Republic of Rwanda
Ministry of ICT and Innovation

ICT Innovation Ecosystem Strengthening Project

Project Completion Report

February 2022

Japan International Cooperation Agency (JICA)

Koei Research and Consulting Inc. (KRC)
C.D.C. International (CDC)

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22-031

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MAP

Map of Project Sites
Kigali, Huye, Musanze, Rwamagana (Agahozo-Shalom Youth Village)

Table of Contents of the Project Completion Report

List of Tables:

List of Figures:

List of Annexes

List of Abbreviations

Abbreviation	Name
AIMS	African Institute of Mathematical Science
ALU	African Leadership University
ATU	African Telecommunications Union
ASYV	Agahozo-Shalom Youth Village
ccTLD	country code Top-Level Domain
CMU-A	Carnegie Mellon University - Africa
DAC	Development Assistance Committee
FTTH	Fiber To The Home
GIZ	Deutsche Gesellschaft für Internationale Zusammenarb
ICANN	Internet Corporation for Assigned Names and Numbers
IGF	UN Internet Governance Forum
IPRC	Integrated Polytechnic Regional College (Rwanda Polytechnic)
ITU	International Telecommunications Union
JCC	Joint Coordination Committee
KOICA	Korean International Cooperation Agency
LOI	Letter of Intent
MIC	Ministry of Internal Affairs and Communications
MINCT	Ministry of ICT and Innovations (renamed from MYICT)
MOU	Memorandum Of Understanding
MYICT	Ministry of Youth and ICT (renamed to MINICT)
NUR	National University of Rwanda
OECD	Organization of Economic Cooperation and Development
POC	Proof of Concept
PPE	Personal Protective Equipment

PSF	Private Sector Federation
RD	Record of Discussion
RDB	Rwanda Development Board
RISA	Rwanda Information Society Authority
RURA	Rwanda Utility Regulatory Authority
SAS	Smart Africa Secretariat
SPIU	Special Project Implementation Unit
SWG	Sector Working Group
TAS	Transform Africa Summit
TCT	IPRC North Tumba College of Technology
TICAD	Tokyo International Conference on African Development (Japan-Africa Development
WBS	Work Break Down Structure
WSIS	World Summit in Information Society

Photos

Create and strengthen facilities to encourage innovation

Strategic Plan Meeting for
FabLab Management

Procurement of equipment to local innovation centers (Huye)

Technical Training in Japan
(FabLab Hamamatsu)

Huye Innovation Hub Launch Ceremony

Initial Training on Usage Equipment of The Innovation Center (Musanze)

kLab Startups Academy Training

250STARTUPS Incubation Programme

Exhibition of Youth Connekt Conference 2018
250STARTUPS (1st Cohort)

Trip to Japan Pitching Event (Tokyo)
250STARTUPS (1st Cohort)

Design Thinking Workshop
250STARTUPS (2nd Cohort)

Trip to Japan (@ Kobe Institute of Computing)
250STARTUPS (3rd Cohort)

Graduation Ceremony (Demo Day)
250STARTUPS (4th and 5th Cohort)

250STARTUPS Incubation Training
(6th Cohort)

Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem

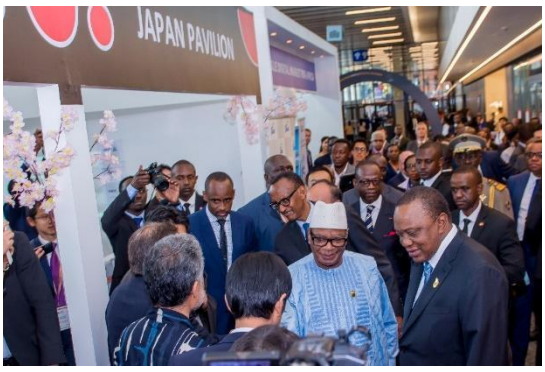
High Level Public Policy Development Workshop

ICT Sector Working Meeting

3rd Retreat Workshop

3rd Joint Coordination Committee

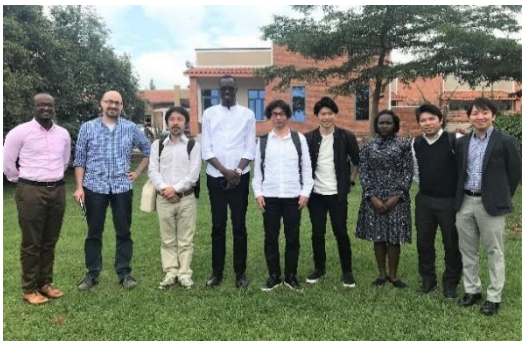
Matching support between Rwandan and Japanese ICT companies



Transform Africa Summit 2019
Japan Pavilion

Business Networking Event
Between Rwandan Japanese ICT companies

Mission of 23 Rwandan companies
for TICD7 (Yokohama)



Japanese Companies Business Mission
Visits Rwanda

I Basic Information of the Project

1 Country

The Republic of Rwanda

2 Title of the Project

The ICT Innovation Ecosystem Strengthening Project

3 Duration of the Project (Planned and Actual)

October 2017 - March 2022 (66 months)
(Original Plan: October 2017 - March 2021 (54 months)

The duration of the project was extended twice to accommodate the implementation slow down caused by the COVID-19 pandemic. The details of the extension are explained in Chapter II 2-3: History of PDM modification.

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

Government of Japan, through Japan International Cooperation Agency (JICA), has been partnering with the Government of Rwanda (GoR) in its efforts to leverage the power of ICT to achieve its primary development goals, the Vision2020.[1] The vision aims to wholly transform Rwanda and attain middle income country status by 2020.

Since 2010, JICA has been working hand in hand with the GoR to create a conducive and innovation emerging ecosystem in Rwanda. Generating innovation and value-added services and products are vital in realizing knowledge-based industries and in attaining Rwanda's aspiration of becoming a knowledge based economy. The initiatives have resulted in many unique outcomes among which are formulation and implementation support of National Information Communications Infrastructure Plan (NICI-III), [2]creation of ICT Chamber, repatriation of ,rw top level domain (TLD, strengthen ties between Rwandan partners with Japanese market and Japanese partners, etc. The repatriation of ccTLD to Rwanda for example, required considerable mobilization of ICT community in Rwanda. Since the ICANN rules stipulated first come first serve base rule for ccTLD and registrar, ".rw" domain was controlled by an individual in Switzerland. Some countries opted to pay off to repatriate their top-level domain and the functionality of top-level domain but Rwanda, through support of JICA, has managed to repatriate ".rw" domain back to Rwanda going through proper procedures, These outcomes have resulted into close partnership and trust between the Rwandan counterparts and JICA in the area of ICT cooperation.

Following the 7 years of advisor support to Rwanda, from October 2017, the GoR and JICA have embarked on a scale-up technical assistance project to further strengthen Rwanda's ICT innovation ecosystem. The project hoped to elevate Rwanda's status as a premier ICT innovation destination and "the ICT Hub for the continent."

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[1] AGREEMENT ON TECHNICAL COOPERATION BETWEEN THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF THE REPUBLIC OF RWANDA, January 14, 2005, Kigali, Rwanda, https://www.jica.go.jp/joureikun/act/actdata/110000200/current/FormEtc/13000019501000000002.pdf

[2] NICI-III(NICI 2010-2015) https://www.itu.int/en/ITU-D/Cybersecurity/Documents/National_Strategies_Repository/Rwanda%20NCSS%20NICI_III.pdf

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

Overall Goal:
Original: ICT Sector's economic contribution to GDP in Rwanda are increased through the enhancing the ICT innovation ecosystem (original PDM ver.0.0)

Modified: ICT sector's economic contribution to Rwanda's economy is increased through enhancing the ICT Innovation Ecosystem. (PDM ver.3.0 – 17th December 2020)

Project Purpose:

Original: ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan (original PDM ver.0.0)

Modified: ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of SRMP, ICT Sector Strategic Plan (SSP) and National Strategy for Transformation (NST-1)
(PDM ver.3.0 – 17th December 2020)

Original Project Goal and Purpose have been modified with the project counterparts to reflect the shifting priorities of the counterparts and to better reflect the intended results of the project. The modified PDM, along with the has been adapted during the 6th Joint Coordination Committee meeting.

6 Project Outputs:

Output 1. Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.

Output 2. Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.

Output 3. Business relation between Rwandan and Japanese companies related to ICT is strengthened.

Output 4. Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and beyond.

7 Implementing Agency

Project Execution Agency:
Ministry of ICT and Innovations (Formally, Ministry of Youth and ICT)

Project Implementing Agency:
- Rwanda Information Society Authority
- Private Sector Federation ICT Chamber
- Rwanda Development Board (*limited engagement)
- Smart Africa Secretariat (*limited engagement)

II Results of the Project

1 Results of the Project

Through the implementation of various different activities, the Project managed to achieve almost all of the objectives and outcomes that were envisioned initially. There were many challenges during the implementation of the project, such as problems of procuring equipment for the Innovation Hubs, activity delays due to local lock-down caused by the COVID-19 disaster, and the prolonged postponement and shortening of dispatching Japanese experts. However, most of the goals (KPIs) established based on numerous discussions with C/P were achieved by the end of the Project. The project has also managed to establish 250STARTUPS, contextualized early-incubation mechanism for Rwanda, and Innovation Hubs in the secondary cities that will become integral parts to the Rwanda's innovation ecosystem and continue to contribute to the country's socio-economic development.

As for the actual outputs, the Output 1 created supported the incubation of 58 local Rwandan startups along with the establishment of the indigenous incubation mechanism. In addition, Outptut 1 also established three innovation hubs in the secondary cities which will contributed to strengthening overall innovation ecosystem in Rwanda. Output 3 matched 17 Rwandan companies to conclude MOUs/LOIs with Japanese companies. Moreover, the Output 3 has supported 10 proof of concept projects which were implemented in partnership between Rwandan-Japanese companies.

