The impact of work competency development program on public welfare and quality of life

Anthonius[1], Nur Subeki[2], Mulyana[3], Monica Agnes Sylvia[4]

Accounting Department, School of Accounting, Accounting Program, Bina Nusantara University, Indonesia[1]
Mechanical Engineering Department, Universitas Muhammadiyah Malang, Indonesia[2]
Project Management Office Prakerja, Coordinating Ministry for Economic Affairs of the Republic of Indonesia, Indonesia[3,4]

Abstract

Kartu Prakerja Programme is an end-to-end digital initiative aimed at enhancing the skills of the workforce through skilling, upskilling, and reskilling. Due to the COVID-19 pandemic, in its initial three years of implementation, the Kartu Prakerja Programme was executed under a semi-social assistance framework, providing training support and distributing social assistance. The objective of this research is to examine the public service innovation implemented by the Kartu Prakerja Programme and its impact on various aspects influencing community welfare and quality of life, particularly in West Java. This research is conducted using quantitative methods, employing questionnaire survey results from program recipients in West Java during 2020-2022 as the primary dataset. The study's findings demonstrate that the Kartu Prakerja Programme significantly contributes to enhancing the welfare and quality of life of individuals in Indonesia, including West Java. These contributions encompass the stimulation of employment and entrepreneurship, income growth, accelerated financial inclusion, enhanced competency, productivity, competitiveness, and promotion of lifelong education.

Keywords: Kartu Prakerja Programme; Work Competence; Welfare; Quality of Life; West Java

Introduction

Based on the 2020 population census, it was anticipated that West Java Province would undergo a demographic dividend, marked by a 4.54% increase in the population aged 15-60, from 66.14% in 2010 to 70.68% in 2020 (Open Data Jabar, 2020). Being the most populous province in Indonesia, the potential demographic dividend could pose a challenge if not managed effectively, hindering its contribution to the national economy. West Java has made a significant economic impact on the national level, accounting for 13.2% of the Gross Regional Domestic Product (GRDP) contribution in 2019 (BPS, 2019). Hence, it is imperative to manage demographic conditions adeptly to prevent potential issues, especially in terms of workforce management.

The major challenges in workforce management that can hinder the optimization of the demographic dividend are threefold: the quality of the workforce, inadequate job opportunities, and unsystematic labor market information (Purbasari et al., 2022). From the perspective of labor supply, the issue of low workforce quality persists in West Java. The working-age population in West Java, constituting

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[1]*E-mail: anthony_partners@yahoo.com*

approximately 70.15% of the total working population, predominantly falls within the 20-49 age bracket. Furthermore, concerning the highest education level attained, the workforce is dominated by individuals who have not attended school, not completed elementary school, or only had high school diplomas, accounting for 57% (BPS, 2020). The low quality of human resources bears the potential to negatively impact various sectors, encompassing education, economy, and health (Aditya, 2020), thereby affecting job quality (ILO, 2016).

Regarding the impact of human resources on the education sector, the World Bank has pointed out that certain sectors suffer from inadequate graduate numbers, while in others, graduates lack the requisite skills. Consequently, a considerable portion of individuals possessing post-secondary qualifications find themselves employed in low-skilled positions, indicating that despite holding a degree, their skill set remains inadequate (World Bank, 2014). Surprisingly, since 2015, as many as 52% of the working population fail to meet the qualifications for their respective roles (McKinsey, 2012).

This situation is evident in West Java's workforce, where 92.46% have never participated in training or courses, nor have they obtained any training certificates (BPS, 2020). This predicament is exacerbated by limited access for the workforce to receive training in terms of location and cost. Furthermore, the capacity of vocational training centers to provide large-scale training is severely constrained in West Java. Consequently, this situation presents a challenge to enhancing workforce quality in the region to meet the dynamic demands of the labor market and the need for workers with novel, specialized skills.

One of the significant issues pertaining to workforce management, particularly from the demand side of the labor market, is job opportunity. As of February 2020, the total workforce in West Java numbered 24.33 million individuals. However, this workforce has not been optimally absorbed by the labor market. According to the Central Bureau of Statistics (BPS), West Java's Open Unemployment Rate (TPT), which represents the percentage of unemployed individuals in relation to the total workforce, stands at 7.07%, equivalent to a total of 1.87 million people. Among high school graduates in the workforce, the proportion experiencing open unemployment is notably high, at 10.03%, accounting for 771,823 people. From an expansion standpoint, the creation of formal jobs remains limited. This predicament is manifest in the fact that the majority of West Java's workforce, approximately 11.07 million individuals (50.02%), is engaged in the informal sector (BPS, 2020).

Addressing the demand side of the labor market, local governments are required to respond to the availability of skilled manpower, especially in leading sectors that significantly contribute to West Java's economy and employ a substantial workforce. The business categories encompassing Wholesale and Retail, as well as the Repair and Maintenance of Cars and Motorcycles, are the sectors that absorb the largest number of workers, approximately 4.99 million individuals or 22.20% of the employed population. Following closely is the Processing Industry Business Field, absorbing as many as 4.45 million individuals, or 19.83% of the total working population (BPS, 2020).

