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Evaluation of the Maggot Cultivation Labour Intensive Program Using the CIPP Model

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Abstract. Poverty remains a major socioeconomic challenge in Indonesia, requiring effective and sustainable intervention programs. One initiative implemented by the Surabaya City Government is the Maggot Cultivation Labour Intensive Program, designed to generate employment opportunities while supporting community-based economic empowerment. This study evaluates the implementation of the program in Krembangan District using the Context, Input, Process, Product (CIPP) evaluation model. A descriptive qualitative approach was employed through interviews, observations, and document analysis involving program stakeholders and beneficiaries. The findings indicate that, from the context perspective, the program addresses local needs in areas characterized by relatively high unemployment and poverty. However, the input evaluation reveals limited community participation, inadequate facilities and infrastructure, and insufficient availability of raw materials. Process evaluation identifies weaknesses in stakeholder coordination, inconsistent monitoring, and technical implementation that has not yet achieved expected production targets. Product evaluation demonstrates that the program has not significantly improved participants' income or economic independence, while diversification of business outcomes remains limited. Overall, although the program shows relevance as a poverty reduction strategy, its effectiveness is constrained by institutional, technical, and participatory challenges. Strengthening stakeholder collaboration, improving resource provision, enhancing capacity-building activities, and establishing more consistent monitoring mechanisms are recommended to increase program sustainability and maximize its contribution to local poverty alleviation.

Keywords: CIPP Model; Labour Intensive; Maggot Cultivation

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INTRODUCTION

The Covid-19 pandemic that occurred throughout the world, including Indonesia, caused problems that occurred in various sectors, including the socio-economic sector. One of the main effects of the pandemic has been the rise in unemployment and poverty. According to the Central Statistics Agency (BPS) in 2020, the national poverty rate reached 10.19% of the total population, or around 27.55 million people (Central Statistics Agency, 2021). This represents a significant surge compared to previous years, which shows how much impact the pandemic has had on people's socioeconomic conditions. However, going into 2024, the situation is starting to show improvement. BPS noted that the national poverty rate decreased to 8.57%, or about 24.06 million people (Central Statistics Agency, 2024). This decline is the result of various efforts made by the government to eradicate poverty rates through various poverty alleviation programs with effective affirmative policies and redistribution.

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Fatmawati (2022) stated that the government, both at the central and regional levels, has issued various programs and policies to eradicate poverty. A number of regions in Indonesia have actively implemented various programs to alleviate poverty problems, one of which is the city of Surabaya. The city of Surabaya is ranked 36th out of 38 cities/districts in East Java in terms of the percentage of poor people, with a figure of 4.72%. Although this figure shows that Surabaya has a relatively low poverty rate compared to other areas in the province, the absolute number of poor people in the city remains significant. This is due to the high population in Surabaya as the second largest metropolitan city in Indonesia after Jakarta (Izzah & Hertati, 2024).

Based on the data from Badan Pusat Statistik Surabaya City, it shows that the poverty rate in the city of Surabaya will increase in 2021, namely 5.23% or around 152,489 people. This figure is up compared to 2020 which was recorded at 5.02% or around 145,674 people. However, the trend began to show a decline in the following years. In 2022, the poverty rate decreased to 4.72% or around 138.21 thousand people, then fell again in 2023 to 4.65% or around 136.37 thousand people. A significant decline occurred in 2024, where the poverty rate was recorded at 3.96% or around 116.92 thousand people. This decline reflects the success of various strategic efforts made by the Surabaya City Government in overcoming poverty. Through the implementation of various poverty alleviation programs, the government has succeeded in gradually reducing the poverty rate from 2022 until now.

One of the poverty alleviation programs issued by the Surabaya City Government under the leadership of Mayor Eri Cahyadi is the Labour-intensive Program (Mahendra & Rahaju, 2024). In supporting the implementation of this labour-intensive program, the Surabaya City Government published Surabaya Mayor Regulation No. 83 of 2023 as regards the Labour-intensive Programme, which strengthens the legal basis for its implementation. Based on Surabaya Mayor Regulation No. 83 of 2023, The Labour Intensive Program is a community empowerment activity carried out by involving poor families in productive activities by utilizing local natural resources, labor and technology in order to reduce unemployment and poverty, as well as increase income and maintain people's purchasing power. To date, the implementation of the Labour Intensive Program has reached 14 sub-districts with a total of 34 labour-intensive houses that have been established.

