WBP Food Project for Sustainable Reintegration: Strengthening Food Security, Human Rights, and Prisoners' Resilience in Support of the SDGs

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Abstract

Correctional institutions play a role not only in restricting liberty but also in preparing prisoners for social reintegration. This paper examines the WBP Food Project at Banyumas Class IIB Detention Center, Indonesia, which integrates urban farming, Black Soldier Fly (BSF) maggot cultivation, and laying-hen farming through organic resource utilization. Using a socio-legal approach based on programme documentation and relevant literature, the study examines the project's potential contribution to food security, human rights protection, and correctional rehabilitation. The analysis considers human dignity, non-discrimination, meaningful participation, occupational safety, and skill development. It argues that the project's primary significance extends beyond food production: productive activities can serve as opportunities for prisoners to develop practical competencies, discipline, responsibility, cooperation, and self-reliance. These capacities are essential to preparing individuals for life after release and may support their social reintegration. However, such benefits depend on meaningful participation, appropriate guidance, and the protection of prisoners' rights; they cannot be assumed from participation alone. By positioning prisoners as active participants in their own development rather than merely as institutional labor, the project illustrates the potential of productive initiatives to connect sustainable food production with rehabilitative objectives. It is also relevant to SDGs 2, 8, 10, 12, and 16.

Keywords: prisoners' resilience; sustainable reintegration; food security; human rights; correctional empowerment; SDGs

I. INTRODUCTION

Correctional institutions are commonly associated with the deprivation of liberty as a consequence of criminal conduct. However, imprisonment is not solely intended to restrict individual freedom. Contemporary correctional systems increasingly recognize the importance of rehabilitation and social reintegration, whereby prisoners are prepared to return to society as independent, responsible, and productive individuals.(Negi et al., 2026)(Snacken et al., 2022) This perspective places human dignity and the development of prisoners' capacities at the center of correctional practice. In Indonesia, this approach is reflected in Law Number 22 of 2022 concerning Corrections, which recognizes correctional guidance and the fulfillment of prisoners' rights as integral aspects of the correctional system. Similarly, the United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules) emphasize the importance of rehabilitation, vocational training, and preparation for social reintegration. Accordingly, correctional institutions are expected not

only to maintain security and order but also to create opportunities for prisoners to develop skills, strengthen self-reliance, and prepare for life after release.(UNODC, 2012)

Rehabilitation should extend beyond behavioral guidance and institutional discipline. It should also provide prisoners with opportunities to develop practical competencies, personal responsibility, cooperation, and self-reliance that may support their lives after release. These capacities are important because social reintegration requires more than the completion of a sentence; it involves the ability to adapt to social environments, pursue productive activities, and establish an independent livelihood. In this regard, correctional programs that incorporate meaningful productive activities may offer opportunities for prisoners to acquire practical experience and strengthen their readiness to return to society.

In this regard, productive initiatives within correctional institutions may provide opportunities to translate rehabilitation objectives into meaningful activities that support prisoners' personal and practical development. One example is the WBP Food Project implemented at the Banyumas Class IIB Detention Center, Indonesia. The project integrates urban farming, Black Soldier Fly (BSF) maggot cultivation, and laying-hen farming as productive activities within the correctional environment. Beyond supporting food production and institutional food security.(Viana et al., 2022) the project provides a context for examining how participation in such activities may contribute to prisoners' personal development, practical competencies, and self-reliance. Its significance therefore extends beyond its productive outputs to its potential contribution to prisoners' preparation for social reintegration.

The significance of such initiatives can also be understood within the broader framework of the United Nations Sustainable Development Goals (SDGs). In particular, SDG 2 emphasizes food security and sustainable food production, while SDG 8 highlights the importance of productive activities and opportunities for skills development. SDG 10 further addresses social inclusion and the reduction of inequalities, which are particularly relevant to prisoners' preparation for reintegration into society. Meanwhile, SDG 12 promotes responsible consumption and production, and SDG 16 emphasizes the development of inclusive, accountable, and effective institutions. These goals provide a broader perspective for understanding how productive initiatives within correctional institutions may contribute not only to institutional sustainability but also to human development and social inclusion.

