### Summary of Evaluation Results

1. Outline of the Project			
Country name: Costa Rica		Project name: The Project on Productivity	
		Improvement for Enterprises in the	
		Republic of Costa Rica	
Fields: Private sector, development,		Assistance type: Technical cooperation	
industrial technology		project	
Supervising office: Small and Medium		Monetary amount of cooperation (at time	
Enterprise Team, Group 1, Economic		Of evaluation): 526 million yen	
Development Department			
Period of	R/D: January 20, 2001 to	Counterpart organizations: Ministry of	
cooperation	January 19, 2006	Science and Technology, Technical	
	F/U:	Instructor and Personnel Training Center	
	E/N: (Grant aid)	(CEFOF)	
		Cooperating organizations in Japan:	
		Ministry of Economy, Trade and Industry;	
		Japan Productivity Center for	
		Socio-Economic Development	
		Other associated cooperation:	

#### 1-1 Background and outline of the project

The government of the Republic of Costa Rica is focused on actively promotion of science and technology while improving the productivity of existing industries and increasing employment opportunities as steps toward the goals of achieving economic autonomy, reinforcing economic infrastructure, developing industries, and improving the public's standard of living. In particular, productivity improvement is recognized as a principal subject that contributes considerably to the industrial development of Costa Rica through human resources development and modernization of Costa Rican enterprises.

In this context, a project-type technical cooperation project entitled "The Technical Instructor and Personnel Training Center for Industrial Development of Central America in the Republic of Costa Rica" was implemented at CEFOF from 1992 to 1997. After the termination of cooperation by JICA, CEROF has conducted training courses centered on the "5S" (seiri, seiton, seiso, seiketsu, and shitsuke), which are a result of technical transfer through JICA cooperation, for neighboring countries. These training courses are receiving the appreciation of countries in the Central American

region, including Costa Rica.

However, the need for productivity improvement is diversifying due to the globalization of economic activity. Thus, it was recognized that there was a need to improve CEFOF technical capacities that are directly linked to business management and production management and to expand the content of CEFOF services so as to maintain and develop CEFOF's standing as a base for disseminating productivity-improvement technologies and information not only in Costa Rica but throughout Central America. Therefore, this technical cooperation project started from January 2001 for a period of 5 years.

## 1-2 Description of cooperation

#### (1) Overall Goal

Productivity improvement activities will be strengthened in Costa Rica and the Central American region through CEFOF.

### (2) Project Purpose

CEFOF will be able to implement and upgrade productivity improvement activities for Costa Rican enterprises.

## (3) Outputs of the project

- 1) The management system of the project will be enhanced.
- 2) The technical capability of the counterpart personnel (C/P) will be upgraded in the fields of production management, quality management, administrative management, and productivity measurement.
- 3) Consultation services will be implemented systematically.
- 4) Information and promotion services will be upgraded.

# (4) Inputs (at time of evaluation)

Japanese side

Dispatch of long-term experts in five fields: Total of 9 experts

Dispatch of short-term experts: 23 experts
Training in Japan: 26 trainees
Provision of machinery and equipment: 61 million yen
Assumption of local costs: 45 million yen

Costa Rican side

Assignment of counterparts: Total of 16 counterparts

(at time of final evaluation)

Assumption of local costs:

1.556 billion colones

Provision of land and facilities:

#### 2. Outline of the Evaluation Team

Team	Team leader:	Nobuetsu Enoshita
members		Senior Technical Advisor, JICA
	Technical Transfer Planning:	Naoya Kuchimura
		International Department, Japan Productivity
		Center for Socio-Economic Development
	Evaluation Management:	Etsuji Yoshimura,
		Chief, Small and Medium Enterprise Team,
		Economic Development Department, JICA
	Evaluation Analysis:	Isao Dojun
		Section Chief, International Project Department,
		Chuo Kaihatsu Corporation
Evaluation	October 4, 2005 to October 24, 2005	
period	Evaluation type: Final evaluation	

### 3. Outline of Evaluation Results

- 3-1 Confirmation of achievements
- 3-1-1 Input achievements
- (1) Achievements of inputs from the Japanese side

A total of nine long-term experts in five fields and 23 short-term experts were dispatched. Training in Japan was provided to a total of 26 C/Ps. A total of approximately 61 million yen in machinery and equipment was provided by the Japanese side. The total amount of management expense assumed by the Japanese side from FY2000 to FY2005 was 526 million yen<sup>1</sup>.