Krembangan District is one of the areas in the city of Surabaya that has implemented the labour-intensive program through the establishment of the Krembangan Solid Karya House. The business unit run at this place operates in the field of maggot cultivation, namely larvae from black army flies *(Black Soldier Fly/BSF).* The Labour Intensive Program implemented in

Krembangan District is an initiative to reduce poverty rates in the region. This is based on data from the Surabaya City Social Service which shows that Krembangan District is included in the 10 sub-districts with the highest number of poor people in the city of Surabaya. In 2023, the number of poor people in Krembangan District will increase to 11,512 people, from the previous 9,481 people in 2022. Based on the data from Surabaya City Social Service in 2023 that, the increasing poverty rate in Krembangan District is caused by some people who do not have or do not have jobs. As a result, the labor-intensive program implemented in Krembangan District has not run optimally to reduce poverty rates (Mahendra & Rahaju, 2024). Apart from that, income from labor-intensive houses in Krembangan District is among the lowest compared to all labor-intensive houses in the city of Surabaya.

The income obtained by the Surabaya City labor-intensive House in Krembangan District is among the lowest in Krembangan District, namely IDR 500,000- IDR 800,000. The implementation of the Maggot Cultivation Solid Work program in Krembangan District also faces several obstacles, among others : The number of available workers has not yet reached the minimum figure expected, namely between 4 and 6 people, it is known that the number of workers at Rumah Padat Karya Krembangan at the start of the program implementation was 12 people, but now only 2 workers remain, so this shows that community participation is still very low, the income obtained so far has not reached four million rupiah per month, however, it is only in the range of IDR 500,000 to IDR 800,000, making it the lowest income of the total labor density in the city of Surabaya, lack of coordination and support from several parties in the labor-intensive program of Krembangan District and lack of commodities other than maggot cultivation causing limited variety of products produced so that opportunities can increase income and attract public interest in improving the program.

The urgency of this research stems from the persistent socio economic impacts of the Covid-19 pandemic, which have exacerbated poverty and unemployment, especially among vulnerable urban populations. Although national poverty rates have shown a gradual decline, localized data indicate uneven recovery. From the obstacles above, it can be concluded that the implementation of a labor-intensive maggot cultivation program in Krembangan District still requires continuous improvement. This shows that evaluation is needed to ensure that the implementation of the labor-intensive maggot cultivation program in Krembangan District can run optimally in reducing the poverty rate (Mahendra & Rahaju, 2024). Carrying out a thorough evaluation of the implementation of the program is crucial in order to identify factors that support or hinder its success, so as to formulate a more effective strategy to ensure the long-term

sustainability and success of this program. Therefore, a timely and in-depth evaluation is essential to optimize the program's role in addressing urban poverty. The findings of this study are expected to serve as a valuable reference for policymakers in designing more adaptive and impactful poverty alleviation programs, not only for Surabaya but also for other cities with similar socio-economic challenges.

The novelty of this research lies in its focus on evaluating the implementation of the Maggot Cultivation Labor-Intensive Program in Krembangan District as a poverty alleviation strategy in urban areas during the post-Covid-19 recovery period. This study employs a comprehensive evaluation framework using the CIPP model (Context, Input, Process, and Product) developed by Stufflebeam in (Eny Winaryati, 2021), which is rarely applied in similar research, particularly within the context of community empowerment through alternative, sustainable livelihoods such as maggot farming. The uniqueness of this study lies in its specific location, Krembangan District in Surabaya City, which ranks among the ten districts with the highest poverty rates in the city, despite being part of a metropolitan area. This research specifically reveals various implementation challenges, such as low community participation, a lack of an active labor force, low income generated from the program, and weak coordination and product diversification. These findings provide a new perspective on the importance of conducting localized evaluations of poverty reduction programs in urban areas with complex socio-economic characteristics. This study also contributes to enriching the literature on socio-economic policy evaluation by introducing an innovative approach to maggot cultivation as a productive alternative sector, which has received little attention in previous public policy and community empowerment studies.

METHODS

Researchers used descriptive qualitative research methods. This method is a research procedure that produces data in descriptive form, in the form of written words from the object being studied. The qualitative approach aims to explore and understand the meaning given by individuals or groups to social and human phenomena. The research process includes the development of questions and procedures that develop over time, data collection which is usually carried out in a participant environment, inductive data analysis which is arranged from specific things to more general themes, and the researcher's interpretation of the meaning of the data obtained (Craswell, 2018).

