

Republic of Angola
National Institute of Employment and Vocational Training
Vocational Training Center for Civil Construction

**Project Completion Report for
Project of strengthening the capacity
of the vocational training center
for civil construction
in Republic of Angola**

August 2019

Japan International Cooperation Agency (JICA)

Serviço Nacional de Aprendizagem Industrial (SENAI)

HM
JR
20-075

Project Completion Report

I. Basic Information of the Project

1. Country

ANGOLA

2. Title of the Project

Project of Strengthening the Capacity of the Vocational Training Center for Civil Construction

3. Duration of the Project (Planned and Actual)

Plan: June 2016 – March 2019

Actual: November 2016 – August 2019

4. Background (from Record of Discussions(R/D))

Since 2002, Angolan economy has been growing steadily with its rich natural resources, and Angola has become a middle income country. However, Angola faces serious lack of skilled human resources who can contribute to reconstruct the country because many Angolan missed opportunities of general education and technical and vocational training due to the prolonged civil war. Thus Angola highly depends on migrant workers to reconstruct basic infrastructure. In addition, Angola needs to rid itself of over-dependency on oil industry and diversify the source of economic growth. As Angolan economic development has been oriented to capital-intensive industry such as oil industry, unemployment rate remains high as 22% (end of 2014). Aiming to reduce the gap between the rich and the poor within the country, it is important to develop skilled human resources through vocational training and diversify industries through development of construction sector.

Japan has been supporting Angola to develop human resources in construction sector in the context of post conflict reconstruction. To enable Vocational Training Center for Civil Construction (CENFOC) located in Viana to provide advanced training courses in three areas, namely Civil Construction, Metallic Structure and Topography, a workshop had been constructed and necessary equipment was provided through Japanese grant aid. JICA expert had been deployed in CENFOC to support capacity development of instructors and staff. As a result, three new training courses were established and the trainings have

been started in 2015 with CENFOC's own initiative. To keep responding to the demand of the construction industry, it is important to enhance the quality of training courses and train skilled workers.

5. Overall Goal and Project Purpose (from Record of Discussions(R/D))

Overall Goal: Vocational Training Centers in Angola provide training on construction utilizing the outcomes of the project.

Project Purpose: The capacity of CENFOC to manage the implementation of the three new training courses which meet the needs of the construction industry is strengthened.

6. Implementing Agency

INEFOP: National Institute of Employment and Vocational Training

CENFOC: Vocational Training Center for Civil Construction

II. Results of the Project

1. Results of the Project

1-1 Input by the Japanese side (Actual)

(1) Amount of Input by Japanese side: 184 millions Japanese Yen

(2) Expert dispatch

- 1 Coordinator (long-term)
- 15 Technical Experts (short-term)

Dispatched from National Service for Industrial Training (Serviço Nacional de Aprendizagem Industrial: SENAI) in Brazil.

(3) Receipt of training participants: 8 participants trained at SENAI Sao Paulo, Brazil (January – April, 2017).

(4) Overseas activities cost: 0.35 millions Japanese Yen

1-2 Input by the Angolan side (Actual)

1. Counterpart personnel and administrative personnel (including minimum eight (8) instructors in three (3) target courses)

2. Suitable office space with necessary equipment

3. Machinery, equipment, instruments vehicles, tools, spare parts and any other materials necessary for the implementation of the project other than the equipment provided by JICA.

4. Running expenses necessary for the implementation of the project

5. Utility fee (including electricity, water, etc.)

6. Local traveling costs and daily subsistence allowance (DSA) for counterpart personnel

1-3 Activities (Actual)

The following activities were implemented as planned.

1-1 Define curriculum for three new training courses (Civil Construction, Metallic Structures and Topography) in collaborating with the construction Industry.

1-2 Develop necessary training materials to implement these three new training courses.

1-3 Plan and schedule these three new training courses.

1-4 Implement the planned three new training courses as regular training courses.

1-5 Monitor and evaluate the three new training courses.

1-6 Revise and update the three new training courses.

- 1-7 Submit curriculum and training materials to INEFOP for the approval and dissemination in the national vocational training system.
- 2-1 Define the requirements for trainers of the three new training courses.
- 2-2 Develop and plan training methodology and schedule for TOT.
- 2-3 Select (or Recruit) and allocate trainers.
- 2-4 Train trainers for the three new training courses.
- 2-5 Establish a sustainable TOT upgrading teaching system year around
- 2-6 Select the trained trainers as "Trainers of Trainers" of CENFFOR
- 2-7 "Trainers of Trainers" conduct TOT targeting trainers of other training centers.

