

## Summary of Terminal Evaluation Results

<b>1. Outline of the Project</b>	
Country : Democratic Republic of the Congo	Project Title : The Project on Development of Capacity of Instructors at INPP
Sector : Human resources- Vocational Training	Cooperation Scheme : Technical cooperation project
Division in Charge : JICA Human Development Department	Total Cost (as of the moment of this evaluation) : 653 million Japanese Yen
Period of cooperation	January 2011 – December 2013 <i>To be extended</i>
	Partner Country’s Implementation Organization : Institut National de Préparation Professionnelle (INPP) Supporting Organization in Japan : Overseas Vocational Training Association & Oriental Consultants Co., Ltd. (Joint venture) Ministry of Health, Labour and Welfare
<p><b>1-1 Background of Project</b></p> <p>The Democratic Republic of the Congo (hereinafter referred to as “DRC”) experienced a series of armed conflicts through the 1990s which have seriously affected the country. One of the priorities among ongoing efforts to recover the economy is technical and vocational training, according to the national agenda on the promotion of employment.</p> <p>The Institut National de Préparation Professionnelle (INPP) is a national vocational training institute, responsible for enhancement of vocational skills of Congolese through its 11 branches across provinces. Although INPP developed its vocational training capacity in the 1980s with assistance from the Government of Japan in terms of technical experts and provision of equipment, INPP today faces serious challenges. Critical issues include inappropriate technical knowledge of instructors, difficulty in the transmission of knowledge and skills of senior trainers to the next generation, deterioration of equipment and facilities, and limited admission capacity, among others.</p> <p>In response to the official request of the Government of DRC to the Government of Japan, INPP and JICA agreed to develop training capacity of INPP through a comprehensive Vocational Training Program which consists of three components; 1) Technical Cooperation Project to improve instruction skills of INPP trainers, 2) Grant Aid to rehabilitate and upgrade facilities and equipment of INPP Kinshasa, and 3) Dispatch of Expert to enhance management capacity of INPP headquarters. This terminal evaluation is conducted to evaluate the component 1, Technical Cooperation Project, namely <i>the Project on Development of Capacity of Instructors at INPP</i> (“the Project”).</p>	
<p><b>1-2 Project Overview</b></p> <p>The Project is planned to be three years from January 2011 until December 2013. Currently, eight consultants are assigned to cover the following technical areas: overall supervision, training design, training planning, training management, pedagogy, baseline survey, coordination and automobile maintenance.</p> <p>Under the Project, a series of training of trainers have been conducted in a phased manner, beginning with the intensive training of the <i>core trainers</i> in Japan, Senegal and INPP Kinshasa, moving on to</p>	

training of trainers from around the country conducted by the core trainers at INPP Kinshasa. The Project is focused on the following three technical subjects;

- 1) Basic subjects common to all trainers (*Tronc Commun*), including electricity and mechanics;
- 2) Specialized skills on a) automobile and b) refrigeration and air conditioning; and
- 3) Pedagogical skills.

(1) Overall Goal

Quality vocational training mainly in automobile and refrigeration and air conditioning is provided at INPP.

(2) Project Purpose

Teaching skill of trainers of INPP, mainly those of the automobile course and the refrigeration and air conditioning course, are improved.

(3) Outputs

Output 1. Implementation system of the basic and common skills training is strengthened.

Output 2: Implementation system of the specialized skills training is strengthened.

Output 3. Implementation system of the pedagogical skills training is strengthened.

(4) Inputs

Japanese side	Total cost: 653 million Japanese Yen
Japanese experts	11experts in the following 9 technical areas (in total 104.87M/M): overall supervision, training design, training planning, training management, pedagogy, baseline survey, coordination, automobile maintenance and training evaluation.
Senegalese experts	3 experts in the following 4 technical areas: hydraulic pressure, pneumatic pressure, Programmable Logic Controller, Tungsten Insert Gas welding.
Training in Japan	Automobile: 2 sessions (5 participants in 2012 and 8 participants in 2013). Refrigeration and air conditioning: 3 sessions (5 participants each year during 2011 and 2013)
Training in Senegal	Mechanics: 2 sessions (8 participants each) Electricity and electronics: 2 sessions (8 participants each)
Equipment	Equipment for training 84,594,190 Japanese Yen (as part of the above total cost)
Operational expenses	41,217,443 Japanese Yen (equivalent to 420,157.42 United States Dollars) (USD=JPY98.10 as of August 2013)
DRC side	
Counterparts	Project Director (Director General, INPP) Project Manager (Technical Director, INPP)

