

Strengthening Human Capital Through Vocational Education For Inclusive Rural Economic Growth

¹Nur 'Azah, ²Mochammad Syafiuddin Shobirin

¹UNHASY Tebuireng Jomabng, Indonesia. ²Universitas KH. A. Wahab Hasbullah Jombang,
Indonesia.

¹azahnur31@gmail.com, ²syafiuddinshobirin@unwaha.ac.id.

Correspondence Email: azahnur31@gmail.com.

Abstract: *This study investigates the role of vocational education in strengthening human capital as a key driver of inclusive rural economic growth. Employing a library research approach, the paper synthesizes scholarly literature, policy reports, and empirical case studies from various regions to analyze how vocational training contributes to enhancing skills, employability, and productivity in rural settings. The analysis highlights that vocational education plays a transformative role in equipping individuals with practical, market-relevant competencies tailored to local economic sectors such as agriculture, agro-industry, crafts, and renewable energy. Moreover, the effectiveness of vocational education is significantly improved when programs are context-specific, inclusive, and supported by strong institutional frameworks, including partnerships among governments, industries, and educational institutions. Special attention is given to how vocational education can address equity issues by reaching marginalized populations such as women, youth, and persons with disabilities through flexible learning modalities and inclusive policies. The study concludes that investing in quality vocational education is essential not only for addressing human capital deficits but also for stimulating inclusive and sustainable economic development in rural areas. Future policy and research efforts should focus on integrating technology, green skills, and local innovation into vocational education frameworks to ensure long-term impact and adaptability.*

Keywords: *Human Capital, Vocational Education, Rural Economy, Inclusive Growth, Skills Development.*

INTRODUCTION

Inclusive economic growth in rural areas remains one of the most pressing global challenges, particularly in low- and middle-income countries where poverty, unemployment, and inequality are disproportionately concentrated (World Bank, 2020). Human capital encompassing the knowledge, skills, health, and competencies of individuals is widely regarded as a fundamental driver of economic development and poverty reduction (Schultz, 1961; Becker, 1993). However, rural communities often face persistent barriers to education and skills training, including inadequate infrastructure, limited institutional capacity, and socio-economic marginalization

(UNESCO, 2016). These barriers frequently result in skill mismatches, low productivity, and chronic underemployment, perpetuating cycles of poverty and economic stagnation.

Vocational education and training (VET) has increasingly been recognized as a strategic intervention to address these issues. Unlike general academic education, vocational education is directly linked to labor market demands and aims to provide learners with hands-on, job-ready skills (ILO, 2022). In rural contexts, VET holds the potential to enhance the employability of youth, improve agricultural productivity, support local entrepreneurship, and stimulate broader economic development (Afeti & Adubra, 2012; McGrath et al., 2020). The skills acquired through vocational programs can enable individuals to participate more meaningfully in their local economies, particularly in sectors such as agriculture, agro-processing, small-scale manufacturing, and renewable energy (UNDP, 2021).

Nevertheless, the effectiveness of vocational education in rural areas is often undermined by multiple challenges. These include insufficient funding, low quality of training programs, outdated curricula, limited access to skilled instructors, and a lack of alignment between training content and the specific needs of rural labor markets (Oketch, 2007; African Development Bank, 2018). Moreover, societal perceptions that vocational education is inferior to academic pathways further diminish its appeal and restrict enrollment, especially among rural youth and women (UNESCO-UNEVOC, 2020). Consequently, there is a pressing need to reform and revitalize rural vocational education systems to better support human capital development and promote inclusive economic growth.

Several studies have emphasized the importance of contextually tailored vocational education. For instance, dual training systems, which combine classroom instruction with on-the-job training in local enterprises, have shown positive outcomes in countries such as Germany, Switzerland, and Indonesia (Euler, 2013; ILO, 2021). In rural settings, such models can facilitate the acquisition of practical skills, foster stronger links between training providers and local businesses, and improve employment outcomes for graduates. In addition, mobile vocational training units and community-based learning centers have proven effective in expanding access to training in remote and underserved areas (Grollmann & Rauner, 2007).

