Federal Democratic Republic of Ethiopia

FY2023 Ex-post Evaluation Report of Technical Cooperation Project

"Project on Capacity Building for Dissemination of Quality and Productivity Improvement (KAIZEN)" and "Project on Capacity Development for KAIZEN Implementation for Quality and Productivity Improvement and Competitiveness Enhancement"

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0. Summary

The Project[1] aimed to increase in numbers of enterprises and institutions implementing KAIZEN and the development of industrial personnel capable of practicing KAIZEN through the improvement and strengthening of the KAIZEN dissemination system/ institution, formulation of the dissemination human resource training system, and provision of KAIZEN services to both the private and public sectors, thereby contributing to the improvement of the quality and productivity of enterprises. The Project aligned with Ethiopia's national development plans and needs, aiming to improve manufacturing sector productivity. The Project's approach was appropriate. Although no other JICA projects or other donors' projects coordinated and agreed on the expected Outputs with the Project, the Project's objectives were consistent with Japan's ODA policy of emphasizing private sector development and capacity building in the business and industrial fields through KAIZEN. Therefore, its relevance and coherence are high. The Project's cost slightly exceeded the plan, but the Project's period was within the plan. Therefore, efficiency of the Project is high. Through the Project, the KAIZEN dissemination system/ institution was improved and strengthened, the dissemination human resource training system was formed, and the number of enterprises introducing KAIZEN increased. Industrial human resources capable of practicing KAIZEN were developed. However, due to limitations in the information provided by the Implementing Agency, it was impossible to confirm the expansion of enterprises implementing and continuing KAIZEN or the improvement in quality and productivity of enterprises introducing KAIZEN. Therefore, effectiveness and impacts of the Project are moderately low. There were slight issues observed in the institutional/ organizational aspects regarding the sustainability of the effects manifested by the Project, but the prospects for improvement/resolution were high. Therefore, sustainability of the Project effects is high.

In light of the above, the Project is evaluated to be satisfactory.

[1] This evaluation report refers to the two projects under evaluation ("Project on Capacity Building for Dissemination of Quality and Productivity Improvement (KAIZEN)" and "Project on Capacity Development for KAIZEN Implementation for Quality and Productivity Improvement and Competitiveness Enhancement") as "the Project."

1. Project Description



Project Location (Source: Prepared by the evaluator using maps obtained from the Ministry of Foreign Affairs website)



The direction sign of the factory in the enterprise implementing KAIZEN (Source: Photo taken by the evaluator)[2]

1.1 Background

Although Ethiopia had achieved high economic growth since the early 2000s, the share of the secondary industry in GDP was around 10%, and the share of the manufacturing sector in GDP was particularly low at 5%. The underdevelopment of the manufacturing sector and the low quality and productivity of the manufacturing sector were barriers to export promotion and the promotion of domestic and foreign investment. To achieve sustainable economic growth and poverty reduction, it was essential to develop the private sector and strengthen competitiveness by improving the quality and productivity of the manufacturing sector.

The Government of Ethiopia showed a strong interest in KAIZEN, a Japanese philosophy and method for improving quality and productivity, which was introduced at the Africa Task Force of the Initiative for Policy Dialogue held in Addis Ababa in July 2008. JICA implemented the "Quality and Productivity Improvement Plan Study in the Republic of Ethiopia" (2009-2011), which involved disseminating basic KAIZEN knowledge and skills to the staff of the KAIZEN Unit (hereinafter referred to as "KU") established within the Ministry of Industry[3] (hereinafter referred to as "MoI") and providing support for the introduction of KAIZEN to manufacturing enterprises.

After seeing the outcome, the Government of Ethiopian established the Ethiopia KAIZEN Institute (hereinafter referred to as "EKI"), the current KAIZEN Excellence Center (hereinafter referred to as "KEC"), under MoI in order to expand the KAIZEN activities.[4]

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[2] The other photos in this report were also taken by the evaluator during the field survey.
[3] During the implementation period of EK3, MoI was reorganized and renamed MoTI, and at the time of the ex-post evaluation, it was reorganized and renamed MoI again.
[4] In this report, the Implementing Agency's name is stated as EKI for the information before the name was changed to KEC (before April 2022) and as KEC for information after the name was changed.

Then, the Government of Ethiopia requested "Project on Capacity Building for Dissemination of Quality and Productivity Improvement (KAIZEN)" (hereinafter referred to as "EK2") and "Project on Capacity Development for KAIZEN Implementation for Quality and Productivity Improvement and Competitiveness Enhancement" (hereinafter referred to as "EK3"), whose main objective was to develop human resources that could implement KAIZEN through the establishment of the KAIZEN dissemination system centered on EKI.

1.2 Project Outline

		EK2	EK3
Overall Goal		An increased number of private enterprises will implement quality and productivity improvement (KAIZEN).	Quality and productivity in targeted industries are improved, leading to an enhancement of industrial competitiveness in Ethiopia.
Project Purpose		The system is established to disseminate quality and productivity improvement (KAIZEN) to private enterprises in a sustainable manner.	KAIZEN practitioners are developed in both private and public sectors through the KAIZEN dissemination system led by EKI.
Outputs	Output 1	The institutional and organizational foundation of Ethiopian KAIZEN Institute (EKI) is established as the core and lead organization for the dissemination of quality and productivity improvement (KAIZEN).	EKI's (including its regional network) management capacity in KAIZEN dissemination [5] is enhanced through the accumulation and standardization of best practices.
	Output 2	The system of human resource development for dissemination of quality and productivity improvement (KAIZEN) to large and medium enterprises (LMEs) is functionalized in EKI.	EKI becomes able to provide intermediate-level KAIZEN [6] training and consultancy services to private and public sectors.
	Output 3	The model system for EKI to foster TVET[7] Trainers' Trainers (TTTs[8]) is developed for quality and productivity improvement (KAIZEN) for micro and small enterprises (MSEs).	A coordinated system (vertical and horizontal) is put in place whereby the quality of KAIZEN training and consultancy services provided by EKI and other institutions is ensured and

[5] In the Japanese version of the PDM, "in KAIZEN dissemination" was not stated. Since EKI was an organization set up to promote KAIZEN, it was judged that there was no discrepancy between the English PDM and Japanese PDM.
[6] In the English version of the PDM, "Advanced Kaizen" is indicated as "Intermediate Kaizen." During the implementation period, the Implementing Consultant and EKI agreed that "Intermediate Kaizen" should be indicated as "Advanced Kaizen."
[7] Technical Vocational Education and Training.
[8] TVET Trainers' Trainers.

	EK2	EK3
		KAIZEN dissemination is promoted at national level.[9]
Total cost (Japanese Side)[10]	682 million yen	797 million yen
Period of Cooperation	November 2011 - November 2014	June 2015 - June 2020
Target Area	All over Ethiopia	All over Ethiopia
Implementing Agency	MoI/EKI	EKI
Other Relevant Agencies/Organizations	[Cooperate agencies/ organizations] ・ Ministry of Urban Development and Construction ・ Federal MSE Development Agency[11] ・ Regional MSE Development Agency ・ Ministry of Education ・ Federal TVET Agency (hereinafter referred to as "FeTA") [12] ・ Regional TVET Agency (hereinafter referred to as "ReTA")[13] ・ Technical Vocational Education and Training Institute	[Supervisory authority during the implementation period] ・ Civil Service Commission (hereinafter referred to as "CSC") ・ Ministry of Public Service and Human Resource Development (hereinafter referred to as "MoPSHRD") ・ Ministry of Trade and Industry (hereinafter referred to as "MoTI," former MoI)[14] [Cooperate agencies/ organizations] ・ Ministry of Science and Higher Education (former Ministry of Education) ・ FeTA
Consultant	Japan Development Service Co., Ltd.	Japan Development Service Co., Ltd. Japan Productivity Center
Related Projects	[Technical Cooperation] ・ The study on quality and	[Technical Cooperation] ・ Study on industrial policy

[9] In the English PDM, the "systematic system" in the Japanese PDM is described as "A coordinated system (vertical and horizontal)."
[10] EK2 includes the cost of the detailed planning survey, but EK3 does not include this cost as the survey was not conducted.
[11] At the time of the ex-post evaluation, after several organizational changes, the Ethiopia Enterprise Development (EED) within the MoI was responsible for SMEs in the manufacturing sector. In contrast, the Ministry of Labor and Skills took on the role of enterprise support for small enterprises in the nonmanufacturing sector and microenterprises in all sectors (hereinafter referred to as "MoLS").
[12] Due to organizational restructuring, MoLS had taken over the role of FeTA at the time of the ex-post evaluation.
[13] At the time of the ex-post evaluation, the Bureau of Labor and Skills was responsible for some of ReTA's functions in some regions and cities, but ReTA also continued to carry out these functions in other regions and cities.
[14] At the time of the ex-post evaluation, KEC was supervised by the MoI (formerly MoTI). EKI was under the supervision of the MoI during the implementation of EK2 and became under the supervision of MoPSHRD due to the reorganization of government organizations in October 2015. Furthermore, due to the reorganization of government organizations in November 2018, MoPSHRD became CSC, which was under the direct control of the Prime Minister, and the organization came under the supervision of CSC.

	EK2	EK3
	productivity improvement (KAIZEN) in the Federal Democratic Republic of Ethiopia (2009-2011, hereinafter referred to as "EK1") ・ Study on industrial policy dialogue in the Federal Democratic Republic of Ethiopia (phase 2) (2012-2016)	dialogue in the Federal Democratic Republic of Ethiopia (phase 2) (2012-2016) ・ Industrial Promotion Project in Ethiopia (2017-2022)[15] ・ Long-term training "International Personnel Doctorate Course" [Grant Aid] ・ The Project for the Construction of TICAD Human Resource Development Center for Business and Industry (2018)

1.3 Outline of the Terminal Evaluation

The following is the outline of the EK3 Project at the time of completion. For information on the actual outputs and outcomes at the time of the Project completion, please refer to "3.2 Effectiveness and Impacts."