2. Achievements of the Project

2-1 Outputs and indicators

Output 1

Three new training courses in the field of construction (Civil Construction, Metallic Structures and Topography) are implemented with proper curricula and training materials.

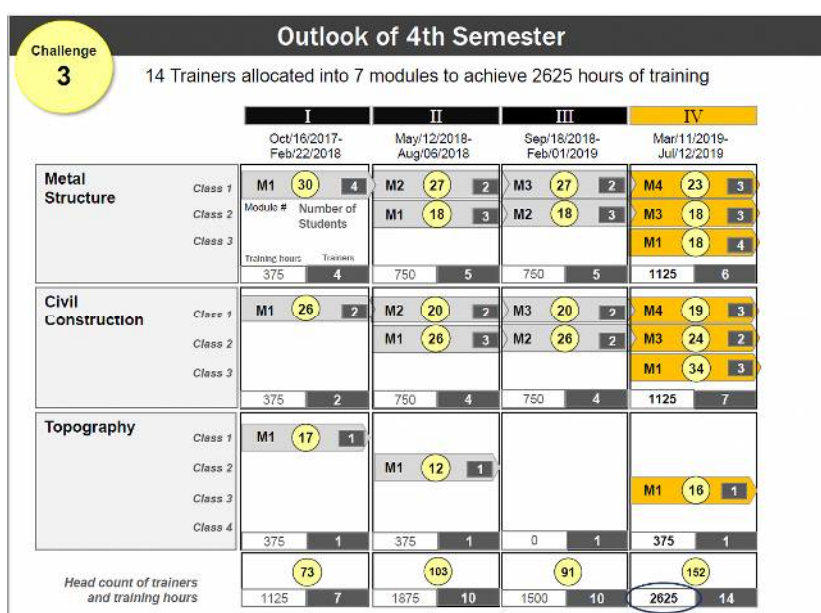
Indicator 1-1. Curricula for the three new courses are defined and developed
Achieved.

Indicator 1-2. Training materials for the three new courses are developed.
Achieved.

Indicator 1-3. More than 20 modules of the three new training courses are implemented.
Almost achieved.

19 modules were implemented as following;

	Civil Construction	Metal Structure	Topography
Module 1	3	3	3
Module 2	2	2	NA
Module 3	2	2	NA
Module 4	1	1	NA



Indicator 1-4. The trainees' satisfaction rating for the courses exceeds 80% on average.

Achieved.

Rate of excellent. (Excellent - Good - Regular - Poor - Bad)

Semester	I	II	III	IV
Metal Structure	62%	81%	88%	98%
Civil Construction	52%	74%	96%	95%

Output 2

Training capacity of the trainers at CENFOC on the field of construction (Civil Construction, Metallic Structures and Topography) is improved.

Indicator 2-1. More than 8 trainers are trained for the three new courses.

Achieved

8 trainers were trained for the three new courses. They completed 3 months practical training in Brazil.

Indicator 2-2. More than 3 trained trainers are selected as "Trainers of Trainers" of CENFFOR.

Achieved.

4 trainers are recognized as candidates.

- 1) Antonieta Esmeralda Fernandes
- 2) Meneses Davi Miguel
- 3) Wilson Alfredo Fumbelo Alone
- 4) Jones Edivaldo Ramos Gourgel

Indicator 2-3. The trainees' satisfaction rating for trainers' performance exceeds 80% on average.

Achieved.

Indicator 1-4 includes trainees' satisfaction rate for trainers' performance.

Indicator 2-4. The pilot technical TOT is implemented into the 3 new courses.

Achieved.

Implemented in IV semester for all the 3 pilot courses and training skills were transferred to 8 instructors who were not trained in Brazil.