Nevertheless, the implementation of productive activities within correctional institutions also raises human rights considerations that extend beyond their intended outcomes. Such initiatives must ensure that prisoners' participation respects human dignity, is conducted fairly, and provides meaningful opportunities for personal and practical development. Attention should also be given to occupational health and safety, as well as the transparent and equitable management of program outputs. More fundamentally, prisoners should not be treated merely as sources of labor for institutional production. Rather, their participation should form part of a rehabilitation process that recognizes them as rights-bearing individuals and respects their fundamental rights.(Negi et al., 2026) International standards concerning the treatment of prisoners similarly emphasize humane treatment, meaningful activities, and preparation for release and reintegration into society.

Although existing scholarship has established the importance of both sustainable food systems and correctional rehabilitation, these areas are generally examined through different analytical lenses.(Listiana et al., 2021) Studies on sustainable food production emphasize food security, resource efficiency, waste utilization, and environmental sustainability, while studies on correctional rehabilitation focus more heavily on vocational training, behavioral development, and preparation for social reintegration.(Heldiora Silva Simamora & Janpatar Simamora, 2024) Meanwhile, discussions concerning prisoners' rights emphasize human dignity and humane treatment, but are less frequently connected to the potential role of

productive initiatives in developing prisoners' personal capacities and practical competencies. This creates a need for further examination of how food-based initiatives within correctional institutions may contribute to prisoners' development and self-reliance as part of their preparation for social reintegration, while remaining attentive to the protection of their fundamental rights.

The WBP Food Project at the Banyumas Class IIB Detention Center, Indonesia, provides a relevant context for examining this intersection. The project integrates urban farming, BSF maggot cultivation, and laying-hen farming within a food-production system that seeks to utilize available resources and organic waste. Beyond its potential contribution to food production, the project provides prisoners, or Warga Binaan Pemasyarakatan (WBP), with opportunities to participate in practical activities intended to support the development of discipline, responsibility, cooperation, technical skills, and self-reliance. Its significance therefore lies not only in the quantity of food produced, but also in its potential contribution to the broader objectives of rehabilitation and reintegration.

Against this background, this study addresses the following central research question: **How can the WBP Food Project contribute to prisoners' personal development, practical competencies, and self-reliance as part of their preparation for social reintegration?** This question examines the potential rehabilitative value of productive activities within correctional institutions, particularly their capacity to provide opportunities for prisoners to develop skills and personal capacities relevant to life after release. It also considers the importance of protecting prisoners' rights and human dignity in the implementation of such initiatives.

The novelty of this study lies in its socio-legal examination of food-based empowerment as a potential instrument of correctional rehabilitation within the context of an Indonesian detention facility. Rather than focusing solely on the project's contribution to food production, resource utilization, and environmental sustainability, this study emphasizes its potential role in developing prisoners' personal capacities, practical competencies, and self-reliance as foundations for social reintegration. By incorporating a human rights perspective, the study also considers the importance of human dignity, non-discrimination, meaningful participation, and protection against exploitation in productive activities within correctional institutions. This perspective broadens the understanding of food-based initiatives beyond their productive outcomes to include their potential contribution to prisoners' development and preparation for life after release.

II. METHOD

This study employs a socio-legal approach to examine the potential contribution of the WBP Food Project to prisoners' rehabilitation and preparation for social reintegration. The approach emphasizes the social dimensions of correctional rehabilitation, particularly the development of prisoners' personal capacities, practical competencies, and self-reliance through participation in productive activities. Relevant legal instruments and human rights principles are incorporated as supporting frameworks to consider the protection of prisoners' rights and human dignity within such initiatives. Rather than measuring the actual outcomes of the program, the study focuses on examining its potential rehabilitative value and its relevance to prisoners' development and social reintegration.