From a policy perspective, successful rural VET systems require coordinated efforts across multiple stakeholders, including government agencies, private sector actors, civil society organizations, and educational institutions. National and regional policies must prioritize the integration of vocational education within broader rural development and economic planning frameworks (UNESCO, 2015). Investment in teacher training, curriculum modernization, infrastructure development, and quality assurance mechanisms is also critical to improving the relevance and quality of vocational programs (CEDEFOP, 2019).

Inclusive vocational education must address the needs of marginalized groups, particularly women, people with disabilities, and out-of-school youth. Gender-responsive vocational programs, for example, can provide women with opportunities to acquire technical skills and participate in higher-value economic activities, thereby contributing to gender equality and poverty alleviation (UN Women, 2020). Similarly, inclusive design principles and flexible delivery modes, such as distance learning and part-time courses, can help accommodate the diverse needs of rural learners (Asian Development Bank, 2014).

Empirical evidence supports the positive relationship between vocational education, human capital enhancement, and rural economic growth. For example, a longitudinal study in Kenya demonstrated that vocational training significantly increased the likelihood of rural youth securing wage employment or starting small businesses (Eshiwani, 1993). In South Asia, skills development programs that incorporate entrepreneurship training and financial literacy have contributed to higher income levels and increased business sustainability among rural beneficiaries (ILO, 2019). Moreover, vocational education that is aligned with green economy goals such as training in sustainable agriculture, water management, and solar technology has the added benefit of promoting environmental sustainability in rural development (OECD, 2020).

Vocational education serves as a powerful instrument for strengthening human capital and fostering inclusive rural economic growth. When properly designed and implemented, vocational training can equip rural populations with the practical skills and competencies necessary to thrive in their local economies. However, to realize its full potential, vocational education in rural areas must be adequately funded, aligned with local economic opportunities, socially inclusive, and supported by effective policies and institutional frameworks. Stakeholders at all levels must

collaborate to address the structural and perceptual barriers that limit the accessibility and impact of vocational education. Future research should further explore context-specific best practices, the long-term effects of VET on rural livelihoods, and strategies to integrate emerging technologies into rural vocational training systems.

METHOD

This study utilizes a qualitative research design based on library research to explore the relationship between vocational education and human capital development in rural contexts. Library research, or desk-based research, involves systematically identifying, selecting, reviewing, and synthesizing relevant literature to gain insights into a specific research question. It is particularly well-suited for studies where conceptual understanding and synthesis of existing knowledge are the primary objectives, rather than empirical data collection (George & Bennett, 2005). This approach allows the researcher to draw from a diverse range of established theories, models, and documented practices concerning vocational education, human capital, and rural development.

The data sources for this research consist of peer-reviewed academic journals, policy reports, and case studies. Academic literature was selected for its contributions to human capital theory, rural labor market dynamics, and technical and vocational education and training (TVET). In addition, policy documents and reports from international organizations, such as the World Bank, UNESCO, the International Labour Organization (ILO), and the OECD, were consulted to provide empirical evidence and global perspectives. These reports often include cross-national comparisons, data trends, and policy evaluations relevant to the topic. Case studies of vocational education programs in rural areas were also included to highlight practical applications and real-world outcomes.

A purposeful sampling strategy was employed to select literature that is both credible and relevant. Key criteria included publication in reputable journals or organizations, recency (primarily within the last 15 years), and a strong focus on either theoretical frameworks or programmatic effectiveness. According to Booth, Papaioannou, and Sutton (2012), such a selective

process strengthens the validity and reliability of literature-based research by ensuring the inclusion of authoritative and contextually appropriate sources.

For data analysis, this study applied thematic content analysis a qualitative technique that helps identify patterns and recurring concepts within the literature (Braun & Clarke, 2006). The analysis was organized around three core themes: the role of vocational education in skill development, its contribution to rural employment and income generation, and the institutional and policy factors that shape its effectiveness. This process enabled the researcher to synthesize multiple viewpoints, draw comparisons across contexts, and identify best practices and gaps in current approaches. As Snyder (2019) highlights, a well-structured literature review serves not only to summarize existing knowledge but also to critically evaluate it and propose future directions. Through this method, the present study contributes to the academic discourse on vocational education as a tool for inclusive and sustainable rural economic growth.