2-2 Project Purpose and indicators

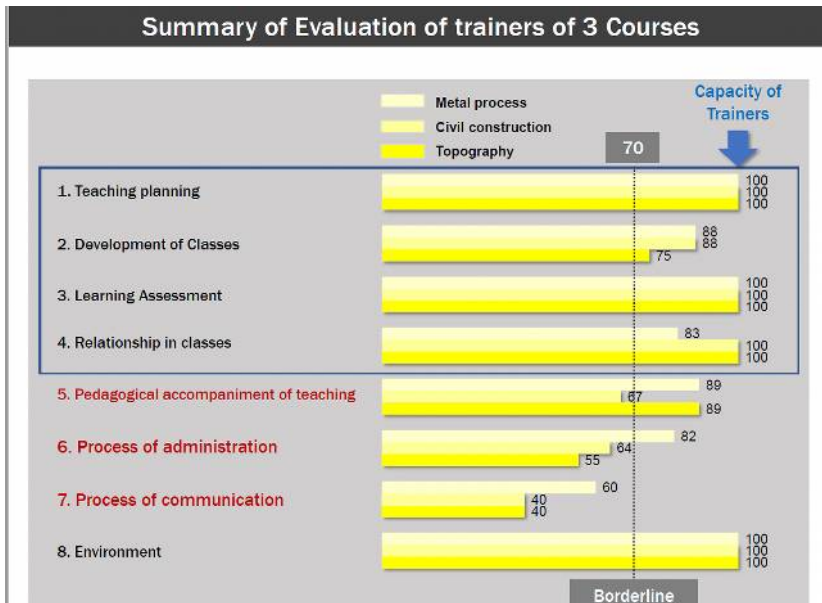
Project Purpose

The capacity of CENFOC to manage the implementation of the three new training courses which meet the needs of the construction industry is strengthened.

Indicator 1. Rating of CENFOC Trainer's capacity are more than 80% on average.

Achieved.

SENAI expert also evaluated that the capacity of trainers is satisfactory. (average 94.5%)



Indicator 2. Schedule and contents of the 3 training courses are checked and revised every semester.

Achieved.

The timeline and content was revised and updated after each semester until the end of the module IV.

Indicator 3. Rating of Industries' satisfaction towards the courses are more than 80% on average.

Achieved.

Companies are sending their employees to CENFOC for training, we well as receiveing CENFOC trainees for their project.

This is the result of the high level of companies' satisfaction about services of CENFOC.

3. History of PDM Modification

Ver. 1 (agreed in the first JCC held on 28 June, 2017): set the target of the following indicators;

- Indicator 1 for the Project purpose
- Indicator 3 for the Project purpose
- Indicator 1-4 for the Output 1
- Indicarot 2-3 for the Output 2

Ver. 2 (agreed in the second JCC held on 28 February, 2018): set the target of the following indicators;

- Indicator 1 for the Overall Goal
- Indicator 2 for the Overall Goal
- Indicator 2-2 for the Output 2

4. Others

4-1 Results of Environmental and Social Considerations (if applicable)

Not applicable.

4-2 Results of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

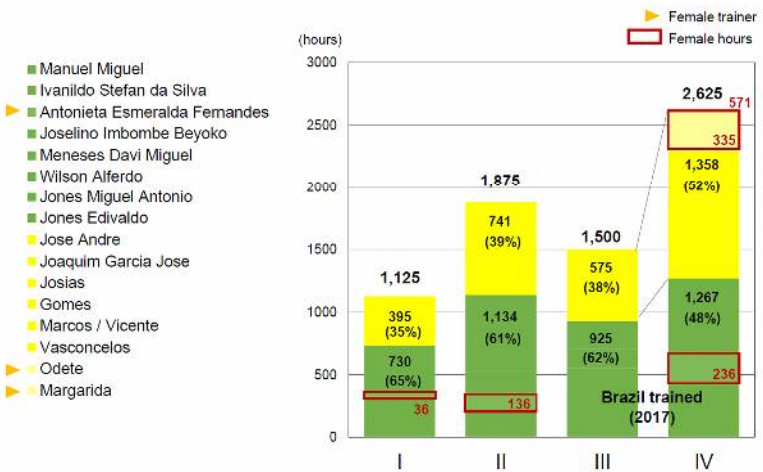
Although not specific measures are taken in the Project, female instructors and female trainees participated the pilot courses quite will dispite the field of the trainings are traditionally male dominant. 1 out of 8 instructors trained in Brazil is female, and 2 out of 8 instructors who received technical transfer from instructors trained in Brazil are female. In the fourth semester, 4 out of 78 trainees of civil construction course were female.

This achievement is made although the project did not take any specific measures to encourage female participation. The atmosfear of CENFOC welcoming any trainees might be a factor of this success. CENFOC was accepting a trainees using wheel chair in the civil construction course in this period.