The study relies on documentary research using existing sources, including relevant legal instruments, academic literature, institutional publications, and available documentation concerning the WBP Food Project. These materials provide the basis for understanding the project's objectives, main activities, and broader correctional context. The analysis focuses primarily on the potential contribution of productive activities to prisoners' personal

development, including discipline, responsibility, cooperation, practical skills, and self-reliance. It also considers relevant human rights dimensions, particularly human dignity, non-discrimination, occupational safety, meaningful participation, and protection against exploitation. Food security and sustainable resource management are considered as supporting dimensions, alongside the project's relevance to the Sustainable Development Goals (SDGs).

The collected materials are analyzed qualitatively through documentary and interpretive analysis. This process involves examining the relationship between the project's activities, the potential development of prisoners' capacities, and the broader objectives of correctional rehabilitation and social reintegration. Relevant legal and human rights principles are used to contextualize the analysis, while academic literature provides insights into the relationship between productive activities, personal development, and rehabilitation. Particular attention is given to distinguishing between the project's stated objectives, information available regarding its implementation, and potential contributions that can reasonably be discussed based on the existing literature and documentation. Accordingly, the study does not claim that the project has demonstrably improved prisoners' competencies or achieved successful social reintegration. Instead, it examines how the initiative may provide opportunities for prisoners' development and contribute to their preparation for life after release.

III. RESULTS AND DISCUSSIONS

A. Result

The WBP Food Project at the Banyumas Class IIB Detention Center integrates urban farming, Black Soldier Fly (BSF) larvae cultivation, and laying-hen farming within a food-production system. According to the available programme description, organic waste generated within the detention center is used for BSF larvae cultivation, with the resulting larvae utilized as an alternative poultry feed source and the residual materials potentially used as organic fertilizer for vegetable production. These activities connect organic-waste management with agricultural and livestock production. Previous studies have identified the potential of BSF larvae to convert suitable organic waste into biomass for animal feed and generate residual materials with potential fertilizer applications (Siddiqui et al., 2024)(Liu et al., 2022).

Warga Binaan Pemasyarakatan (WBP) participate in the operation and maintenance of the food-production activities, including plant cultivation, poultry management, BSF larvae cultivation, organic-waste handling, and maintenance of production facilities. According to the programme description, training and supervision are provided to support their involvement in these activities. The programme also incorporates production recording and activity evaluation as part of its operational framework. Thus, WBP not only do the work as a labor, but they enhancing their practical experience and skills.

The project generates several outputs, including vegetables, eggs, BSF larvae, and residual materials from BSF cultivation. Vegetables and eggs may contribute to food provision, while BSF larvae can serve as an alternative poultry feed source and suitable residual materials may be used as organic fertilizer. The actual utilization of these outputs depends on the programme's management practices, including whether they are consumed internally, reused in production, or distributed for other purposes. The utilization of these outputs connects the project's agricultural, livestock, and waste-processing activities. BSF larvae may serve as poultry feed, while suitable residual materials from cultivation may be used as fertilizer. Previous research has identified the potential of BSF processing to produce larval biomass and frass for animal feed and agricultural applications, although their suitability depends on the organic substrate and

processing conditions. (Basri et al., 2022) In the WBP Food Project, these applications provide a basis for resource reuse, but their actual implementation requires programme-specific evidence.

The programme description also identifies production recording and activity evaluation as components of its operational framework. When implemented consistently, these practices can help document the types and quantities of outputs generated, the materials used, and how the resulting products are utilized. Such records may also support the evaluation of production continuity and the identification of operational constraints. However, the availability and completeness of these records must be established through programme-specific documentation.

Overall, the WBP Food Project brings together agricultural production, poultry farming, and organic-waste processing through the participation of WBP. Its documented activities and outputs provide an overview of the programme's operational framework, including the roles of participants, the production processes, and the potential utilization of resulting materials.