Facilities and equipment	Project Coordinator (Director, INPP Kinshasa) Total 86 INPP staff as members of various commissions and working groups Project office in INPP Kinshasa
Operational expenses	52,698,595 Japanese Yen (equivalent to 487,949,954 Congolese Franc) (CDF=JPY98.10 as of August 2013)

## 2. Evaluation Team

Members of Evaluation Team	Team leader	Ms. Emi Aizawa	Director, Social Security Division, Human Development Department, JICA
	Vocational Training	Mr. Hirotake Iida	Deputy Director, Planning and Coordinating Division, Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers
	Evaluation planning	Ms. Yahoko Asai	Special Advisor, Social Security Division, Human Development Department, JICA
	Evaluation analysis	Ms. Akemi Serizawa	Global Link Management Co., Ltd.
Period of Evaluation	20 <sup>th</sup> July – 10 <sup>th</sup> August 2013		Type of Evaluation: Terminal Evaluation

## 3. Evaluation Results

### 3-1 Project Performance

#### 3-1-1 Outputs

##### (1) **【OUTPUT 1】 Implementation system of the basic and common skills training is strengthened.**

Output 1 has been achieved vis-à-vis all indicators concerning planning and implementation of training, satisfaction of trainers, and revision of training. Tronc Commun training was fully developed and became a standard program of INPP to be applied to all INPP schools in provinces. The functional training management system is in place, through which Tronc Commun is managed by the Tronc Commun working group, the data collection team, the Commission of Training Management and Improvement (in INPP Kinshasa) and the Commission of Diffusion (in INPP headquarters), following the plan-do-check-act cycle (PDCA cycle).

##### (2) **【OUTPUT 2】 Implementation system of the specialized skills training is strengthened.**

Output 2 has been achieved vis-à-vis all indicators. Concerning the indicator *lesson plans and teaching materials are developed and revised more than two times during the Project*, it is important to note that the specialized skills training is a training in which the core trainers transfer their knowledge and skills that they acquired from the Japanese experts and in the several training sessions in Japan to other trainers. Due to this nature, the contents differ every time and lesson plans and teaching materials could not be standardized unlike Tronc Commun and Pedagogy. However, the terminal evaluation team confirmed that the necessary revisions have been made (e.g. extension of training period, addition of practical training

using appropriate equipment) and therefore, it can be judged that the indicator was achieved.

One of the factors leading to the difference in the satisfaction rates of the trainers (92% for automobile and 80% for refrigeration and air conditioning) may be that the trainers of the latter did not have enough practical training at INPP Kinshasa due to the lack of necessary equipment. The delay in the provision of such equipment was caused by the delay in the construction of facilities by Japan's Grant Aid (component 2 of the Vocational Training Program as mentioned above) due to the Great East Japan Earthquake (2011).

**(3) [OUTPUT 3] Implementation system of the pedagogical skills training is strengthened.**

Output 3 will be achieved vis-à-vis all the indicators once one more revision is made before the Project concludes. Pedagogy training was fully elaborated and became a standard program of INPP to be applied to all INPP schools in provinces. The management system of training is in place through which Pedagogy training is managed by the Pedagogy working group, the data collection team, the Commission of Training Management and Improvement and the Commission of Diffusion, following the PDCA cycle.

**3-1-2 Project Purpose**

**Teaching skills of INPP trainers, mainly those of the automobile course and the refrigeration and air conditioning course, are improved.**

The Project Purpose has been achieved vis-à-vis the project indicators. However, the table below shows that the result of training in refrigeration and air conditioning evaluated by the core trainers (63%) is lower than other subjects. This suggests that the quality of training of the core trainers in refrigeration and air conditioning was not sufficient due to the reason discussed in the section Output 2 above. Their teaching skill should be further strengthened.