The asymmetrical distribution of labor market information also persists as a challenge for job seekers. Job seekers exhibit a tendency to seek conventional job information through word of mouth, relying on family or acquaintances for information. This approach is favored by 91.52% of job seekers in West Java. In contrast, only 37.33% of job seekers use printed or electronic media, as well as internet job vacancy portals, to search for work (BPS, 2020). Establishing a systematic and accessible mechanism to connect job seekers with the job market, catering to various societal levels, becomes imperative.

Efforts to enhance workforce management necessitate significant investment in the quality of formal education and the provision of skills to the workforce, encompassing skilling, reskilling, and upskilling. Since 2020, the provincial government of West Java has partnered with the Programme Management Office of Kartu Prakerja (PMO Kartu Prakerja) to address labor management issues in the region through the Kartu Prakerja Programme. The Kartu Prakerja Programme represents a novel approach to addressing labor management issues in Indonesia, particularly through the practical implementation of the Welfare to Work (WtW) concept, offering training incentives to enhance work competence and providing social assistance in response to the economic impact of the COVID-19 pandemic (Muhyiddin et al., 2022). This policy model operationalizes the Active Labor Market Policies (ALMP) principle to elevate the capabilities, productivity, and income of economic participants (Bonoli, 2013).

Numerous studies conducted in developed countries, primarily across Europe, highlight that the effectiveness of WtW program implementation hinges on targeted beneficiaries. In England, for instance, single parent women witnessed increased income due to enhanced work capacity resulting from training (Blundel, 2001). Another study by Bloom (Bloom: 1997 cited in Martinson & Strawn 2003, p.15) has also found that welfare recipients assisted with education and training found higher paying jobs and remained in employment over the longer term compared to those assigned to control groups and not receiving this

assistance In the Netherlands, upskilling initiatives for adult job seekers have proven effective in augmenting employment prospects (Bekker and Withagen, 2015).

However, there is limited empirical evidence regarding the impact of large-scale competency development programs in developing countries such as Indonesia. This study seeks to address this gap by assessing the outcomes and broader implications of Work Competency Development Programs through the Kartu Prakerja Programme, on public welfare and quality of life. By introducing novel indicators, exploring social protection, and providing actionable policy recommendations, this research contributes valuable knowledge that can inform both policymakers and practitioners striving to enhance societal well-being through competency development initiatives. This study focuses on the implementation of the Kartu Prakerja Programme in West Java Province due to its highest number of Kartu Prakerja Programme beneficiaries compared to other provinces in Indonesia (Appendix 2), with 2.3 million individuals in the province having received the Kartu Prakerja Programme between April 2020 and December 2022 (MPPKP, 2022).

Literature Review

When the COVID-19 pandemic occurred globally, almost all countries experienced an economic contraction. The pandemic has introduced new challenges to the existing workforce landscape in Indonesia, such as low-quality and asymmetric competency requirements between the industry and the workforce. This uncertain economic situation has led to unprecedented job losses, disproportionately affecting vulnerable groups, including youth, women, migrants, and informal workers (ADB, 2022). On the other hand, the pandemic has also accelerated the process of economic digitization across various sectors, resulting in changes in the economic structure, primarily influenced by the increased demand for the digital industry (Zhang et al., 2022).

Industry 4.0 is revolutionizing manufacturing processes and significantly impacting globalization by transforming the workforce and increasing access to new skills and knowledge. The World Economic Forum predicts that by 2025, 50% of all employees will require retraining due to the adoption of new technologies (Schwab & Zahidi, 2020). Therefore, lifelong learning must be a strategic goal. Considerable efforts should be dedicated to making learning opportunities, such as reskilling and upskilling, accessible, available, and affordable to the workforce (Li, 2022).

In the 2016 World Economic Forum report, experts projected that 65% of children entering primary school today will eventually work in completely new types of jobs that do not exist today (Schwab & Samans, 2016). Faced with these changes, it becomes imperative to develop new and diverse educational programs and promote innovative curricula that provide the skills, knowledge, and attitudes required for an entrepreneurial culture (Li, 2020).

In response to these challenges, Indonesia has increased its investment in developing social protection during the pandemic, including policies related to the labor market. Labor market policy refers to a set of instruments by which the government supports individuals who face difficulties in the labor market, especially, though not exclusively, those who are openly unemployed (Clegg, 2015). Labor market policies are developed as a response to market failures such as an imbalance between labor supply and demand, inadequate income support, a shortage of skilled labor, or discrimination against certain workers (Bredgaard, 2015). Various countries adopt two models of labor market policy approaches, namely Passive Labor Market Policies (PLMP) and Active Labor Market Policies (ALMP).

In many countries, Passive Labor Market Policies (PLMP) are implemented as forms of social protection to prevent job seekers from falling into poverty and bankruptcy. This is achieved through financial assistance for unemployment and insurance for employees who have lost their jobs (Gunderson, 2003; Thuy, Hansen & Price, 2001). However, this policy model has recently faced criticism for fostering long-term dependency on financial assistance for the unemployed (Considine, Lewis, O'Sullivan & Sol, 2015).