B. Discussion

The WBP Food Project represents more than a collection of agricultural and livestock activities within a correctional institution. By integrating urban farming, Black Soldier Fly (BSF) larvae cultivation, and laying-hen farming, it establishes a production system in which organic waste can be converted into larval biomass for poultry feed, while residual materials may be reused as fertilizer for vegetable cultivation. This arrangement connects waste management with agricultural and livestock production, reflecting the potential of BSF-based bioconversion to recover resources from organic waste (Liu et al., 2022).

The significance of this system can be understood in relation to food security, which encompasses not only food availability but also access to sufficient, safe, and nutritious food and the stability of that access over time (Boliko, 2019). Within the Banyumas Class IIB Detention Center, vegetables and eggs produced through the project may provide an additional source of food to support institutional needs. However, the existence of food production alone does not establish an improvement in food security. Such an assessment would require information on production volumes, the distribution and utilization of outputs, and the continuity of supply. The project is therefore better understood as an institutional initiative with potential food-security benefits rather than a comprehensive solution to food insecurity.

The project also reflects principles of a circular bioeconomy through its attempt to recover and reuse organic resources. Organic waste serves as a substrate for BSF cultivation, the resulting larvae may be incorporated into poultry feed, and suitable residual materials may be returned to vegetable cultivation as fertilizer. Nevertheless, the effectiveness of this approach depends on the characteristics of the waste, the management of the cultivation process, and the suitability of the resulting materials. The presence of interconnected activities does not necessarily establish that the system is fully circular or environmentally sustainable. Evidence concerning the amount of waste processed, the actual reuse of resulting materials, and the reduction of external inputs or waste disposal would be necessary to assess its environmental contribution (Lopes et al., 2022).

The correctional setting adds a human-development dimension to this production model. Unlike agricultural initiatives primarily concerned with production efficiency, activities within correctional institutions also take place within a framework of guidance and rehabilitation. WBP participation in cultivation, poultry management, BSF

production, and organic resource management creates opportunities for practical engagement and learning. Research on prison horticulture has similarly identified potential benefits associated with structured gardening programmes, including outcomes related to health and well-being. In this context, the project's significance may extend beyond institutional food production to the opportunities it provides for participants to acquire practical knowledge and experience.

Maintaining an integrated production system requires continuity in cultivation, livestock care, waste management, and coordination across production activities. WBP involvement may therefore provide opportunities to practise these tasks and develop relevant knowledge. However, the acquisition of transferable skills depends on the quality of instruction, the duration and consistency of participation, and the responsibilities assigned to participants. The project's potential rehabilitative contribution should consequently be considered alongside its productive function, without assuming that participation automatically produces measurable improvements in competence or employment prospects.

The WBP Food Project is also relevant to the objectives of Sustainable Development Goals (SDGs) 2 and 12. Its cultivation and livestock activities correspond with SDG 2, which emphasizes food security, improved nutrition, and sustainable agriculture. Meanwhile, its use of organic waste and potential reuse of production residues relate to SDG 12, particularly the reduction of waste through prevention, recycling, and reuse (United Nations, n.d.). These connections demonstrate the project's relevance to sustainable food production and resource management at the institutional level. However, alignment with the SDGs should not be interpreted as evidence that the programme has independently achieved these goals. Its contribution would need to be assessed through documented production, resource recovery, and the continuity of these practices.

The rehabilitative significance of the WBP Food Project cannot be assessed solely through its productive activities or the outputs they generate. Although Warga Binaan Pemasyarakatan (WBP) experience restrictions on their liberty, they retain their fundamental rights and human dignity. The central consideration is therefore whether their participation is organized to protect their rights, develop their capacities, and support their preparation for social reintegration. This distinction is important in determining whether a productive programme functions as correctional rehabilitation or risks reducing participants to a source of institutional labor.