The terminal evaluation found that the participants of training of trainers felt that their instruction capacity has been enhanced. They stated that they started applying what the core trainers were doing in their own classes; that they could better plan, implement and evaluate the training for trainees; that they became able to breakdown a complicated task into small steps so that it is easier for trainees to understand key learning points during practical training; and that hygiene and safety management were improved in their classes.

Indicators		Status		
		Self-evaluation		Evaluation by core trainers after training
		Before training	After training	
1	More than 80% of trainers who attended Tronc Commun receive at least a 3 grade point, applying 5 grade evaluation system	29%	95%	93%
2	More than 80% of trainers who attended specialized skills training receive at least a 3 grade point, applying 5 grade evaluation system	(automobile course)		83%
		14%	94%	
		(refrigeration and air conditioning course)		63%
		16%	80%	

3	More than 80% of trainers who attended pedagogical skills training receive at least a 3 grade point, applying 5 grade evaluation system	53%	98%	100%
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Source: Endline survey report (July 2013)

### 3-1-3 Overall Goal

#### **Quality vocational training mainly in automobile and refrigeration and air conditioning is provided at INPP.**

Most of the Overall Goal indicators have been achieved. While economic, social and personal factors need to be examined, the strengthened capacity of the trainers through this Project is likely to be one of contributing factors to the improved performance of trainees and to an increased percentage of trainees who think that the training at INPP has helped them find a job. In addition, the increase in the number of companies which have sent their employees to INPP training courses proves that INPP is becoming a more widely recognized vocational training center. This improvement is attributed not only to the strengthened capacity of INPP trainers but also to INPP's expanded network with companies which was achieved with a support from the Vocational Training Advisor dispatched to INPP headquarters. INPP's public relations efforts were also notable to improve INPP's recognition among partner companies.

No clear changes were observed concerning the trainees' employment rate and their satisfaction about training contents and equipment. However, the Overall Goal is likely to be achieved because, with the assistance of the Project and the Vocational Training Advisor, INPP realized the importance of employment support and started taking concrete actions such as company visits and various seminars for trainees who are seeking jobs after graduation. INPP is also setting up a system to collect data concerning INPP graduates. Continuous data collection and regular analysis of employment status of INPP graduates is crucial for INPP to timely identify emerging issues and improve the quality of training. Delay in installation of equipment concerning refrigeration and air conditioning may adversely affect the training quality. Further training for trainers is required.

Indicators		Status	
		Baseline survey (Aug-Sept 2012) Graduates of 2010	Endline survey (May-July2013) Graduates of 2012
1	Employment rate of graduates (employed or self-employed) from the targeted courses of INPP Kinshasa improves compared with the data at the beginning of the Project	Employment rate of 2010 graduates Automobile course 9.7% (19 out of 196 respondents)  refrigeration and air conditioning course 22.3% (40 out of 179 respondents)	Employment rate of 2012 graduates Automobile course 13.7% (26 out of 190 respondents)  refrigeration and air conditioning course 21.0% (30 out of 143 respondents)

2	Satisfaction rate of companies which employed INPP graduates from the targeted courses improves compared with the data at the beginning of the Project	Enterprises that have sent their employees to training at INPP: 62.5%  Enterprises that thought INPP met their needs: 90%	Enterprises that have sent their employees to training at INPP: 73.1%  Enterprises that thought INPP met their needs: 93.7%
3	Exam scores of the targeted courses improve compared with the data at the beginning of the Project	Trainees 2010 Average score of the final exam (Maximum Score 100) Automobile course Gasoline engine 55.0 Automobile electronics 59.7  Housing refrigeration and air conditioning 50.0	Trainees 2012 Average score of the final exam (Maximum Score 100) Automobile course Gasoline engine 59.6 Automobile electronics 62.5  Housing refrigeration and air conditioning 58.8
4	Percentage of those who were satisfied with the training improves	Percentage of those who were satisfied with the content of the training: 95%  Percentage of those who were satisfied with the training equipment: 75.6%  Percentage of those who thought that INPP training helped them find the job: 84.4%	Percentage of those who were satisfied with the content of the training: 95.4%  Percentage of those who were satisfied with the training equipment: 75.3%  Percentage of those who thought that INPP training helped them find the job: 90.2%
5	Evaluation results of training of trainers improve	Average score of trainers monitored between 2009 and 2011 (66 persons) (Maximum Score 100) : 72.6	Average score of trainers monitored in 2013 (5 persons) (Maximum Score 100) : 75.8

