Sciences, (2020), doi: 10.18502/kss.v4i12.7634
46. Ferdian P.A., *Community Development UMKM Eks Lokalisasi Dolly Melalui Digital Platform dalam Menghadapi Covid-19*, Jurnal Layanan Masyarakat (Journal of Public Services), **5**, 1, 221, (2021), doi: 10.20473/jlm.v5i1.2021.221-232
47. Destrianti F., Harnani Y., *Studi Kualitatif Pekerja Seks Komersial (PSK) di Daerah Jondul Kota Pekanbaru Tahun 2016*, Jurnal Endurance, **3**, 2, 302, (2018), doi: 10.22216/jen.v3i2.1021
48. Retnaningsih H., *Dampak Sosial Penutupan Lokalisasi Dolly*, Info Singkat Kesejahteraan Sosial, **6**, 13/1/P3DI/Jul/2014, 9–12, (2014)
49. Tran T.K.P., *Unemployment and Shadow Economy in ASEAN Countries*, The Journal of Asian Finance, Economics and Business, **8**, 11, 41–46, (2021)
50. Ahmad A.N., Sijabat H.G.S., Manor U., *Pemberantasan di Persimpangan Jalan: Principal Agent dan Collective Action sebagai Jalan Tengah Pemberantasan Korupsi di Indonesia*, Salus Cultura: Jurnal Pembangunan Manusia dan Kebudayaan, **2**, 1, 69–80, (2022), doi: 10.55480/saluscultura.v2i1.47
51. Handayani W., Mulyaningsih S., Widayati W., *Community Empowerment School Closure Localization Dolly in Kelurahan Putat Jaya Sawahan Surabaya*, Engagement: Jurnal Pengabdian Kepada Masyarakat, **1**, 2, 210–217, (2017), doi: 10.29062/engagement.v1i2.16