

EFFECTIVENESS OF COLLABORATIVE CLASS PROGRAM FOR CIVIL SERVANTS TOWARD SUSTAINABLE DEVELOPMENT GOALS

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Abstract: Disparities in the quality of civil servants between developed and underdeveloped regions remain a structural problem in Indonesian governance, particularly in the Central Highlands of Papua, where access to higher education is limited. This study aims to analyse the effectiveness of the Collaborative Class Programme, run by the Tolikara Regency Government in collaboration with Cenderawasih University, in strengthening the capacity of civil servants through structured undergraduate, master's and doctoral education. The study will also examine the programme's contribution to achieving the Sustainable Development Goals. A qualitative case study design with an interpretive paradigm was employed for the study, and data were collected through the analysis of documents and archives containing policy documents, official releases, and programme administration data for the 2025–2026 period. These data were selected purposively and analysed thematically through condensation, display, and conclusion drawing. The main findings show that programme effectiveness rests on four dimensions: accurate targeting of active civil servants; suitability of blended learning for the geographical context; curriculum alignment with local bureaucratic needs; and institutional sustainability through the planned establishment of an off-campus study programme. The findings suggest that a partnership between the local government and university is a strategic instrument for accelerating sustainable development, as it strengthens local bureaucratic capacity and contributes directly to quality education, decent work, reduced inequalities, strong institutions and partnerships for achieving the goals.

Keywords: Collaborative Class; Civil Servants; Capacity Building; Government-University Partnership; Sustainable Development Goals

INTRODUCTION

The development of government capacity through higher education has long been recognised as a fundamental prerequisite for effective governance and sustainable development. Cross-country studies show that investment in bureaucratic human capital correlates positively with the quality of public services and development outcomes. The Republic of Korea's experience demonstrates that the early institutionalisation of civil servant training systems formed the basis for the transformation of the bureaucracy towards world-class standards (Development Asia, 2018). In Bangladesh, meanwhile, the strengthening of human capital within the civil bureaucracy was identified as a key factor in achieving SDG 16 concerning effective and inclusive institutions (Haque, 2024). In the European context, studies affirm that the competencies of civil servants for global and transnational governance require the continuous updating of public administration curricula (van der Walddt, 2025). In Indonesia, this commitment is supported by a robust regulatory framework: Law Number 20 of 2023 on the State Civil Apparatus affirms civil servants' right to competency development;



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Law Number 12 of 2012 on Higher Education facilitates educational cooperation between universities and local governments; and the Merdeka Belajar–Kampus Merdeka policy, together with the Golden Indonesia 2045 agenda, prioritises human capital development to reduce inter-regional disparities (Oxford Business Group, 2024).

At the local government level, this commitment is reflected in Tolikara Regency's development vision, which aims to make Tolikara a religious, cultured, independent, just and prosperous place. This vision is broken down into five missions: promoting spirituality and culture; preserving the environment in line with tradition; building equitable infrastructure; developing superior, sustainable human resources; and promoting village-based economic development. The fourth mission directly led to the creation of the Collaborative Class Programme for civil servants. However, empirical conditions reveal a real gap: Tolikara Regency, located in the central highlands of Papua Pegunungan Province, faces structural limitations in terms of access to higher education, infrastructure, and the availability of experts. Dependence on external consultants to manage local bureaucracy and finance indicates weak internal capacity, while the isolated geographical location hinders participation in conventional education programmes in the provincial capital. In response to these issues, the Tolikara Regency Government has established a strategic partnership with Cenderawasih University to deliver the Collaborative Class Programme for civil servants at undergraduate, master's and doctoral levels, commencing in the 2025/26 academic year. The programme aims to train over 1,000 bachelor's degree graduates, 100 master's degree graduates and 50 doctoral degree graduates within five years, utilising a blended learning approach adapted to local geographical conditions (Liwun, 2025).