1.3.1 Achievement Status of Overall Goal at the Time of the Project Completion[16]

In the EK3 Project Completion Report, the achievement of the Overall Goal was expected to be as follows:

・ EKI was following up with in in-company trainings (hereinafter referred to as "ICT") enterprises and newly providing the consulting service by itself. It was thought that if these activities had been continued, the number of enterprises implementing and continuing KAIZEN would increase.

・During the implementation of EK3, an agreement was met between the consultant team and EKI that "intermediate KAIZEN" should be defined as "advanced KAIZEN" and that of the 56 large and medium-sized enterprises that had introduced the intermediate KAIZEN, either through the Project or independently by EKI, 51 enterprises (91%) were continuing their KAIZEN activities. In addition, it was expected that the KAIZEN index in the enterprises that implemented KAIZEN would improve by 40-50% in the relevant line or department. Although the company-wide figures would differ depending on the degree of horizontal deployment in each enterprise, the KAIZEN index value was expected to improve

[15] The scheme was Technical Cooperation for Development Planning. Under this cooperation, the industrial policy dialogue was continued.

[16] In the ex-post evaluation report, an overview of the terminal evaluation of the final phase is to be included for phased projects. However, for EK3, since the terminal evaluation has not been conducted, an overview of the Project's completion shall be provided.

by around 10% compared to before KAIZEN was implemented.

1.3.2 Recommendations from the Terminal Evaluation

(1) Establishing EKI as a Self-Sustaining Organization

To enhance customer satisfaction with EKI Consulting Services, it was essential for EKI to charge consulting fees and obtain genuine evaluations from clients regarding EKI Consulting Services. By implementing paid consulting services, EKI needed to develop an attitude focused on improving customer satisfaction.

(2) Standardization of KAIZEN Consulting

The standardization of follow-up processes was crucial for the efficiency of consulting activities. By standardizing the KAIZEN themes, the client preferences, the number and level of consultants available, and the duration of engagements, it became easier to plan visits to enterprises. This also led to the standardization of follow-up processes. To achieve standardization, it was necessary to analyze consulting activities, and the utilization of IT for daily management and analysis tasks is effective. Promoting efficiency and standardization through IT implementation is required.

(3) Capacity Building to Aim for a Center of Excellence in KAIZEN

To enhance Ethiopia's industrial competitiveness, EKI must have demonstrated exceptional consulting capabilities in specific industries or sectors and become a model for neighboring countries. This also aligned with the goal of establishing the Center of Excellence (COE) for KAIZEN in the English-speaking regions of Africa. Specific capacity-building initiatives included developing a small group of consultants capable of providing comprehensive marketing services for specific industries and creating training programs that offer enterprises hierarchical management training (for supervisors, first-line managers, senior managers, etc.).

2. Outline of the Evaluation Study

2.1 External Evaluator

Ruiko Hino, Foundation for Advanced Studies on International Development

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: October 2023 - February 2025

Duration of the Field Study: February 16, 2024 - March 16, 2024; and
July 15, 2024 - July 19, 2024

2.3 Constraints During the Evaluation Study

Due to the security situation, the government-related agencies/ organizations and enterprises that could be surveyed were limited to those in the capital city of Addis Ababa. Consequently, information gathering from regions outside the capital was restricted to distributing and collecting questionnaires (electronic data) and interviews conducted online.

3. Results of the Evaluation (Overall Rating: B[17])

3.1 Relevance/ Coherence (Rating: ③[18])

3.1.1 Relevance (Rating: ③)

3.1.1.1 Consistency with the Development Plan of Ethiopia

At the beginning of EK2, the *Growth and Transformation Plan 2010/11-2014/15* (hereinafter referred to as "GTP1") emphasized the promotion of LMEs and MSEs centered on manufacturing, the development of industrial zones, and the strengthening and privatization of public enterprises. The *Growth and Transformation Plan II (GTP II) (2015/16-2019/20)* (hereinafter referred to as "GTP2"), which was drafted at the beginning of EK3 and remained the national policy until its completion, continued to promote economic structural reforms focused on industrialization. Additionally, a new chapter on productivity and competitiveness was added, indicating the Ethiopian government's policy to position KAIZEN as a tool for enhancing productivity and competitiveness.

3.1.1.2 Consistency with the Development Needs of Ethiopia

From the time of the ex-ante evaluation to the completion of the Project, the share of Ethiopia's manufacturing sector in GDP remained low, between 5% and 6%, acting as a bottleneck to sustainable economic growth. The share of the manufacturing sector in GDP was 5.7% in 2012/13 and 6.4% in 2015/16, and it remained at a low level of 6.9% in 2020/21 at the time of Project completion.[19]

Additionally, as indicated in GTP2, "productivity improvement" was a crucial element of the Ethiopian government's development policy; that is, the productivity improvements

[17] A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory
[18] ④: Very High, ③: High, ②: Moderately Low, ①: Low
[19] Source: URL: https://www.combanketh.et/en/publications/(accessed on February 14, 2024)

aimed for in EK2 and EK3 aligned with the development needs of Ethiopia.

3.1.1.3 Appropriateness of the Project Plan and Approach (Describe, If Applicable.)

The Project stakeholders responded appropriately to the "Lessons Learned from Similar Past Project and Application to the Project" section of the ex-ante evaluation sheets as follows:

(1) EK2

1) Consideration of "Understanding and Commitment to KAIZEN by Enterprise Managers" in Enterprise Selection

Based on the lessons from the previous phase, EK1, the Ethiopian side agreed during the planning period that the enterprise selection criteria would include "understanding and commitment to KAIZEN by enterprise managers." In EK2, "managerial motivation" was included as a selection criterion, and enterprises were selected after confirming their intentions.

2) Emphasis on Establishing a System for Promoting Quality and Productivity Improvement

Drawing from the lessons of "The Master Plan for Quality/ Productivity Improvement in the Republic of Tunisia" (2006-2008), it was deemed essential to establish a system within the government to promote quality and productivity improvement. Accordingly, Activity 1 involved organizing and structuring EKI, and Activities 2 and 3 aimed at human resource development to disseminate Kaizen, which was implemented as planned.

3) Collaboration with Sector-Specific Technical Service Providers in Consulting on Quality and Productivity Improvement

The "Master Plan for Quality/ Productivity Improvement in the Republic of Tunisia" and the "Productivity and Quality Improvement Center Project" in Egypt (2007-2010) highlighted the necessity of collaborating with sector-specific technical service providers in consulting on quality and productivity improvement. In EK2, it was planned to collaborate with bureaus and agencies within or under MoI responsible for technological advancements in various industrial sectors and to obtain advice on improving elemental technologies as needed. In practice, EK2 was at the stage of disseminating basic KAIZEN, and sector-specific technologies were not significantly required.

(2) EK3

1) Improvement of EKI Consultants' Treatment

Based on the lessons from EK1, it was determined that EKI should reduce the number

of resignations by improving the treatment of directly employed consultants. During the implementation period of EK3, EKI staff salaries were increased, and the turnover rate significantly decreased.

Regarding gender considerations, at the time of planning EK2, it was planned to ensure a certain level of female participation in the selection of TTTs. Additionally, technology transfer to female representatives was expected in ICT-participating enterprises. The first director of EKI set a policy that 30% of participants in training and other activities should be women.[20] EKI's emphasis on female participation was also evident in terms of the inclusion of gender as an element in the Kaizen performance indicators.

The components of the Project, from the time of planning to the completion, aligned with the development plans of Ethiopia, which emphasized productivity improvement in the manufacturing sector and the development needs that recognized the essential role of manufacturing in Ethiopia's sustainable economic growth. Furthermore, the approach was deemed appropriate as the lessons from similar past projects were generally applied in the Project's implementation.

3.1.2 Coherence (Rating: ②)

3.1.2.1 Consistency with Japan's ODA Policy

The *Country Assistance Program for Ethiopia* (2008) was partially revised in 2009 to include "industrial development" as one of the priority areas. In the *Country Assistance Policy for Ethiopia* (2013), "private sector development" was identified as one of the four priority areas of assistance, along with "agriculture and rural development," "infrastructure development," and "education." Additionally, at the Fifth Tokyo International Conference on African Development (TICAD V) in June 2013, the Government of Japan announced its support for capacity development in African countries' business and industrial sectors through KAIZEN.

Therefore, the Project's objective, which was to improve the quality and productivity of the manufacturing sector in Ethiopia through the dissemination of Kaizen, was consistent with Japan's ODA policies for Ethiopia at the time each phase was planned.

3.1.2.2 Internal Coherence

At the time of the ex-ante evaluation and the implementation of the Project, a series of industrial policy dialogues,[21] the long-term training "Kaizen Doctoral Program," and the grant aid "TICAD Industrial Human Resource Development Center Construction Plan" were

[20] In this evaluation survey, no information was obtained regarding the actual performance.
[21] "Industrial Policy Dialogue Phase 2" (2012-2016) and "Industrial Promotion Project" (2017-2023).

projects that had a synergistic effect with EK2 and EK3.[22] However, no projects were identified where the Implementing Agency or JICA discussed and agreed on the content of collaboration and the expected outcomes within the Project.[23]

3.1.2.3 External Coherence

Collaboration and the synergistic effect between the Project and other donor projects were not confirmed at the planning stage or during their implementation.[24] Regarding the coherence with international frameworks, the Project contributed to developing the Africa Kaizen Initiative in some aspects[25] (hereinafter referred to as "AKI").[26]

As for coherence, the objectives of the Project were consistent with the Government of Japan's ODA policies for Ethiopia at the time of the ex-ante evaluations. However, there were no discussions and agreements on the content of the collaboration and the expected outcomes with other JICA projects, and no collaboration with other agencies was confirmed.