Achievements
1

Training hours by Trainer

Weight of Non-Brazil trained increases to 52% in training hours
Weight of female trainers increases to 571 hours (22%)



Voice of female students

Total 8 female students attending classes at CENFOC

		I	II	III	IV	
		Oct/16/2017- Feb/22/2018	May/12/2018- Aug/06/2018	Sep/18/2018- Feb/01/2019	Mar/11/2019- Jul/12/2019	
1 female students	Metal Structure	Class 1: M1 (30) 4	M2 (27) 2	M3 (27) 2	M4 (27) 3	
	Class 2	Module # Number of Students	M1 (18) 3	M2 (18) 3	M3 (18) 3	
	Class 3	Training hours: Trainers	375 4	750 5	750 5	1125 6
Civil Construction	Class 1	M1 (26) 2	M2 (20) 2	M3 (20) 2	M4 (20) 3	
	Class 2		M1 (26) 3	M2 (26) 2	M3 (24) 2	
	Class 3				M1 (34) 3	
		375 2	750 4	750 4	1125 7	
Topography	Class 1	M1 (17) 1				
	Class 2		M1 (12) 1			
	Class 3				M1 (16) 1	
	Class 4					
Head count of trainers and training hours		(73) 1125 7	(103) 1875 10	(91) 1500 10	(157) 2625 14	

III. Results of Joint Review

1. Results of Review based on DAC Evaluation Criteria

Relevance: High

The Project was in line with the Angolan policy, development needs and Japanese policy for development assistance.

Effectiveness: High

The plan of the Project was appropriate, and the objective of the Project was achieved.

Efficiency: High

Input of the Project created the expected Outputs.

Impact: High

The Project had promoted diversity inclusion to the courses in the field of construction. Female instructors, female trainees, and a trainee with disabilities (wheel chair user) were well accommodated in the courses. Especially the trainee with disabilities was introduced in the national newspaper with an interview of the Principal of CENFOC. This is a good practice that may impact on the local society.

Sustainability: High in terms of technical aspect, middle in terms of financial aspect.

Instructors trained in the Project have enough capacity to transfer the skills required to implement the courses to other instructors.

Securing training material will be challenge due to the depreciation of local currency. Partnership with the private sector strengthened in the Project may mitigate this risk.

2. Key Factors Affecting Implementation and Outcomes

Procurement of training material has been a big challenge throughout the pilot courses due to unstable supply in market, as well as unstable price caused by depreciation of local currency. JICA/SENAI expert closely worked with counterparts to manage procure necessary material in time. The method of procurement and stock management was transferred to CENFOC.

3. Evaluation on the results of the Project Risk Management

To address the risk factor of the sustainability of technical transfer, the Project had supported CENFOC to strengthen the partnership with the private sector. By receiving trainees from companies and taking order from companies, CENFOC were able to generate some income.

4. Lessons Learnt

CENFOC's recognition by the society as an Excellence Vocational Training Center in the field of Civil Construction to Angola, through the engaging actions as well as the Continuous Improvement of the Teaching Environments, Learning Strategies, and Teaching Updating.

IV. For the Achievement of Overall Goals after the Project Completion

1. Prospects to achieve Overall Goal

Overall Goal: Vocational Training Centers in Angola provide training on construction utilizing the outcomes of the project.

As CENFOC instructors who were trained in Brazil already conducted hands-on TOT within CENFOC for other CENFOC instructors, they have enough capacity to transfer their skills to implement courses piloted in the Project. With a strong commitment of INEFOP, achievement of Overall Goal is realistic.

2. Recommendations for the Angolan side

1) Sustain the model through partnership with the private sector.

The first priority is to sustain the model introduced in the Project. Securing training material may be a challenge. To address this challenge, strengthening with the private sector is important. CENFOC had already developed a quite good linkage with private sector by receiving trainees from companies, dispatching CENFOC instructors to companies, intaking orders from companies, and so forth. It is recommended to keep strengthening the link with the private sector.

2) Follow up the graduates of the pilot courses

It is recommended to conduct a tracer survey to be updated about graduates' placement. Strengthening career guidance and placement support may be the next step to upgrade the pilot courses of the Project.

ANNEX 1: Results of the Project

List of Experts - SENAI

Rogério Alves Firmino – SENAI Coordinator in Angola
Anderson Barcelos Rocha Braga – SENAI Coordinator in Brazil
Abílio José Weber – SENAI Expert
Edson Lemes – SENAI Expert
Sandra Regina Marins Gonçalves – SENAI Expert
João Batista da Silva – SENAI Expert
Carlos Eduardo Machado de Oliveira – SENAI Expert
Leonardo Casanova Cardelle Junior – SENAI Expert
Márcio de Oliveira Cruz – SENAI Expert
Denis Roberto Lourenço – SENAI Expert
Jair Leal Alves – SENAI Expert
Fabio dos Santos – SENAI Expert
Márcia Rodrigues da Silva – SENAI Expert
Márcio José do Nascimento – SENAI Expert
Gustavo do Vale Dias Rosa – SENAI Expert
Dáfanie Suelen do Vale Soares – SENAI Expert