Active Labor Market Policies (ALMP) represent government interventions aimed at improving the functioning of the labor market by influencing changes in labor supply and demand, as well as the job-matching process. The objective of this policy is to preserve existing jobs, create new employment opportunities, facilitate the reintegration of unemployed individuals into the labor market, and support the job search and matching process (Ernst et al., 2022). Examples of ALMP include training programs designed to enhance labor supply skills, wage subsidies intended to stimulate employers' demand for labor, and job search and matching assistance aimed at facilitating better connections between employers and

workers (McKenzie, 2017). ALMP is also operationalized through the Welfare-To-Work (WtW) policy, which aims to motivate job seekers, enhance their skills, and remove barriers to their employment search (Dall, 2019).

Some literature states that the implementation of WtW policies through job training initiatives aims to improve the employability of participants by equipping them with relevant skills and qualifications (Bloom et al., 2000). An effective job training program has the potential to increase opportunities for job placement thereby helping program beneficiaries transition into the workforce (Card et al., 2010). Other research states that participants who take part in a well-designed job training program experience an increase in income as a result of increased job placement and promotion opportunities in the workplace (Cancian et al., 2013). Job training programs can contribute to reducing dependency related to social assistance programs because participants find sustainable employment (Pavetti et al., 2018). From a macroeconomic perspective, job training initiatives can have a positive impact on society, contributing to economic growth and social welfare (Rangarajan et al., 2000).

Kartu Prakerja Programme

The Kartu Prakerja Programme is a competency development program designed for job seekers, workers, or laborers impacted by layoffs, as well as those who seek competency improvement. The program's objectives include enhancing workforce competencies, increasing productivity and competitiveness, and fostering entrepreneurship (Presidential Decree No. 76 2020; Presidential Decree No. 113 2020).

This program is open to all Indonesian citizens who are at least 18 years old, not currently enrolled in any formal education, and willing to apply for the program. Its scope extends beyond prospective workers to encompass individuals already employed who wish to enhance their skills, aiming to align labor skills with market demands. Providing this training assistance to adult learners in several literatures has the potential for Improved Practical Skills, independent learning, Real world application, Increased motivation, technological proficiency and effective communication skills (Merriam and Bierema, 2014.

In response to the COVID-19 pandemic, the program underwent adjustments. It was extended to workers who were laid off, those who lost their jobs, and Micro, Small and Medium Enterprises (MSMEs) forced to close due to the pandemic. Alongside training assistance, beneficiaries also receive social support. Due to pandemic-related mobility restrictions, training during this period was conducted exclusively through online platforms.

To access the benefits of the Kartu Prakerja Programme, applicants must complete several steps (Figure 1). First, participants need to register on the Prakerja website. Second, the PMO Kartu Prakerja verifies applicants' personal information before they are considered for the selection process. Third, successful candidates receive a decision letter confirming their status as program recipients. Fourth, a virtual account is created for each beneficiary. Fifth, training vouchers and post-training incentives totaling IDR 3.5 million are transferred to the virtual account. Sixth, beneficiaries can choose and purchase training from the Digital Platform by providing their Prakerja number. Seventh, recipients complete the training, taking pre- and post-tests to obtain a certificate. Upon training completion, beneficiaries rate and review the training to qualify for post-training incentives. Eighth, recipients can select a bank or e-wallet and undergo Know-Your-Customer (KYC) procedures with the payment partner to receive the initial post-training incentive in their designated account. Ninth, after receiving the first incentive, beneficiaries fill out the Evaluation Survey questionnaire (MPPKP, 2020).

Recipients of the Kartu Prakerja Programme enjoy the flexibility to select training courses within the Prakerja ecosystem based on their individual needs and interests. There is an extensive array of training options available, totaling around 1,701 different types of training provided by 150 training providers , all accessible through 7 digital platforms. The Kartu Prakerja Programme has also established an integrated ecosystem that incorporates end-to-end digital and multi-channel Government-to-Person (G2P) payment processes for distributing training assistance to program beneficiaries. This payment mechanism operates in collaboration with 5 payment partners, encompassing government-owned banks and e-wallet providers (MPPKP, 2021). Furthermore, the Prakerja application features a job search functionality, aiding users in accessing job-related information, estimated salaries, and facilitating a smoother job application process (MPPKP, 2022).