Therefore, its relevance and coherence are high.

3.2 Effectiveness and Impacts[27] (Rating: ②)

3.2.1 Effectiveness

An integrated evaluation was conducted in this evaluation. Given the same Implementing Agency and the high commonality and continuity of the Project's purposes and their indicators, the status of the achievement of the Output was measured by the achievements of the Outputs of EK2 and EK3 and the degree of achievement of EK2's Project Purpose. Also, the status of the achievement of the Immediate Outcome was measured by the degree of achievement of EK3's Project Purpose. The following sections describe the status of the Output and the Immediate Outcome achievement.

3.2.1.1 Achievement of the Output (EK2 and EK3 Output and EK2's Project Purpose)

All three Outputs of EK2 were achieved as planned.

Regarding the three Outputs of EK3, Output 1, "EKI's (including its regional network)

[22] Regarding the synergistic effects, they were described in "3.2 Effectiveness and Impacts."
[23] It was confirmed through a literature review, questionnaires, and interviews from the Implementing Agency, Implementing Consultant, and JICA stakeholders.
[24] It was confirmed through a literature review, questionnaires, and interviews from the Implementing Agency, Implementing Consultant, and JICA stakeholders.
[25] AKI is a ten-year initiative launched in 2017 by AUDA-NEPAD (African Union Development Agency-New Partnership for Africa's Development) and JICA, following the declaration to promote the KAIZEN initiative across Africa at the 6th Tokyo International Conference on African Development (TICAD VI) in 2016 (Source: https://www.jica.go.jp/information/seminar/2022/20221005_02.html [accessed February 10, 2024])
[26] They were described in "3.2 Effectiveness and Impacts."
[27] When providing the sub-rating, effectiveness and impacts are to be considered together.

management capacity in KAIZEN dissemination is enhanced through the accumulation and standardization of best practices," and Output 2, "EKI becomes able to provide intermediate-level KAIZEN training and consultancy services to private and public sectors," were achieved as planned. For Output 3, "A coordinated system (vertical and horizontal) is put in place whereby the quality of KAIZEN training and consultancy services provided by EKI and other institutions is ensured, and KAIZEN dissemination is promoted at national level," the following points were noted: The database of the enterprises that implemented and continued KAIZEN, the Kaizen Management Information System (hereinafter referred to as "KMIS"), was near completion at the time of the Project's completion but was still under development. The "Value-Added Productivity Indicator Analysis for ICT Enterprises" was conducted to verify the contribution of KAIZEN to the improvement of Ethiopia's industrial sector. However, EKI staff had not acquired the ability to conduct this analysis independently by the end of the Project.[28] Except for these points, Output 3 was achieved as planned.

The Project Purpose of EK2, as shown in Table 1, was achieved as planned.

Therefore, the Outputs of the Project were achieved as planned by the completion of the Project.

[28] Source: Interview with the Implementing Agency

Table 1 Achievement of Project Purpose (EK2)

Project Purpose	Indicator	Actual
The system is established to disseminate quality and productivity improvement (KAIZEN) to private enterprises in a sustainable manner[29]		[Achieved as planned]
	Indicator 1: 60 qualified professionally trained EKI consultants.	[Mostly achieved as planned] ・ At the time of the Project's completion, 49 Kaizen Consultants were qualified and professionally trained, and eight candidates received training.
	Indicator 2: 170 qualified professionally trained TTTs.	[Achieved more than planned] ・ 131 TTTs were qualified and professionally trained. Including the 175 trainees who completed the training given independently by EKI at TVETs, 306 TTTs were trained.
	Indicator 3: The system to disseminate quality and productivity improvement (KAIZEN) is clearly described in long-term KAIZEN dissemination plan.	[Achieved as planned] ・ It was planned that KAIZEN dissemination would be included in GTP2. Ethiopia's national development policy and the drafted long-term plan for Kaizen dissemination have been created in line with the draft of GTP2.
	Indicator 4: 75% of enterprises participated in in-company trainings answer the results of consulting services as satisfactory	[Achieved more than planned] ・ Approximately 94% of the enterprises responded that they were "satisfied" with the two-choice questionnaire for the LMEs that participated in ICT. Approximately 96% of the enterprises responded that they were four or more high on the five-step evaluation questionnaire for the training for MSEs that participated in ICT. If four or higher were judged to be "satisfied," more than 96% responded that they were "satisfied."
	Indicator 5: Accumulation of good practices of participating enterprises as model cases.	[Achieved as planned] ・ Among the ICT enterprises that achieved remarkable KAIZEN results, the standard operating procedures (SOPs) that could be used across the board in enterprises and the preventive maintenance in the leather manufacturing enterprises were highlighted and included in the KAIZEN manual.

Source: Prepared by the evaluator based on the Project Completion Report

3.2.1.2 Achievement of the Immediate Outcome (EK2's Project Purpose)

The Project Purpose of EK3 was mostly achieved as planned, as shown in Table 2.

Therefore, the Project mostly achieved the Immediate Outcome. This success could be attributed to the strong ownership by the Ethiopian side from the planning to the implementation. Additionally, continuous efforts were made to maintain good communication between the JICA project stakeholders, including the Implementing

[29] In EK2, the "the system to disseminate KAIZEN to private enterprises in a sustainable manner" referred to the following: The training program on the methods and concepts of basic KAIZEN was developed. A system for providing consulting services was established and can be implemented (Source: Responses to the questionnaire from the Implementing Consultant)

Consultant, the Implementing Agency, and the supervising agencies. Furthermore, the Japanese side provided support that aligned with the needs of the Ethiopian side (for details, see "5.1.2 Subjective Perspective").

Table 2 Achievement of Project Purpose (EK3)

Project Purpose	Indicator	Actual
		[Mostly achieved as planned]
KAIZEN practitioners are developed in both private and public sectors through the KAIZEN dissemination system led by EKI.	Indicator 1: 81 consultants complete intermediate-level KAIZEN training, and 32 consultants are certified and registered as intermediate-level Kaizen consultants.	[Partially achieved as planned] ・ 83 individuals completed the training and were trained as consultants. Out of these, 17 were certified and registered as intermediate-level consultants under the consultant certification system.[30] ・ Many consultants who applied did not take the exam due to busy schedules and a lack of study materials, which likely resulted in not meeting the target value.
	Indicator 2: The values of KAIZEN indicators of the enterprises that received KAIZEN training or consulting services during the Project period increased by 20% on average compared to before KAIZEN.	・ For the performance of this indicator, refer to Indicator 3 in Table 3.[31]
	Indicator 3: 30 enterprises are involved in intermediate-level KAIZEN activities.	[Achieved more than planned] ・ Through the intermediate-level KAIZEN training conducted by the project, a total of 38 ICT enterprises implemented KAIZEN activities. EKI's independent intermediate KAIZEN services were provided to five enterprises in 2017/18 and eight enterprises in 2018/19. Therefore, a total of 51 enterprises implemented intermediate-level KAIZEN activities.
	Indicator 4: 360 managers and workers are involved in intermediate-level KAIZEN activities.	[Achieved more than planned] ・ Through intermediate-level KAIZEN training, 504 managers and workers from the ICT enterprises were involved in KAIZEN activities.

Source: Prepared by the evaluator based on the Project Completion Report

3.2.2 Impacts

3.2.2.1 Achievement of Overall Goal

In this evaluation, the integrated evaluation was conducted. It was determined that the

[30] Kaizen Consultant Certification, Accreditation and Registration System, CARS.

[31] As this indicator corresponded to the Overall Goal, "quality and productivity in targeted industries are improved, leading to an enhancement of industrial competitiveness in Ethiopia," it was listed in the results for Indicator 3 of the Overall Goal in Table 3.

Implementing Agency for the two projects being evaluated was the same, and there was a high degree of commonality and continuity in the Overall Goals and its indicators. Therefore, the Impacts (Intermediate Outcomes) were measured by the level of the achievement of the EK3's Overall Goal.[32] The level of achievement of the EK3's Overall Goal is shown in Table 3.

Table 3 Achievement of Overall Goal (EK3)

Overall Goal	Indicator	Actual
Quality and productivity in targeted industries[33] are improved, leading to an enhancement of industrial competitiveness in Ethiopia.	Indicator 1: 20% of LMEs have continued KAIZEN for more than 2 years.	・ In this evaluation, the information to verify what percentage of LMEs continued KAIZEN for more than 2 years could not be obtained from the Implementing Agency. The following considerations were based on the available information. ・ Among the 28 ICT enterprises targeted by EK3, 50% (14 enterprises) continued KAIZEN. However, three of the 14 enterprises that did not continue KAIZEN were in the conflict-affected Tigray Region. Excluding these three enterprises, the percentage of enterprises that continued KAIZEN was 56% (14 out of 25 enterprises). ・ KEC supported the introduction of KAIZEN to a total of 311 manufacturing enterprises over the 4 years from 2019/20 to 2022/23. Additionally, KEC supported the introduction of KAIZEN to a total of 148 manufacturing enterprises over the 7 years from 2012/13 to 2018/19. This totaled 459 enterprises (though it was possible that not all information on the manufacturing enterprises that introduced KAIZEN was covered). ・ At the time of the ex-post evaluation, the Manufacturing Industry Development Institute (hereinafter referred to as "MIDI") under MoI provided data showing that there was a total of 8,459 LMEs[34] in the Ethiopian manufacturing sector (1,825 large enterprises and 6,634 medium enterprises). The number of enterprises that introduced KAIZEN through KEC accounted for approximately 5.5%. If 56% (257 enterprises) of the 459 enterprises continued KAIZEN for more than 2 years, it could be estimated that approximately 3.0% of LMEs in the Ethiopian manufacturing sector introduced KAIZEN through KEC's support and continued it for

[32] The indicator for measuring the degree of achievement of the EK2's Overall Goal is "5% of private companies engage in quality and productivity improvement (KAIZEN)," and Indicator 2 and 3 of the EK3's Overall Goal are indicators that divide the relevant indicator into the enterprise size and check the status of continuation and are indicators that measure the status of cooperation.