This study is based on two complementary theoretical frameworks. Human capital theory, which was developed by Becker (1993) and has been updated in more recent studies, views education and training as investments that boost the productivity and economic value of individuals and organisations. In the public sector, human capital encompasses the knowledge, skills, and competencies necessary for the effective performance of government functions. Recent research supports this idea, demonstrating that human resource management (HRM) practices are crucial for developing employee competencies (Salman et al., 2023), that human capital attributes can substantially enhance organisational performance when mediated by innovative leadership (Mubarik et al., 2023), that strategic HRM can contribute to the organisational performance of governments in developing countries (A.M Fadli Mappisabbi et al., 2026), that systematic evidence confirms the centrality of human capital investment to the outcomes of HRD (Arokiasamy et al., 2023), that workplace training can boost employee job satisfaction and performance through affective commitment (Nauman et al., 2021), and that HR practices such as recruitment, training, and career opportunities can directly improve the job satisfaction, commitment, and in-role performance of civil servants in public administration (Ouabi et al., 2024). However, scholars also note that the added value of HRM in the public sector remains comparatively underexplored (Boselie et al., 2021).

Formulated by Ansell and Gash (Ansell & Gash, 2008) and refined by Emerson et al. (2012), the theory of collaborative governance explains how collective decisions are made by cross-sector stakeholders to achieve public goals that cannot be accomplished by a single actor alone. The theory emphasises face-to-face dialogue, shared commitment, trust, and a shared understanding. The Triple Helix model enriches this framework by linking academia, government, and industry to promote regional growth (Cai & Etzkowitz, 2020). Evidence on the effectiveness of education–government integration in regional development has extended the importance of community moments in educational collaboration (Cheng et al., 2024).

The international literature from 2020 to 2026 shows a consensus that bureaucratic human capital is a key factor in determining the quality of governance. Basic education and training programmes can significantly increase the capacity of young officials to contribute to the achievement of the Sustainable Development Goals (SDGs) (Haque, 2024). In the SDG era, civil servants require transversal competencies to balance economic, social and environmental policy dimensions (OECD, 2021). Cross-country higher education capacity-building projects can contribute directly to public administration modernisation and skilled workforce retention (European Commission, 2023). Furthermore, longitudinal evidence shows that senior public officials' engagement with SDG-focused training programmes enables the collective delivery of public services with transformational societal impact (Azmat et al., 2025). Concurrently, higher education literature portrays universities as pivotal development actors, demonstrating that higher education contributes to the SDGs through education, research and community engagement (Chankseliani & McCowan, 2021). Furthermore, university–community partnerships have been shown to support SDG delivery across countries (Leal Filho et al., 2023), while service learning and community engagement have become established channels through which universities promote sustainability agendas (Rodríguez-Zurita et al., 2025). There are consistent patterns linking education to development outcomes: individual human capital drives public organisational innovation (Sun et al., 2020); apparatus capacity correlates with measurable development outcomes (Nurdin et al., 2023); collaborative competency mediates collaborative governance success (Djalil et al., 2025) and government spending on education contributes to the Human Development Index (Maharda & Aulia, 2020).

Further studies on collaboration mechanisms show that government involvement effectively bridges the interests of different actors in producing innovative talent (Cheng et al., 2024). Triple Helix collaboration structures determine innovation-based regional development (Cai & Etzkowitz, 2020). University–government interaction generates knowledge transfer that has a positive impact on the region (Marques & Vorontsova, 2022). The sustainability of educational collaboration depends heavily on goal alignment and long-term institutional commitment (Zhuang & Shi, 2024). However, contradictions in the literature also exist: educational investment does not always translate into performance without proper knowledge utilisation (Haque, 2024); cross-sector collaboration is prone to failure without trust, commitment and facilitative leadership (Ansell & Gash, 2008; Wang & Ran, 2023); and governance fragmentation and inter-regional capacity gaps hinder the effectiveness of academic partnerships in Indonesia (Rosser, 2023). In Indonesia and Southeast Asia, the main pillars aligned with the SDGs are human capital strengthening, digital transformation, and public–private partnerships (Nobuhiro, 2023; Sendouw, 2025; World Bank, 2021). However, the benefits of transformation tend to concentrate in developed regions unless accompanied by targeted investment in education and upskilling in underdeveloped areas (Lito et al., 2025). Public sector reform requires alignment between education policy and organisational needs (Repucci, 2014; Samaratunge et al., 2008), and local government–university collaboration can stimulate socio-economic development (Dwiputrianti et al., 2025; Geeraert & van Bottenburg, 2025).