The project's activities create opportunities for WBP to engage with different stages of an integrated production system. When accompanied by appropriate training, supervision, and clearly defined responsibilities, participation may extend beyond task completion to support practical learning and the development of responsibility. This interpretation is consistent with the rights-based orientation of Indonesia's Law Number 22 of 2022 concerning Corrections, which recognizes guidance and the protection of prisoners' rights as integral aspects of the correctional system. It also corresponds with the United Nations Standard Minimum Rules for the Treatment of Prisoners, or the Nelson Mandela Rules. Rules 96–99 emphasize meaningful work, vocational training, the development of skills useful after release, and the principle that prisoners' vocational interests should not be subordinated to institutional profit (United Nations General Assembly, 2015). These standards provide a normative basis for assessing productive activities according to their correctional and developmental purposes, rather than institutional output alone.

Productive work and rehabilitation are not necessarily competing objectives. Agricultural and livestock activities may provide a structured setting in which WBP practise procedures, cooperate with others, assume responsibilities, and develop task-

related skills. However, these benefits do not arise automatically from participation. As Mantouvalou (2024) explains in her analysis of prison labor, work in correctional settings can support reintegration but may also create risks of exclusion and exploitation when participants' rights and interests are inadequately protected. The rehabilitative character of the WBP Food Project therefore depends on how responsibilities are assigned, whether learning is meaningfully supported, and whether participants' rights are respected.

Meaningful participation involves more than the physical presence of WBP in production areas or the completion of assigned tasks. It also requires opportunities to understand the activities being performed, learn relevant procedures, and assume appropriate responsibilities. Because the project connects cultivation, poultry management, BSF production, and organic resource utilization, it may expose participants to different aspects of the production process. The extent of this learning opportunity depends on the distribution of responsibilities, the quality of instruction, and the degree to which participants understand how their activities contribute to the wider system.

At the same time, participation must operate within legitimate correctional requirements, including institutional security, order, and supervision. Supervision is not inherently inconsistent with empowerment; when appropriately implemented, it can provide the structure necessary for safe and purposeful learning. The important consideration is whether supervision supports responsible participation and the development of competencies or focuses exclusively on controlling participants' labor. A rights-based approach therefore seeks to balance institutional requirements with opportunities for WBP to exercise responsibility within clearly defined limits.

Fair access to productive and training opportunities is another important dimension of rights-based rehabilitation. Where participation is selective, transparent and objective criteria can help ensure that task allocation considers individual capacities, training needs, and the requirements of particular activities. This does not necessarily mean that every WBP must perform every task. Rather, access to rehabilitative opportunities should be administered fairly and should not be shaped by arbitrary or discriminatory treatment.

Occupational safety and health must also remain central to programme implementation. Activities involving organic waste, BSF cultivation, poultry, agricultural equipment, and production facilities may present risks associated with hygiene, sanitation, material handling, and contact with animals or biological materials. Relevant instruction, suitable protective equipment, safe working procedures, and adequate supervision are therefore important safeguards. The Nelson Mandela Rules provide an international benchmark by emphasizing that prison work should not be afflictive and that prisoners must not be subjected to slavery or servitude (United Nations General Assembly, 2015). These principles reinforce the need to ensure that production objectives do not take precedence over the dignity, welfare, and safety of participants.

The management of programme outputs also raises questions of transparency and institutional accountability. Vegetables and eggs, as well as materials generated through BSF cultivation, require appropriate recording, utilization, and distribution. Clear management procedures can demonstrate how the outputs of productive activities are handled and whether their use corresponds with the programme's stated objectives. Transparency may also strengthen the educational dimension of participation by helping WBP understand how their tasks contribute to the wider production system. These considerations do not imply that WBP must control institutional resources; rather, they emphasize the importance of accountable management consistent with institutional procedures and applicable rights protections.

Overall, the project's potential as a form of rights-based correctional rehabilitation depends on more than its ability to generate food or utilize institutional resources. Training, meaningful participation, fair access, appropriate supervision, occupational safety, and accountable management shape whether productive activities support rehabilitation or remain primarily directed toward institutional production needs. The project should therefore be assessed not only through its productive outputs but also through the conditions under which WBP participate and the developmental opportunities available to them.