Source: Endline survey report (July 2013)

### 3-2 Summary of Evaluation Results

#### 3-2-1 Relevance: High

The relevance of the Project is high. It is in line with the policy and the needs of DRC as well as Japan's development assistance policy for DRC.

##### (1) Relevance to the DRC policies

Unemployment is a serious issue in DRC. Concerning the high unemployment rate of 53.2% in 2008 (Ministry of Employment, *Politique Nationale de l'Emploi et de la Formation Professionnelle*, May 2011), the government places a high priority on human resource development. The second Development and Poverty Reduction Strategy (2011-2015) emphasizes the improvement of

employment situation through vocational training. INPP is a national vocational training institute established by the Ordinance No. 206 dated 29 June 1964. INPP is a relevant counterpart, considering its unique mandates to train employees sent by the partner companies in turn of their financial contributions, to train trainers, and to lead other vocational centers for the provision of quality training, in addition to training of job seekers.

(2) Relevance of the Project scope, target subjects and beneficiaries

The scope of the Project was relevant because INPP urgently needed to upgrade its trainers' instruction skills in order to provide quality vocational training. Tronc Commun and Pedagogy training greatly helped trainers improve their basic knowledge and skills. Standardization of training programs on these two subjects was significant as senior trainers used to train new trainers in their own styles, affecting the overall quality of training. Selection of the automobile and refrigeration and air conditioning courses was appropriate as there are clear demands for these technical skills.

(3) The Project is in line with the Japan's assistance policy for DRC (December 2012) in which vocational training is among its priority areas. JICA has a comparative advantage in technical support for vocational training as it has ample experiences in various countries in the world. Japan's advanced vehicle maintenance techniques have also contributed to the Project.

**3-2-2 Effectiveness: High**

The effectiveness of the Project is high.

The Project Purpose was achieved vis-à-vis the project indicators except for the evaluation score by the core trainers in refrigeration and air conditioning. Tronc Commun and Pedagogy training programs were standardized to be applied to all INPP schools in provinces, and have strengthened the basic capacity of trainers beyond the two target specialized programs. INPP has established the training management system operated by the working groups, the data collection teams, the Commission of Training Management and Improvement as well as the Commission of Diffusion, following the PDCA cycle. While the Project was implemented only in INPP Kinshasa, the efforts were made to include trainers from all INPP schools in provinces.

The future challenges for INPP are to improve administrative capacity to efficiently implement training and to address lack of training equipment and facilities in INPP schools other than INPP Kinshasa.

**3-2-3 Efficiency: Relatively high**

The efficiency of the Project is relatively high.

The delay in the provision of some of the equipment and the implementation of training on refrigeration and air conditioning has affected the quality of training of core trainers. Other than that, all the Project inputs and activities have been implemented as planned and contributed to the achievement of the Outputs.

It was cost-effective that the Project engaged Senegalese experts and adopted a phased approach to training of trainers, focusing on core trainers first and then on trainers from all INPP schools. Training equipment investment for INPP Kinshasa was proportional to its size and enabled practical training for trainers as well as trainees.

### **3-2-4 Impact: Relatively high**

The impact of the Project is relatively high.

The quality of INPP training has been improved as supported by the Overall Goal indicators to show the exam scores and level of satisfaction of trainees, and satisfaction of the partner companies. Furthermore, the Vocational Training Advisor assisted INPP to enhance its network with partner companies, leading to an increase in the number of companies which have sent their employees to INPP's training courses. INPP's efforts to increase its media coverage have also contributed to attracting more partner companies. As discussed above, the implementation of the training on refrigeration and air conditioning for the core trainers in INPP Kinshasa is necessary to achieve the Overall Goal.