On the other hand, the training regimens at the innovation hubs within the Output 1 were shorter than originally planned due to delays caused by COVID-19. Output 2 has achieved activity level success, however, there remains great needs for capacity development in the area of policy formulation and implementation due mostly to the technical backgrounds of the officers and lack of human resources in the ministry. In addition, Output 4 also needs to be further strengthened in the next project in order to better advocate about JICA's activities and to share Rwanda's lessons-learned with other countries.

In order to maximize the results of this project, the PDM agreed upon with the project counterparts was revised three times along with the target indicators. Correspondingly, sub-activities for actual implementation have been established. In order to facilitate the smooth implementation of the project, these activities and sub-activities have been compiled and implemented in the form of WBS. The inputs provided, activities undertaken, and the status of achievement of each output are as follow:

1-1 Input by the Japanese side (Planned and Actual)

(Planned)	(Actual)
Following are the inputs identified and planned under PDM ver.1.0 – 2nd October 2019 ▪ Japanese Experts (Chief Advisor, Sub-Chief Advisor, Project Manager, Project Coordinator, Investment Advisor, Incubation Advisor, Open Innovation Advisor, Digital Fabrication Advisor, Product development Advisor, Branding Advisor, Business Advisor, Entrepreneurship Advisor, Innovation Hub Coordinator, M&E Specialist, Agriculture Advisor, and others) ▪ Equipment (Necessary equipment for	Following are the inputs identified and supplied within the PDM ver.3.0 – 17th of December 2020. The inputs planned under PDM ver.1.0 has been dully fulfilled during the project implementation. ▪ Japanese Experts (Chief Advisor, Sub-Chief Advisor, Project Manager, Project Coordinator, Investment Advisor, Incubation Advisor, Open Innovation Advisor, Digital Fabrication Advisor, Product development Advisor, Branding Advisor, Business Advisor, Entrepreneurship Advisor, Innovation Hub Coordinator, M&E Specialist, Agriculture Advisor, and others)

project activities) ▪ Capacity Development for Counterpart Personnel (on-line, in country, in Japan, and in Third country) ▪ Local cost for the activities for Japanese Experts ▪ Local consultants (ICT-SWG coordinator, Incubation Coordinator, Innovation Center Coordinator, Investment Advisor, Communication Specialist, and others)	 ▪ Equipment (Necessary equipment for project activities) ▪ Capacity Development for Counterpart Personnel (on-line, in country, in Japan, and in Third country) ▪ Local cost for the activities for Japanese Experts ▪ Local consultants (ICT-SWG coordinator, Incubation Coordinator, Innovation Center Coordinator, Investment Advisor, Communication Specialist, and others)

1-2 Input by the Rwandan side (Planned and Actual)

(Planned)	(Actual)
Following are the inputs identified and planned under PDM ver.1.0 – 2nd October 2019 ▪ Allocation of Counterpart Personnel (focal point) from MINICT, RISA, RDB, ICT Chamber, and Smart Africa Secretariat ▪ Office space for Japanese experts and other space necessary for the project implementation ▪ Necessary data ▪ Organization support for ICT-SWG and other meetings ▪ Local cost (Maintenance/Repairing cost for the existing equipment that are not covered by JICA support, preparation cost for conference, running expenses necessary for the Project and Others).	Following are the inputs identified and supplied within the PDM ver.3.0 – 17th of December 2020. The inputs planned under PDM ver.1.0 has been generally fulfilled during the project implementation period except for the office space and space for the 250STARTUPS Programme which became unavailable due to renovation of the Telecom House. ▪ Allocation of Counterpart Personnel (focal point) from MINICT, RISA, RDB, ICT Chamber, and Smart Africa Secretariat. *Most of the counterpart personnel were assigned by the counterparts, however, involvement of these personnel to the project were varied. ▪ Office space for Japanese experts and other space necessary for the project implementation. *RISA has provided the Project with an office space and space for 250STARTUPS Programme and FabLab/kLab for the project from the beginning of the project. However, due to Telecom House refurbishment, it was necessary for the Project to vacate these venues. ▪ Necessary data ▪ Organization support for ICT-SWG and other meetings

	▪ Local cost (Maintenance/Repairing cost for the existing equipment that are not covered by JICA support, preparation cost for conference, running expenses necessary for the Project and Others). *During the course of the project, general maintenance of the equipment procured under the

1-3 Activities (Planned and Actual)

(1) Original Activities planned by the Project	(2) Project Activities planned and implemented under PDM ver.1~ver.3
The Record of Discussion (R/D) signed prior to the commencement of the Project spelled out broad outputs, objectives, and impacts. However, as the project is designed to retain maximum flexibilities to attain results, s hallmark feature of previous JICA ICT projects, many of the critical inputs and activities to attain the outputs were not specified under the R/D. The project, therefore, conducted several extensive stakeholder consultation exercises during the course of the project to define and modify the key activities, inputs, and output indicators. The exercises included conducting an intensive retreat with key stakeholders and counterparts to define more detailed project activities (including defining sub-activities and Work Breakdown Structure (WBS)) and key performance indicators. The tables below correspond to the evolution of activities planned and implemented during the course of the project:	After two years of the Project implementation, as the general implementation framework for the Project have become clear to the stakeholders, the JCC recommended to incorporates the sub-activities under WBS into PDM proper to monitor and capture the results of the Project. With the recommendation, the Project compiled PDM ver.1 with elements of sub-activities that was presented to the 4th JCC on 2nd of October 2019 and was approved as a guide for the further Project implementation. The table below indicates the PDM ver.1 and corresponding activities:

Table II.1 Original activities planned under PDM ver.0 26th of July 2017

Activity
1.1 Supporting activities for ICT startups (e.g. kLab/FabLab, "Start up 250" initiatives)
*Sub-activities were formulated under WBS
1.2 Organizing/Attending events projects for ICT start-ups
-ibid-
1.3 Conducting pilot projects for ICT innovation
-ibid-
2.1 Support for organizing/

Table II.2 Activities planned under PDM ver.1 - 02nd of October 2019

Activity
1.1 Create and strengthen facilities to encourage innovation
1.1.1 Understand the status of the incubation facilities 1.1.1.1 Conduct research on current status of innovation centers 1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline 1.1.2 Plan and conduct management training on innovation center management (kLab, FabLab) and on-

coordinating ICT-SWG	site technical training 1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community 1.1.4 Conduct overseas training on innovation center management 1.1.5 Procure equipment for three innovation centers in the secondary cities/rural area
2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	1.2 Organizing/ attending events for ICT start-ups
-ibid-	1.2.1 Support for ICT related major events 1.2.2 Conduct overseas study tour for ICT entrepreneurs
3.1 Matching support between Japanese companies and Rwanda ICT companies	1.3 Conducting pilot projects for ICT innovation
-ibid-	1.3.1 Select target sectors and develop implementation framework/ procedure 1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)
3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	2.1 Support for organizing/ coordinating ICT-SWG
-ibid-	2.1.1 Recruit ICT-SWG coordinator 2.1.2 Assist Ministry of ICT and Innovation to coordinate ICT-SWG 2.1.3 Develop Operation Manual for organizing ICT-SWG
4.1 Collecting ICT-use good practices and modeling the case to promote	2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem
-ibid-	2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda 2.2.2 Support MINICT (and other C/Ps) to formulate policies 2.2.3 Recruit Policy Specialist for OJT style Policy advisory support with the MINICT team
4.2 Disseminating the case studies through International Regional organizations and appropriate fora	2.3 Conduct Capacity Development Support to the Ministry and relevant agencies to raise their capacity to plan, formulate, coordinate and implement policies
-ibid-	2.3.1 Create Human Capacity Development plan 2.3.2 Conduct Hybrid type training (online/offline) as a POC
	3.1 Matching support between Rwandan and Japanese ICT companies
	3.1.1 Understand the current situation of ICT business environment in Rwanda

Source: Record of Discussion

The Project implemented activities with the original PDM. The Project activities were subdivided into different components based on the planned Outputs. In order to facilitate actual implementation, these Project activities were accompanied with sub-activities formulated under the WBS. The decision to use the WBS format to supplement the original PDM was made to furnish additional flexibilities at the initial stage of the Project when the optimal ways of the Project implementation was still unclear. The tactics was successful in the initial stage of the Project and during the first two years of the Project implementation, WBS were reviewed and modified at each JCC interval to make certain that not only the activities implemented by the Project would attain desired results but, at the same time. It would accommodate new activities which the counterparts would like to conduct as proof of concept.

(a) Activities undertaken to achieve Output.1 “Promotion of ICT Innovation” of the PDM ver.0

The original PDM indicated Output 1 to be “Innovative ICT enabled activities in ICT and other different sectors are

promoted especially through private sector." The activities to achieve that goal is mostly around creation of

In order to achieve the Output, 3 main activities were planned, "Activity 1.1 Supporting activities for ICT startups (e.g. kLab/FabLab, "Start up 250" initiatives)," "1.2 Organizing/Attending events projects for ICT start-ups," and "1.3 Conducting pilot projects for ICT innovation."