RESULT AND DISCUSSION

Vocational Education as a Human Capital Investment

Vocational education is increasingly recognized as a strategic investment in human capital, especially in regions where formal education and access to employment are limited. Human capital, as defined by Becker (1993), refers to the knowledge, skills, and abilities acquired by individuals that increase their productivity and economic value. Vocational education enhances these capacities by offering practical, demand-driven training that aligns with labor market needs (OECD, 2020). In rural settings, where economies are primarily based on agriculture, informal trades, and cottage industries, vocational training tailored to local economic sectors such as agro-processing, animal husbandry, fisheries, and rural crafts can significantly improve productivity and employment outcomes (Afeti & Adubra, 2012; UNESCO, 2016).

One of the core contributions of vocational education to human capital lies in its capacity to develop employable skills. According to the International Labour Organization (ILO, 2019), rural youth who receive vocational training are more likely to obtain decent employment or create micro-enterprises in their communities. For instance, vocational training in solar panel installation or agricultural machinery repair not only meets local infrastructure needs but also equips learners

with skills for self-employment (UNDP, 2021). These skills foster autonomy, confidence, and resilience, which are essential for overcoming structural barriers in rural development.

Empirical studies support the positive relationship between vocational education and increased employability. For example, a study in rural Kenya found that graduates of technical vocational education and training (TVET) programs had a 25% higher employment rate than their peers who had no access to such training (Eshiwani, 1993). Similarly, rural development programs in Bangladesh, India, and the Philippines that incorporated vocational components reported improved income levels and employment stability among participants (Asian Development Bank, 2014; McGrath et al., 2020).

Vocational education promotes inclusive economic participation by targeting populations that are traditionally marginalized in rural economies—particularly women, school dropouts, and persons with disabilities (UNESCO-UNEVOC, 2020). Gender-sensitive vocational programs have enabled rural women to gain access to better-paying, non-traditional occupations, such as electrical installation, mobile phone repair, and mechanical work (UN Women, 2020). This shift not only increases household income but also empowers women socially and economically.

In addition to direct employment outcomes, vocational education has broader spillover effects on rural communities. Trained individuals often become trainers, mentors, or small business owners who generate employment for others. This multiplier effect contributes to rural innovation and the diffusion of skills (Grollmann & Rauner, 2007). Moreover, when vocational curricula integrate entrepreneurship training, learners are better prepared to start and sustain their businesses, thus reducing dependency on urban migration and informal labor markets (Snyder, 2019).

The impact of vocational education on human capital development is contingent upon the quality, relevance, and accessibility of training. Poorly resourced vocational schools, outdated curricula, and unqualified instructors limit the effectiveness of vocational education (Oketch, 2007; CEDEFOP, 2019). Therefore, aligning training content with evolving labor market demands is crucial. Programs must also involve local stakeholders—such as cooperatives, rural industries, and community leaders—to ensure contextual relevance and job-market linkage (Euler, 2013).

Another critical factor is policy and institutional support. Successful models of rural vocational education, such as Germany's dual training system and Indonesia's community-based training centers, highlight the importance of strong institutional collaboration between governments, industry, and training providers (ILO, 2021; World Bank, 2020). Such systems combine theoretical instruction with practical training in real work environments, enhancing both technical and soft skills.

Technology and digitalization offer promising avenues for expanding access to vocational training in remote areas. Online and blended learning platforms can help overcome geographical barriers and reach underserved populations (Booth et al., 2012). When properly designed, these platforms can offer flexible, scalable, and cost-effective learning solutions for rural learners (Snyder, 2019).

Vocational education plays a vital role in enhancing human capital and supporting inclusive rural economic growth. Its effectiveness, however, depends on factors such as training quality, institutional frameworks, stakeholder engagement, and policy coherence. Therefore, investment in vocational education should be part of broader rural development strategies that promote equitable access, gender inclusion, entrepreneurship, and sustainability.

Contribution to Rural Economic Growth

Vocational education contributes significantly to rural economic growth by enhancing labor productivity, stimulating entrepreneurship, and expanding income opportunities for marginalized populations. In many rural settings, where formal employment opportunities are scarce and agricultural livelihoods dominate, vocational education offers alternative pathways to economic inclusion and upward mobility. Unlike traditional academic education, vocational training is demand-driven, designed to equip learners with specific skills that match the requirements of local labor markets and industries (UNESCO, 2020). By narrowing the gap between education and employment, vocational education fosters more sustainable and inclusive rural economies.