Based on this review, three research gaps have been identified. Firstly, previous studies have primarily focused on developed countries or large administrative centres, while research on underdeveloped regions with extreme geographical constraints, such as the Papua highlands, has been limited. Secondly, existing studies tend to analyse the effectiveness of civil servant education programmes separately from the sustainable development framework. Consequently, the direct link between civil servant education partnership schemes and measurable SDG indicators has not been explicitly mapped. Thirdly, there is still a lack of academic documentation on blended-learning-based collaborative class models for civil servants in isolated areas. This study addresses these gaps

by analysing the effectiveness of the civil servant education partnership programme in an underdeveloped region, mapping its contribution to SDG achievement in an integrated manner. The main research question is: how effective is the implementation of the Collaborative Class Programme between the Tolikara Regency Government and Cenderawasih University, and what contribution does it make to achieving the Sustainable Development Goals?

METHODS

This study employed a qualitative approach with a case study design grounded in an interpretive paradigm, chosen to gain an in-depth understanding of the implementation of the civil servant education partnership program within its specific social, institutional, and geographical context (Creswell, J.W , Poth, 2018; Merriam, 2009; Schwartz-Shea & Yanow, 2012). The research site is the Collaborative Class Program between the Tolikara Regency Government and Cenderawasih University, Papua, Indonesia. Data sources were selected through purposive sampling based on relevance to the research focus, and data were collected through documentation and archival analysis of official government releases, the Tolikara Regency vision and mission documents, civil servant and higher education policy regulations, program administration data on participants and graduate targets, and institutional cooperation documents covering the 2025–2026 period, supported by scholarly publications and international agency reports for context and triangulation. Data were analyzed using thematic analysis following the interactive model of Miles, Huberman, and Saldaña (2014) through data condensation, data display, and conclusion drawing and verification, with deductive coding based on program effectiveness dimensions and SDG indicators and inductive coding for emergent themes (Saldana, 2025), while validity was maintained through source triangulation (Yin, 2018).

RESULTS AND DISCUSSION

Document analysis shows that the effectiveness of the Collaborative Class Programme depends on four main factors: targeting accuracy, method suitability, curriculum alignment and institutional sustainability. In terms of targeting accuracy, the programme specifically targets active civil servants within the Tolikara Regency Government, meaning that educational investment is directed straight at strengthening the capacity of those performing government functions. In terms of method suitability, the programme uses a blended learning approach, combining online and face-to-face instruction, and allows civil servants to continue their duties by scheduling sessions at times that are convenient for them. Lecturers are also deployed to the location on a rotational basis. In terms of curriculum alignment, the programme adopts the flexible Merdeka Belajar curriculum while maintaining quality standards equivalent to those of the main campus in Jayapura. In terms of institutional sustainability, the programme serves as an entry point for establishing an Off-Main-Campus Study Programme (PSDKU), which will expand disciplinary fields according to regional needs. Table 1 presents the detailed distribution of participants across faculties and levels.

Table 1. Distribution of Participants and Administration of the Civil Servant Collaborative Class Program, 2025/2026 Academic Year

Faculty / Study Program	Level	Participants	Standard Duration
Faculty of Social and Political Sciences	Bachelor (S1) & Master (S2)	Entrance test applicants	S1: 4 years; S2: 2 years
Faculty of Economics and Business (Accounting)	Bachelor (S1)	100 participants	4 years

Faculty of Economics and Business (Accounting)	Master (S2)	100 participants	2 years
Faculty of Economics and Business (Accounting)	Doctoral (S3)	10 participants	3 years
Five-year target (all fields)	S1 / S2 / S3	1,000 / 100 / 50	National standards

Source: Compiled from official releases of the Tolikara Regency Government and Diskominfo Tolikara (2025)

Table 1 illustrates the scale and distribution of the intake in the first year. Of the 210 confirmed participants in the Faculty of Economics and Business, 100 participants are enrolled at bachelor level and 100 at master level (47.6% each), while 10 participants are enrolled at doctoral level (4.8%). This indicates that the immediate need for qualifications is concentrated at the basic and intermediate levels of the organisation, with the doctoral programme acting as a selective pathway for future leadership positions within the bureaucracy. The five-year target row further illustrates the disparity in scale across the levels: the bachelor target (1,000 graduates) is ten times greater than the master target (100), and twenty times greater than the doctoral target (50). This reflects the composition of the local bureaucracy's qualification deficits.