These main activities were accompanied with the following sub-activities under the following WBS:

WBS
Sub-Activities under Output 1
1.1: Supporting activity for ICT start-ups 1.1.1 Understand the status of the incubation facilities 1.1.2 Conduct Human Resource Development activities to improve incubation management (kLab, FabLab) capacities 1.1.3 Support Fab community members to take Fab-academy training course 1.1.4 Conduct overseas training on FabLab management 1.1.5 Procure equipment for incubation centers
1.2: Organizing/ attending events for ICT start-ups 1.2.1: Support for ICT related major events 1.2.2: Conduct overseas study tour for ICT entrepreneurs
1.3: Conducting pilot projects for ICT innovation 1.3.1: Select target sectors and develop implementation framework/ procedure 1.3.2: Pilot incubation of ICT entrepreneurs for six months (max. 10 incubatees/ per cohort)

(b) Activities undertaken to achieve Output.2 "Formulation of Policy Framework" of the PDM ver.0:

These main activities were accompanied with the following sub-activities under the following WBS:

WBS
3.1.2 Promote Rwandan ICT companies to foreign market (especially Japanese) by compiling promotional materials 3.1.3 Support networking tour to/from Rwanda from/to Japan, and conduct follow up activities
3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda
3.2.1 Develop supporting program for Japan-Rwanda Joint venture pilot projects. 3.2.2 Support Implementation of pilot projects
4.1 Define Rwanda Model of Success and Advocate Activities and Outputs
4.1.1 Define and compile "Rwanda model" of success (ICT for Development) 4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar}
4.2 Extract and share lesson learned from the Project activities
4.2.1 Summarize lesson learned from the Project activities 4.2.2 Share lessons learned through various medium.

Source: Project Team

Sub-Activities under Output 2
2.1: Support for organizing/coordinating ICT-SWG 2.1.1: Capacity building support for planning skills 2.1.2: Assist to coordinate ICT-SWG
2.2: Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem 2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries 2.2.2 Support MiTEC to formulate policies

(c) Activities undertaken to achieve Output.3 “Business Matching between Rwanda and Japan” of the PDM ver.0:

WBS
Sub-Activities under Output 3
3.1: Matching support between Japanese companies and Rwanda ICT companies 3.1.1: Understand the current situation and advice organizational structure to promote investments 3.1.2: Support to promote Rwanda to foreign companies (especially Japanese) 3.1.3: Conduct networking tour from Rwanda to Japan (3-times), and from Japan to Rwanda (3-times)
3.2: Conducting pilot projects with the Japanese companies to promote utilization of ICT private sector in Rwanda 3.2.1: Develop pilot business concept, and identification of joint business group 3.2.2: Implement pilot projects (1), (2), and (3) for 4-months while monitoring and review

(d) Activities undertaken to achieve Output.4 “Disseminating Experience of the Project” of the PDM ver.0:

WBS
Sub-Activities under Output 4
4.1: Collecting good practices in ICT-use and modeling cases to promote 4.1.1: Collect ICT-use good practices and modeling the case to promote
4.2: Disseminating the case studies through international/regional

organizations and appropriate for a 4.2.1: Disseminate the cases studied (lessons learned, implication, model, etc.) Some of these activities were continuously being modified, realigned into different output, and/or cancelled based on the requests of the counterparts and also due to various implementation difficulties which include COVID-19 pandemic induced difficulties.	

The Project activities have been further modified in conjunction with the 6th JCC which was organized on 17th of December 2020. The JCC members recommended further extension of the Project due to the delay incurred by the Covid-19 pandemic. In addition to the extension of the Project period, JCC and its preparatory committee have recommended to add and modify activities specified under the PDM ver.1 (PDM ver.2 contained no change in the planned/implemented activities) to support COVID-19 Pandemic mitigation and recovery processes.

The list of modified and added activities for the Project are in the following Table:

Table II.3 Additional activities planned and implemented under PDM ver.3 – 17th of December 2020 from PDM ver.1

Original activities under PDM ver.1	Modified activities under PDM ver.3
Activities under Output 1.1 Create and strengthen facilities to encourage innovation	
1.1.5 Procure equipment for three innovation centers in the secondary cities/rural area N/A	1.1.5 Furnish appropriate equipment for three regional innovation centers 1.1.6 Support preparation for local incubation programme to be rolled out in the future Activities under Output 1.3 Conducting pilot projects for ICT innovation
1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)	1.3.2 Pilot incubation of ICT entrepreneurs for six months ((limited support for 6th batch to contrive with Rwanda's priority needs of intra/post COVID-19 society)
N/A	1.3.3 Monitor the progress of Ninja post COVID-19 business innovation POC programme
Activities under Output 4.1 Define Rwanda Model of Success and Advocate Activities and Outputs	
N/A	4.1.3 Synthesize Rwanda Model of ICT for Development (including JICA's contribution) to be applicable for other countries - building on to current Rwandan ICT model

The activities listed under the PDM ver.3 was the final version which were implemented

until the end of the Project.

2 Achievements of the Project

Overall, the Project has achieved its objective and outputs envisioned through implementing various different activities. Most of the targets (KPI) specified under the Project have been achieved despite number of challenges which the Project faced during the course of its implementation. The Project support the counterparts to create several signature mechanisms, such as 250STARTUPS, which will lead to strengthening innovation ecosystem in Rwanda and long-term positive impacts of contributing to the socio-economic development of Rwanda.

In order to garner maximum results, the initial PDM, as per agreed with the Project counterparts under RD, was modified three times along with the target indicators. Moreover, corresponding project activities have also been modified and/or added along with extra sub-activities. These activities and sub-activities were compiled into WBS to facilitate smooth implementation of the project. The following sections denote implemented activities and achievements of each output.

Outputs and indicators (Target values and actual values achieved at completion)

1) Output 1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.

(1) Activity 1-1: Create and strengthen facilities to encourage innovation

Table II.4 Activities and Progress of Output 1.1

Activity	Achievements
1.1 Create and strengthen facilities to encourage innovation	
1.1.1 Understand the status of the incubation facilities 1.1.1.1 Conduct research on current status of innovation centers 1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline 1.1.2 Plan and conduct management training on innovation center management (kLab, FabLab)	1.1.1 ・ Initial assessment and analysis of incubation facilities and mapping of innovation facilities in Kigali were completed throughout the involvement of relevant stakeholders such as MINICT, RISA, ICT Chamber in a process of drafting document. ・ Compiled an Action Plan/Operational Guideline for Innovation Hubs/Centers and Expansion Strategy in Rwanda (Annex 5) throughout a series of workshops. ・ Delivered the final draft of the Tech-enabled Innovation Hubs/Centers and Expansion Strategies (Annex 5) to RISA for its finalization for budget allocation and public funding to enable operation of new centers in secondary cities, which has led relevant stakeholders such as MINICT, RISA, ICT Chamber to secure necessary resources for realization by selecting center location, assisting in recruitment of human resource, and advocating for appropriate financial resource allocation. ・ Personnel assigned for the manager and ICT technician was assigned through the coordination among RISA, RDB and local governments (Huye and Musanze) /institution (ASYV) to ensure operationalization of the Hubs/Center 1.1.2 ・ Further training for FabLab masters on operation and maintenance of FabLab equipment training were conducted in Hamamatsu (Annex 5),

and on-site technical training 1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community 1.1.4 Conduct overseas training on innovation center management 1.1.5 Furnish appropriate equipment for three regional innovation centers 1.1.6 Support preparation for local incubation programme to be rolled out in the future	Japan, producing O&M manuals (Annex 5) for CNC router and Laser Cutter . ・ Management Training conducted (Annex 5) ・ Undertook capacity development through: Capacity Building Training (Annex 5) conducted for three FabLabs of Innovation Hubs/Centers at Huye, Musanze, and ASYV), targeting the managers and ICT technician together with some of the Fab Masters from FabLab Kigali with case studies of different types (vision and strategies) of FabLabs and Innovation Hubs/Centers of actual situation, and organizational management towards elaboration of local action plan and networking which led to be concluded with shared challenges and corresponding a short term action plan as common tasks which are to be monitored and supported by RISA. ・On-site technical assistance conducted for FabLabs in each Innovation Hubs/Centers to ensure the functioning of each machine and equipment installed by both a Japanese expert and FabLab Kigali. ・Strengthened Infrastructure of Innovation Hubs/Centers -FabLabs with electricity and internet installation in ASYV, Huye and Musanze. In case of Musanze, the building is renovated in coordination with the District and RISA. (Annex 5) ・ Installation of FabLab equipment conducted as part of technical assistance among RISA, Districts/Institution (AYSV) and the Innovation Hubs/Centers for their FabLabs in ASYV, Huye, and Musanze (Annex 5). ・ Awareness programs (Annex 5)conducted in the Fab Labs of Innovation Hubs/Center in AYSV, Huye and Musanze. ・ Two Weeks Initial training (Annex 5) conducted for the users assigned for all machines and equipment in the Fab Lab of Innovation Hubs/Centers in ASYV, Huye and Musanze. ・ Follow-up Trainings (Annex 5)conducted to gain more knowledge and skills in depths for particular machine and equipment identified during the Initial training done in each FabLab of the Innovation Hubs/Center in ASYV, Huye and Musanze. ・ Wrap-up meeting conducted for management and technical issues for FabLabs in Innovation Hub/Centers conducted for three centers in ASYV, Huye and Musanze to present the progress of each center and understanding of each. ・ Basic spare parts and security measures for the machine and equipment installed (Annex 5) 1.1.3 ・ Financially supported 13 candidates for Fab Academy selected by RISA to undertake a course throughout 3 batch. Among them, 10 have finished their course work (4 of them are re-applying for their final evaluation to get official certificates) and 3 failed to complete which are the subjects to compensate with their community work (Annex 5). 1.1.4 ・ Assessed and discussed about conducting an overseas training regarding the place, scope, and schedule among relevant stakeholders. ・ Planned to implement the Third Country Training program in India.