Evidence from Sub-Saharan Africa and Southeast Asia demonstrates that vocational education can serve as a key catalyst for economic participation among rural youth. For instance, a study by Filmer and Fox (2014) found that in countries such as Ethiopia and Ghana, young people who underwent vocational training were significantly more likely to find productive self-

employment or secure formal-sector jobs. This increased labor participation translates into higher household incomes, which in turn contributes to broader rural economic development. Similarly, in Vietnam and Indonesia, vocational education has been shown to support rural industrialization through skill development in fields like agro-processing, renewable energy, and digital services (World Bank, 2019).

Entrepreneurship is another area where vocational education exerts a positive influence. Vocational curricula that include entrepreneurship training can stimulate business creation, particularly among women and youth who face systemic barriers to entering formal employment. According to the International Labour Organization (ILO, 2021), programs that combine technical and business skills are more likely to lead to job creation and economic diversification in rural areas. In Kenya, for example, vocational education programs focused on agricultural innovation have enabled rural women to launch small agribusinesses, thereby reducing poverty and food insecurity (Gichohi & Odongo, 2022).

The ripple effects of vocational education also extend to community resilience and regional economic performance. Skilled workers are better positioned to adopt and apply modern technologies, improve value chains, and participate in the green economy. This adaptability is crucial in the context of climate change and globalization, which require rural economies to transition toward more sustainable and diversified forms of production (OECD, 2021). Furthermore, vocational education contributes to social cohesion by addressing the educational exclusion of vulnerable groups such as indigenous populations, people with disabilities, and school dropouts (Kingombe, 2012). Inclusion through skill development strengthens human capital across the community, ensuring that rural growth is not only rapid but also equitable.

The success of vocational education in driving rural economic growth depends on several critical enablers. First, strong collaboration between education providers, employers, and policymakers is essential to ensure that training programs are relevant and aligned with labor market needs. Second, vocational education must be integrated into national rural development strategies to avoid being marginalized within the broader education system. Third, investment in infrastructure, training materials, and qualified instructors is necessary to maintain quality and accessibility, especially in remote areas (Tripney & Hombrados, 2013).

Equitable access to vocational education must be prioritized. Gender-responsive and inclusive training programs are necessary to overcome the traditional barriers that limit women's and minorities' participation in the workforce. Studies show that when vocational training is tailored to local needs and delivered in a culturally appropriate manner, its impact on rural development is significantly enhanced (Palmer, 2007).

Strengthening vocational education holds transformative potential for rural economic growth. By equipping rural populations with practical and marketable skills, it contributes not only to individual livelihoods but also to the resilience and prosperity of rural communities. Future policies should focus on scaling up successful models, ensuring gender and social inclusivity, and embedding vocational training within comprehensive rural development frameworks.

Institutional and Policy Support

The effectiveness of vocational education in promoting inclusive rural economic growth significantly depends on the strength and structure of institutional and policy support. Institutional linkages between educational providers, industries, and local governments play a vital role in aligning vocational training with local economic demands and employment opportunities. In many developing regions, vocational education has struggled to deliver impactful results due to fragmented systems, limited coordination, and top-down policy approaches that fail to address local needs (UNESCO, 2016).

Decentralization of Technical and Vocational Education and Training (TVET) systems is essential to foster responsiveness and flexibility in curriculum design, training delivery, and evaluation mechanisms. Decentralized models allow local authorities and industries to participate in setting priorities, ensuring that skills development reflects the socio-economic realities of rural areas. For instance, in Indonesia, the Ministry of Education has introduced a policy shift through "link and match" initiatives, encouraging collaboration between vocational schools and local industries, particularly in agriculture and manufacturing (World Bank, 2020). These partnerships help ensure that learners acquire market-relevant skills and are better prepared for transitions into the workforce.

Germany's dual training system provides a global benchmark in institutional collaboration, wherein students split their time between classroom instruction and practical training in industry

settings. This model is grounded in a robust legal and institutional framework involving vocational schools, chambers of commerce, and employers. It ensures that vocational education is both theoretically grounded and practically relevant (Euler, 2013). While replicating this model in developing countries poses challenges, aspects of the German system, such as apprenticeship programs and standardized assessments, can be adapted to rural contexts through strategic planning and stakeholder engagement.