In its efforts, the Kartu Prakerja Programme engages with local governments to provide support for program implementation. This includes program outreach, furnishing data on quality training institutions in each region, offering information on regional labor demands by industry, and facilitating participant registration and selection of training courses. The program also collaborates with stakeholders in the education sector (universities and NGOs) to ensure the compliance and quality of training within the

ecosystem. This comprehensive curation process is aimed at maintaining training quality and supports the monitoring of training implementation (MPPKP, 2022).
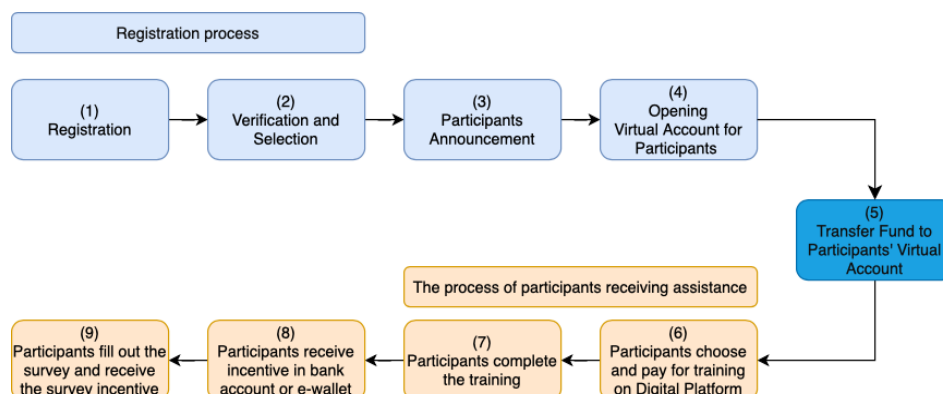
Source: PMO Kartu Prakerja, 2022

Figure 1. Prakerja User Journey

Quality of Life and Welfare

Quality of life is defined as an individual's perception of their position within the culture and value system of their living environment. This perception is evaluated in relation to personal goals, expectations, standards, and other aspects of individual concerns (WHO, 1997). The assessment of quality of life incorporates both objective and subjective viewpoints. Objective indicators encompass access to essential needs such as food, income, health care, security, and transportation. Nevertheless, these indicators must be interpreted through the lens of an individual's subjective perspective, taking into account their cultural and value-based context. In this context, the concept of lifelong learning emerges as a tool to attain these objective benchmarks (Molina & Schetini, 2021). In Indonesia, indicators of welfare comprise elements like population, health, nutrition, education, employment, consumption patterns, housing, environmental conditions, poverty rates, and other social references, all aimed at enhancing the quality of life (BPS, 2021).

Research Method

This study employs a quantitative method using surveys as its foundation. The data sources encompass both primary and secondary data. The research focuses on the impact of the Kartu Prakerja Program in West Java province, which has the highest number of participants among all provinces, with 2,390,575 beneficiaries out of a total of 16,425,000, accounting for 14.55% of the program's total population in 2020 to 2022. To examine the impact of the Kartu Prakerja Programme on enhancing workforce competency in West Java, the research utilizes primary data collected through survey questionnaires distributed to all beneficiaries in West Java by the Project Management Office of the Kartu Prakerja Programme (PMO Kartu Prakerja) from 2020 to 2022. Confidentiality and data protection are upheld as part of the ethical principles throughout the research process in ensuring the rights and well-being of participants. Protections are implemented to safeguard the confidentiality and anonymity of participants' responses and data are treated in secure storage with limited access only by authorized staff.

Concurrently, secondary data is gathered from relevant articles, journals, and other supportive literature in providing supplement and context to the findings obtained from the primary data through surveys. The secondary data provides background information, theoretical frameworks and empirical evidence through literature review that contribute to a deeper understanding of the research question and support the primary data interpretation.

The evaluation of the impact follows a retrospective analysis approach, which involves scrutinizing the program's effects following its implementation. This approach corresponds to the evaluative model as it incorporates various evaluation methods to assess the effects of ongoing or implemented policies (Dunn, 2003). The survey encompassed 2,126,810 participants and aimed to gather information about participants' behavior, attitudes, and opinions pertinent to the research (Marczyk et al., 2005). The questions were compiled into a digital questionnaire accessible through participants' accounts.

The survey took place after participants completed their training within the program's timeline from April 2020 to November 2022. Table 1 below illustrates the distribution of respondents based on their ID and the year of the survey.

Table 1. The Number of Respondents by Survey Year

Year	Number of Sample	% Response Rate
2020	688,226	87.5
2021	643,802	90.7
2022	794,782	89.8
Total	2,126,810	

Source: PMO Kartu Prakerja, 2022

Subsequently, the data is analyzed using the STATA statistical software with descriptive statistical methods to summarize participants' responses to survey questions. Descriptive statistical analysis entails a numerical procedure or graphical representation aimed at providing an overview of the dataset (Cooksey, 2020). This analysis furnishes a summary of the statistical information derived from the dataset. The evaluation of the impact employs a retrospective evaluation model approach, involving several indicators that serve as proxies for welfare and quality of life resulting from the Kartu Prakerja Programme. The following indicators and proxy variables are integrated into the research instrument (questionnaire).

Table 2. Indicators and Variables in the Evaluation Survey Instrument of Kartu Prakerja Programme

Indicators	Pre-Intervention	Post-Intervention
Welfare		
Employment Status	In January 2020/ 2021/ 2022, did you work as an employee or entrepreneur to earn income?	Are you currently working as an employee or entrepreneur to earn income?
Social Protection		For what purposes do you allocate the cash incentives of Kartu Prakerja Programme?
Increased Income	How much income/revenue did you receive in January 2020/2021/2022?	● How much increase in income/revenue have you received as an employee since January 2020/2021/2022? ● How much increase in income/revenue have you received as an entrepreneur since January 2020/2021/2022?