[33] In GTP2, the targeted industries were assumed to be export industries and import substitution industries.

[34] Ethiopian manufacturing enterprises are defined by the number of employees and total assets. Large enterprises have 100 or more employees and total assets of over 90 million Birr. Medium enterprises have between 51 and 100 employees and total assets between 10 million and 90 million Birr. Small enterprises have between 11 and 50 employees and total assets greater than 600,000 Birr but less than 10 million Birr. Micro enterprises have up to 10 employees and total assets up to 600,000 Birr. However, total assets take precedence over human resources (Source: *Federal Negarit Gazette, Regulation No.526/2022 Definition of Organization, Powers and Duties of the Ethiopian Enterprise Development Regulation,* The Federal Democratic Republic of Ethiopia, 2022, Addis Ababa)

		more than 2 years. ・ However, as discussed later, many medium enterprises have introduced KAIZEN through TVET. The number of LMEs that implemented KAIZEN was expected to exceed 459 enterprises so far, and it was highly likely that more than 3.0% of LMEs have continued KAIZEN for more than 2 years.[35] ・ Additionally, the MIDROC Investment Group, [36] the largest enterprise group in Ethiopia encompassing over 40 enterprises, has been promoting the introduction of KAIZEN across the entire group.
	Indicator 2: 10% of SME[37] have continued KAIZEN for more than 2 years.	・ In this evaluation, information to verify what percentage of MSEs continued KAIZEN for more than 2 years could not be obtained from the Implementing Agency and the related organizations. The following related information was available. ・ According to data obtained from MoLS at the time of the ex-post evaluation, the number of micro, small, and medium enterprises in Ethiopia was 325,190 (2016/2017). As of 2023, 162,883 enterprises received KAIZEN training. ・ Wolkite Polytechnic College in the Central Ethiopia Region provided Industrial Extension Services (hereinafter referred to as "IES") to over 200 micro, small, and medium enterprises in 2022/2023. Among these, 125 were medium enterprises, and 75 were small or micro enterprises. KAIZEN was one of the four IES support packages. Additionally, 70% of the enterprises receiving KAIZEN training continued KAIZEN for over 1 year (Wolkite Polytechnic interview).
	Indicator 3: The values of KAIZEN indicators of the enterprises that received KAIZEN training or consulting services during the previous 2 years increased by 10% on average compared to before KAIZEN.	・ At the time of the project completion, the KAIZEN indicators for ICT enterprises involved in the first to fifth batches of intermediate-level KAIZEN training had increased by an average of 42%.[38] (This was the reference information based on the situation at the time of the project completion.) ・ During the ex-post evaluation, the data on changes in KAIZEN indicators for enterprises that received KAIZEN consulting services from KEC were not provided. Therefore, it was difficult to clearly measure the achievement of this indicator. However, the following related information was available. ・ Interviews were conducted with 10 enterprises [39] that received KAIZEN

[35] In EK2, it was initially planned that TVET would disseminate KAIZEN to micro and small enterprises (MSEs). However, during the ex-post evaluation, it was confirmed that KAIZEN was also disseminated to medium enterprises in addition to micro and small enterprises.

[36] The group's business activities are diverse, including agriculture and agricultural product processing, manufacturing, mining, commerce, construction and real estate, and hotels and tourism.

[37] It was stated as "MSE" in the Japanese version of PDM.

[38] The five Kaizen indices used were quality (Q), productivity (P), delivery (D), cost (C), maintenance (M), and institution building (I).

[39] Eight enterprises were ICT enterprises of EK3. Two enterprises received KAIZEN implementation support from EKI in 2013. The remaining enterprise received KAIZEN implementation support from the successor

		implementation support from EKI. Positive effects through the implementation of KAIZEN were confirmed. For "material flow," which is related to the productivity improvement, the positive effects were confirmed in all 10 enterprises. For "machine efficiency" and "product lineup," the positive effects were confirmed in nine enterprises, excluding one logistics enterprise. Additionally, for "technical skills" and "employee mindset," which were indirectly considered to have positive effects on quality and productivity, the positive effects were confirmed in nine and eight enterprises, respectively.

Source: Prepared by the evaluator based on the documents from the Implementing Agency, interview with the Implementing Agency, the related organizations, and the enterprises implementing Kaizen

KEC continued to support the implementation of KAIZEN in a certain number of enterprises after the completion of EK3. Despite data limitations, interview results confirmed the positive effects on the quality and productivity in the enterprises that implemented and continued KAIZEN. Additionally, the fact that the largest enterprise group in Ethiopia promoted KAIZEN across the entire group further substantiated the positive effects of KAIZEN.

At the time of the ex-post evaluation, both the Output and the Immediate Outcome mostly continued; however, the some of them was not confirmed. Specifically, for Output 3 of EK3, "A coordinated system (vertical and horizontal) is put in place whereby quality of KAIZEN training and consultancy services provided by EKI and other institutions is ensured, and KAIZEN dissemination is promoted at the national level." The database of enterprises that have introduced and/ or implemented KAIZEN, namely KMIS, was not in use. Additionally, the "Value-Added Productivity Indicator Analysis for ICT Enterprises" conducted under EK3 was recognized as necessary. However, EKI staff had not acquired the skills and knowledge to conduct this analysis independently, and it was not being implemented.[40]

The situation where KMIS was not continuously used led to a lack of accumulated information at the Implementing Agency to measure the achievement of the Overall Goal.

Based on the above, it could not be determined that the target values for Indicators 1 and 2 of the Overall Goal of EK3 were achieved, based on the information obtained in this evaluation. Additionally, due to information limitations, it must be said that it was difficult to determine whether Indicator 3 was achieved. Therefore, it could not be concluded that the

project starting in 2021. Of the 10 enterprises, nine were manufacturing enterprises, and one was a logistics enterprise. Nine enterprises were located in Addis Ababa, and one is in Oromia Region. Eight enterprises were visited by the evaluator and the local consultant (LC). One enterprise was interviewed online, and the remaining enterprise was visited and interviewed by LC. Details are provided in the "Column."

[40] Source: The Implementing Agency's response to the questionnaire and the interview

Intermediate Outcomes of the Project have achieved the expected effects.

3.2.2.2 Other Positive and Negative Impacts

(1) Impacts on the Environment

It was determined that the project would have minimal adverse environmental impacts (EK2), and the project did not fall into regions or characteristics that are prone to such impacts as outlined in the guidelines (EK3). Therefore, the Project was classified as Category C based on the *JICA Guidelines for Environmental and Social Consideration* (April 2010).

In the enterprises where EKI supported the introduction of KAIZEN, improvements were observed in byproduct recycling, processing practices, efficient and effective use of input resources to reduce waste, and social hygiene standards. These improvements indicated positive environmental impacts through the implementation of the Project.[41]

(2) Resettlement and Land Acquisition

No resettlement or land acquisition occurred in this Project.[42]

(3) Gender Equality/ Marginalized People

As indicated in the Relevance section, the Implementing Agency has demonstrated a policy that considers gender balance. However, no positive or negative impacts were confirmed through the field survey, which was conducted using the questionnaires and the interviews.

(4) Social Systems and Norms, People's Well-being and Human Rights

In the enterprises where EKI supported the introduction of KAIZEN, improvements were observed in communication between workers and between management and workers,[43] working environments,[44] and reduced accidents.[45] Additionally, improvements in corporate social responsibility were noted through byproduct recycling and better working conditions for workers.[46]

(5) Unintended Positive/ Negative Impacts

[41] Source: The Implementing Agency's response to the questionnaire and the interview with the enterprises
[42] Source: The responses to the questionnaires from the Implementing Agency and the Implementing Consultant
[43] Nine out of 10 companies observed the improvements in their communication flow (Source: Interviews from the enterprises that introduced KAIZEN).
[44] Two of the 10 enterprises secured the spatial expansion by clearing out unnecessary equipment on the premises, and one company increased the width of the aisles (Source: Interviews from the enterprises that introduced KAIZEN)
[45] One of the 10 enterprises, the reduction in the number of accidents was confirmed (Source: Interviews from the enterprises that introduced KAIZEN).
[46] Source: The Implementing Agency's response to the questionnaire

The following impacts, which were not expected within the Project, were confirmed through interviews with the enterprises that introduced KAIZEN:

- Improved enterprise reputation, making obtaining financing easier (two out of 10 enterprises).
- Changes in employee mindset (eight out of 10 enterprises), specifically improvements in communication and teamwork, changes in learning attitudes, time management, and awareness of norms.