(2) Achievements of inputs from the Costa Rican side

During the five years from FY2001 to FY2005, budgetary input from the Costa Rican

<sup>1</sup> Expert dispatch: 439 million yen; acceptance of trainees: 15 million yen; provision of machinery and equipment: 61 million yen; dispatch of study teams: 10 million yen)

side to the project totaled approximately 1.556 billion colones. The Costa Rican side also provided a total of 317 million colones in machinery and equipment. In the area of personnel assignment, the Costa Rican side assigned 3 C/Ps in project management and 13 C/Ps in technical areas. The technical C/Ps were classified into groups focused on production management, quality management, administrative management, and productivity measurement.

# 3-1-2 Achievement of the outputs

(1) The management system of the project will be enhanced.

Although the number of technical C/Ps to be assigned based on the initial plan was 17, the actual number of assigned technical C/Ps at the time of the final evaluation was 13. However, this did not have a significant impact on project activities.

Looking at budget expenditure for the project of the Costa Rican side, the Ministry of Science and Technology, which is the supervising government organization, allocated budgetary funds in accordance with the initial plan. However, there were instances where CEFOF earnings were insufficient, which led to delays in payment of salary to employees and insufficient equipment maintenance and management funds.

Joint Coordination Committee (JCC) meetings and regular meetings at the management level were held periodically, and these meetings proved useful for information sharing. However, no substantial improvements were made at the meetings with regard to problems in consulting service sales and marketing.

Consulting service activities themselves were actively implemented by the C/Ps and Japanese experts. However, marketing of the consulting services by CEFOF's management was less than sufficient, and thus issues remain in establishment of an operations management system for the project.

(2) The technical capability of the counterpart personnel (C/P) will be upgraded in the fields of production management, quality management, administrative management, and productivity measurement

It was judged that the knowledge and ability of C/Ps to implement consulting services had, in general, improved to a satisfactory technical level. Moreover, a significant number of manuals and instructional materials were prepared for use in on-the-job training (OJT), seminars, and training, which contributed to improvements in C/P

knowledge and ability.

(3) Consultation services will be implemented systematically.

The results of a questionnaire survey of 10 companies in Costa Rica that received consulting services indicated that many had high levels of satisfaction with said services. As a whole, it can be said that the consulting services for the companies were implemented effectively based on good relations between the C/Ps and Japanese experts.

(4) Information and promotion services will be upgraded.

In the course of implementation of the seminars, the conventions, and training under the Project, information and materials related to Project activities were distributed to the participants from public institutions and private companies.

### 3-1-3 Achievement of the Project Purpose

As a result of technical transfer through the Project, CEFOF became capable of implementing and upgrading productivity improvement activities. Of these, Japanese-style productivity improvement activities had high popularity among targeted companies.

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### 3-1-5. Achievement of the Overall Goal

Various activities were conducted by the Project in Costa Rica and the rest of Central America, and achievements are already being made toward the Overall Goal. Through these activities, a network was built between CEFOF and public institutions and the private sectors in the Central American region. Moreover, CEFOF is receiving increasing recognition from public institutions and private enterprises in Central America, and is receiving high praise from these institutions and enterprises. In addition, third-country training is being implemented by JICA and CEFOF for the purpose of human resources development in Central America.