Quality Life		
Access to Competency Improvement Training	Before participating in the Kartu Prakerja Program, had you attended any training, courses or workshops?	Skilling, reskilling and upskilling as the output of training.

Post-Training Impact		- To gain knowledge, skills and soft skills; - To increase productivity; - To enhance competitiveness; - To promote entrepreneurship.
Promoting Future Skills		Obtain future skill competencies (cognitive, interpersonal, leadership, digital)
Fostering Lifelong Learning Habits		When the application is not successful, applicants purchase training independently.
Financial Inclusion		E-wallet and bank account utilization

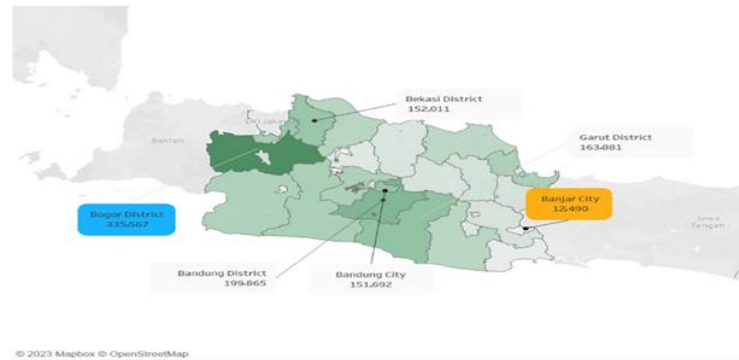*Source: PMO Kartu Prakerja, 2022*

Result and Discussion

Analysis of Data

The recipients of the Kartu Prakerja Programme consist of individuals with various demographic characteristics, including those from rural and urban areas, different age groups, and varied educational backgrounds. Figure 2, which displays spatial information, presents the distribution of Kartu Prakerja Programme beneficiaries across the 27 Districts/Cities within West Java Province over a span of three years. The color gradient, ranging from dark to light green, signifies the varying numbers of program beneficiaries. The darker green shade represents areas with the highest number of participants, such as Bogor District with 335,567 beneficiaries. Conversely, the lighter green hue indicates regions with fewer participants, like Banjar City with a population of 12,490. In terms of age groups, the beneficiaries are predominantly young adults between the ages of 18 and 35, constituting a total of 64.68%. Furthermore, based on educational attainment, recipients with high school education dominate the program. The Kartu Prakerja Programme also caters to individuals with lower levels of education, accounting for approximately 18.3% of beneficiaries who have not completed elementary school education.

The effectiveness of the Kartu Prakerja Programme's reach is facilitated by its end-to-end digital program design within its ecosystem. This digital process allows citizens from all across Indonesia to easily and efficiently submit their applications, transcending limitations of time and location. The digitization also ensures inclusivity, enabling diverse groups, including those with disabilities, limited education, and former foreign workers, to participate (Purbasari et al., 2022). The acceleration of this digital trend was prompted by the COVID-19 pandemic. The increased adoption of digital approaches aimed to reach a wide spectrum of beneficiaries, including households that were previously outside the scope of social protection systems (Gentilini et al., 2020; IPC-IG, 2021). The availability of internet infrastructure in West Java, spanning 5,871 villages, supports this trend (Open Data Jabar, 2023).

The substantial number of young adults (18-35 years old) interested in joining the Kartu Prakerja Programme ecosystem signifies the program's role in providing access to benefits for new vulnerable groups during the pandemic (ADB, 2022). The 18-25 age bracket is a critical transition period from schooling to entering the workforce. Removal of financial support from families, along with shifts in government social security policies, have spurred young adults to adapt swiftly to life milestones in order to secure employment. However, the global economic uncertainty stemming from the COVID-19 pandemic has cast a shadow over the job prospects of many young adults. This group is particularly susceptible to job insecurity due to their limited job-relevant skills and experience, smaller social networks, reduced economic resources for job searching, and a lack of information on how to secure employment (Kalleberg, 2020, 259). Conversely, the Kartu Prakerja Programme has provided opportunities for older individuals (above 46 years) to engage in training. This counters certain cases where men over 50 were less likely to receive training offers from employers. Noticeable participation inequalities indicate a divide in access to jobs that

provide training and advancement prospects (Canduella et al., 2012). The substantial number of Kartu Prakerja Programme beneficiaries across different education levels, from elementary to high school, underscores the growing interest among individuals with lower education levels to enhance their skills according to their competencies. This skill improvement is crucial in adapting to evolving demands for new skills in the labor market and contemporary entrepreneurial developments.