List of Counterparts

Project Director: Manuel Mbangui
Project Manager: Manuel A. Pimentel

List of Trainings

Training of Trainers – Technical Training Program for Trainers from the CENFOC – Brazil and Angola – focused on the development of technical skills and abilities of the trainers

Training of Trainers – Pedagogical Training Program for Trainers from the CENFOC and CENFFOR

Managerial Training – Managerial Training Program (short) for the Principal and for the coordinator from the CENFOC (an adaptation of the activity)

ANNEX 2: List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project

List of Products

For each activity it was produced a report by each expert or group of experts (SENAI). All the reports have been submitted to JICA Brazil Office during the process of accountability.

There have been also produced, the courses plans and textbooks as well as their revision after the conclusion of the pilot courses and submitted to JICA Angola Office and INEFOP

Result	Activity	Product
R2	A2.4	Pedagogical Training - <i>Estratégias e Técnicas de Ensino e Aprendizagem - Strategies and Techniques of Learning</i>
	A2.5	Civil Construction - <i>Revestimentos / Plastering</i>
		Civil Construction - <i>Pintura de Construção / Building Painting</i>
		Civil Construction - <i>Montagem de Coberturas / Roofing Assembly</i>
		Civil Construction - <i>Instalações Elétricas / Electrical Installations</i>
		Civil Construction - <i>Construção de Estruturas Prediais / Building Structures Construction</i>
		Civil Construction - <i>Carpintaria de Cofragem / Formwork Carpentry</i>
		Civil Construction - <i>Canalização / Plumbing</i>
		Metallic Construction - <i>Soldagem / Welding</i>
		Metallic Construction - <i>Processos de Produção de Estruturas Metálicas / Metallic Structures Production Process</i>
		Metallic Construction - <i>Matemática Aplicada / Applied Mathematics</i>
	Metallic Construction - <i>Desenho Técnico / Technical Drawing</i>	
	Metallic Construction - <i>Medições Topográficas / Topographic Measurements</i>	
	A2.6	Civil Construction - <i>Revestimentos / Plastering - Update 2019</i>
Civil Construction - <i>Pintura de Construção / Building Painting - Update 2019</i>		

	Civil Construction - <i>Montagem de Coberturas / Roofing Assembly - Update 2019</i>
	Civil Construction - <i>Instalações Eléctricas / Electrical Installations - Update 2019</i>
	Civil Construction - <i>Construção de Estruturas Prediais / Building Structures Construction - Update 2019</i>
	Civil Construction - <i>Carpintaria de Cofragem / Formwork Carpentry - Update 2019</i>
	Civil Construction - <i>Canalização / Plumbing - Update 2019</i>
	Metallic Construction - <i>Soldagem / Welding - Update 2019</i>
	Metallic Construction - <i>Processos de Produção de Estruturas Metálicas / Metallic Structures Production Process - Update 2019</i>
	Metallic Construction - <i>Matemática Aplicada / Applied Mathematics - Update 2019</i>
	Metallic Construction - <i>Desenho Técnico / Technical Drawing - Update 2019</i>
	Metallic Construction - <i>Medições Topográficas / Topographic Measurements - Update 2019</i>
A2.7	Curricula - Construtor de Edificações / Building Constructor
A2.7	Curricula - Construtor de Estruturas Metálicas / Metallic Structure Constructor
A2.7	Curricula - Medidor Topográfico / Topographic Measurer

A2.4, A2.5, A2.6 – Textbooks

ANNEX 3: PDM (All versions of PDM)

Project Design Matrix

Project Title: Project of Strengthening the Capacity of Vocational Training Center for Civil Construction (CENFOC)