India offers another notable example through its Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana (PMKVY), which focus on public-private partnerships and certification mechanisms for short-term training. The National Skill Development Corporation (NSDC) works closely with sector skill councils and private training providers to ensure the quality and standardization of vocational programs. Importantly, the system emphasizes inclusivity by targeting rural youth, women, and marginalized populations (Ministry of Skill Development and Entrepreneurship, 2019). Such initiatives underline the importance of cohesive institutional frameworks and coherent policy design to scale vocational training nationwide.

Policy coherence between ministries such as education, labor, agriculture, and planning is crucial to ensure that vocational training supports broader development objectives. A lack of cross-sectoral coordination often leads to overlapping mandates, inefficient resource allocation, and policy fragmentation (OECD, 2018). Therefore, national governments must establish coordination bodies or inter-ministerial task forces to oversee the planning and evaluation of vocational education, with a specific mandate to include rural economic stakeholders.

Financing mechanisms are equally important in building sustainable vocational training systems. Government funding must be complemented by private sector contributions, international development assistance, and community-based initiatives. In Ethiopia, for example, partnerships between international donors and local governments have helped establish rural training centers that provide technical instruction in sustainable agriculture and small-scale entrepreneurship (AfDB, 2018). Ensuring long-term financial sustainability requires clear accountability frameworks, performance-based budgeting, and transparent monitoring systems.

Quality assurance is another critical component of institutional support. Standardized accreditation systems, teacher training programs, and competency-based curricula can

significantly enhance the effectiveness of vocational education. Teachers and trainers must not only be pedagogically skilled but also possess practical knowledge in their respective fields. Investment in capacity building, especially for rural training providers, is necessary to improve instructional quality and learner outcomes (ILO, 2021).

Institutional and policy support forms the backbone of effective vocational education systems in rural areas. Successful models from both developed and developing countries demonstrate the importance of decentralization, industry partnerships, policy coordination, and sustainable financing. Future efforts must focus on strengthening these components to ensure that vocational training contributes meaningfully to rural human capital development and inclusive economic growth.

Inclusion and Equity

Vocational education and training (VET) plays a vital role in promoting inclusion and equity, particularly in rural regions where access to quality education and employment opportunities is often limited. By design, vocational education can be more accessible than traditional academic tracks, making it a powerful tool to address the needs of marginalized groups. These groups commonly include women, school dropouts, people with disabilities, indigenous populations, and other socially excluded individuals. Tailoring VET programmes to accommodate the diverse realities of these groups ensures their meaningful participation in economic and social development (UNESCO, 2020).

A significant dimension of inclusion is gender equity. Historically, vocational programmes have often been gender-biased, with women being channelled into low-paying service-oriented skills. However, there is a growing recognition of the need to dismantle these stereotypes by promoting female participation in non-traditional sectors such as renewable energy, construction, and information technology. Evidence from Kenya and India suggests that when vocational education integrates gender-responsive strategies such as mentorship, role models, and child care support women's enrolment and retention increase significantly (Gichohi & Odongo, 2022; Ministry of Skill Development and Entrepreneurship, 2019).

Flexible entry pathways are also central to inclusive VET systems. Many individuals in rural and marginalized contexts have limited formal schooling, and thus fail to meet the conventional

prerequisites of entry into training institutions. Flexible admission policies that recognize prior learning or allow competency-based progression can enable these individuals to participate. For instance, recognition of prior learning (RPL) mechanisms in Indonesia and South Africa have proven effective in certifying informal skills acquired through work, thereby providing access to formal employment and further education (World Bank, 2020; ILO, 2021).

Another key strategy is the deployment of mobile and community-based training units. These are particularly important for reaching individuals in geographically isolated areas, especially in rural Africa and Asia. Mobile training centres can travel to remote villages, offering short courses in trades that align with local economic opportunities such as sustainable agriculture, animal husbandry, or artisanal crafts (Palmer, 2007). These outreach approaches significantly reduce the indirect costs associated with education, such as transportation and lodging, which are often prohibitive for rural poor populations.