Source: PMO Kartu Prakerja, 2022

Figure 1. Demografic Conditions of Program Kartu Prakerja Recepients (Year 2020-2022)
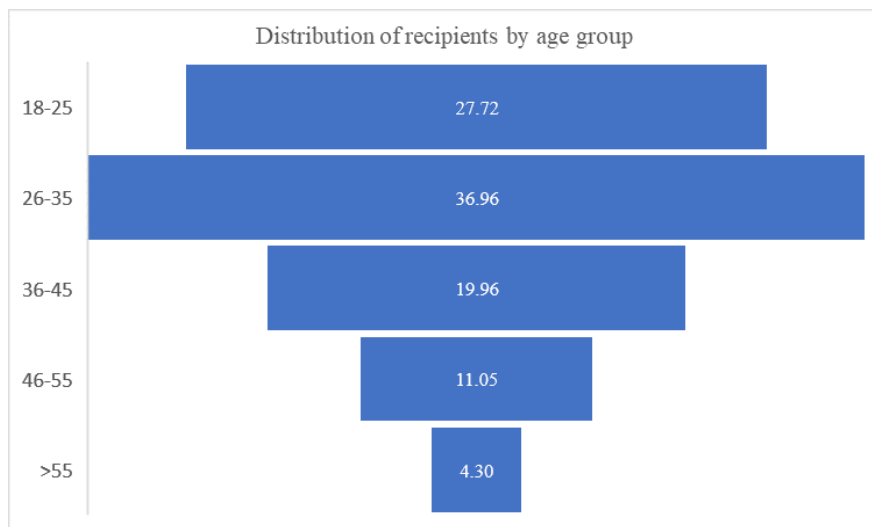
Source: PMO Kartu Prakerja, 2022

Figure 2. Demografic Conditions of Program Kartu Prakerja Recepients (Year 2020-2022) by Age Group level
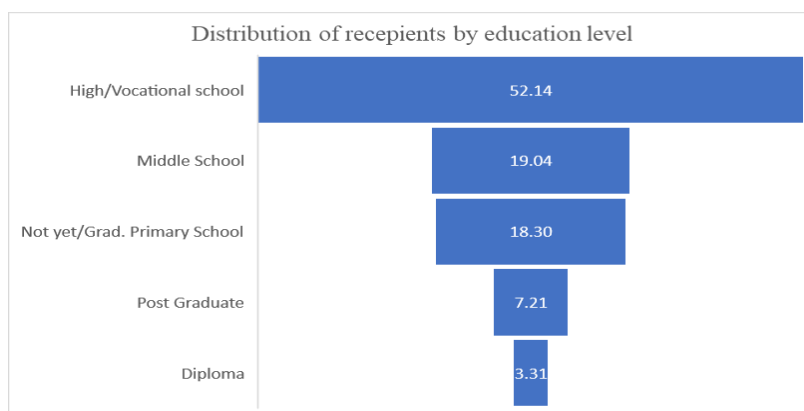
Conditions of Prakerja Recipients Prior to Receiving The Intervention

The beneficiary targets of the Kartu Prakerja Programme encompass job seekers, individuals who have been laid off, and workers aiming to enhance their competencies. The precision in targeting the program's beneficiaries in West Java becomes evident through the characteristics of recipients before the program intervention (as depicted in Table 3). A significant portion of program beneficiaries is currently unemployed (59.63%). While categorized as active workers, participants of the Kartu Prakerja Programme belong to the informal labor category, including actors from MSMEs and/or occasional workers (79.26%). A large majority of program beneficiaries have not previously engaged in any training to enhance their competencies (85.88%). The program's inclusivity is evident in its engagement of individuals with disabilities (2.45%), women (49%), and former Indonesian migrant workers (3%).

These statistics underscore the implementation of social protection principles within the program, which serves to mitigate demographic inequality, gender disparity, and the exclusion of marginalized groups.

Post Program Kartu Prakerja Programme: The Impact on Welfare

In the early stages of the pandemic, the Kartu Prakerja Programme embarked on two simultaneous missions. The first mission involved the development of work competencies for job seekers, workers/laborers who had been laid off or lost their jobs, and/or workers/laborers seeking competency improvement through the provision of training assistance. The second mission entailed functioning as a form of social protection in response to the COVID-19 pandemic by offering conditional social assistance to program recipients upon the completion of training (Conditional Cash Transfer). The expectation was that both mechanisms would contribute to enhancing the quality of life and providing financial support to vulnerable groups during the pandemic.

Source: PMO Kartu Prakerja, 2020-2022

Figure 3. Demografic Conditions of Program Kartu Prakerja Recepients (Year 2020-2022) Education

Table 3. Respondents Profile of Kartu Prakerja Programme Recipents

Social Welfare Aspect	Percentage
Unemployed when applying the program	59.93
Person with Disability	3
Never attended training	85.88
Former Migrant Worker	3
Woman	49
Informal Workers	79.26*

Note:
*of the total respondent who work
Source: PMO Kartu Prakerja, 2020-2022

From a social welfare perspective, the program's impact is discernible through the benefits of social assistance, increased income, and the opportunities created for participants to re-enter the workforce.

As a Work Competency Development Program, Prakerja has shown a contribution to the increased number of individuals in the labor force who have secured jobs. Approximately 26.76% of respondents have secured employment after previously experiencing unemployment. This finding is evidence that an effective job training program has the potential to increase opportunities for job placement thereby helping program beneficiaries transition into the workforce (Card et al., 2010). This finding is also supported by the job search service feature available for Prakerja participants to seek employment. This feature enables job seekers to explore employment opportunities and match their skills with the demands of the business sector within the job application ecosystem.