The terminal evaluation also observed several positive impacts. For example, through the baseline and endline surveys, INPP improved its awareness about importance of data which is useful to prove the quality and effectiveness of INPP vocational training. Participation in the evaluation of the Tronc Commun and Pedagogy trainings has encouraged the inspectors to proactively engage in the training improvement process. Furthermore, INPP became more conscious about the needs of partner companies and the labour market and therefore, it started to consider concrete actions to be taken such as modification of course duration and contents for trainees dispatched by the companies.

The negative impact identified was that, although temporarily, the number of trainees in INPP Kinshasa decreased in 2012 compared to the previous years, partly because of the unavailability of trainers for training programs for job-seekers while they participate in the Project activities.

### **3-2-5 Sustainability: Relatively high**

Sustainability of this Project is relatively high.

#### (1) Policy aspects

Human resource development and vocational training development are likely to continue to be one of the priorities of DRC. INPP maintains a unique position in the country as a national training institute, mandated to provide quality training for companies' employees and to lead other vocational training centers by providing training of trainers. It is necessary for INPP to develop a concrete plan to continue and expand training of trainers.

#### (2) Institutional aspects

Aiming at becoming a leading vocational training institute in Central Africa in the future, INPP demonstrated a strong ownership and commitment to improve the quality of vocational training by strengthening trainers' capacity throughout the project period. The training management system is established and the working groups, the data collection team, the Commission of Training Management and Improvement as well as the Commission of Diffusion are fully functional to plan, implement, and evaluate each training program. Further improvement of quality of vocational training requires INPP to strengthen operational management skills and consider organization-wide reform.

#### (3) Technical aspects

The technical capacity of INPP trainers has been strengthened under the Project. As mentioned, the



implementation of practical training of core trainers on refrigeration and air conditioning is necessary to ensure the sustainability of technical capacity on this subject. Furthermore, evolving technologies and companies' demands require INPP to continuously upgrade trainers' capacity as well as to increase the number of the core trainers.

#### (4) Financial aspects

INPP is likely to secure the budget to continue project activities because during the Project, a reasonable amount has been paid by INPP. Increase in the number of partner companies and their financial contributions also suggest INPP's financial capability. Appropriate training plan and corresponding budgeting are necessary to ensure the financial sustainability.

### **3-3 Factors Promoting the Production of Effects**

#### **3-3-1 Factor concerning to Planning**

(1) Combination of training of trainers on Tronc Commun, Pedagogy and specialized training supported a wider number of trainers to extend their basic knowledge and skills as a trainer.

(2) Vocational Training Program for INPP consisting of this Project, the Vocational Training Advisor and rehabilitation of infrastructure at INPP Kinshasa by Grant Aid produced synergetic effects.

(3) Expertise of Centre de Formation Professionnelle et Technique Sénégal-Japon (CFPT), Senegal, has contributed to development of the Tronc Commun course and implementation of training of trainers at INPP.

(4) 5S (Sort, Set, Shine, Standardize, Sustain) activities have contributed to the improvement of training by offering cleaner working environment and efficiency of training.

#### **3-3-2 Factor concerning to Process**

##### (1) Establishment of a new system for improving training management

Collaboration between the Commission of Diffusion at INPP headquarters and the Commission of Training Management and Improvement at INPP Kinshasa contributed to quality of training supported by the Project. This will be the foundation for INPP to carry out effective training of trainers even after the Project.

##### (2) INPP's commitment and constant communication among the Project members

INPP is keenly aware of its responsibility to meet the needs of Congolese for vocational training and aiming at becoming a leading vocational training institute in Central Africa. Sharing this common goal, the Project enjoyed constant communication among the members which resulted in steady implementation of the planned activities.

##### (3) Enhancement of the evaluation system of training of trainers

Following the recommendation made by the Mid-term Evaluation, the Project developed an additional evaluation tool to measure the acquired skills of trainers by examining quality of finished products made during the practical training. This helped the core trainers assess the level of understanding of training participants (trainers) and also identify areas for improvement concerning the training programs.