While Table 1 shows the distribution of graduates across categories at a single point in time, Figure 1 illustrates the temporal dimension of the programme by projecting the cumulative graduate trajectory implied by the five-year target under the assumption of an even annual intake.

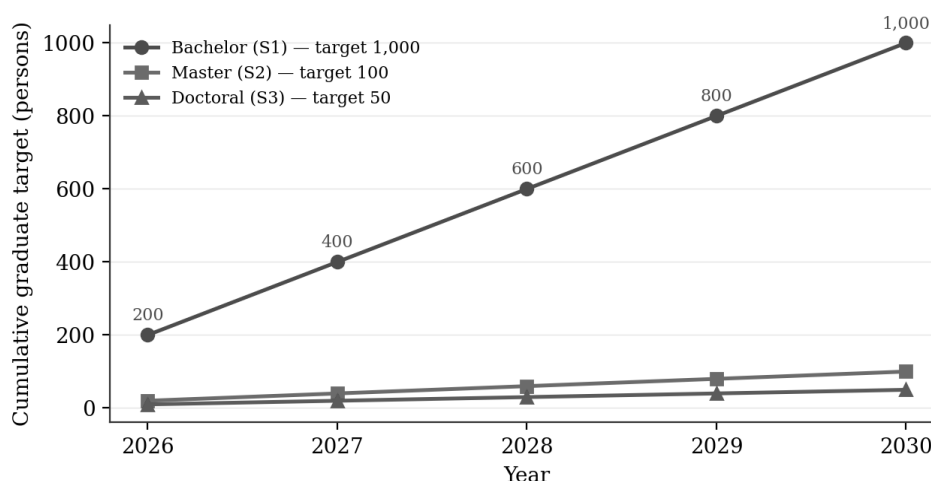


Figure 1. Projected Cumulative Graduate Trajectory of the Collaborative Class Program, 2026-2030

Source: Authors' projection based on the five-year targets in official program documents (2025)

Figure 1 illustrates the growth pattern rather than the programme's composition. While all three levels follow a steadily rising trajectory towards their respective 2030 targets, the slope of the bachelor's line is notably steeper. This requires an average of 200 graduates per year, compared to 20 per year at master's level and 10 per year at doctoral level. Over time, the widening vertical gap between the bachelor's line and the two postgraduate lines signals that, as the programme matures, the operational burden, including lecturer deployment, blended learning infrastructure and academic supervision, will increasingly concentrate on the undergraduate stream. This trajectory underscores the importance of maintaining annual intake capacity to sustain the upward trend, which is directly linked to institutional sustainability and the caution in the literature that educational investment fails to translate into performance without continuous institutional support (Haque, 2024; Zhuang & Shi, 2024).

A different analytical angle, namely the relative position of the first-year intake against the five-year commitment, is visualized in Figure 2.

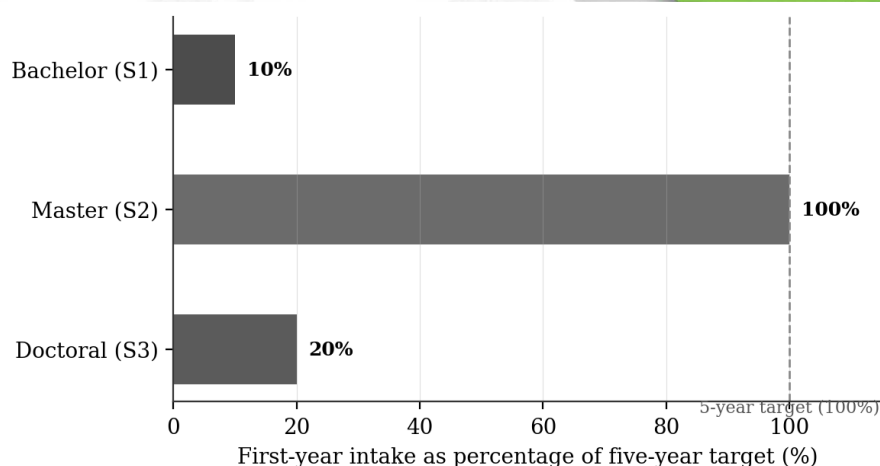


Figure 2. First-Year Intake Attainment Relative to the Five-Year Target by Educational Level