Beyond these productive and rights-based dimensions, the WBP Food Project provides a context for examining how food-based activities may contribute to prisoners' capacity development and preparation for social reintegration. Through vegetable cultivation, BSF larvae production, laying-hen farming, and organic waste utilization, WBP participate in activities that require continuity, responsibility, cooperation, and practical problem-solving. These characteristics are relevant to rehabilitation because they create opportunities to practise competencies that may support greater self-reliance. The project can therefore be understood as a practical learning environment in which productive activities may contribute to personal and practical development.

In this context, resilience should not be understood merely as the ability to endure incarceration. Rather, it concerns the capacity to adapt to challenges, maintain constructive engagement, and respond to changing circumstances. The project's routine activities may provide opportunities to practise these capacities through ongoing responsibilities. Vegetable cultivation requires regular maintenance, while BSF cultivation and poultry management involve monitoring, feeding, and maintaining appropriate conditions. Such activities connect daily responsibilities with longer-term production outcomes. Nevertheless, participation alone does not establish measurable improvements in resilience. Demonstrating such outcomes would require further evidence, including participant accounts, observations over time, or appropriate assessments.

The rehabilitative relevance of these activities is consistent with the Nelson Mandela Rules. Rules 4, 96, and 98 emphasize rehabilitation, useful work, and vocational training that can help prisoners develop the capacity to earn a living after release (United Nations General Assembly, 2015). These principles position productive activities as potentially valuable when they contribute to personal development and preparation for life beyond detention. Accordingly, the significance of the WBP Food Project lies not only in the tasks performed or products generated but also in the opportunities it creates for WBP to practise responsibility, acquire practical knowledge, and develop competencies that may be useful in their future lives.

Capacity development is also reflected in the interconnected nature of the project's production system. Engagement with organic waste processing, BSF cultivation, poultry management, and vegetable production may expose participants to practical approaches to resource recovery and integrated food production. The potential learning value therefore extends beyond individual tasks to an understanding of how different activities relate to one another. Such experience may contribute to resource-management knowledge and practical problem-solving abilities. However, the extent of learning depends on the instruction provided, the responsibilities assigned, and the duration and consistency of participation.

The project's relevance to sustainable development further connects technical learning with environmental awareness. SDG 2 emphasizes food security, improved nutrition, and sustainable agriculture, while Target 2.4 specifically promotes sustainable food production systems and resilient agricultural practices (United Nations, n.d.). The WBP Food Project reflects principles compatible with these objectives through its

combination of cultivation, livestock management, and organic resource utilization. For participating WBP, these activities may provide opportunities to understand the relationship between productive practices, resource efficiency, and environmental sustainability. Nevertheless, alignment with sustainable development objectives does not, by itself, demonstrate increased participant resilience or successful reintegration.

The continuity of participation is particularly relevant to the development of practical competencies. Unlike one-time instructional activities, agricultural and livestock production requires knowledge to be applied repeatedly under changing conditions. Through consistent participation, WBP may gain experience in following procedures, identifying operational difficulties, and adjusting their actions to meet production needs. These experiences may support practical competence and work-related habits, although their longer-term value depends on whether participants can retain and apply what they learn beyond the institutional setting.

The collective nature of the project may also create opportunities to develop social capacities. Maintaining cultivation areas, caring for poultry, managing organic waste, and coordinating production activities can require communication, cooperation, and shared responsibility. These experiences may allow participants to practise working with others toward common objectives. Research on prison-based horticultural programmes has identified potential benefits related to skills development, work preparedness, social interaction, and relationships within correctional settings (Farrier et al., 2019). Although these findings provide a useful comparative basis, differences in programme settings and implementation mean that they do not establish the same outcomes among WBP participants in Banyumas.

These technical and social capacities are relevant to sustainable social reintegration because preparation for release involves more than acquiring a specific vocational skill. Individuals may also need to establish constructive routines, cooperate with others, assume responsibilities, and adapt to expectations in workplaces and communities. The WBP Food Project may provide a setting in which some of these capacities can be practised before release. Its potential contribution is therefore preparatory: participation may create experiences and competencies useful in community life, but it does not guarantee employment, economic independence, social acceptance, or reduced recidivism.