#### 3-2 Outline of evaluation results

#### (1) Relevance

One of the important issues toward activation of the economy in the National Development Plan 2002-2006 is improvement of competitiveness in the production sector. Moreover, one of the important issues of the Ministry of Science and Technology's National Program on Science and Technology 2002-2006 is "contribution to improving competitiveness in the production sector in order to increase the level of development and assure improvement in the quality of living of all citizens." One of the priority fields of Japan's assistance to Costa Rica is industrial promotion. The provision of consulting services pertaining to productivity improvement is in line with the needs of small and medium enterprises. Furthermore, Japan's has abundant experience implementing similar projects in the productivity improvement field, and it has also technical advantages in this field. Accordingly, the relevance of the Project is assured.

### (2) Effectiveness

From the perspectives of "the types of and number of clients using CEFOF technical support services shall increase" and "clients who are beneficiaries of the services are satisfied with CEFOF activities" as indicators, it is evaluated that the level of achievement of the Project Purpose is at an appropriate level and that outputs of the Project have contributed to the achievement of the Project Purpose.

As a result of technical transfer through the Project, the capacity of CEFOF is enhanced with regard to such productivity improvement activities as consulting services, seminars, and training. The number of clients is increasing not only in Costa Rica but also other countries in Central America. Most companies that have received the consulting services through the Project have shown a high level of satisfaction with CEFOF's activities. Accordingly, it is evaluated that effectiveness is being sufficiently maintained.

## (3) Efficiency

In general, inputs by both the Japanese side and Costa Rican side were appropriate in terms of quantity, quality, and timing. The inputs from both the Japanese side and Costa Rican side were efficiently converted into outputs for indicators pertaining to "C/P assignment," "budget allocation," "meetings of the Joint Coordination Committee (JCC)," "use of supplied machinery and equipment," "technical transfer to the C/Ps,"

"preparation of teaching materials and manuals," "consulting service activities and client satisfaction," and "supply and diffusion of information on productivity improvement," and, for the most part, the expected outputs have been achieved at a satisfactory level. It is evaluated that essentially good efficiency is being maintained in Project implementation. JCC meetings and regular meetings at the management level have been conducted periodically. However, CEFOF made little substantial improvement in problems mainly related to CEFOF's management system, such as problems in marketing and sales of consulting services.

### (4) Impacts

### 1) Review of achievement of the Overall Goal

The C/Ps already have the technical capability needed to provide some consulting services on their own, and it is evaluated that CEFOF has the technical capability to implement productivity improvement activities for small and medium enterprises without the presence of Japanese experts. Moreover, consulting services were already being provided in Costa Rica and the rest of Central America during the Project Period, and achievements have already been made toward the Overall Goal. However, the Cost Rican government will need to take the initiative if activities in Central America are to be fortified going into the future.

## 2) Other impacts

In the Project, consulting services for companies have been used as a tool for capacity development of C/Ps in the form of OJT. Consulting service provided by Japanese experts and C/Ps are well appreciated by companies. It is understood that companies that have received consulting services through the Project have benefited from various positive impacts in terms of productivity improvement.

According to the results of an interview survey and questionnaire survey of companies, the following positive impacts have been reported:

- Common understanding of words used in the workplace
- Positive change of attitude among workers in areas that include way of thinking, awareness of security, and *kaizen* (continuous improvement)
- Simplification and standardization of production processes, improvement of teamwork, better awareness of international competition in global business
- Understanding of how introduction of ISO 9001:2000 improves efficiency of company operation and provides more focus on customers' satisfaction

# (5) Sustainability

### 1) Political sustainability

As was mentioned above, the Project is in conformity with the aims of the National Development Plan and the National Program on Science and Technology 2002-2006 of the Ministry of Science and Technology. Therefore, it can be said that the Project has a political foundation.

### 2) Organizational sustainability

Although CEFOF serves to implement activities for strengthening competitiveness, improving productivity, and improving information mechanisms in the production sector, it has been noted that CEFOF's activities in the publicity and sales/marketing of its consulting services are weak. However, CEFOF is currently formulating an improvement strategy to address this weakness as part of its plans for the next fiscal year.