Positive outcomes are also evident in the 3.17% increase in income for formal workers and a 4.30% increase for entrepreneurs. This finding aligns with the research by Cancian et al (2013) suggesting that participants engaging in a properly-structured job training program experience an increase in income as a result of increased job placement and promotion opportunities in the workplace.

Table 4. The Impact on Welfare Post Program Kartu Prakerja Programme

Social Welfare Aspect	Percentage
Obtain job	26.76*
Increasing entrepreneurial income	4.30***
Social assistance supports basic needs	90.17**
Social assistance supports capital needs	63.62**
Increase of worker income	3.17***

Note:

*previously unemployed

** the impact of social assistance provision through Kartu Prakerja Programme during pandemic

*** income increase from previous employment and entrepreneurship

Source: PMO Kartu Prakerja, 2020-2022

Meanwhile, The Kartu Prakerja Programme, through its social assistance mechanism, has aided beneficiaries in meeting their basic needs during COVID-19 pandemic. Around 90.17% of beneficiaries reported utilizing the social assistance incentive to cover their basic needs. These findings align with empirical observations from various countries where social assistance has played a role in preventing food insecurity during the pandemic (Kumar et al., 2022; Narayanan et al., 2022; Bottan et al., 2020). Following basic needs, 63.62% of beneficiaries also utilize the social assistance for capital needs to sustain their businesses.

Post Program Kartu Prakerja Programme: The Impact on Quality of Life

The program's impact on the quality of life is assessed through various indicators, including the outcomes of attending the training, the effects of training attendance, perceptions of future skills enhancement, promotion of lifelong learning habits, and access to financial services. As a result of attending the training, Kartu Prakerja Program beneficiaries, in general, have experienced an increase in skills and positive preferences.

The program beneficiaries reported that they have acquired new skills that were previously unfamiliar to them, obtained certificates of expertise (86.52%), learned new strategies for work or entrepreneurship (95.19%), improved their efficiency in task completion (93.98%), and acquired the latest or updated work-related skills (87.09%). These outcomes align with the goals of the Kartu Prakerja Programme, where the provided training aims to enhance workforce competencies (skilling, upskilling, and reskilling) to bridge the skill gap in current industrial demands and offer new insights into the latest entrepreneurial methods. This finding is also in line with the practice of providing training to adult learners which will have the potential for increased practical skills, real-world application and technology proficiency (Merriam and Bierema, 2014.

The impact of these increased competencies is reflected in the enhancement of participants' knowledge, skills, and soft skills (96.65%), as well as their contribution to increased productivity (94.13%). Program beneficiaries also expressed that the improved competence obtained could enhance competitiveness (91.66%) and foster entrepreneurship (94.43%). These results confirm the training

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initiatives for the workforce to enhance the employability of participants by providing them with relevant skills and qualifications, the results of which can increase job placement rates and help WtW program recipients to transition into the workforce (Bloom et al, 2004; Card, et al, 2010). These results could potentially serve as an alternative solution to address the issues of low competence, productivity, and competitiveness among workers in West Java.

In response to preparing for future skills, as outlined by McKinsey (2021), there are four categories of skills crucial for the workforce: cognitive, interpersonal, leadership, and digital skills. These skills encompass a synthesis of various abilities. For instance, cognitive skills encompass critical thinking, communication, planning, work methods, and mental flexibility. Kartu Prakerja Programme has motivated beneficiaries to acquire these skills, with cognitive abilities being gained by 89.48% of participants after completing the training. Kartu Prakerja Programme training also empowers recipients to acquire interpersonal skills (88.72%), leadership skills (92.61%), and digital skills (89.59%) (Table 5).

Interpersonal skills enable recipients to develop negotiation abilities, foster relationships with others, and effectively lead teams. Leadership skills are cultivated through understanding and managing oneself, entrepreneurial capabilities, and a focus on goal achievement. Digital skills are naturally acquired by program beneficiaries through their participation. The user journey within the Kartu Prakerja Programme, spanning from the registration process and online training participation to survey completion, inherently imparts new experiences in utilizing technological tools and digital applications. This experience fosters an increase in digital literacy, particularly during the utilization of various features within the Prakerja application, such as purchasing training on digital platforms and engaging in digital financial transactions. In the context of adult learning, these findings are in line with the potential outcomes for adult learners which will increase effective communication skills and technology proficiency (Merriam and Bierema, 2014).

While not serving as the primary policy, the Kartu Prakerja Programme has effectively increased recipients' access to formal financial institutions by 23.92%. The COVID-19 pandemic has created opportunities to expedite financial inclusion in West Java. The implementation of social mobility restrictions to curb the virus's spread led to the closure of bank branches and the expansion of mobile financial agent operations in villages. Simultaneously, the government has promoted the use of cashless and contactless methods for distributing social assistance, a strategy also embraced by the Kartu Prakerja Programme. Training assistance is channeled through recipients' virtual accounts. Furthermore, access to digital wallets and bank accounts is facilitated upon recipients receiving the first incentive following training completion. For individuals without prior bank accounts, Kartu Prakerja Programme has expanded access to bank accounts by 92.20% and e-wallets by 7.80%. The incentives are disbursed to recipients for utilization according to their needs.