Furthermore, EKI promoted Ethiopia's advanced KAIZEN initiatives at international conferences, contributing to the development of AKI, with EKI becoming the COE of AKI.[47] Additionally, the KAIZEN dissemination organizations were formed in the local administrative organizations (regions and special cities) in Ethiopia, establishing the dissemination system for public institutions. KAIZEN became a nationwide movement in Ethiopia, expanding beyond the scope expected in the Project to include not only administrative agencies and hospitals but also kindergartens.[48] This expansion was supported by the Ethiopian side's ownership because it was believed that KAIZEN was effective in improving civil servants' productivity and the ethics, and KAIZEN was introduced through the Civil Service College.[49]

[47] EKI participated in the TICADV Ministerial Meeting in 2013 and the KAIZEN Knowledge Sharing Seminars, held annually since 2016. These seminars disseminated the KAIZEN efforts and achievements in Ethiopia. The KAIZEN Knowledge Sharing Seminars evolved into AKI. At the time of the ex-post evaluation, Mr. Tadesse Mekonnen, the first director of EKI, was active as the AKI consultant. Sharing such advanced KAIZEN initiatives from Ethiopia was believed to have indirectly supported KAIZEN efforts in other African countries (Source: The Implementing Consultant's responses to the questionnaire and the interview, JICA project stakeholders' interviews)

[48] Regarding this point, the JICA project stakeholders at that time stated, "No one anticipated that KAIZEN would spread to the level of kindergartens." Additionally, the supervisory authority (MoI/MIDI) recognized that EK2 was extremely important as a "Showcase of KAIZEN" for expanding the KAIZEN initiative beyond the manufacturing sector.

[49] Source: Interview with JICA project stakeholders

Column: Changes in Enterprises Implementing KAIZEN

The changes in quality and productivity, the continuation of KAIZEN activities, and the outcomes (such as changes in employee behavior) in the enterprises that received KAIZEN services were confirmed.

(1) Continuation of KAIZEN

KAIZEN continued to be implemented in all 10 enterprises visited. However, one medium enterprise continued only some of the KAIZEN activities (cleaning and organizing) EKI introduced. Maintaining motivation among management and employees was key to practicing and continuing KAIZEN. Two enterprises introduced the award system to maintain employee motivation, one enterprise considered introducing it, three enterprises incorporated KAIZEN into the employee evaluations, and two enterprises reported the effectiveness of training for employees. State-owned enterprises faced challenges in maintaining management's motivation for KAIZEN due to frequent changes in management. This enterprise has aimed to maintain and improve motivation by conducting refresher training for management.

(2) Changes Since the Beginning of KAIZEN Activities

Positive effects (positive changes) through the implementation of KAIZEN were confirmed as follows:

1) Productivity Improvement: All 10 enterprises reported positive effects on material flow. Nine enterprises, excluding one logistics enterprise, reported positive effects on machine efficiency and product lineup. Three enterprises reported increased revenue through KAIZEN implementation.[50] A fabric printing enterprise reported improved printing technology, and one enterprise that manufactured and sold cables reported improved product packaging.

2) Management: Five enterprises reported positive effects on marketing strategy, seven on management leadership, and two on financial access. The two enterprises that reported improved financial access attributed it to increased enterprise recognition and evaluation.

3) Relationships with Other Enterprises: Six enterprises reported positive effects. Five enterprises reported positive effects on relationships with the government. Improved relationships with other enterprises were attributed to increased enterprise visits through the introduction of KAIZEN. These visits included not only the same industry but also different industries. Improved relationships with the government were attributed to enterprises starting KAIZEN implementation due to government initiatives and the government officials visiting enterprises that introduced KAIZEN.

4) Employee Mindset: Nine enterprises reported positive effects on the employee mindset, which is believed to affect quality and productivity positively indirectly. Specifically, all eight enterprises that responded reported improved communication.[51] Seven enterprises reported positive changes in employee confidence and attitudes toward learning. Six enterprises reported positive effects on punctuality, adherence to rules, and teamwork.

(3) Other Changes

Other changes included safety improvements, with two enterprises reporting a reduction in the number of accidents.

Additionally, two of the interviewed enterprises belonged to the MIDROC Investment Group, the largest enterprise group in Ethiopia. This group, which included over 40 enterprises, decided to implement KAIZEN across all group enterprises in mid-2022.[52] This

[50] However, one enterprise shifted from production based on technical training to production based on business, and it was thought that the change in management policy may have had impacts.

[51] It was unable to obtain a response from one enterprise.

[52] One of the enterprises the evaluator and LC interviewed had resumed KAIZEN activities after the decision to introduce KAIZEN across the entire MIDROC Group.

indicated that the introduction of KAIZEN in Ethiopia was accelerating due to the decision-making of large group enterprises.



Photo 1: Organized and labeled filing cabinets at the KAIZEN-implementing enterprise

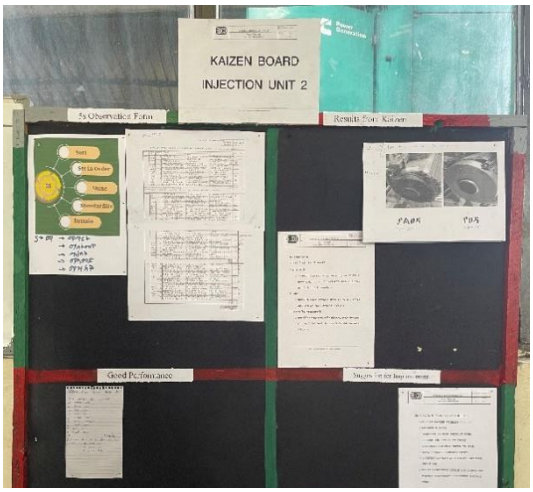

Photo 2: KAIZEN board posted at the KAIZEN-implementing enterprise

(6) Synergies with Other JICA Projects

The following synergies between the Project and other JICA projects were confirmed:

1) "Study on industrial policy dialogue in the Federal Democratic Republic of Ethiopia (phase 2)" (2012-2016) and "Industrial Promotion Project in Ethiopia" (2017-2023)

In these two projects, the industrial policy dialogues were conducted. Until around 2015, KAIZEN was one of the main topics discussed in the industrial-policy dialogues. These dialogues were held in the high-level forums attended by the prime minister's advisors and ministers, including those from the MoI.[54] The director of EKI participated in these forums and reported on the progress with KAIZEN. Through these policy dialogues, the achievements with KAIZEN were shared with senior government officials. As a result, KAIZEN was positioned as a major pillar of industrial development within Ethiopia's national policy, GTP2. Experiences from other countries (such as Singapore and Vietnam) were also shared.

Through the industrial-policy dialogues, consultations on the staffing and treatment of EKI were held, leading to improvements in the treatment of EKI staff. Furthermore, the policy dialogue demonstrated the government's proactive stance in promoting KAIZEN,

[54] *Report on the 12th Field Visit for the Ethiopia Industrial Policy Dialogue (January 24, 2012)*, GRIPS Development Forum, 2012, pp. 1-2. In addition, the several JICA project stakeholders confirmed that policy dialogue and JICA's KAIZEN assistance were "paired."

which contributed to raise motivation within the enterprises visited by the Project, and EKI staff. After EKI returned under the MoI, the National Graduate Institute for Policy Studies , which led the policy dialogues, cooperated in inviting the director of MIDI to Japan.[53]

2) Long-term training, “International Personnel Doctorate Course”

In March 2014, EKI, in collaboration with Mekelle University, established a KAIZEN master’s course. Twenty EKI staff participated in this course. In October 2018, a doctoral program was established. The EK3 Japanese expert supported the design of the curriculum for the doctoral program.[54] Mekelle University sought collaboration with Japanese universities, and JICA considered providing educational opportunities in Japan. As a result, the above long-term training was implemented under JICA’s support scheme. Studying in the master’s and doctoral programs at domestic universities and participating in long-term training in Japan served as incentives for EKI staff and helped prevent the outflow of human resources from EKI. Additionally, through learning in these programs, the recognition that KAIZEN could be applied to sectors other than manufacturing spread, contributing to the dissemination of KAIZEN.[55]

3) “The Project for the Construction of TICAD Human Resource Development Center for Business and Industry” (2018).

The planning of this center’s construction raised expectations for EKI to play a significant role in disseminating KAIZEN within Africa.[56]

The targeted Project aimed to increase the number of enterprises and institutions implementing KAIZEN and to develop industrial human resources capable of practicing KAIZEN (Immediate Outcome) through the establishment and strengthening of the KAIZEN dissemination system/ institution, the formation of a dissemination human resource development system, and the provision of KAIZEN services to the private and public sectors (Output). This was intended to improve quality and productivity in enterprises (Intermediate Outcome).

Since this Project has achieved its Immediate Outcome and Intermediate Outcome only to a certain extent. Therefore, effectiveness and impacts of the Project are moderately low.

[53] Source: Interview with the Implementing Consultant
[54] Source: Project Completion Report of EK3
[55] Source: Interview with the Implementing Agency
[56] Source: Interview with the Implementing Consultant, the Implementing Agency, and JICA project stakeholders. KEC was the COE of AKI at the time of the ex-post evaluation, and there were more opportunities to learn about cases in other countries. KEC was considering providing paid services in the future, and if they would be able to provide these services, it was expected that they would be able to earn income from providing services to other countries.

For the Immediate Outcome, which was measured by the achievement level of the EK3 Project Purpose, was mostly achieved as planned. As for the Intermediate Outcome, it could not be concluded that it has been achieved the expected effects.