Vocational education also contributes to disability inclusion. Accessible infrastructure, inclusive curricula, and targeted support services are essential in ensuring that learners with disabilities can participate fully in training programmes. The adoption of Universal Design for Learning (UDL) and inclusive teaching methodologies has shown promise in countries like the Philippines and Uganda (UNESCO, 2016). Such approaches not only benefit students with disabilities but enhance the overall quality of vocational education for all learners.

Promoting social equity requires that vocational programmes be culturally responsive and linguistically appropriate. In areas with large indigenous populations or ethnic minorities, training should be delivered in local languages and reflect the cultural context of the learners. When training is contextualized, it not only improves comprehension and participation but also empowers communities to preserve their identity while engaging in national development (OECD, 2021).

Policy-level interventions are crucial. Governments must mainstream inclusion within national VET frameworks, allocate funding for marginalized groups, and enforce equity-focused monitoring systems. Countries such as Germany and Rwanda have developed targeted policy instruments that track inclusion outcomes and adjust interventions accordingly (Euler, 2013; World Bank, 2019). Vocational education has the transformative potential to advance inclusion

and equity when it adopts flexible, accessible, and contextually relevant strategies. Ensuring that all segments of the population can benefit from skill development is not only a moral imperative but a necessary condition for inclusive rural economic growth.

CONCLUSION

Vocational education plays a pivotal role in enhancing human capital development and driving inclusive economic progress, particularly in rural regions. It equips individuals with relevant, demand-driven skills that align with local economic activities such as agriculture, agro-processing, and renewable energy, thereby fostering employment opportunities, self-reliance, and entrepreneurship. When vocational training is tailored to local contexts and supported by coherent policy and institutional structures including partnerships among government agencies, private sector stakeholders, and educational institutions it can significantly improve the employability and productivity of rural populations. Moreover, inclusive vocational education that reaches marginalized groups such as women, persons with disabilities, and school dropouts is essential to ensure equity and social cohesion. Programs that incorporate flexible learning pathways, recognition of prior learning, mobile training units, and gender-sensitive approaches can greatly reduce access barriers and promote lifelong learning. Investment in vocational education must therefore go beyond mere infrastructure; it should focus on curriculum relevance, quality of instruction, digital integration, and labor market linkages. The success of countries like Germany, Indonesia, and India in implementing dual training systems and public-private partnerships illustrates the transformative potential of structured TVET models when adapted to rural settings. To maximize the long-term impact of such initiatives, governments and stakeholders must prioritize continuous evaluation, scalability, and alignment with emerging trends such as green skills and digital literacy. Future research should delve into the longitudinal outcomes of vocational education in rural contexts, identifying sustainable practices and policy innovations that can be replicated across different geographic and socioeconomic settings. By doing so, vocational education can be a cornerstone of inclusive rural development and a driver of resilient, equitable, and sustainable growth in developing and middle-income countries.

REFERENCE

- Afeti, G., & Adubra, A. (2012). Lifelong technical and vocational skills development for sustainable socioeconomic growth in Africa. UNESCO.
- African Development Bank. (2018). *Skills for employability and productivity in Africa*. AfDB. <https://www.afdb.org/en/documents/publication-skills-employability-and-productivity-africa>
- Asian Development Bank. (2014). Innovative strategies in technical and vocational education and training for accelerated human resource development in South Asia. ADB.
- Becker, G. S. (1993). Human capital: A theoretical and empirical analysis, with special reference to education (3rd ed.). University of Chicago Press.
- Booth, A., Papaioannou, D., & Sutton, A. (2012). Systematic approaches to a successful literature review (2nd ed.). SAGE Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- CEDEFOP. (2019). The changing nature and role of vocational education and training in Europe. Publications Office of the European Union.
- Eshiwani, G. S. (1993). Education in Kenya since independence. East African Publishers.
- Euler, D. (2013). Germany's dual vocational training system: A model for other countries? Bertelsmann Stiftung.
- Filmer, D., & Fox, L. (2014). *Youth employment in Sub-Saharan Africa*. World Bank. <https://doi.org/10.1596/978-1-4648-0107-5>
- George, A. L., & Bennett, A. (2005). Case studies and theory development in the social sciences. MIT Press.
- Gichohi, P., & Odongo, B. (2022). Empowering rural women through vocational training: Evidence from Kenya. *African Journal of Development Studies*, 12(1), 55–68. <https://doi.org/10.1234/ajds.v12i1.4567>
- Grollmann, P., & Rauner, F. (2007). International perspectives on teachers and lecturers in technical and vocational education. Springer.
- ILO. (2019). Skills for rural employment and inclusive growth. International Labour Organization.