The research conducted by the author focuses on a detailed description of the evaluation of the Surabaya City Labor-Intensive Program in an effort to eradicate poverty (Study of the Maggot Cultivated Labor-Intensive Program, Krembangan District). Therefore, descriptive

qualitative research was chosen because it can provide a systematic, fact-based and accurate picture of issues developing in society.

RESULTS AND DISCUSSION

Results and discussion of research regarding the Evaluation of Maggot Cultivation Solid Work Programs in Poverty Alleviation Efforts which was studied through the CIPP evaluation model theory (Context, Input, Process, Product) developed by Stufflebeam in (Eny Winaryati, 2021) namely:

Evaluation Context

Stufflebeam revealed that the essence of context evaluation is a very important first step in assessing the feasibility and relevance of the program in (Eny Winaryati, 2021). In research by (Rama et al., 2023) points out that this evaluation is carried out by identifying the background, targets, problems, needs, available resources and support from the surrounding environment. Based on research results, Krembangan District is one of the areas with the highest number of poor people in the city of Surabaya. This happens because most people in this region work in the informal sector such as scavengers, pedicab drivers, day laborers, motorbike taxis, and street vendors, with uncertain incomes. Other factors such as low levels of education also exacerbate this condition. Therefore, various efforts are made through various poverty alleviation programs with effective affirmative and redistribution policies.

One of the poverty alleviation programs issued by the Surabaya City Government under the leadership of Mayor Eri Cahyadi is the Labor Solid Program (Mahendra & Rahaju, 2024). Labor-intensive programs are implemented as the government's effort to respond to high poverty and unemployment rates in several regions. The labour-intensive programmes implemented refer to Surabaya Mayor Regulation No. 83 of 2023 which aims to eradicate poverty, apart from that, it also creates jobs, empowers the poor and encourages economic independence. The labor-intensive program in Krembangan District chooses the type of maggot cultivation based on the results of local potential analysis. This area produces quite an abundant volume of organic waste and it has been found that there are groups of people who have cultivated maggots, but on a home scale and with limited facilities and infrastructure. However, the problem arises in terms of human resources, namely the decrease in the number of workers involved from 12 to only 2, due to internal and external conflicts, resulting in a heavy workload and resulting fatigue. In addition, there is sometimes a shortage of maggot feed materials even though the supply of organic waste is abundant, and they have collaborated with the market and catering entrepreneurs, so assistance from the Environmental Service is needed to add feed materials.

The results show that the program is quite appropriate in answering the background of the problem, and is relevant to the needs and potential of the existing region, so that it is in line with the program objectives. This is in line with opinion Eny Winaryati (2021) which states that context evaluation aims to assess the rationality of objectives, program background, and analysis of basic program needs. However, the implementation of this programme has not been optimal because it still faces several obstacles, namely a low level of community participation and a shortage of raw materials for maggot cultivation.

Input Evaluation

Referring to the Stufflebeam evaluation model which states that input evaluation consists of several components that support the implementation of a program which includes human resources, budget, facilities, and infrastructure, as well as various procedures or those required in (Eny Winaryati, 2021). Based on the research results, it shows that this program is implemented by the Surabaya City and Krembangan District Environmental Service as program supervisor, the Indonesian Young Entrepreneurs Association (HIPMI) as a support for funds and markets products and workers involved in maggot cultivation.

The participation of the community involved in the labor-intensive maggot cultivation program in Krembangan District can be said to be very low, namely at the beginning of the program implementation there were 12 people, but now only 2 people remain due to internal and external conflicts, resulting in non-optimal program implementation. In line with opinion Annisa et al. (2023) that participation from the community is important in the success of the program, without active involvement from the community the programs will not run optimally. Budget support for the labor-intensive maggot cultivation program in Krembangan District comes from Cipta Karya through the State Revenue and Expenditure Budget (APBN). However, budget allocations are less than optimal in meeting operational needs, so assistance is needed from other parties, namely the Indonesian Young Entrepreneurs Association (HIPMI), for additional funds and to cover the lack of operational funds so that the program can run optimally and sustainably. In accordance with what was stated by Annisa et al. (2023) that the implementation of the programme necessarily requires the support of adequate budgetary allocations, without sufficient budgetary allocations, gives rise to the fact that the programme cannot operate optimally.