KEC continued to support the introduction of KAIZEN to a certain number of enterprises after the Project's completion. The results of the KAIZEN introduction enterprise survey conducted in this evaluation confirmed the effects on quality and productivity improvement. Additionally, changes in the employee mindset were confirmed, contributing to productivity improvement. The fact that the largest enterprise group in Ethiopia promoted KAIZEN across all group enterprises further substantiated the positive effects of KAIZEN. However, regarding the achievement level of the Intermediate Outcomes (achievement level of the EK3 Overall Goal), it couldn't be determined that Indicators 1 and 2 of the Overall Goal were achieved based on the information obtained in this evaluation. It was also difficult to determine whether Indicator 3 was achieved. Therefore, it was impossible to determine whether the effects of the Project had been confirmed regarding the Intermediate Outcome.

3.3 Efficiency (Rating: ③)

3.3.1 Inputs

(1) EK2

Inputs	Plan	Actual
(1) Experts	・ Long-Term (chief advisor/ system development, inter-ministerial collaboration/ dissemination promotion, quality/ productivity improvement/ project coordination) ・ Short-Term (dispatch as needed)	23 experts (169 MM)
(2) Trainees received	・ Training in Japan and training in the third country	・ Training in Japan: 10 persons ・ Training in Malaysia: 36 persons
(3) Equipment	Three vehicles, office equipment, etc. necessary for activities	Three vehicles, one copier, 11 laptop computers, six video cameras
(4) Outward Project Strengthening Fee	Project activity expenses	38 million yen
Japanese Side Total Project Cost	576 million yen	682 million yen
Ethiopia Side Total Project Cost	・ Counterpart assignment ・ Expert's office and facilities; salaries of counterparts and staff of related organizations; domestic travel expenses; equipment use and maintenance costs; electricity, water, etc. usage fees; fuel and maintenance costs for project vehicles; other necessary expenses	・ Counterpart assignment ・ Project office, electricity and water usage fees, counterparts' salaries and travel expenses, equipment use and maintenance costs, fuel and maintenance costs for project vehicles, and other necessary expenses

Source: Ex-ante evaluation sheets for Plan, project completion report, and the Implementing Consultant's response to the questionnaire for Actual
(Note) MM stands for Man (person) Month.

(2) EK3

Inputs	Plan	Actual
(1) Experts	・ Organization strengthening, quality and production improvement, system development, higher-education support, project coordination, and others as needed (150 MM)	13 experts (188 MM)
(2) Trainees received	・ Training in Japan and/ or training in a third country	・ Training in Japan: 10 persons ・ Training in Malaysia: 32 persons
(3) Equipment	Minibus, other as needed	Six minibuses, one multifunction copier
(4) Outward Project Strengthening Fee	Project activity expenses	46 million yen
Japanese Side Total Project Cost	670 million yen	797 million yen
Ethiopia Side Total Project Cost	・ Counterpart assignment ・ Expert's office space ・ Operating expenses required for project activities	・ Counterpart assignment ・ Expert's office space ・ Operating expenses required for project activities

Source: Ex-ante evaluation sheets for Plan, project completion report for Actual

3.3.1.1 Elements of Inputs

Regarding the Japanese side's inputs, there were delays in vehicle procurement for EK2. However, during this period, activities were conducted using rental cars and vehicles the Implementing Consultant used, which did not significantly impact the execution of activities. The flexible response to the needs of EKI and the Ethiopian government led to an increase in the input of human resources.[57] This increase contributed to the growth of personnel trained under the project (TTTs, intermediate-level trainees), smooth project implementation, improved motivation of EKI staff through the establishment of the doctoral course, and ultimately the prevention of staff turnover.

Regarding the Ethiopian side's inputs, there was a 3.5-month delay in hiring new EKI staff for EK2, and training for EKI consultants was postponed. The final training batch was still ongoing at the time of project completion.[58] Additionally, vehicles and personnel (EKI consultants) necessary for implementing this Project's training were often allocated to EKI's

[57] For EK2, additional tasks included supporting the implementation of the TICADV Ministerial Preparatory Meeting event and inviting counterparts. For EK3, additional tasks included supporting the establishment of the KAIZEN doctoral course, inviting government officials, and facilitating the participation of Ethiopian enterprises in the AKI annual meeting. Furthermore, EK2 increased the number of TTTs being trained, and EK3 increased the number of KAIZEN intermediate-level trainees.

[58] After completing the Project, the final batch of trainings was completed as scheduled.

independent activities, causing occasional disruptions to the Project's smooth operation. However, these issues did not significantly affect the achievement of the Project's Outputs.

3.3.1.2 Project Cost

The project cost slightly exceeded the plan (118% of the planned budget). The increase in project costs was due to the increase in the number of expert dispatch MM and additional tasks for both projects. All additional tasks contributed to this Project's effectiveness.

Table 4 Project Cost

(Unit: millions of yen)

	Plan	Actual	In percentage of Plan (%)
EK2	576	682	118%
EK3	670	797	118%
Total	1,246	1,470	118%

Source: Ex-ante evaluation sheets, EK2 Project Completion Report, EK3 Project Completion Report

3.3.1.3 Project Period

The project period was within the plan.

Table 5 Project Period

	Plan	Actual	In percentage of Plan (%)
EK2	36 months (November 2011 - October 2014)	36 months (November 2011 - November 2014)	100%
EK3	60 months (June 2015 - May 2020)	60 months (June 2015 - June 2020)	100%
Total	96 months	96 months	100%

Source: Ex-ante evaluation sheets and documents provided by JICA
(Note) The actual period for EK2 was from November 15, 2011, to November 14, 2014, and for EK3, from June 26, 2015, to June 25, 2020, resulting in 36 months and 60 months of project duration, respectively.

The project cost slightly exceeded the plan. The project duration was within the plan. Therefore, efficiency of the Project is high.

3.4 Sustainability (Rating: ③)

3.4.1 Policy and System

In the *Ten Years Perspective Development Plan* formulated in 2021, one of the development goals was to "promote overall productivity and competitiveness and ensure the transformation of the economic structure." As a specific initiative to promote the *Ten Years*

Perspective Development Plan, MoI launched the *Ethiopia Tamirt Movement* in April 2022. This movement was intended to build a national system to achieve sustainable development and enhance the manufacturing industry's competitiveness. The policy document for this movement, formulated in September 2022, introduced Japan's quality and productivity improvement movement along with examples from four other countries.

Therefore, the sustainability of policy and systems was considered high.

3.4.2 Institutional/ Organizational Aspect

(1) Role of the Implementing Agency

As of the ex-post evaluation, KEC has been providing the following services: 1) direct KAIZEN training and consulting services to the industrial sector in various regions and cities, including Addis Ababa; 2) capacity building for regional and city industrial bureaus through training of trainers (hereinafter referred to as "ToT") and coaching services; 3) organizing research seminars and workshops in various regions; and 4) conducting the national KAIZEN conference and presenting KAIZEN awards. These roles have not significantly changed since the time of the Project's completion.[59]

(2) Role of Cooperating Organizations/ Agencies Related to KAIZEN Dissemination

KEC's supervisory agency was the MoI. Within the MoI, MIDI functioned as the supervisory authority for KEC, providing support in management and operations. This included training for KEC staff, budget allocation and management, annual plan preparation support, and performance monitoring and evaluation.[60]

EED within MoI developed KAIZEN-related skills and knowledge for its staff, regional bureau staff, and small and medium enterprises. For MSEs, regional trainers provided training. In June 2023, an organizational restructuring took place, resulting in the dissolution of the KAIZEN department and the establishment of the Capacity Development Department. KAIZEN became one of the activities within this new department. The collaboration framework with KEC and regional bureaus has been maintained and strengthened under the new system.[61]

MoLS was in charge of and oversaw the creation of employment, skills and knowledge development, and labor issues. The Training and Institutional Development Directorate, responsible for TVET, formulates laws, policies, and operational guidelines related to TVET and develops curricula, standards, teaching materials, and trainer training. MoLS provided training to private enterprises, not limited to the manufacturing sector, through TVET.

[59] Source: The Implementing Agency's response to the questionnaire
[60] Source: Responses to the questionnaires from the Implementing Agency and MIDIs
[61] Source: Interview with EED

KAIZEN was included in the support package for SMEs (IES).[62]

(3) Adequacy of Personnel in the Implementing Agency

The table below shows the changes in personnel involved in KAIZEN dissemination at KEC.

According to KEC, as of the ex-post evaluation, there was a shortage of personnel in research and development, training, consulting services, project monitoring and auditing, and project management due to consultant turnover and the inability to hire new personnel.

As a countermeasure to the personnel shortage, a policy has been indicated to improve effectiveness and efficiency through consultants' capacity building.[63]

Table 6 KEC's Personnel involved in the KAIZEN dissemination

(Unit: person)

	2023/2024	2022/2023	2021/2022	2020/2021
Director			12(2)	12(2)
Desk Leader	11	11		
Lead Consultant/ Researcher	0	0	11(4)	12(4)
Senior Consultant/ Researcher	0	0	21(5)	24(5)
Consultant	17	28	40(7)	41(7)
Associate Consultant	20	23	16(1)	17(1)
Junior Consultant	20	24	0	0
Total	68	86	100(19)	106(19)

Source: Prepared by the evaluator based on KEC's response to the questionnaire

(Note) Figures in parentheses indicate staff involved in research departments; because of the organizational changes in FY 2022/2023, desk leaders have been assigned instead of directors.