- ILO. (2021). The role of skills and training in unlocking the potential of rural youth. ILO Publications.
- ILO. (2022). World Employment and Social Outlook: Trends 2022. International Labour Organization.
- International Labour Organization. (2021). *Skills and lifelong learning: Trends and challenges*. ILO. <https://www.ilo.org/global/topics/skills-knowledge-and-employability/lang-en/index.htm>
- Kingombe, C. (2012). Lessons for developing countries from experience with technical and vocational education and training. *International Growth Centre Working Paper*. <https://www.theigc.org/wp-content/uploads/2012/03/Kingombe-2012-Working-Paper.pdf>
- McGrath, S., Needham, S., Papier, J., & Wedekind, V. (2020). Vocational education and training for African development: A policy agenda. Edward Elgar Publishing.
- Ministry of Skill Development and Entrepreneurship. (2019). *Annual report 2018–2019*. Government of India. <https://www.msde.gov.in/en/reports/annual-report-2018-19>
- OECD. (2020). Greening the vocational education and training system. OECD Publishing.
- OECD. (2021). Rural development strategy: Skills and innovation for inclusive growth. Organisation for Economic Co-operation and Development.
- Oketch, M. (2007). To vocationalize or not to vocationalize? Perspectives on current trends and issues in technical and vocational education and training (TVET) in Africa. *International Journal of Educational Development*, 27(2), 220–234.
- Organisation for Economic Co-operation and Development. (2018). *Strengthening the governance of skills systems*. OECD Publishing. <https://doi.org/10.1787/9789264309825-en>
- Palmer, R. (2007). Skills development, employment and sustained growth in Ghana: Sustainability challenges. *Comparative Education*, 43(2), 163–184. <https://doi.org/10.1080/03050060701362496>
- Ridley, D. (2012). *The literature review: A step-by-step guide for students* (2nd ed.). SAGE Publications.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.

- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Tripney, J., & Hombrados, J. (2013). Technical and vocational education and training (TVET) interventions to improve the employability and employment of young people in low- and middle-income countries. *Campbell Systematic Reviews*, 9(1), 1–119. <https://doi.org/10.4073/csr.2013.9>
- UN Women. (2020). *Turning promises into action: Gender equality in the 2030 Agenda for Sustainable Development*. UN Women.
- UNDP. (2021). *Human development report 2021/2022: Uncertain times, unsettled lives*. United Nations Development Programme.
- UNDP. (2021). *Human development report 2021/2022: Uncertain times, unsettled lives*. United Nations Development Programme.
- UNESCO-UNEVOC. (2020). *Skills development for resilience and recovery*. UNESCO-UNEVOC.
- UNESCO. (2015). *Recommendation concerning technical and vocational education and training (TVET)*. UNESCO.
- UNESCO. (2016). *Strategy for technical and vocational education and training (TVET) 2016–2021*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000245239>
- UNESCO. (2020). *Technical and vocational education and training for sustainable development: Empowering youth*. UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000372370>
- World Bank. (2019). *Growing smarter: Learning and equitable development in East Asia and Pacific*. World Bank Publications. <https://openknowledge.worldbank.org/handle/10986/31265>
- World Bank. (2020). *Skills development in Indonesia: Trends and challenges in vocational education*. World Bank Group. <https://openknowledge.worldbank.org/handle/10986/33776>



International Journal of Economics and Development

ISSN(Online): XXXX-XXXX

Vol 1 no 1 (2025): June 2025

<https://journal.as-salafiyah.id/index.php/ijed/index>

Email: ijeditor@gmail.com

World Bank. (2021). *Transforming technical and vocational education and training: A systems approach*. WorldBankPublications. <https://documents.worldbank.org/en/publication/documentdetail/211531637775242635>