The training assistance offered through the Kartu Prakerja Programme has introduced novel experiences to recipients who had not previously participated in competency enhancement training. The experience of engaging in training cultivates an awareness of the significance of continuously acquiring new skills. Lifelong learning practices play a vital role in maintaining work capabilities and adapting to stay competitive in the labor market. Notably, 20.88% of program beneficiaries intend to continue attending training even when training assistance is no longer available. When these habits are internalized, along with increasing competence and income, recipients of training assistance programs are willing to attend and participate in training even though they are required to pay by their own budget and no longer depending on training assistance (Pavetti et al., 2018)akerja Programme of work competency enhancement has emerged as one of the solutions to address labor

When segregated into gender analysis, it is found that the women group had the greatest impact on improving their future skills (cognitive, interpersonal, leadership and digital skills) and financial inclusion (Appendix.1). This finding is relevant and contributes to Sustainable Development Goals (SDGs) Number 4: Quality Education and Number 5: Gender Equality and Empowering Women. Meanwhile, when segregated into educational background, Program Kartu Prakerja provides the most impact for High School/ Vocational School Graduates compared to the others (Appendix.1), including training results for skilling, upskilling and reskilling, increasing productivity, competitiveness and entrepreneurship, promoting future skills and stimulating life-long learning practice, as well as supporting financial inclusion & access to bank account & e-wallet ownership. These impacts are relevant and contribute to the SDGs Number 8 of Decent Work and Economic Growth.labor

Table 5. Impact on Quality of Life after receiving Kartu Prakerja Programme
Quality of Life Aspects

	%
Training Results	
Teaches new skills that were not previously acquired (skilling)	**95.98**
Provides a certificate of expertise/skills that were previously acquired (skilling)	**86.52**
Teaches new ways/strategies for work/entrepreneurship (upskilling)	**95.19**
Increases efficiency for work completion (upskilling)	**93.98**
Trains the latest/updated skills of working (reskilling)	**87.09**
Impact of Training	
Helps improve the participants' knowledge, skills, and soft skills	**95.98**
Helps increase productivity	**86.52**
Teaches new ways/strategies for work/entrepreneurship (upskilling)	**95.19**
Increases efficiency for work completion (upskilling)	**93.98**
Trains the latest/updated skills of working (reskilling)	**87.09**
Promoting Future Skills	
Cognitive	**89.48**
Interpersonal	**88.72**
Leadership	**92.61**
Digital	**89.59**
Financial Inclusion	**23.92**
Increase access to account ownership	
• Bank Account	**92.20**
• *E-wallet*	**7.80**
Stimulating Lifelong-learning Practice	
Repurchase training once assistance is no longer available	**20.99**

Conclusions, suggestions and limitations

The Kartu Prakerja Programme of work competency enhancement has emerged as one of the solutions to address labor management issues in West Java, Indonesia. The provision of training assistance has proven effectively supported the workforce in West Java, enabling them to access essential training opportunities. The outcomes of participating in these training programs have resulted in increased competence, productivity and competitiveness of West Java workforce, resulting in the increased number of individuals in the labor force who have secured jobs and the increase of income for formal workers & entrepreneurs, contributing to the public welfare.

On the impact to the quality of life, The Kartu Prakerja Programme cultivates the lifelong learning ethos among participants. Through the programme, participants are equipped with the cognitive and soft skills i.e: interpersonal, leadership and digital skills. According to the statistics, The Kartu Prakerja Programme has benefited women, particularly in promoting future skills, i.e: cognitive, interpersonal, leadership as well as digital skills, and financial inclusion. These collective benefits ultimately contribute to an enhanced quality of life for the residents of West Java.

The social assistance component, functioning as an incentive within the Kartu Prakerja Programme, has served as a crucial form of social protection during the ongoing pandemic. Beneficiaries have primarily utilized these incentives to fulfill basic necessities and ensure business continuity

The adoption of an end-to-end digital system within the Kartu Prakerja Programme has significantly advanced financial inclusion in West Java. Furthermore, the integration of a job search feature, supported by digital technology, has proven instrumental in assisting job seekers in West Java to effectively pursue employment opportunities that align with their skill sets.

It is recommended that policies and implementations aimed at improving work competency in West Java be pursued in a continuous and sustainable manner. The positive outcomes stemming from collaborative efforts involving multiple stakeholders have demonstrated their significant contributions to

the workforce in West Java. This collaborative approach has particularly played a pivotal role in enhancing both welfare and the overall quality of life in the region.

Despite the increased number of income for formal workers and entrepreneurs, the direct influence of skills advancement on individual and business income remains inconclusive at this point in the study. One limitation of this research is its inability to delve deeper into whether the income increase results from the skills enhancement provided by the training through the Kartu Prakerja Programme or due to the relaxation of restriction policies during the COVID-19 pandemic. Further methodologies can be employed to assess the impact of the increased income attributed to the Kartu Prakerja Programme over an extended period

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