	(However, it was inevitable to call for cancellation due to the COVID-19 pandemic. The official cancellation in order to make it out of scope of the project was being discussed and agreed upon in the 7th JCC on June 2021. 1.1.5 ・ Procurement of equipment completed locally and in overseas dispatched in several times to Rwanda to which RISA has facilitated the clearance process and distribution to local centers. ・ Installation and inspection conducted in coordination with RISA (Annex.5) ・ Missing parts and un-functioning parts supported with additional products and/or replacement procured. ・ Inspection and handover process conducted (Annex 5) ・ Consumables purchased for the training to start activities in FabLab for each Innovation Hub/Centers.

(2) Activity 1-2: Organizing/ attending events for ICT start-ups

Table II.5 Activities and Progress of Output 1.2

Activities	Achievements
1.2 Organizing/ attending events for ICT start-ups	
1.2.1 Support for ICT related major events	・ Supported the realization of TAS 2018 (Japan Pavilion and implementation of kick-starting event for the 250STARTUPS) in May 2018 and TAS 2019 (supported the established ICT companies to attend and develop network with Japanese companies) in May 2019. ・ The Project, in coordination with the financial assistance from the JICA Rwanda Office, supported incubates (1st cohort) to attend and promote their business at Youthconnekt in Oct. 2018 and 2019. ・ The project directly supported startups event in Kenya (Dec. 2018). ・ The Project has supported the established ICT companies to attend and develop network with Japanese companies at TICAD 7 in Aug 2019. Several startups from 250STARTUPS also were selected and participated in networking events with Japanese companies. ・ The project held the online seminars in August and September 2020 to promote business relationships between Japanese and Rwandan companies (see 3.1.3 for details). ・ Some startups from 250STARTUPS were invited to participate in different domestic/international events, though the project didn't directly support it.
1.2.2 Conduct overseas study tour for ICT entrepreneurs	・ A Study Tour in Japan for the selected startups from the 1st cohort was conducted in Jan. 2019 in coordination with the financial assistance from JICA Rwanda Office. Then, the project directly supported the following two study tours to Japan for the selected startups from 2nd and 3rd cohorts (Sep. 2019 and Jan 2020)

	・ The Project identified the top 5 startups from the 4th and 5th cohorts each and awarded to take them to a business trip to Japan. Due to COVID-19, however, the trips have been cancelled and additional financial support was provided instead.

(3) Activity 1-3: Conducting pilot projects for ICT innovation

Table II.6 Activities and Progress of Output 1.3

<table>
<tr><th>Activities</th><th>Achievements</th></tr>
<tr><td colspan="2">1.3 Conducting pilot projects for ICT innovation</td></tr>
<tr><td>1.3.1 Select target sectors and develop implementation framework/ procedure</td><td>Target Sector Selection
・ Target priority sectors have been identified in line with the national priority.
・ Target sectors for the 1st cohort of 250STARTUPS have been identified in collaboration with the C/Ps and key stakeholders (Annex 5). The potential target sectors were proposed from the point of view of Rwanda Vision 2020, Smart Rwanda Master Plan, ICT Chamber Vision & Mission, and SDGs, and Africa Economic Outlook and the 5 sectors 1) agriculture, 2) education, 3) energy (alternative/micro), 4) fintech, and 5) health) were selected based on the consensus from the stakeholders at the first JCC. Initially, the Project recommended to focus on one sector per batch but with strong desire from the C/Ps, first batch was made open to all the five sectors.
・ During the implementation of the 1st cohort, however, discussion was made among C/Ps to select narrower target sectors for the corresponding cohorts. Therefore, for the 2nd batch, two specific sectors are targeted, namely agriculture and education.
・ From the 3rd cohort and onward, 250STARTUPS did not focus on specific sectors as long as the solutions utilize ICT technologies, partly because it became difficult to secure sufficient number of candidates to select 10 startups.
Implementation framework
・ The implementation framework/ procedure is developed based on the past cohort experiences (Annex 5).
・ RISA provided 1st floor of Telecom House to 250STARTUPS for the 3rd batch and onward. Also, it decided to bear the cost of internet from December 2019, which makes the implementation of 250STARTUPS much more effective and sustainable.
・ However, the renovation of Telecom House has forced the Project to support 250STARTUPS for the venue and the internet. RISA tried to identify the alternative venue for 250STARTUPS but not able to find it during the project duration.</td></tr>
<tr><td>1.3.2 Pilot incubation of ICT entrepreneurs for six months ((limited support for 6th batch to contrive with</td><td>・ The 6 cohorts were successfully implemented as below (Annex 5).
<table>
<tr><th>Cohort</th><th>Start</th><th>Finish</th><th>No. of startups completed</th><th>Remarks</th></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Rwanda's priority needs of intra/post COVID-19 society)</td><td>
<table>
<tr><td>1</td><td>Jun. 2018</td><td>Dec. 2018</td><td>8 teams</td><td>2 startups dropped out due to the gap between our service and their expectations.</td></tr>
<tr><td>2</td><td>Mar. 2019</td><td>Aug. 2019</td><td>10 teams</td><td></td></tr>
<tr><td>3</td><td>Jul. 2019</td><td>Jan. 2020</td><td>10 teams</td><td></td></tr>
<tr><td>4</td><td>Jan. 2020</td><td>Oct. 2020</td><td>10 teams</td><td>The program was stopped from Mar. to Apr. due to COVID-19.</td></tr>
<tr><td>5</td><td>Jan. 2021</td><td>Oct. 2021</td><td>10 teams</td><td>Most of the programs were conducted online due to COVID-19.</td></tr>
<tr><td>6</td><td>Oct. 2021</td><td>Jan. 2022</td><td>10 teams</td><td>The duration was shorter than the others due to the project duration but 250STARTUPS achieved the same goal with other previous cohorts by putting more resources.</td></tr>
</table>

250STARTUPS successfully contributed to incubate 58 startups during the project along with 60 financial and, legal interns for each, and 20 IT interns. About 70% of the startups keep operating the business after the program and also about 70% of interns secured a job after the program. Interestingly, around 10% of interns were inspired by the startups and decided to start their own business after the program (Annex 5)
kLab Startup Academy supported which aims to create a feeder mechanism for the 250STARTUPS programme (Annex 5)

</td></tr>
<tr><td>1.3.3 Monitor the progress of Ninja post COVID-19 business innovation POC programme</td><td>

The project supported various stages of the Ninja post COVID-19 business innovation POC programme. Creation of initial selection criteria, applicant evaluation processes, progress monitoring support, and the final evaluation of the selected companies. All selected companies significantly boosted their businesses to mitigate the effects of Pandemic through creation of additional services/products through utilizing the Ninja POC support. Many of the selected companies used data extensively for its new services. As these companies are adept at using data, the Ninja selected companies may be good candidates to be supported under the second phase project.

</td></tr>
</table>

2) Output 2: Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated

(1) Activity 2-1: Support for organizing/ coordinating ICT-SWG

Table II.7 Activities and Progress of Output 2.1

Activities	Achievement
2.1 Support for organizing/ coordinating ICT-SWG	

2.1.1 Recruit ICT-SWG coordinator 2.1.2 Assist Ministry of ICT and Innovation to coordinate ICT-SWG 2.1.3 Develop Operation Manual for organizing ICT-SWG	・ The project supported the Recruitment of SWG coordinator and provided other advisory support to strengthen his/her capacities to conduct tasks assigned to the coordinator. ・ Policy Advisor, Policy Analyst, and other Project members have regularly joined the SWG and supported the discussions through providing expert advises and inputs. ・ Operational manual has been developed by the SWG coordinator (Annex 5). The manual is being updated by the SWG as necessary.

(2) Activity 2-2: Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem

Table II.8 Activities and Progress of Output 2.2

Activities	Achievement
2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	
2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda 2.2.2 Support MINICT (and other C/Ps) to formulate policies 2.2.3 Recruit Policy Specialist for OJT style Policy advisory support with the MINICT team	・ The project supported the creation of common vision for ICT innovation Ecosystem in Rwanda within the innovation center action plan (Annex.5) ・ Policy advisory support has been continuously provided by the Policy Advisor and Policy Analyst to strengthen policy related capacities of the Ministry in OJT style training. Such documents as FLJSR/BLJSR and other policy documents have been provided with various different inputs which include deepening conceptual models, advising different outputs, activities as well as recommendations. ・ In order to provide policy advisory support to the MINICT and to implement human capacity development activities, a policy analyst was hired to provide on-the-job (OJT) style training and to coordinate online and offline training for staff to strengthen their policy formulation and implementation capacities. Since most of the ICT ministry staff came from technical backgrounds, strengthening ministry's policy formulation and implementation capacity was challenging. During the four years of support, training and other activities did not proceed as scheduled due to COVID-19, and in the last year of the project, the policy analysts has decided to join other development partner's project. However, through continuous policy support, the dependency of the staff on consultants for policy formulation has been reduced. As a result, the staff of the MINICT has become more responsible and self-reliant in policy formulation and implementation. As a result, the policy formulation and implementation capacity of the Ministry of ICT has improved.

(3) Activity 2-3: Conduct Capacity Development Support to the Ministry and relevant

agencies to raise their capacity to plan, formulate, coordinate and implement policies

Table II.9 Activities and Progress of Output 2.3

<table>
<tr><th>Activities</th><th>Achievement</th></tr>
<tr><td colspan="2">2.3 Conduct Capacity Development Support to the Ministry and relevant agencies to raise their capacity to plan, formulate, coordinate and implement policies</td></tr>
<tr><td>2.3.1 Create Human Capacity Development plan
2.3.2 Conduct Hybrid type training (online/offline) as a POC</td><td>
・ The Human Capacity Development plan was created by Policy Analyst (Annex 5) and various different capacity building trainings were conducted in line with the compiled plan.
・ Online based training through Udemy for Government (Annex 5) of and other academic institutions were offered to the officers of the counterparts. These courses were complimented by in-person/Physical trainings in the area of management, leadership, writing for officers and policy formulation training for the leadership of the counterpart institutions. In order to facilitate the procurement of the training courses, some of the trainings were supported through the procurement processes of the JICA Country office and the technical operation budget of the Project's sub-chief advisor. Due to COVID-19 pandemic, many of the in-person trainings were delayed and conducted at the Q1 2022 (Annex 5).