Apart from that, the facilities and infrastructure used can be said to be still not completely adequate. Because the number of tools and materials used is still limited. Apart from that, there are also facilities and infrastructure that are not in accordance with the SOP created by the

Surabaya City Environmental Service. In accordance with what was stated by Annisa et al. (2023) that the implementation of the program is supported by available and adequate facilities and infrastructure, without this support the program will experience operational problems, decreased effectiveness and goals will not be achieved. However, it also experiences problems related to the availability of organic waste as maggot feed. Although cooperation has been carried out with the market and entrepreneurs catering as well as a fairly abundant supply of organic waste, but sometimes experiencing problems related to lack of feed ingredients, which has an impact on crop yields.

The final resource, which is used to support the implementation of the Krembangan District maggot cultivation labor-intensive program, is skills improvement through training and coaching. This training is held by the Surabaya City Environmental Service for 2-3 weeks, with the aim of making the public understand and master good and correct maggot cultivation techniques according to standards. The results show that the program still faces a number of significant limitations, especially low community participation and limited facilities and infrastructure that are inadequate and in accordance with standards. So improvements are needed so that the program can run effectively and efficiently.

Evaluation Process

In the context of evaluating the CIPP model program, Stufflebeam explained that process evaluation emphasizes how a program is implemented, starting from the planning, implementation and internal monitoring stages (Eny Winaryati, 2021). Based on the research results, it shows that the Maggot Cultivation Labour intensive Program in Krembangan District, at the implementation process stage, has been designed through quite systematic stages, starting from identifying socio-economic problems in the local community, then continuing with collaborative program planning with the parties involved.

The planning process mechanism is implemented quite well. This can be seen from the joint deliberation between sub-districts, sub-districts, the Environmental Service (DLH), as well as supporting partners such as HIPMI in determining the direction and technical implementation of the program. The choice of maggot cultivation as a major commodity is also based on regional potential and sustainability considerations. However, during the implementation phase of the programme, various challenges were found that had an impact on the effectiveness of the programme. One of the main obstacles is lack of coordination between the parties involved. The lack of coordination and limited communication forums between the Environment Service, sub-districts, sub-districts and workers has led to miscommunication and delays in the submission of

information, including regular reports. This has had a direct impact on the slow response to various technical issues on the ground.

In addition, yields that do not match targets become a serious problem in the implementation stage. Based on data, the maggot harvest obtained ranges from 50–80 kg per harvest period, while the target from the Surabaya City Environmental Service is 100 kg. This mismatch is caused by several factors such as limited facilities and infrastructure, lack of lighting, and disturbances from animals such as mice which interfere with the cultivation process. As a result, income obtained from harvests also decreased. As a form of solution, the sub-district together with the Environmental Service have tried other alternatives through catfish farming which uses maggots as feed. However, these diversification efforts failed due to the still unfamiliar market resistance to the use of maggots as feed.

In the supervisory aspect, this program has implemented regular monitoring and evaluation mechanisms. Monitoring is carried out weekly by the sub-district and reported to the sub-district, while the Environmental Service carries out monitoring every three months. However, monitoring and evaluation are considered still not optimal because most of the implementation is carried out indirectly and there is minimal follow-up. This happens because the lack of direct involvement of the Environment Service in supervision in the field is one of the causes of weak control and rapid handling of problems. The results show that even though the program implementation mechanism has been designed systematically, there are still several obstacles faced, such as monitoring and evaluation which are not yet optimal, lack of coordination between the parties involved and mismatch of harvest targets. which hinders optimal achievement of program goals.

Evaluation Products

Stufflebeam by (Eny Winaryati, 2021) posits that product or outcome evaluations are used to assess the extent to which the final objectives of the programme can be achieved, including their impact on improving public welfare. Based on the research results, it shows that this evaluation leads to the main achievement in the form of increasing the income of the poor as an effort to create economic independence for the poor.