Version 0

Implementing Agency: INEFOP and CENFOC

Date: Feb 26, 2016

Target Group: INEFOP, CENFOC, Trainers of CENFOCProject Period: June, 2016 – March 2019 (two years and nine months)Target Area: INEFOP (Luanda), CENFOC (Viana)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Vocational Training Centers in Angola provide training on construction utilizing the outcomes of the project.	1. More than XX trainers attend TOT implemented by the "Trainers of Trainers" trained in CENFOC. 2. More than XX vocational training centers utilize the curricula and materials developed in the project.	1. Document Investigation 2. Document Investigation	
Project Purpose The capacity of CENFOC to manage the implementation of the three new training courses which meet the needs of the construction industry is strengthened.	1. The rating of CENFOC trainers' capacity exceeds XX% on average. 2. The schedule and contents of the three new training courses is checked and revised every semester. 3. The rating of Industries' satisfaction towards the courses exceeds XX% on average.	1. Evaluation sheet 2. Interview with Experts and CP 3. Questionnaire survey to industries	1. Financial resources are executed to INEFOP and CENFOC enough by MAPTESS in a sustainable manner. 2. Human resource needs in the construction industry are not drastically decreased.
Outputs 1. Three new training courses in the field of construction (Civil Construction, Metallic Structures and Topography) are implemented with proper curricula and training materials. 2. Training capacity of the trainers at CENFOC on the field of construction (Civil Construction, Metallic Structures and Topography) is improved.	1-1. Curricula for the three new courses are defined and developed 1-2. Training materials for the three new courses are developed. 1-3. More than 20 modules of the three new training courses are implemented. 1-4. The trainees' satisfaction rating for the courses exceeds XX% on average. 2-1. More than 8 trainers are trained for the three new courses. 2-2. More than XX trained trainers are selected as "Trainers of Trainers" of CENFFOR. 2-3. The trainees' satisfaction rating for trainers' performance exceeds XX% on average. 2-4. The pilot technical TOT is implemented more than XX times.	1-1. Interview with Experts and CP 1-2. Interview with Experts and CP 1-3. Document Investigation 1-4. Questionnaire survey to trainees 2-1. Document Investigation 2-2. Document Investigation 2-3. Questionnaire survey to trainees 2-4. Interview with Experts and CP	The counterpart personnel, especially CENFOC trainers, capacitated by the Project, continue working for their respective positions.
Activities	Input		Pre-Condition
0 Conduct a baseline survey 1-1 Define curriculum for three new training courses (Civil Construction, Metallic Structures and Topography) in collaborating with the construction Industry. 1-2 Develop necessary training materials to implement these three new training courses. 1-3 Plan and schedule these three new training courses. 1-4 Implement the planned three new training courses as regular training courses. 1-5 Monitor and evaluate the three new training courses. 1-6 Revise and update the three new training courses. 1-7 Submit curriculum and training materials to INEFOP for the approval and dissemination in the national vocational training system. 2-1 Define the requirements for trainers of the three new training courses. 2-2 Develop and plan training methodology and schedule for TOT. 2-3 Select (or Recruit) and allocate trainers. 2-4 Train trainers for the three new training courses. 2-5 Establish a sustainable TOT upgrading teaching system year around 2-6 Select the trained trainers as "Trainers of Trainers" of CENFFOR 2-7 "Trainers of Trainers" conduct TOT targeting trainers of other training centers.	Japanese Side 1. Experts • Coordinator (long-term) • Technical Experts (short-term) • Others as necessary 2. Training • Training in Brasil 3. Equipment and material • When necessary	Angolan Side 1. Counterpart personnel and administrative personnel (including minimum eight (8) instructors in three (3) target courses) 2. Suitable office space with necessary equipment 3. Machinery, equipment, instruments vehicles, tools, spare parts and any other materials necessary for the implementation of the project other than the equipment provided by JICA. 4. Running expenses necessary for the implementation of the project 5. Utility fee (including electricity, water, etc.) 6. Local traveling costs and daily subsistence allowance (DSA) for counterpart personnel	Security condition of Angola is stable, etc. Major Stakeholders collaborate with the project

Project Design Matrix

Project Title: Project of Strengthening the Capacity of Vocational Training Center for Civil Construction (CENFOC)