### **3-4 Factors Inhabiting the Production of Effects**

#### **3-4-1 Factor concerning to Planning**

None.

#### **3-4-2 Factor concerning to Process**

Delay in the implementation of Japan's Grant Aid to rehabilitate infrastructure caused the delay in the provision of equipment by the Project, and the trainees could not do sufficient practical training using the equipment.

### **3-5 Conclusion**

The terminal evaluation team concludes that Relevance and Effectiveness of the Project are high and Efficiency, Impact and Sustainability are relatively high.

The Outputs and Project Purpose have been achieved vis-à-vis the indicators due to commitment and efforts by both Congolese and Japanese sides. Most of the activities have been implemented according to the plan and the remaining activities are to be conducted by the end of the Project, except for the provision of some of the equipment and the implementation of training on refrigeration and air conditioning. The capacity development of these core trainers has not been sufficient and it may have an adverse impact on the sustainability of the Output 2 and the achievement of the Overall Goal. The terminal evaluation team, therefore, considers that it is necessary to extend the duration of the Project.

It suggests that, during the extended Project period, the equipment be installed and a Japanese expert be dispatched to provide minimum training necessary to utilize the equipment in the new facility being constructed by Japan's Grant Aid. INPP and JICA will decide the exact duration of the Project when there is enough information to determine when the equipment will be installed and the training will be conducted.

### **3-6 Recommendations**

The terminal evaluation team recommends that the following actions be taken in order to sustain and utilize the outputs of the Project.

#### **3-6-1 Development of a policy on the continuous capacity development of trainers**

#### **3-6-2 Continuation of training of trainers on Tronc Commun and Pedagogy**

- Develop a strategy to make full use of Tronc Commun training; and
- Develop a plan on how to conduct Pedagogy training to existing trainers and newly recruited trainers.

#### **3-6-3 Utilization of evaluation system of the training of trainers for the improvement of training programs**

#### **3-6-4 Enhancement of the capacity of INPP provincial schools**

- Periodically analyze and prioritize the training needs at each INPP provincial school based on the industry demands;
- Identify required facilities and equipment at each INPP provincial school;
- Develop an overall training plan for each INPP provincial school; and

- Develop a plan for the capacity development of the trainers of INPP provincial schools.

### **3-7 Lessons learned**

#### **3-7-1 Program approach**

The Project implementation and achievement of the Project Purpose and the Overall Goal were promoted by the other components of the Vocational Training Program for INPP; enhancement of management capacity of INPP headquarters with assistance of the Vocational Training Advisor as well as rehabilitation of facilities at INPP Kinshasa by the Grant Aid. On the other hand, although owing to a natural disaster, the delay in the construction of facilities by the Grant Aid affected the achievement of the Project Purpose of the Technical Cooperation Project. In order to maximize the benefit of program approach, it is necessary to take measures to minimize the negative impact of each component.

#### **3-7-2 Improvement of quality of vocational training**

Training of trainers is a critical first step towards improvement of quality of vocational training. However, it needs to be followed by further actions such as modification of training contents, revision of learning materials and development of new training courses. All of these actions require a responsible vocational training institute to have sufficient capacity to make a comprehensive planning, strategic decision as well as operational instructions including timely and adequate budgetary allocation.

#### **3-7-3 Effective training in evaluation and careful utilization of its results**

It was significant that the INPP counterparts acquired evaluation skills because of the Project process which was combined by theory and practice (e.g. core trainers collected feedbacks from training participants and utilized the results to actually modify the training programs). The benefits of training evaluation are twofold; first, training organizers are able to identify specific areas for improvement of training; and second, training participants are able to understand their own strengths and weaknesses from the evaluation results. However, careful guidance and monitoring are necessary to ensure these benefits because there is a risk that training evaluation results are misused as performance reports of trainers or grade reports of training participants.

#### **3-7-4 Others**

5S activity was effective to achieve systemic maintenance of equipment that was procured by the Project. The inventory is also necessary to efficiently and effectively maintain and manage various equipment and materials, and development of such inventory requires a detailed analysis of the existing system.