(4) Structure of the Implementing Agency

In the organizational restructuring of 2022/2023, the Region and City Kaizen Directorate within KEC, which coordinated with regions and special cities, was abolished. The role was taken over by desk leaders of three departments within KEC. Similarly, the Research and Best Practice Directorate was abolished, and all consultants at KEC were assigned the role of researchers. KEC has planned to revitalize research activities, focusing on those with doctoral degrees.[64]

[62] Source: MoLS's response to the questionnaire and interview
[63] Source: The Implementing Agency's response to the questionnaire and interview
[64] Source: The Implementing Agency's response to the questionnaire and interview questions

(5) KAIZEN Dissemination System to regions/ cities

KAIZEN dissemination was conducted mainly through the provision of IES by TVET, which MoLS-related organizations in regions and cities supervised. The primary targets were small and medium enterprises.[65] IES has been provided in all regions and cities, but KAIZEN dissemination through TVET was not implemented in the Tigray Region due to significant conflict impacts.[66]

At the time of the ex-post evaluation, regions/ cities KAIZEN Institutes (hereinafter referred to as "R/CKI") mainly disseminated KAIZEN to public institutions. However, there was a city like Dire Dawa that directly disseminated KAIZEN to large and medium enterprises. There was a region, like the Oromia Region, that disseminated KAIZEN in a cascade system, where public institutions disseminated KAIZEN to enterprises in collaboration with KEC.[67]

KEC provided direct KAIZEN training and consulting services to large and medium enterprises in special cities, including Addis Ababa and various states. It also offered ToT and coaching services to industrial development-related departments in regions and cities to build their capacity. KAIZEN dissemination to local areas is conducted through the MoI and not solely at KEC's discretion.[68]

Therefore, the Implementing Agency's and cooperating agency's roles in KAIZEN dissemination were clear. Although there have been changes in the structure of the Implementing Agency since the time of project completion, a system that allowed for continued coordination and research with regions and cities was reasonably maintained. The KAIZEN dissemination system to regions and cities, mainly through TVET, was established and functioning, except in one conflict-affected region. Regarding the adequacy of personnel in the Implementing Agency, although a certain number of consultants were secured, there was still a shortage; it was determined that the sustainability on the institutional and

[65] Source: Responses of MoLS and the related departments in R/CKIs to the questionnaires and interview questions. In this evaluation, information was obtained from TVET-related departments in six regions and one special city (Oromia, Amhara, Tigray, Harari, Benishangul-Gumuz, Central Ethiopia, and Addis Ababa). However, questionnaires could not be collected from six other regions and one city (Gambela, Afar, Sidama, Southern Ethiopia, Southwestern Ethiopia, Somali, and Dire Dawa).

[66] Source: The Tigray TVET Agency's response to the questionnaire. The provision of educational services in the KAIZEN master's and doctoral programs at Mekele University, Tigray, was also suspended.

[67] Source: The response to the questionnaires and interview questions from R/CKIs (Oromia, Amhara, Tigray, Harari, Benishangul-Gumuz, Addis Ababa, and Dire Dawa). However, questionnaires could not be collected from seven other regions (Gambela, Afar, Sidama, Southern Ethiopia, Southwestern Ethiopia, Central Ethiopia, and Somali).

[68] Source: The Implementing Agency's response to the questionnaire and interview. As of the ex-post evaluation, KEC was collaborating with R/CKIs in Dire Dawa and Oromia, indirectly contributing to the dissemination of KAIZEN in these regions. Additionally, special cooperation was planned for Somali, Afar, and Benishangul-Gumuz Regions, and cooperation with Gambela Region was under consideration. For the Tigray Region, remote support was being considered.

organizational aspects was moderately low.[69]

3.4.3 Technical Aspect

Although there has been consultant turnover at KEC, a significant number of consultants have remained for long periods, ensuring a certain level of technical expertise.[70]

The manuals and guidelines developed through the Project have been continuously used, with some revisions and updates from intermediate KAIZEN to comprehensive KAIZEN versions.[71]

KEC continued to provide training and consulting services to enterprises and TVET. Therefore, the sustainability on the technical aspect was high.

3.4.4 Financial Aspect

The Implementing Agency's budget and expenditure performance after the Project's completion are shown in the table below. The budget for EKI at the time of project completion (FY 2019/2020) was 39,877,400 Ethiopian birr (ETB). Compared to the time of the Project's completion, a larger budget has been secured. The reasons for the lower expenditure compared to the budget were that salaries for resigned staff were not paid and KAIZEN dissemination activities in regions and cities could not be conducted due to deteriorating security conditions, resulting in reduced spending.[72]

KEC stated that the budget was insufficient. However, the number of enterprises introducing KAIZEN increased from 67 in FY 2021/22 to 147 in FY 2022/23. This indicated that it was possible to introduce KAIZEN to a certain number of enterprises with the current budget. KEC planned to generate its own income in the future through the provision of KAIZEN training and consulting services.[73]

Therefore, sustainability in the financial aspects was mostly ensured and considered high.

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[69] Regarding the KAIZEN dissemination system to regions and cities, there was a nationwide support system through TVET. It was anticipated that even in the Tigray Region, where KAIZEN dissemination was not functioning at the time of the ex-post evaluation, the dissemination of KAIZEN and the provision of educational services would resume once reconstruction progresses and TVET and Mekelle University become operational. This suggested that this Project's effects would continue.

[70] Of the 84 EKI staff members who were counterparts in EK3, 56 (67%) were still working at KEC at the time of the ex-post evaluation (Source: The Implementing Agency's provided data as of March 2024). Additionally, the average tenure of KEC staff was 8 years, with 17 consultants having worked for 11 years (data as of May 2023).

[71] Regarding the "Guideline of Organizational Management of Civil Service Organization" developed in EK2, its usage status could not be confirmed within this evaluation survey.

[72] Source: The Implementing Agency's response to the questionnaire and interview

[73] However, KEC has been under the umbrella of the MoI, and to generate its own income, it needed to obtain approval from the MoI and related ministries (Source: The Implementing Consultant's interview)

Table 7 The Implementing Agency's Budget and Expenditure Performance

(Unit: ETB)

Fiscal Year	Budget (ETB)	Expenditure (ETB)
2024/25	49,000,000.00	-
2023/24	46,014,035.00	44,946,683.01
2022/23	51,056,419.00	48,587,615.51
2021/22	46,978,000.00	46,062,601.21

Source: Prepared by the evaluator based on the documents the Implementing Agency provided

3.4.5 Environmental and Social Aspect

As stated in section 3.2.2.2, "Other Positive and Negative Impacts," no negative impacts on environmental and social considerations were observed.

3.4.6 Preventative Measures to Risks

According to the Implementing Agency, the deterioration of security and economic stagnation have made it difficult to implement KAIZEN in enterprises continuously, expanded the scale of KAIZEN implementation, and supported the introduction of KAIZEN to new enterprises. Particularly for enterprises that have imported raw materials, the shortage of foreign currency affected production adjustments, leading to interruptions in KAIZEN activities or hindering their continuous implementation. As a response to this issue, KEC has proposed supporting the creation of business continuity plans where possible. Additionally, for enterprises in the Tigray Region, where direct support could not be provided due to security issues, KEC has indicated a policy of providing remote support.[74]

Slight issues have been observed in the institutional/organizational aspects; however, there were good prospects for improvement/resolution. Therefore, sustainability of the Project effects is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The Project aimed to increase in numbers of enterprises and institutions implementing KAIZEN and the development of industrial personnel capable of practicing KAIZEN through the improvement and strengthening of the KAIZEN dissemination system/ institution, formulation of the dissemination human resource training system, and provision of KAIZEN services to both the private and public sectors, thereby contributing to the

[74] Source: The Implementing Agency's response to the questionnaire and interview

improvement of the quality and productivity of enterprises. The Project aligned with Ethiopia's national development plans and needs, aiming to improve manufacturing sector productivity. The Project's approach was appropriate. Although no other JICA projects or other donors' projects coordinated and agreed on the expected Outputs with the Project, the Project's objectives were consistent with Japan's ODA policy of emphasizing private sector development and capacity building in the business and industrial fields through KAIZEN. Therefore, its relevance and coherence are high. The Project's cost slightly exceeded the plan, but the Project's period was within the plan. Therefore, efficiency of the Project is high. Through the Project, the KAIZEN dissemination system/ institution was improved and strengthened, the dissemination human resource training system was formed, and the number of enterprises introducing KAIZEN increased. Industrial human resources capable of practicing KAIZEN were developed. However, due to limitations in the information provided by the Implementing Agency, it was impossible to confirm the expansion of enterprises implementing and continuing KAIZEN or the improvement in quality and productivity of enterprises introducing KAIZEN. Therefore, effectiveness and impacts of the Project are moderately low. There were slight issues observed in the institutional/ organizational aspects regarding the sustainability of the effects manifested by the Project, but the prospects for improvement/resolution were high. Therefore, sustainability of the Project effects is high.

In light of the above, the Project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

Establishment and Continuous Use of an Information Management System for KAIZEN-Implementing Enterprises

It is recommended that KEC urgently develop a data management system to accumulate information on enterprises and public institutions that have introduced KAIZEN to understand the status of KAIZEN's effects and to disseminate this information externally. It is also recommended that specialized personnel be assigned and training for staff be provided to ensure the sustainable and secure use of the developed data management system.

New Employment of KAIZEN Dissemination Personnel

It is recommended that MoI/MIDI and KEC promptly hire and secure the human resources needed to promote KAIZEN. Although there have been budgetary constraints, looking at the budget execution status of KEC, there was a discrepancy between the budget and actual expenditure, as the budget for the salaries of employees who had left the organization was not being executed. At the very least, the staff positions that can be secured

in the annual budget shall be filled as soon as possible.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

Project Implementation Based on Mutual Understanding Through Appropriate Communication

The Project was initiated under strong ownership from the Ethiopian side. JICA project stakeholders respected this ownership and implemented the Project through appropriate communication to achieve mutual understanding. Although ownership is indispensable for the manifestation and continuation of projects' effects, advice from JICA project stakeholders regarding feasibility and sustainability is necessary. Although there may be occasional conflicts between the two sides, implementing projects based on mutual understanding through appropriate communication is believed to lead to the expected manifestation and continuation of effects. Therefore, it is crucial to thoroughly understand and discuss the counterpart country's requests and background and to set up more opportunities for discussion.