Version 1

Implementing Agency: INEFOP and CENFOCDate: Jun 28, 2017Target Group: INEFOP, CENFOC, Trainers of CENFOCProject Period: June, 2016 – March 2019 (two years and nine months)Traget Area: INEFOP (Luanda), CENFOC (Viana)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Vocational Training Centers in Angola provide training on construction utilizing the outcomes of the project.</p>	<p>1. More than XX trainers attend TOT implemented by the "Trainers of Trainers" trained in CENFOC.</p> <p>2. More than XX vocational training centers utilize the curricula and materials developed in the project.</p>	<p>1. Document Investigation</p> <p>2. Document Investigation</p>	
<p>Project Purpose The capacity of CENFOC to manage the implementation of the three new training courses which meet the needs of the construction industry is strengthened.</p>	<p>1. The rating of CENFOC trainers' capacity exceeds 80% on average.</p> <p>2. The schedule and contents of the three new training courses is checked and revised every semester.</p> <p>3. The rating of Industries' satisfaction towards the courses exceeds 80% on average.</p>	<p>1. Evaluation sheet</p> <p>2. Interview with Experts and CP</p> <p>3. Questionnaire survey to industries</p>	<p>1. Financial resources are executed to INEFOP and CENFOC enough by MAPTESS in a sustainable manner.</p> <p>2. Human resource needs in the construction industry are not drastically decreased.</p>
<p>Outputs 1. Three new training courses in the field of construction (Civil Construction, Metallic Structures and Topography) are implemented with proper curricula and training materials.</p> <p>2. Training capacity of the trainers at CENFOC on the field of construction (Civil Construction, Metallic Structures and Topography) is improved.</p>	<p>1-1. Curricula for the three new courses are defined and developed</p> <p>1-2. Training materials for the three new courses are developed.</p> <p>1-3. More than 20 modules of the three new training courses are implemented.</p> <p>1-4. The trainees' satisfaction rating for the courses exceeds 80% on average.</p> <p>2-1. More than 8 trainers are trained for the three new courses.</p> <p>2-2. More than XX trained trainers are selected as "Trainers of Trainers" of CENFFOR.</p> <p>2-3. The trainees' satisfaction rating for trainers' performance exceeds 80% on average.</p> <p>2-4. The pilot technical TOT is implemented more than XX times.</p>	<p>1-1. Interview with Experts and CP</p> <p>1-2. Interview with Experts and CP</p> <p>1-3. Document Investigation</p> <p>1-4. Questionnaire survey to trainees</p> <p>2-1. Document Investigation</p> <p>2-2. Document Investigation</p> <p>2-3. Questionnaire survey to trainees</p> <p>2-4. Interview with Experts and CP</p>	<p>The counterpart personnel, especially CENFOC trainers, capacitated by the Project, continue working for their respective positions.</p>
Activities	Input		Pre-Condition
<p>0 Conduct a baseline survey</p> <p>1-1 Define curriculum for three new training courses (Civil Construction, Metallic Structures and Topography) in collaborating with the construction Industry.</p> <p>1-2 Develop necessary training materials to implement these three new training courses.</p> <p>1-3 Plan and schedule these three new training courses.</p> <p>1-4 Implement the planned three new training courses as regular training courses.</p> <p>1-5 Monitor and evaluate the three new training courses.</p> <p>1-6 Revise and update the three new training courses.</p> <p>1-7 Submit curriculum and training materials to INEFOP for the approval and dissemination in the national vocational training system.</p> <p>2-1 Define the requirements for trainers of the three new training courses.</p> <p>2-2 Develop and plan training methodology and schedule for TOT.</p> <p>2-3 Select (or Recruit) and allocate trainers.</p> <p>2-4 Train trainers for the three new training courses.</p> <p>2-5 Establish a sustainable TOT upgrading teaching system year around</p> <p>2-6 Select the trained trainers as "Trainers of Trainers" of CENFFOR</p> <p>2-7 "Trainers of Trainers" conduct TOT targeting trainers of other training centers.</p>	<p>Japanese Side</p> <p>1. Experts</p> <ul style="list-style-type: none"> • Coordinator (long-term) • Technical Experts (short-term) • Others as necessary <p>2. Training</p> <ul style="list-style-type: none"> • Training in Brasil <p>3. Equipment and material</p> <ul style="list-style-type: none"> • When necessary 	<p>Angolan Side</p> <p>1. Counterpart personnel and administrative personnel (including minimum eight (8) instructors in three (3) target courses)</p> <p>2. Suitable office space with necessary equipment</p> <p>3. Machinery, equipment, instruments vehicles, tools, spare parts and any other materials necessary for the implementation of the project other than the equipment provided by JICA.</p> <p>4. Running expenses necessary for the implementation of the project</p> <p>5. Utility fee (including electricity, water, etc.)</p> <p>6. Local traveling costs and daily subsistence allowance (DSA) for counterpart personnel</p>	<p>Security condition of Angola is stable, etc.</p> <p>Major Stakeholders collaborate with the project</p>

Project Design Matrix

Project Title: Project of Strengthening the Capacity of Vocational Training Center for Civil Construction (CENFOC)