The list of the trainings offered under the activity are following:

<table>
<tr><td>Online Training</td></tr>
<tr><td>- Udemy for Government</td></tr>
<tr><td>- Leadership training for senior leadership (Virtual)</td></tr>
<tr><td>- Building University-Industry Relations (Oxentia-online)</td></tr>
</table>
<table>
<tr><td>In-Person/Physical training</td></tr>
<tr><td>・ Effective Writing</td></tr>
<tr><td>・ Policy Analysis (senior leadership was target)</td></tr>
<tr><td>・ Research and Data Analysis</td></tr>
<tr><td>- Project management training</td></tr>
</table>
<table>
<tr><td>Planned In-Person/Physical training supported by JICA CO (Q1 2022)</td></tr>
<tr><td>・ Leadership/Management training for CDOs</td></tr>
<tr><td>・ Policy Analysis (for CDOs and Senior Leadership)</td></tr>
</table>
</td></tr>
</table>

3) Output 3: Business relation between Rwandan and Japanese companies related to ICT is strengthened

(1) Activity 3-1: Matching support between Rwandan and Japanese ICT companies

Table II.10 Activities and Progress of Output 3.1

Activities	Achievement

<table>
<tr><td colspan="2">3.1 Matching support between Rwandan and Japanese ICT companies</td></tr>
<tr><td>3.1.1 Understand the current situation of ICT business environment in Rwanda</td><td>・ The survey on Rwanda's investment environment (Annex 5) was undertaken by the investment expert. Based on the survey result, the C/P asked project to focus on more practical actions for business networking.</td></tr>
<tr><td>3.1.2 Promote Rwandan ICT companies to foreign-market (especially Japanese) by compiling promotional materials</td><td>・ In order to introduce Rwandan companies to Japanese companies widely, the project supported the training and making company profiles support for 15 Rwandan companies.
・ The project has created a book (Annex 5) introducing 30 innovative Rwandan companies to promote Rwandan companies at TICD 7 (Yokohama) in the summer 2019. In addition, this book has been translated into English and made available on the project homepage[3].</td></tr>
<tr><td>3.1.3 Support networking tour to/from Rwanda from/to Japan, and conduct follow up activities</td><td>・ The project supported and organized the following business tours.
<table>
<tr><td colspan="2">Japanese Business Mission visited Rwanda (2018.7.23-25)
Japan → Rwanda</td></tr>
<tr><td>Organized by</td><td>Ministry of Foreign Affairs of Japan, etc.</td></tr>
<tr><td>Number of participating companies</td><td>31 Japanese Companies</td></tr>
<tr><td colspan="2">Kobe Africa Business Mission visits Rwanda（2018.11.10-13）Japan → Rwanda</td></tr>
<tr><td>Organized by</td><td>Kobe City</td></tr>
<tr><td>Number of participating companies</td><td>11 Japanese Companies</td></tr>
<tr><td colspan="2">TICAD7 Business tour (2019.8.23-9.1)
Rwanda → Japan</td></tr>
<tr><td>Organized by</td><td>ICT Project</td></tr>
<tr><td>Number of participating companies</td><td>23 Rwandan Companies</td></tr>
<tr><td colspan="2">TICAD7 Follow Up business tour (2019.8.23-9.1) Japan → Rwanda</td></tr>
<tr><td>Organized by</td><td>ICT Project</td></tr>
</table></td></tr>
</table>

[3] ICT Innovation Ecosystem Strengthening Project Home Page: https://www.innovation.rw/resources

Number of participating companies	5 Japanese Rwandan Companies

The project organized the following business seminar.

Rwanda ICT & Innovation Forum (2019.8.26)	
Organized by	ICT Project & UNIDO
Number of participating companies	30 Rwandan Companies 50 Japanese Companies
Kobe Africa Business Mission visits Rwanda（2020.8/19, 8/26, 9/9, 9/10	
Organized by	ICT Project & UNIDO
Number of participating companies	113 Rwandan Companies 187 Japanese Companies

(2) Activity 3-2: Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda

Table II.11 Activities and Progress of Output 3.2

Activities	Achievement
3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	
3.2.1 Develop supporting program for Japan-Rwanda Joint venture pilot projects.	・ The concept and operation method of the first batch pilot project were developed with reference to the overseas support scheme implemented by JETRO. ・ In the first batch of pilot project, the projects asked the potential companies to submit a lengthy application document, which overwhelmed the applicants. As a result, sometimes the companies that attempted to apply for the scheme failed to apply. In order to mitigate the operational challenges of the pilot project and to lead to further outcomes, the project revised the operational process of the second batch. Specifically, the project has simplified the application forms and asked the company to set the KPI for pilot project. ・ Due to the impact of the covid-19, it was difficult to implement the pilot project in Rwanda, the project shortened the implementation period of the pilot project to deal with the difficulties. ・ All pilot projects have been completed by the end of January 2022. The project also has supported companies to take the next step, such as linking these participating companies to the JICA Rwanda office.
3.2.2 Support Implementation of pilot projects	・ The project supported the implementation of the following pilot projects. 1st batch

	Owner company	Partner Company
1	Allm Inc. (Japanese Company)	Tech Avenue 137 (Rwanda Company)
	Allm Inc provides a mobile app used by Rwandans to seek medical consultations with expert medical Doctors based in Europe and Asia. The app also links patients to medical records, ambulances and other types of services. Jointly Allm Inc and Tech Avenue signed agreements with King Faisal Hospital, Rwanda Information Society Agency and Rwanda Biomedical Center to run a pilot project in Rwanda.	
2	Go Ltd (Rwandan Company)	Amegumi Co., Ltd (Japanese Company)
	Amegumi Co. manufactures smartphones that cost below $30 each, jointly with Go Ltd they distributed over 200 smartphones to Agronomists and other Agricultural value chain players in Rwanda to share information about crops and animals. The smartphones have Go Ltd's agriculture value chain digital platform pre-installed.	
3	Beno Holdings (Rwandan Company)	BumpRecorder (Japanese Company)
	BumpRecorder creates smart solutions that detect and record road roughness index. BumpRecoder in Partnership with Beno Holdings, RISA and Rwanda Transport Development Agency, recorded and analyzed road roughness index of over 800km of road.	
4	Guez Show (Rwandan Company)	ThanksLab (Japanese Company)
	ThanksLab creates 3D animations for the Asian market. In partnership with GuezShow, they trained over 8 Young Rwandans with 3D Animation creation skills. ThanksLab outsources some of its work to GuezShow's trained team.	
5	D-Energy (Rwandan Company)	Mizuho Research & Technologies, Ltd (Japanese Company)
	D-Energy and Mizuho Research and Technologies conducted market research about Rwanda's solar	

	powered Irrigation, Green Houses and Storage facilities. They looked at the various technologies available on the market that serve irrigation, green houses and storage. They plan to introduce Japanese manufactured green technology solutions to the Rwandan Market.	
2nd batch		
6	Location Mind (Japanese Company)	Yambi connect Ltd (Rwandan Company)
	Location Mind creates devices that measure distance and location of smartphones that are within short distances of less than 100m. In partnership with Yambi Connect, they are carrying out market research for potential use cases of their solutions with Rwanda Museums and Supermarkets to record which shelves have high visitor traffic and which ones have less traffic in order to optimize visiting and shopping experience respectively.	
7	Nyereka Tech (Rwandan Company)	ict4e (Japanese Company)
	Nyereka Tech has an IoT training digital platform and an eCommerce platform that sells IoT devices. Jointly with ICT4E who experts in IoT trainings are, they are upgrading Nyereka Tech's training digital platform so that it can offer IoT trainings to more Rwandans.	
8	Arkedgespace(Japanese Company)	Locus Dynamics Ltd (Rwandan Company)
	Arkedgespace creates microsatellites such as RWASAT-1. Jointly with Locus Dynamics they are installing IoT devices in Rwanda, so that with help of RWASAT, they are able to monitor several parameters like temperature, rainfall, wind and more.	
9	Harakamed (Rwandan Company)	DaraJapan(Japanese Company)
	Harakamed runs an eCommerce platform for pharmacies in Rwanda, while DaraJapan runs businesses in Tanzania. Harakamed jointly with DaraJapan are working on upgrading the e-commerce pharmacy platform in terms of user experience and listed inventory.	

	10	NEC (Japanese Company)	Algorithm Inc (Rwandan Company)
		NEC has developed an AI powered smart solution that detects counterfeit medical drugs through image recognition. Jointly with Algorithm Inc (which runs a ERP system that manages pharmacies) are working on a pilot project to detect counterfeit medical drugs in Rwanda.	