Source: Authors' calculation from Table 1 data (2025)

Figure 2 reveals an uneven attainment pattern across levels, which is not apparent from the absolute figures alone. The master's level has already reached its five-year target of 100% in the first intake, indicating strong early demand and suggesting that the target may need to be increased. In contrast, the bachelor level stands at 10% and the doctoral level at 20% of their respective targets, indicating that substantial recruitment is still required. This asymmetry has policy implications: the rapid saturation of the master's quota reflects pent-up demand among mid-career civil servants, while the long runway at bachelor's level confirms that the largest qualification gap, and therefore the programme's greatest potential contribution to human capital accumulation, lies at foundational level. Interpreted through the lens of Human Capital Theory, this pattern aligns with Becker's (2018) proposition that investment gravitates towards areas with the highest marginal returns on qualifications. It also corroborates the findings of Haque (2024) and Hilmawan et al. (2023), who argue that educational capacity building must be tiered to align with the structure of the qualification deficit.

However, the effectiveness of this investment ultimately depends on whether graduates are placed and empowered according to their qualifications. The adaptive blended learning design strengthens the feasibility of this approach by enabling civil servants to upgrade their qualifications while continuing in their roles. This is consistent with evidence that blended learning is particularly advantageous in rural and remote areas, where teacher availability and travel constraints can limit conventional instruction (Ghimire, 2022), and with systematic reviews confirming that well-designed blended learning arrangements can achieve comparable learning outcomes to those of face-to-face instruction (Topping et al., 2022).

Beyond the quantitative dimension, the mapping results show that the program contributes to several sustainable development goals through distinct mechanisms. The categorical mapping of goals, mechanisms, and relevant indicators is detailed in Table 2.

Table 2. Mapping the Contribution of the Collaborative Class Program to Sustainable Development Goals Indicators

SDG Goal	Program Contribution Mechanism	Relevant Achievement Indicators
SDG 4 Quality Education	Expansion of access to quality S1-S3 higher education in isolated areas through blended learning	Number of apparatus obtaining higher education; quality parity with the main campus
SDG 8 Decent Work	Improvement of apparatus professional competency and productivity	Proportion of qualified apparatus; independence in regional financial management

SDG 10 Reduced Inequalities	Reduction of human resource capacity disparities between underdeveloped and developed regions	Equitable access to higher education across regions
SDG 16 Strong Institutions	Strengthening bureaucratic capacity and reducing dependence on external consultants	Effectiveness and accountability of local government institutions
SDG 17 Partnerships	Cross-sector collaboration between local government and university	Existence of institutional partnership; PSDKU establishment plan

Source: Document analysis with reference to the SDGs framework (United Nations, 2015) and program documents (2025)

Table 2 shows the differences in contribution mechanisms categorised by the five goals. SDG 4 operates through expanding access, while SDG 8 and SDG 16 operate through strengthening competencies and institutions. SDG 10 operates through reducing disparities, and SDG 17 operates through the partnership arrangement itself. The local government's statement that accounting graduates are expected to independently manage regional finances without relying on external consultants is a concrete indication of linkage to SDGs 8 and 16. Meanwhile, the plan to establish study programmes in agriculture, fisheries, forestry, medicine and health personnel demonstrates the programme's orientation towards broader regional development needs. Through the lens of Collaborative Governance Theory, the relationship between the Tolikara Regency Government and Cenderawasih University exhibits the characteristics of a collaborative arrangement (Ansell & Gash, 2008): it involves cross-sector actors, shares resources and responsibilities, and is directed towards shared public goals that cannot be achieved by a single actor alone. The local government provides financing and participant targets, while the university provides academic capacity and quality assurance. Dialogue and shared commitment, as evidenced by entrance tests and the attendance of leaders from both institutions, indicate a collaborative process based on trust, consistent with the work of Emerson et al. (2012). These findings corroborate the work of Djalil et al. (2025) on the role of collaborative competency in mediating governance success, and that of Dwiputrianti et al. (2025) on local government-university collaboration as a catalyst for development. However, following Wang and Ran (2023)'s caution that collaboration sustainability is vulnerable without facilitative leadership and strong institutions, the PSDKU establishment plan indicates that the collaboration is intended to be long-term rather than a one-off arrangement.