Version 2

Implementing Agency: INEFOP and CENFOC

Date: Feb. 28, 2018

Target Group: INEFOP, CENFOC, Trainers of CENFOCProject Period: June, 2016 – March 2019 (two years and nine months)Target Area: INEFOP (Luanda), CENFOC (Viana)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal</p> <p>Vocational Training Centers in Angola provide training on construction utilizing the outcomes of the project.</p>	<p>1. More than 8 trainers attend TOT implemented by the "Trainers of Trainers" trained in CENFOC.</p> <p>2. More than 2 vocational training centers utilize the curricula and materials developed in the project.</p>	<p>1. Document Investigation</p> <p>2. Document Investigation</p>	
<p>Project Purpose</p> <p>The capacity of CENFOC to manage the implementation of the three new training courses which meet the needs of the construction industry is strengthened.</p>	<p>1. The rating of CENFOC trainers' capacity exceeds 80% on average.</p> <p>2. The schedule and contents of the three new training courses is checked and revised every semester.</p> <p>3. The rating of Industries' satisfaction towards the courses exceeds 80% on average.</p>	<p>1. Evaluation sheet</p> <p>2. Interview with Experts and CP</p> <p>3. Questionnaire survey to industries</p>	<p>1. Financial resources are executed to INEFOP and CENFOC enough by MAPTESS in a sustainable manner.</p> <p>2. Human resource needs in the construction industry are not drastically decreased.</p>
<p>Outputs</p> <p>1. Three new training courses in the field of construction (Civil Construction, Metallic Structures and Topography) are implemented with proper curricula and training materials.</p> <p>2. Training capacity of the trainers at CENFOC on the field of construction (Civil Construction, Metallic Structures and Topography) is improved.</p>	<p>1-1. Curricula for the three new courses are defined and developed</p> <p>1-2. Training materials for the three new courses are developed.</p> <p>1-3. More than 20 modules of the three new training courses are implemented.</p> <p>1-4. The trainees' satisfaction rating for the courses exceeds 80% on average.</p> <p>2-1. More than 8 trainers are trained for the three new courses.</p> <p>2-2. More than 3 trained trainers are selected as "Trainers of Trainers" of CENFFOR.</p> <p>2-3. The trainees' satisfaction rating for trainers' performance exceeds 80% on average.</p> <p>2-4. The pilot technical TOT is implemented into the 3 new courses.</p>	<p>1-1. Interview with Experts and CP</p> <p>1-2. Interview with Experts and CP</p> <p>1-3. Document Investigation</p> <p>1-4. Questionnaire survey to trainees</p> <p>2-1. Document Investigation</p> <p>2-2. Document Investigation</p> <p>2-3. Questionnaire survey to trainees</p> <p>2-4. Interview with Experts and CP</p>	<p>The counterpart personnel, especially CENFOC trainers, capacitated by the Project, continue working for their respective positions.</p>
Activities	Input		Pre-Condition
<p>0 Conduct a baseline survey</p> <p>1-1 Define curriculum for three new training courses (Civil Construction, Metallic Structures and Topography) in collaborating with the construction Industry.</p> <p>1-2 Develop necessary training materials to implement these three new training courses.</p> <p>1-3 Plan and schedule these three new training courses.</p> <p>1-4 Implement the planned three new training courses as regular training courses.</p> <p>1-5 Monitor and evaluate the three new training courses.</p> <p>1-6 Revise and update the three new training courses.</p> <p>1-7 Submit curriculum and training materials to INEFOP for the approval and dissemination in the national vocational training system.</p> <p>2-1 Define the requirements for trainers of the three new training courses.</p> <p>2-2 Develop and plan training methodology and schedule for TOT.</p> <p>2-3 Select (or Recruit) and allocate trainers.</p> <p>2-4 Train trainers for the three new training courses.</p> <p>2-5 Establish a sustainable TOT upgrading teaching system year around</p> <p>2-6 Select the trained trainers as "Trainers of Trainers" of CENFFOR</p> <p>2-7 "Trainers of Trainers" conduct TOT targeting trainers of other training centers.</p>	<p>Japanese Side</p> <p>1. Experts</p> <ul style="list-style-type: none"> • Coordinator (long-term) • Technical Experts (short-term) • Others as necessary <p>2. Training</p> <ul style="list-style-type: none"> • Training in Brasil <p>3. Equipment and material</p> <ul style="list-style-type: none"> • When necessary 	<p>Angolan Side</p> <p>1. Counterpart personnel and administrative personnel (including minimum eight (8) instructors in three (3) target courses)</p> <p>2. Suitable office space with necessary equipment</p> <p>3. Machinery, equipment, instruments vehicles, tools, spare parts and any other materials necessary for the implementation of the project other than the equipment provided by JICA.</p> <p>4. Running expenses necessary for the implementation of the project</p> <p>5. Utility fee (including electricity, water, etc.)</p> <p>6. Local traveling costs and daily subsistence allowance (DSA) for counterpart personnel</p>	<p>Security condition of Angola is stable, etc.</p> <p>Major Stakeholders collaborate with the project</p>