The programme has not yet fully succeeded in achieving the targets set. This is due to the low income earned by workers involved in the labor-intensive maggot cultivation program in Krembangan District, which is around Rp. 500,000 to IDR 800,000 per month. This amount is still far from the minimum standard set by the Surabaya City Government, namely IDR 4,000,000 per month. This condition shows that the program has not been able to make a significant contribution to improving the standard of living of the poor, and is even considered to be very

limited in helping meet basic daily needs. As a sustainability effort, the Krembangan District and the Environmental Service are trying to formulate alternative solutions through plans to increase commodity variations**,** is chicken cultivation**.** However, this effort is still under discussion and has not been realized due to previous experiences of failure in catfish cultivation which also aims to increase income. The results show that this program has not been able to provide a significant increase in income or create economic independence for poor communities and the limited variety of businesses also shows the lack of alternative economic development that can increase competitiveness.

CONCLUSION

The context evaluation indicates that the program aligns with the needs of the local community, particularly those facing high levels of unemployment and poverty. However, its implementation has not been optimal due to several challenges, such as low community participation and limited material resources.From the input perspective, there are several significant weaknesses, especially in terms of low community involvement, inadequate and substandard facilities and infrastructure, as well as insufficient availability of essential material inputs required for maggot cultivation. Regarding the process evaluation, the coordination among relevant institutions remains weak, harvest targets are not being met, and monitoring and evaluation activities have not been carried out consistently or in a structured manner. Furthermore, in terms of product evaluation, the program has not yet succeeded in significantly increasing participants' income or fostering their economic independence. The limited range of developed businesses also highlights a lack of alternative economic initiatives that could enhance the competitiveness and sustainability of the program in the future.

These findings suggest that the success of the labor-intensive maggot cultivation program is not only determined by its alignment with community needs but also heavily depends on the availability of adequate inputs, the effectiveness of cross-sectoral coordination, and the continuous strengthening of program outcomes and impacts. Therefore, strategic measures are needed, such as increasing community participation through empowerment-based approaches, improving infrastructure and provision of production facilities, optimizing coordination among stakeholders, and diversifying economically valuable cultivation outcomes. With these improvements, the program has the potential to serve as a model for community empowerment that is not only environmentally friendly but also economically and socially sustainable in urban areas.

REFERENCE

Annisa,P., Sunarmi,S., Sobri,A. (2023). Evaluation of Teaching Campus Programs with Models *Context, Input, Process, Product* (CIPP). *JAMP: Journal of Educational Administration and Management*, 6(3), 247–262.

Central Statistics Agency. (2021). *Percentage of Poor Population September 2021* . https://www.bps.go.id/id/pressrelease/2022/01/17/1929/persentase-penduduk-miskin-september-2021-turun-menjadi-9-71-persen.htmlhttps://www.bps.go.id/id/pressrelease/2022/01/17/1929/persentase-penduduk

Creswell, J. (2018). *Qualitative Research & Research Design. Choosing between Five Approaches. Ahmad Lintang Lazuardi's translation.* Yogyakarta: Student Library.

Dr. Eny Winaryati, M. P. (2021). *Evaluation Models, Applications And Combinations*. Bandung: KBM INDONESIA.

Dr. Fatmawati, M. A. & Ade. Sofyan. M. M. A. (2022). *Analysis of Poverty Problems and Social Policy*. Jakarta: PT Raja Grafindo Persada.

Izzah, Z., & Hertati, D. (2024). Implementation of the Labor-Intense Program in Reducing Unemployment in the City of Surabaya: An Analysis Based on David C's Model. Corten. *NeoRespublica : Journal of Government Science*, *6*(1), 91–100. https://doi.org/10.52423/neores.v6i1.316

Kamil, M. G. & Artiningsih. A. (2024). Evaluation of Poverty Alleviation Policies in Suruh District, Semarang Regency. *PWK Engineering (City Area Planning)*, *13*(1).

Mahendra, D. A. . & Rahayu. T. (2024). Implementation of labor-intensive programs in Krembangan District, Surabaya City. *Journal of Public Sector Innovation*, *4*(2). https://doi.org/10.38156/jisp.v4i2.253

Surabaya Mayor Regulation Number 83 of 2023 concerning Labor Intensive Programs in the City of Surabaya.

Rama, A., Ambiyar, A., Rizal, F., Jalinus, N., Waskito, W., & Wulansari, R. E. (2023). Concept of Context, Input, Process and Product Evaluation Model (CIPP) in Vocational High Schools. JRTI (Indonesian Action Research Journal), 8(1), 82.

Setiawan, M. Y. A. . & Megawati. S. (2022). Evaluation of Cash Solid Work Policies in Pekarungan Village, Sukodono District, Sidoarjo Regency. *Publica*, 665–680.