Document analysis further shows that the Collaborative Class Program is a direct operational instrument of the Tolikara Regency development vision. The program most explicitly translates the fourth mission, superior and sustainable human resource development, through structured and tiered upgrading of apparatus academic qualifications, yet its linkages extend across missions. The categorical alignment between each regional mission, the form of program contribution, and the related SDGs is presented in Table 3.

Table 3. Alignment of the Collaborative Class Program with the Vision and Missions of Tolikara Regency Development

Regional Development Mission	Form of Program Contribution	Related SDGs
Mission 4: Superior and sustainable human resource development	Structured and tiered upgrading of civil servant qualifications (S1-S3)	SDG 4, SDG 8
Mission 5: Village-based regional economic development	Planned study programs in agriculture, fisheries, and forestry according to local economic needs	SDG 8, SDG 1
Mission 2: Environmental preservation aligned with customs and culture	Development of forestry and environmental expertise based on local context	SDG 13, SDG 15

Mission 3: Just and equitable regional infrastructure improvement	Strengthening apparatus capacity in development planning and governance	SDG 9, SDG 10
Mission 1: Developing Tolikara as a center of spirituality and culture	Forming apparatus with integrity upholding religious values and local cultural wisdom	SDG 16

Source: Analysis of the Tolikara Regency Government vision-mission documents and program documents (2025)

As shown in Table 3, all five regional missions are covered by at least one form of programme contribution. Mission 4 is linked to two education- and work-related goals (SDG 4 and SDG 8), while the remaining missions are distributed across nine other goals. This categorical breadth demonstrates that Mission 4 serves as the main entry point, with the programme's contributions extending to economic, environmental, infrastructure and governance missions. This positions human capital strengthening as an enabling foundation for the entire development agenda. When the civil servant education programme is considered a direct derivative of the human resource development mission, human capital investment acquires the political legitimacy and policy support necessary for its sustained implementation, in line with the collaborative governance proposition that shared public goals explicitly formulated sustain actor commitment and motivation (Geeraert & van Bottenburg, 2025). This interpretation corroborates the findings of Hilmawan et al. (2023) and Maharda et al. (2020), who concluded that institutional capacity and education spending contribute to broader development outcomes. The connection between the regional vision-missions and the SDGs framework also demonstrates the convergence of local and global development agendas. This affirms that the civil servant education partnership programme in Tolikara functions as a bridge, translating global sustainable development commitments into concrete, contextualised regional development action.

CONCLUSION

This study concludes that the Collaborative Class Programme for civil servants, run by the Tolikara Regency Government in partnership with Cenderawasih University, is an effective initiative designed to strengthen institutional capacity in underdeveloped regions. This programme is supported by four mutually reinforcing dimensions: the accurate targeting of active civil servants; the suitability of blended learning for the geographical context; the alignment of the curriculum with local bureaucratic needs; and the planned establishment of an off-campus study programme to ensure institutional sustainability. The programme is directly derived from the Tolikara development vision, particularly the mission of superior and sustainable human resource development. It also exerts cross-mission leverage in support of agendas relating to economic independence, the environment, and governance, and contributes directly to the achievement of SDGs 4, 8, 10, 16 and 17 by strengthening human capital within the apparatus and encouraging cross-sector collaboration. Theoretically, this study enriches the literature by integrating human capital theory and collaborative governance theory to explain civil servant education partnerships in underdeveloped regions, mapping their linkages to regional visions and missions, and SDG indicators. In practice, the findings suggest that other local governments with similar characteristics should consider education partnership schemes with universities as a strategy to accelerate development, aligned with their regional vision. Future research is advised to adopt a longitudinal design to trace actual programme outcomes, and to assess long-term impacts on bureaucratic performance and sustainable development achievement by adding the perspectives of participants and managers through interviews and observation.



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