5. Non-Score Criteria

5.1 Performance

5.1.1 Objective Perspective

The supervising ministry (MoI/MIDI) recognized that Japanese support was crucial for disseminating KAIZEN throughout Ethiopia. Specifically, it was mentioned that practical training in Japan and the third country provided Ethiopian experts, mainly from EKI, with practical knowledge. KEC also noted that the insights gained from the third-country training contributed to the creation of manuals and the establishment of the consultant certification system and were referenced in building networks with enterprises. Additionally, KEC utilized these experiences in providing training to other African countries.[75]

5.1.2 Subjective Perspective (retrospective)

Interviews were conducted with JICA project stakeholders and the Implementing Consultant, and responses were obtained from the first director of EKI through a questionnaire for subjective perspective. The following sections outline (1) the situation at the initial stages of the Project, (2) challenges during the implementation stage and responses to those challenges, (3) responses to difficult and unexpected situations, and (4) the established KAIZEN dissemination system and the Project's contributions.

(1) The Situation at the Initial Stages the Project

At the planning stage of EK2, before the beginning of the Project, there was a concept for establishing EKI, but the Project began with concerns about budget and staffing.[76] At this stage, there were guidelines and a vision for KAIZEN dissemination in the nation, but the organizational structure to achieve the goals was not yet in place.[77] At the beginning of EK2, EKI had just been established, and the Implementing Consultant had to wait for EKI's response. However, there was strong ownership from the Ethiopian side, led by the then prime minister,[78] for the introduction of KAIZEN in Ethiopia. The hiring of EKI staff was carried out quickly and top-down.[79] Most of the KU members trained in EK1 were assigned to the newly established EKI, and as a new organization, the staff's motivation was high.[80]

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[75] KEC had experience providing training to Djibouti, and it was scheduled to conduct training for Ghana in August 2024.

[76] Source: Interview with JICA project stakeholders. The driving force behind the establishment of EKI was the Ethiopian side's ownership. Additionally, policy dialogue was conducted in tandem with the KAIZEN support project, and the promotion of the manufacturing industry was incorporated into GTP1, which also contributed to the success. Furthermore, through the implementation of EK1, the effects of KAIZEN, including economic impacts, were quantified, and the Ethiopian side recognized these effects firsthand, leading to strong ownership.

[77] Source: Interview with the Implementing Consultant

[78] JICA project stakeholders described Prime Minister Meles (at the time) as having "the power to move people."

[79] Source: Interview with JICA project stakeholders

[80] Source: Interview with the Implementing Consultant

Although there were difficulties, such as delays in vehicle arrangements at the beginning of the Project, the Implementing Consultant stated that there were no major concerns, as the prime minister and EKI were motivated.

(2) Challenges During the Implementation Stage and Responses to Those Challenges

1) Staffing of the Implementing Agency

At the beginning of EKI, the management department consisted only of the director, but staffing gradually increased, and recruitment continued.[81] This was influenced by the strong ownership of the first director of EKI, Mr. Getahun, who was also the head of KU and a strong supporter of KAIZEN since recognizing its benefits in EK1. The Implementing Consultant and JICA also attempted to retain staff. Recognizing that only a part of KAIZEN could be taught during the Project's implementation period and that staff retention was necessary for EKI to continue consulting enterprises, the Implementing Agency, the Implementing Consultant, and JICA made efforts, resulting in increased salaries for the Implementing Agency staff.[82]

2) Responses to Requests from the Ethiopian Side

During the implementation stage, the Ethiopian side made several requests, and the Implementing Consultant and JICA responded sincerely. Specifically, regarding the training of TTTs in TK2, the number of TTTs to be trained was increased at the Ministry of Higher Education's request during the first JCC. Similarly, in EK3, there was a request to increase the number of consultants to be trained, which was addressed. The establishment of KAIZEN master's and doctoral courses and training in Japan was also conducted in response to requests from the Ethiopian side. The Ethiopian side believed that these courses would provide not only practical learning for EKI staff but also academic learning, thereby enhancing staff motivation. Although there were difficulties in time adjustments, the Implementing Consultant and JICA responded to the Ethiopian side's requests.[83]

3) Responses to Other Challenges

During the implementation period, there were challenges as shown below, but close communication between the Ethiopian and the Japanese sides led to efforts to resolve them.[84]

・ At the beginning of EK3, it was indicated as "Advanced KAIZEN" instead of

[81] As of August 2015, the number of EKI staff was 105, of which 72 were consultants. Subsequently, fresh staff were recruited annually, and as of June 2020, the number of EKI staff was 154, of which 109 were consultants. Additionally, the organizational restructuring of EKI in March 2016 significantly increased the number of managerial positions (Source: EK3 Project Completion Report)

[82] JICA project stakeholders expressed the opinion that the motivation of the Ethiopian side also contributed to the realization of the salary increase.

[83] Source: Interview with the JICA project stakeholders and the Implementing Consultant

[84] Source: Interview with the Implementing Consultant

"Intermediate KAIZEN," but the Implementing Agency expressed that it was not "Advanced," leading to adjustments, including the changes in the plan.

- EKI consultants were new graduates without work experience in enterprises, and the industries targeted were diverse. Therefore, it took time for them to be able to teach KAIZEN with confidence based on their knowledge and experience. However, the Project provided opportunities to share expert knowledge during limited training opportunities in enterprises.

Communication between the Implementing Agency and JICA was facilitated through forums such as the annual AKI Conferences.[85] Additionally, in building the KAIZEN dissemination system, the Implementing Consultant frequently discussed with EKI the system design and its concepts, leading to the creation of guidelines.

(3) Responses to Difficult and Unexpected Situations

1) Changes in the Implementing Agency's Supervisory Authority

During the implementation period of EK3, EKI's supervisory authority changed multiple times. Three months after the commencement of the Project, in October 2015, the supervisory authority changed from MoI to MoPSHRD due to government reorganization. Furthermore, in February 2018, former Prime Minister Hailemariam Desalegn announced his resignation, and the current prime minister, Abiy Ahmed Ali, formed a new cabinet in March of the same year. Subsequently, in November 2018, MoPSHRD was reorganized into CSC under the prime minister's direct control, and EKI came under its umbrella.

Despite many organizational reorganizations and situations where the Project was temporarily halted, the Implementing Consultant and JICA communicated with the Ethiopian side, inviting government officials to Japan each time to achieve mutual understanding.[86] As a result, although the changes in the supervisory authority required explanations from scratch, which was time-consuming, the Project's progress was not significantly hindered.[87] The change from the MoI to MoPSHRD was a major shift, but MoPSHRD understood well that this Project's main target was the manufacturing industry, and no significant changes were made to the Project's direction. The selection of target enterprises was conducted through dialogue.[88]

2) Change of Government

In Ethiopia, the change of government occurred in March 2018 when the current prime

[85] Source: Interview with the JICA project stakeholders. There was an opinion that compared to other projects, there were more opportunities for discussion
[86] Source: Interview with the Implementing Consultant
[87] Source: Interview with the JICA project stakeholders
[88] Source: Interview with the JICA project stakeholders

minister, Abiy Ahmed Ali, formed a new cabinet. Despite such a notable change, there was no major shift in the policy of promoting KAIZEN dissemination by the Ethiopian side.[89]

This was largely due to the fact that (i) EKI already existed as an independent agency with clear authority and roles and its organizational foundation was established as well as (ii) the groundbreaking ceremony for the TICAD Human Resource Development Center for Business and Industry, which took place in September 2019, and grant aid cooperation was planned in addition to this Project.[90]

(4) The Established KAIZEN Dissemination System and the Project's Contributions

1) KAIZEN Dissemination System Established by the Project

Through the Project, the system was established where EKI plays a central role in sustainably developing KAIZEN dissemination personnel. In other countries, there is no system to develop KAIZEN consultants as a specialized agency, which can be said to be unique to Ethiopia. Additionally, leaders of enterprises and organizations that introduced KAIZEN with EKI's support have become able to implement KAIZEN continuously.[91]

2) The Project's Contributions

The first director of EKI pointed out that the foundation for establishing, strengthening, and maintaining the KAIZEN dissemination system in Ethiopia was a combination of (i) the establishment of EKI (strategically institutionalizing and promoting KAIZEN by the Ethiopian government with a clear vision, mission, and activities), (ii) the recruitment of young staff at EKI and their acquisition of basic and intermediate KAIZEN knowledge, and (iii) the consultant certification and registration system (maintaining and sustaining the quality of consultants' skills and knowledge and contributing to career development). The implementation of the Project significantly contributed to points (ii) and (iii).

5.2 Additionality

None

(End)

[89] Source: Interview with the JICA project stakeholders. JICA staff who managed the Project at that time stated, "The Ethiopian side consistently held a strong commitment to KAIZEN and respected the Japanese approach. While respecting the methods of the technical cooperation project, they aimed to absorb and expand what they could."

[90] Source: Interview with the JICA project stakeholders. The opinion was heard that the Ethiopian side perceived Japan's stance of providing seamless support and assistance in becoming COE for AKI.

[91] Source: Interview with the JICA project stakeholders