Output 4: Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda

(1) Activity 4-1: Collecting good practices in ICT-use and modeling cases for promotion

Table II.12 Activities and Progress of Output 4.1

Activities	Achievement
4.1 Define Rwanda Model of Success and Advocate Activities and Outputs	
4.1.1- Define and compile "Rwanda model" of success (ICT for Development) 4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, social media, Conference/seminar) 4.1.3 Synthesize Rwanda Model of ICT for Development (including JICA's contribution) to be applicable for other countries - building on to current Rwandan ICT model	・ Rwanda model of ICT development journey has been drafted (awaiting finalization through receiving expert inputs and validation) from interviews of key movers and shakers who have intimately involved in the Rwanda's pursuit of using ICT for its development in the past 20 years. The model was compiled in the form of primers of key themes as well as infographics denoting some of the ley features and characteristics of the Rwanda's pursuit of ICT for development journey. The result is expected to be shared with other countries at appropriate fora. The primers are sub-divided into 5 volumes with 5 major themes which has been identified as those made the differences in the Rwandan journey of ICT for Development. The first volume is the ICT Policy and Strategy. One of the major things Rwanda differentiates itself from other countries is its long-term ICT strategies and accompanying policies which allowed the country to move forward ICT led development in effective ways. The lessons-learned in the area of ICT policies/strategies formulation and implementation from interviews of stakeholders make up for the volume one. The second volume is ICT institutions. Where Rwanda's institutional development to support ICT for development in the past 20 years are revisited and how they are instrumental in advancing Rwanda's aspiration of utilizing ICT as a pillar for its development. The third volume is ICT Infrastructure. Rwanda has invested heavily in core ICT infrastructure even when other infrastructure such as paved roads and electricity were not available. The decision was somewhat controversial, but the investment eventually paid off when the ICT became critical national infrastructure and enabler for developing many other sectors. The lessons-learned from preemptive investment, telecom liberalization, infrastructure sharing, and monopolization of advanced technology are some of the interesting lessons-learned for other countries. The fourth volume is ICT Human Capital Development. It is one area which Rwanda still needs a lot of attention but some of the activities within the ICT human resource development in the last 20 years and more recent development could be interesting for the domestic leadership and those countries which also are in the process of working hard to create capable ICT human resources. The fifth and the final volume is ICT Private Sector Development. This

	is the sector which JICA has also supported strongly in the past decade. It has quite unique structure where ICT sector works hand in hand with the Government's strategies and policies almost like a symbiotic relationship. Also, some of the lessons learned from the innovation oriented programme and strategic use of ICT events have solidified the image of Rwanda as an ICT savvy country in the continent. ・ The project has supported various different advocacy activities which include advocating the results attained by the Project but also Rwandan counterparts' advocacy for both domestic and international audiences. The Project advocated Rwanda's potential as an innovation hub of the continent and past achievements to utilize ICT for its development at different international for a. For the domestic audiences, the Project used various different events to advocate the Project's activities as well. The Project also used social media (Facebook and Tweets) and domestic news media to advocate project's activities and achievements. Moreover, other advocacy activities (e.g.; Embassy of Japan's media tour) were also supported as additional advocacy activities. As of 8th of February 2022, Project Twitter has 1259 followers with 108 tweets. The Project Facebook has 652 followers with 605 "Likes." 250Startups Twitter has 2711 followers and 901 tweets. Facebook has 365 followers with 341 "Likes."

(2) Activity 4-2: Extract and share lesson learned from the Project activities

Table II.13 Activities and Progress of Output 4.2

Activities	Achievement
4.2 Extract and share lesson learned from the Project activities	
4.2.1 Summarize lesson learned from the Project activities 4.2.2 Share lessons learned through various medium.	・ Different outputs of the project have compiled various reports which could be used as lessons-learned for the second phase and other similar initiatives in the future. These reports will be submitted to the counterparts and JICA for references and for future use. ・ The project has been sharing some of the lesson-learned of the Project mostly through various different international conferences.

2-2 Project Purpose and indicators (Target values and actual values achieved at completion)

Table II.14 Outputs and achievements

Outputs	Target	Actual	Remarks
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector			
Output 1.1 Create and strengthen facilities to encourage innovation			
	15 people (5 people * 3 years) graduate successfully from the Fab-academy training course.	Partially completed	1st cohort had 5 people completed the regimen as scheduled. 2nd cohort had 3 people completed the regimen. 2 candidates did not finish the course work citing personal issues. Since FabLab has contracts to reimburse the amount in the case of non-completion with these candidates, it has been decided that these candidates will provide community services at FabLab as repayment. 3rd cohort had 3 candidates attended the course. Due to COVID-19 restrictions, these candidates were having difficulties completing the course in the 1st year. The Fab Foundation has given global extension for the candidates but 1 of the candidates failed to complete the course. FabLab Kigali has compiled a memorandum of understanding to provide that specifies how it will repay through providing community support activities for Innovation Centers in lieu of cash reimbursement.
	3 innovation centers with equipment are established.	Completed All 3 centers have been established	There was number of challenges with procurement of the equipment, especially at the beginning of the Project. However, by consolidating the procurement process through Japanese trading company, the procurement of the large equipment for these centers have been completed. Due to the delay caused by the initial procurement

			difficulties, however, the center establishment has been delayed considerably which gravely affected overall training activities for the innovation centers.
	All participants of the training course showed more than 70% of understanding on the training contents about innovation center management.	Completed	Due to the procurement challenges and resultant delay in establishment of innovation centers in secondary cities, there was significant delay in starting the training sessions for the innovation center management and personnel. However, Q3~Q4 of 2021and Q1 2022, concerted efforts were made to accelerate the training among the management staff and select future community members (including teachers at the IPRC and Universities, and other members). Questionnaire sent after the trainings revealed that the average understanding of participants to be 70%.
	6 batches of incubations are implemented	Completed	First 5 cohorts were part of the original PDM with each cohort had 10 companies each for incubation. The 6th cohort was based on the broad theme for COVID mitigation and recovery. Evaluation report of each cohort of the 250STARTUPS including result of the questionnaire used to track alumni are attached as ANNEX.
	Rwandan model of early incubation programme established and handed over	Completed	After 6th cohorts, the 250STARTUPS Programme is well established as a Rwandan early incubation programme. It was handed over to Rwandan counterparts as part of the 6th cohort graduation (demo-day).

	Progress of NINJA COVID-19 Business Innovation POC companies was monitored	Completed	All NINJA COVID-19 Business Innovation POC successfully completed with results. Many of the companies are moving forward with the services/products which were created through the NINJA Programme.
Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	At least 6 ICT-SWG (twice per year) are supported	Completed	Different sector working activities were supported through participation of the Chief Advisor (when applicable) and ICT Policy Specialists and other
	SWG Operation Manual is handed-over.	Completed	The Operational Manual which spells out basic coordination mechanism needs regular update as the SWG operations continues to evolve (e.g.; organized monthly instead of quarterly basis, creation of annual work and event plan, etc.)
	More than 15 policies and related documents are reviewed and advised.	Completed	Different Policy related documents such as Joint Sector Reports (JSR), Sector Strategy Paper (SSP), sector ICT strategies, and specific strategies (e.g.; gender and ICT strategy, smart village strategy, innovation hub strategy, Digital Inclusion, etc.) have been compiled, reviewed, and/or advised throughout the duration of the Project by the Chief Advisor, Policy Analyst, and other member of the Project.
	HRD Plan created and implemented as a POC.	Completed	HRD Plan which was compiled by the Policy Specialist has been handed over and POC type hybrid hands-on and online (Udemy for Government) type capacity development activities have been implemented
	30 participants obtain certificate of training completion	Completed	More than 96 participants (not unique participants) from Ministries and affiliated agencies have undertaken training courses which included both online and in-person trainings.

			These courses include the Udemy for Government, Effective Writing, Policy Analysis, Project Management, Leadership trainings, etc.
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	15 companies profiling sheets are compiled.	Completed	Completed profiling sheets were used for networking with Japanese companies.
	Promotional booklet including 30 Rwandan companies information is published (Japanese/English)	Completed	Promotional booklet was compiled in English and in Japanese. The booklet t of companies followed-up
	More than 30 Rwandan and 50 foreign companies are followed-up for matching opportunities.	Completed	More than 200 companies were solicited/networked for potential partnerships. Total of 17 companies signed MOU/LOI for partnerships.
	Implementation of 6 pilot projects are supported	Completed	Pilot Projects between Rwandan and Japanese companies have been completed with some of the initiative reached a new level such as
	Implementation of additional 5 pilot projects supported	Partially completed 3 out of 5 opportunities were supported.	Despite vigorous advocacy measures to solicit applications for the POC opportunities, due to COVID-19 pandemic not all the POC opportunities were supported through the additional POC scheme
Output4 Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and beyond.	"Rwanda model of ICT for development journey" compiled into concise materials	Completed *Draft conceptual model is being circulated to Rwandan experts for their inputs and revisions. Following validation exercise, the model will be	Rwanda's 20 years' journey of ICT for development compiled from oral history (interviews from key stakeholders in the journey). The volumes were compiled into theme-based primers to be shared with relevant stakeholders. In addition, archival recordings of the interviews (interviews conducted to the key stakeholders were recorded to be kept as archive for future leaderships of the Government and the ICT sector) will also be handed over to the C/P as part of preserving oral history for the

		published in PDF format.	future generation. The model was originally scheduled to be finalized by the end of February, but due to resurgence of COVID-19 (especially the lockdown due to the expansion of the Omicron stock and the evacuation of Japanese experts), it was not released during the project reporting period. Finalization is expected in March 2022. The model would be used as lessons learned of Rwandan experiences for other countries to learn from at various different fora beyond the Project duration.
	Project activities and outputs are promoted through at least 4 types of medium (e.g. conference/seminar, radio, printing medium, video, social media etc.).	Completed	Promoted conducted at national and international conferences, TV, printing medium, social media, video material.

2-3 History of PDM Modification

As has been reported, initial PDM attached to the Record of Discussion (R/D) signed prior to the commencement of the Project spelled out broad activities, outputs, objectives, and impacts in a rough manner to allow maximum flexibilities to allow the Counterparts and JICA to utilize the Project to conduct innovative and POC activities.