The distinction between capacity development and actual reintegration is particularly important. Research on correctional education and vocational programmes suggests that such interventions may support post-release outcomes, although their effects vary according to programme design, implementation, and the outcomes measured. Stickle and Schuster (2023), in a meta-analysis of prison education programmes, identified generally positive effects on recidivism, employment, and wages, while also noting variation across programme types. In contrast, McNeeley (2023) found no significant differences in employment or recidivism outcomes associated with vocational certification in the study examined. These findings indicate that participation in training should not automatically be treated as proof of successful reintegration. For the WBP Food Project, a more defensible conclusion is that the programme may contribute to practical and behavioral capacities that could support reintegration, while longer-term outcomes require separate evaluation.

The potential livelihood relevance of the skills developed through the programme also warrants attention. Experience in vegetable cultivation, poultry management, BSF cultivation, and organic waste processing may provide a foundation for further vocational learning or related productive activities after release. Likewise, experience in maintaining routines, following procedures, and cooperating with others may be

relevant to work readiness. However, the transferability of these competencies depends on the quality of instruction, the relevance of the skills to opportunities available in the community, and participants' access to resources needed to apply them. Post-release employment and self-reliance may also depend on external conditions, including access to further training, employers, family and community support, and opportunities to establish a livelihood. The programme should therefore be understood as one potential component of a broader reintegration process rather than a standalone solution to social and economic challenges.

Participation in productive activities may also provide WBP with opportunities to experience themselves as contributors to a shared institutional undertaking. By taking part in activities that produce food and support resource utilization, participants can assume roles involving practical contribution, learning, and responsibility. This may create opportunities to develop a sense of competence and recognize the value of their efforts. Such possibilities are consistent with the rehabilitative emphasis of the Nelson Mandela Rules on self-respect, responsibility, and preparation for self-support after release (United Nations General Assembly, 2015). Nevertheless, claims about changes in self-esteem, identity, or personal motivation would require support from participants' own accounts or other relevant empirical evidence.

Overall, the WBP Food Project illustrates the potential to connect food production, environmental resource management, vocational learning, and human development within a correctional institution. Its contribution to capacity development lies in the opportunities it creates for WBP to practise technical tasks, maintain productive routines, cooperate with others, and assume responsibility. These experiences may support competencies relevant to resilience, self-reliance, and future social reintegration. However, their effects depend on the quality and continuity of participation, the relevance of the skills acquired, and the availability of opportunities to apply them after release. The programme is therefore best understood as a potential contributor to a broader rehabilitative process, with its longer-term significance requiring further evidence of learning, skill retention, and post-release experiences.

IV. CONCLUSION

The WBP Food Project at the Banyumas Class IIB Detention Center demonstrates an integrated approach to food security and correctional rehabilitation through its implementation of urban farming, Black Soldier Fly (BSF) maggot cultivation, and laying-hen farming. Its contribution to food security is reflected in the production of vegetables and eggs, while the integration of organic kitchen waste into BSF cultivation and the use of its residual material as fertilizer provide evidence of resource efficiency and sustainable food production. The development of WBP skills and self-reliance is supported by their involvement in practical food-production activities that require knowledge and routine management, as identified through the research data, while the findings concerning participation, responsibility, and cooperation indicate the program's rehabilitative dimension. Furthermore, the provision of meaningful productive activities within the correctional setting can be related to human dignity and preparation for social reintegration, although the study does not claim to measure long-term post-release outcomes. Overall, the findings indicate that the WBP Food Project serves as a practical mechanism for connecting food production, sustainable resource utilization, skills development, and correctional rehabilitation, thereby demonstrating its relevance to SDG 2 on Zero Hunger and sustainable agriculture and SDG 16 on inclusive, peaceful, and accountable institutions.

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