### 3) Financial sustainability

The Ministry of Science and Technology is providing the budgetary funding previously agree upon to the Project throughout the Project Period. This funding amounts to 43% of the entire CEFOF budget. The remaining 57% comes from earnings of CEFOF activities (training courses, consulting services, etc.). However, the majority of earnings is applied to personnel expenses, and project activity expenses are not always sufficiently covered. Thus, further improvements in CEFOF's financial sustainability will be required.

#### 4) Technical sustainability

Among the C/Ps, there are some that have experience being dispatched as third-country experts to neighboring countries (Ecuador, etc.) and that have technical acquired capability at a satisfactory level. Accordingly, CEFOF has the technical capacity to implement productivity improvement activities for small and medium enterprises without Japanese experts in the future. It is therefore confirmed that technical sustainability is sufficient.

#### 3-3 Factors contributing to emergence of effects

At the time of the Mid-Term Evaluation, steps were taken toward introduction of a "management consultant certification system" as a means of motivating counterparts to

stay with the Project. Although it was confirmed that excellent counterparts were changing jobs at the time of the Mid-Term Evaluation, no counterparts changed jobs in the period following the Mid-Term Evaluation, and thus it is evaluated that the objective of having counterparts stay with the Project during the Project Period has been sufficiently achieved.

#### 3-4 Problem areas and factors leading to problems

The Mid-Term Evaluation Report pointed out that CEFOF management, marketing and sales, and technical departments must work together to ascertain needs, and that a CEFOF management framework that allows integrated support for clients in the area of productivity improvement is required. Based on this, the Japanese experts used regular meetings with CEFOF officials and discussions with the Minister of Science and Technology to request improvements that were founded on proposals for improved CEFOF management. However, the Costa Rican side did little to adequately respond to these requests. Consequently, problem areas that were identified at the time of the Mid-Term Evaluation were not entirely resolved at the time of the Final Evaluation. Nonetheless, technical transfer to the C/Ps is being sufficiently implemented, and it is expected that management improvements will be made in the future.

Looking at the budget, the Ministry of Science and Technology allocated budgetary funds according to plan. However, because CEFOF earnings were insufficient, there were instances of delays in payment of salary to employees and of insufficiencies in equipment maintenance and management funds.

### 3-5 Conclusion

The Project is in conformity with the development policy of Costa Rica, the needs of SMEs, and the aid policy of Japan. It can be said that the Project Purpose is being achieved satisfactory in terms of human resources development. On the other hand, as was mentioned above, system-related aspects in marketing and sales are inadequate. For weaknesses in certain parts of the organizational management framework, it will be necessary to continue making required proposals up until the completion of the Project, and to study ways of following up on these proposals in the future.

3-6 Recommendations (specific measures, proposals, and advice pertaining to the Project)

CEFOF's consulting services for productivity improvement have received high praise in

Costa Rica and other Central American countries. However, it will be necessary to change attitudes towards business activity among CEFOF employees and to restructure marketing and sales operations in order to ensure CEFOF's sustainability. The purpose of this restructuring will be to reinforce publicity, sales, and marketing of the consulting service in order to obtain more clients.

3-7 Lessons learned (items drawn from the Project that will prove useful as references when identifying and formulating, implementing, and managing similar projects) When implementing a technical cooperation project that seeks to foster management consultants in the area of productivity improvement, it is important to carry out an advance detailed study at the preparatory study stage in order to clarify the division of roles between the public sector and the private sector.

#### 3-8 Follow-up situation

A study is currently underway toward dispatch of short-term experts in FY2006 in order to continue support to establish the management consultant certification system. Furthermore, efforts are underway to recruit Senior Volunteers in quality management, production management, and operational coordination. It is expected that such Senior Volunteers will be dispatched at some time beginning in April 2006, at the earliest.