As one of the first steps of the project, the project conducted extensive stakeholder consultation exercises to define the baseline for potential Project indicators, and formulated output indicators for the Project. The exercises included conducting an intensive retreat with key stakeholders and counterparts to define more detailed project activities in the form of sub-activities within the Work Breakdown Structure (WBS)) and defining key performance indicators. These exercises resulted to following evolution of the PDMs:

20th of October 2019 - PDM ver.1.0

Adopted at the Fourth JCC which was held on 20h of October 2019. The Project utilized the PDM ver.1.0 until the subsequent PDM modification which occurred in conjunction with the extension recommendation/request of the Project.

05th of August 2020 – PDM ver.2.0

At the 5th JCC which was held on 05th of August 2020, with the uncertainty over the COVID-

19 pandemic and to recover from various delay in implementing activities, the JCC recommended to extend the project. The resultant PDM ver.2 reflected the Project extension of 10 months from original termination date of October 2020 to August 2021. The PDM ver.2 did not incorporate substantial changes from the PDM ver.1, as it was primarily modified to reflect the Project extension.

06th of December 2020 – PDM ver.3.0

At the 6th JCC on 16th of December 2020, however, the JCC has recommended to extend the Project for another 7 months but also recommended to conduct additional activities to mitigate the effects of the COVID-19 and to prepare for the recovery beyond the Pandemic. Actual activities added in the PDM ver.3 were extensively discussed at the "Section II.1.3 - Activities (Planned and Actual)" of the Report.

(1) Extension of the Project

The Project was extended twice from initial 3 years as per agreed under RD to accommodate various different activities to be conducted by the Project and to mitigate the delays experiences by the COVID-19 Pandemic. The Pandemic related delay in implementation was particularly hard hit for the Project. The extension also was requested to support the Pandemic mitigation activities in Rwanda as well. The table below indicates the chronological modifications made to the Project.

Table II.15 Chronological Modification to the Project Duration

Original and modified Duration	Final Duration
Original RD (PDM ver.0 and ver.1) October 2017 – October 2020 (3 years) 1st modification: October 2017 to August 2021 (3 years and 10 months) (PDM ver.2.0) 2nd modification: October 2017 – March 2022 (4 years and 5 months) (PDM ver.3.0)	October 2017 – March 2022 (53 months)

(2) Modification of Activities and Outputs

During the course of the Project implementation, the PDMs were modified to incorporate various different activities and resultant outputs. The Project was designed from the inception stage to anticipate several different modifications to the PDMs while implementing the Project. This methodology was taken as many of the initiatives planned in the Project is entirely new as JICA initiatives with no prior methodology were available. In this regard, the Project wanted to retain maximum flexibility to make sure that implementation could be done in a POC type manner. In many ways, the Project itself was like a Startup, embarking a new way of implementing the Project which was greatly helped by this arrangement.

As such, when the Project started, the original PDM was rudimentary with only rough outputs and activities were defined. In order for the Project to properly implement various different activities, however, the Project needed to have more detailed activities. The Project opted to use Work Breakdown Structure (WBS) with sub-activities to supplement the original PDM. The decision to use the WBS added another layer of flexibility especially in the beginning of the Project when the Project sought better ways of implementing different activities. The WBS

was used extensively during the course of the Project implementations up until the PDM ver.3 when the Project consolidated all the sub-activities under WBS into the final PDM.

Since the Project itself was like a programme with 4 (output 1 is further sub-divided into 2 distinct activities one of which is innovation hub strengthening and another one being distinct small projects based on each output, during the course of the Project Implementation, the Project modified activities frequently as per WBS while not modifying overall PDM and outputs to allow many new initiatives to be implemented by the Project. This has allowed achieving overall outputs (where the Project want to go) while allowing many experiments which the Project counterparts wanted to conduct (how to get there). Chronological evolution of the modified activities (and corresponding outputs) is listed below:

Table II.16 Chronological Modification to the Project Activities

Original Under Monitoring Sheet Ver.1	Original Activities under Monitoring Sheet ver.1	Modified Activities Ver.2 ~ Ver.5	Modified Activities Ver.6~Ver.7 (incorporating WBS sub-activities into the Monitoring Sheet)	Modified Activities Ver.8 (incorporating additional COVID-19 mitigation measures)	Final Activities Ver.9
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	Activity 1.1 Supporting activity for ICT start-ups	Activity 1.1 Supporting activity for ICT start-ups	Activity 1.1 Supporting activity for ICT start-ups *(*Output for Activity 1.1 came to known as Output 1.1*)	Activity 1.1 Supporting activity for ICT start-ups	Activity 1.1 Supporting activity for ICT start-ups
	1.1.1 Understand the status of the incubation facilities	-Ibid-	1.1.1 Understand the status of the incubation facilities	1.1.1 –Ibid	1.1.1 –Ibid Completed
			1.1.1.1 Conduct research on current status of innovation centers	1.1.1.1 –Ibid-	1.1.1.1 –Ibid- Completed
			1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline	1.1.1.2 –Ibid-	1.1.1.2 –Ibid- Completed
	1.1.2 HRD for		1.1.2 Plan and conduct	1.1.2 –Ibid-	1.1.2 –Ibid- Completed

	improving incubation management (kLab, FabLab)		management training on innovation center management (kLab, FabLab) and on-site technical training		
	1.1.3 Support for Fab-academy training course (MIT)		1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community	1.1.3 –Ibid-	1.1.3 –Ibid- Completed with partial number of candidates completing the courseg
	1.1.4 Conduct overseas training on FabLab management		1.1.4 –Ibid-	1.1.4 –Ibid- (*Project was still hopeful for the COVID-19 Pandemic to subside but cited moving trainings to be conducted domestically)	1.1.4 cancelled due to COID-19 Pandemic. Provided additional technical and management trainings in lieu of the activity
	1.1.5 Procure equipment for incubation centers		1.1.5 Procure equipment for three innovation centers in the secondary cities/rural area	1.1.5 –Ibid-	1.1.5 –Ibid- Completed
	Activity 1.2 Organizing/ attending events for ICT start-ups	Activity 1.2 Organizing/ attending events for ICT start-ups	Activity 1.2 Organizing/ attending events for ICT start-ups *(*Output for Activity 1.2 & 1.3 came to known as Output 1.2*)	Activity 1.2 Organizing/ attending events for ICT start-ups	Activity 1.2 Organizing/ attending events for ICT start-ups
	1.2.1 Support for ICT related major	-Ibid-	-Ibid-	-Ibid-	-Ibid- Completed

	events 1.2.2 Conduct overseas study tour for ICT entrepreneurs				
	Activity 1.3 Conducting pilot projects for ICT innovation	Activity 1.3 Conducting pilot projects for ICT innovation	Activity 1.3 Conducting pilot projects for ICT innovation *(*Output for Activity 1.2 & 1.3 came to known as Output 1.2*)	Activity 1.3 Conducting pilot projects for ICT innovation	Activity 1.3 Conducting pilot projects for ICT innovation
	1.3.1 Select target sectors and develop implementation framework/ procedure	-Ibid-	1.3.1 Develop implementation framework/ procedure (target sector model has been eliminated)	1.3.1 –Ibid-	1.3.1 –Ibid- Completed
	1.3.2 Pilot incubation of ICT entrepreneurs for six month (max. 10 incubatees/ batch for 2018)	1.3.2 Pilot incubation of ICT entrepreneurs for six month (max. 10 incubatees/ x 5 batches) (modified during the 2nd JCC)	1.3.2 –Ibid-	1.3.2 –Ibid (*Proposal was put forward to support 6th batch for COVID-19 pandemic relief and recovery)	1.3.2 –Ibid- Completed
Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	Activity 2.1 Support for organizing/ coordinating ICT-SWG	Activity 2.1 Support for organizing/ coordinating ICT-SWG	Activity 2.1 Support for organizing/ coordinating ICT-SWG	Activity 2.1 Support for organizing/ coordinating ICT-SWG	Activity 2.1 Support for organizing/ coordinating ICT-SWG
	2.1.1 Capacity building support for planning skills	2.1.1 Recruit SWG Coordinator (based on 4th JCC and corresponding PDM amendment)	2.1.1 Recruit SWG Coordinator (based on 4th JCC and corresponding PDM amendment)	2.1.1 –Ibid- (*New coordinator was requested as the previous coordinator resigned)	2.1.1 –Ibid- Completed
	2.1.2 Assist to coordinate ICT-SWG	2.1.2 –Ibid-	2.1.2 –Ibid-	2.1.2 –Ibid-	2.1.2 –Ibid- Completed

		2.1.3 Support development of Operational Manual ICT-SWG (added on 4th JCC)	2.1.3 –Ibid-	2.1.3 –Ibid-	2.1.3 –Ibid- Completed
	Activity 2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	Activity 2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	Activity 2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	Activity 2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	Activity 2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem
	2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries	2.2.1 Create Common Vision for ICT innovation Ecosystem (modified after the 2nd JCC)	2.2.1 -Ibid-	2.2.1 -Ibid-	2.2.1 -Ibid- Completed
	2.2.2 Support MiTEC (and other C/Ps) to formulate policies	2.2.2 Support MINICT (and other C/Ps) to formulate policies	2.2.2 –Ibid-	2.2.2 –Ibid-	2.2.2 –Ibid- Completed
			2.2.3 Recruit Policy Specialist for OJT style Policy Advisory Support with the MINICT Team	2.2.3 –Ibid-	2.2.3 –Ibid- Completed, however, after the previous Policy Analyst left the position, the recruitment of replacement was not successful due to limited duration of the Project
Output3 Business relation between Rwandan and Japanese companies related to	Activity 3.1 Matching support between Rwandan and Japanese ICT companies	Activity 3.1 Matching support between Rwandan and Japanese ICT companies	Activity 3.1 Matching support between Rwandan and Japanese ICT companies	Activity 3.1 Matching support between Rwandan and Japanese ICT companies	Activity 3.1 Matching support between Rwandan and Japanese ICT companies

ICT is strengthened	3.1.1 Understand the current situation and advice organizational structure to promote investments	3.1.1 –Ibid-	3.1.1 –Ibid-	3.1.1 –Ibid-	3.1.1 –Ibid- Completed
	3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	3.1.2 –Ibid-	3.1.2 –Ibid-	3.1.2 –Ibid-	3.1.2 –Ibid- Completed
	3.1.3 Conduct networking tour from Rwanda to Japan (3-times), and from Japan to Rwanda (3-times)	3.1.3 –Ibid-	3.1.3 Conduct networking tour from Rwanda to Japan (modified due to COVID-19 Pandemic – Virtual Networking sessions were organized in lieu of Physical tours)	3.1.3 -Ibid- (*Decision was taken after the JCC to switch to virtual networking support and to add additional POCs)	3.1.3 -Ibid- Completed with Virtual networking sessions replaced for physical tour during the Pandemic
	Activity 3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	Activity 3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	Activity 3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	Activity 3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda	Activity 3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda
	3.2.1 Develop pilot business concept, and identification of joint business group	3.2.1 –Ibid-	3.2.1 –Ibid-	3.2.1 –Ibid-	3.2.1 –Ibid- Completed
	3.2.2 Implement pilot projects (3-cases) for	3.2.2 Implement pilot projects (6*-cases)	3.2.2 –Ibid-	3.2.2 Implement pilot projects (10*-cases) for	3.2.2 Implement pilot projects (10*-cases) for

	4 months while monitoring and review	for 4 months while monitoring and review (Increased from 3 to 6 after the 2nd JCC)		4 months while monitoring and review (Decision was taken after the JCC to increase the number of POCs to 10)	4 months while monitoring and review Completed 10 companies supported
Output4 Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.	Activity 4.1 Collecting good practices in ICT-use and modeling cases for promotion 4.1.1 Collect ICT-use good practices and modeling cases for promotion	Activity 4.1 Collecting good practices in ICT-use and modeling cases for promotion –Ibid-	Activity 4.1 Collecting good practices in ICT-use and modeling cases for promotion 4.1.1 Define and Compile "Rwanda model" of success (ICT for Development) (Modified based on 4th JCC and PDM Amendment) 4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar) (Modified based on 4th JCC and PDM Amendment)	Activity 4.1 Collecting good practices in ICT-use and modeling cases for promotion 4.1.1 –Ibid- 4.1.2 –Ibid-	Activity 4.1 Collecting good practices in ICT-use and modeling cases for promotion 4.1.1 –Ibid- Draft has been completed and will be utilized for both domestic stakeholders and international audiences 4.1.2 –Ibid- Completed.
	Activity 4.2 Disseminating the case studies	Activity 4.2 Disseminating the case studies	Activity 4.2 Extract and share lesson learned from	Activity 4.2 Extract and share lesson learned from	Activity 4.2 Extract and share lesson learned from

	through international/ regional organization and appropriate fora	through international/ regional organization and appropriate fora	the Project activities (Modified based on 4th JCC and PDM Amendment)	the Project activities	the Project activities
	4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.)	4.2.1 –Ibid-	4.2.1 Summarize lesson learned from the Project activities (Modified based on 4th JCC and PDM Amendment)	4.2.1 –Ibid-	4.2.1 –Ibid- Completed
			4-2.2 Share lessons learned through various medium (Modified based on 4th JCC and PDM Amendment)	4.2.2 –Ibid-	4.2.2 –Ibid- Completed

3 Others

3-1 Results of Environmental and Social Considerations (if applicable)

Innovation Ecosystem Strengthening Project did not pose substantial environmental effects through its implementation process.

Supporting open innovation spaces (especially in the secondary cities), creation of open ideation programme (kLab), creation of Rwandan National Startups programme, capacity building at innovation centers have opened up many opportunities to the people, especially the youth, who were previously deprived of such opportunities. Providing these open innovation opportunities are expected to create positive social benefits especially among the youth in Rwanda.

3-2 Results of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

At the beginning of the Project, the Project considered putting special emphasis on Gender through encouraging women entrepreneurs for different outputs. The Project also had a consultation with JICA's Senior Advisor on gender issues to see if meaningful gender-based approach could be incorporated into the Project implementation. However, given the context of Rwanda, where women's participation is already strongly encouraged and many of the applicants to the Project supported incubation programme have been women, no special affirmative measures were taken by the Project. While the Project encouraged more women to apply for the Project supported incubation programme, actual selection processes were conducted based on the applicants' merits.

III Results of Joint Review

1 Results of Review based on DAC Evaluation Criteria

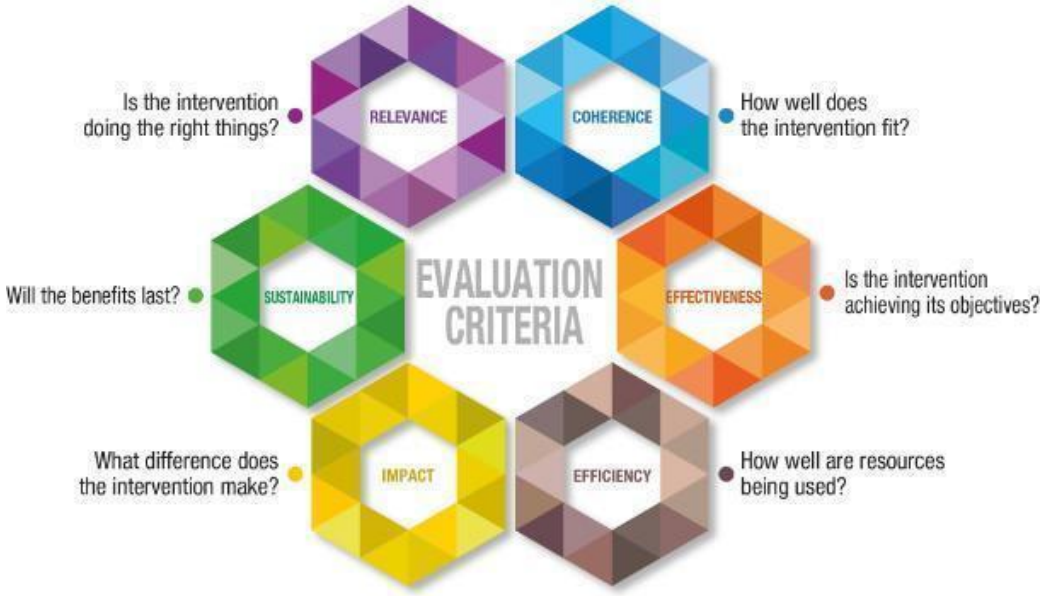


Figure III.1 DAC Evaluation Criteria
Source: OECD DAC Evaluation Criteria [4]

Table III.1 Evaluation based on DAC Criteria

DAC Criteria	Results	Remark
RELEVANCE: IS THE INTERVENTION DOING THE RIGHT THINGS?	Achieved	The Project objectives and design provided appropriate interventions that responded to country priorities, as well as they were coherent with JICA's country support framework. The interventions were appropriate to Rwanda's economic, equity, social, political economy, and capacity conditions which ensured that the support contributed to the objective of strengthening emerging innovation ecosystem in Rwanda.
COHERENCE: HOW WELL DOES THE INTERVENTION FIT?	Achieved	The Project support has had both internal and external coherences where the support was fully aligned with the national priority and aspiration of creating

[4] DAC Evaluation Criteria, OECD, https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

		Knowledge based economy and becoming ICT hub of the region and POC country. The Project was also externally coherent with many development partners (e.g.; GIZ, KOICA, Westerville Foundation, World Bank) which are supporting similar initiatives.
EFFECTIVENESS: IS THE INTERVENTION ACHIEVING ITS OBJECTIVES	Achieved – although more results may have been obtained if the implementation slow-down caused by the Pandemic was not	Objectively verifiable indicators for the Project Purpose and Project Outputs specified within the Project's PDM have achieved fully. Flexibility which was built in from the design stage of the Project has been instrumental in achieving results through conducting innovative ways of implementing the Project. Unintended consequences of the COVID-19 pandemic and procurement challenge, however, have slowed down the implementation of activities that have affected the Project to achieve more results.
EFFICIENCY: HOW WELL ARE RESOURCES BEING USED?	Satisfactory	Both Economic efficiency and Operational efficiency were adequately achieved during the course of the implementation of the Project. Use of resources in terms of monetary resources and use of experts in various different activities were adequate as well. Counterparts' involvement in the Project implementation in beginning of the Project were mixed, however, during the COVID-19 pandemic, counterpart leadership in advancing the Project was instrumental in moving the Project forward. There was, however, some remark made during the Project implementation that the Project hired most of the local staff to implement various different activities.

		More expanded involvement of local counterpart human resources was difficult at the beginning, given the slim structures of the counterpart organizations. During the COVID-19 pandemic, however, active engagement and leadership by the counterpart organization was the key for successful implementation of the Project in difficult circumstances and attaining desired results. For the second phase of the Project, it will be important to maintain this active engagement and leadership of the Counterpart to garner desired outcomes.
IMPACT: WHAT DIFFERENCE DOES THE INTERVENTION MAKE?	Satisfactory – it is expected that the results obtained through the Project interventions will become foundation for Rwanda's innovation ecosystem.	Impact will be measured in mid-long term which would be difficult to measure at the end of the Project. However, it is hoped that many of the results obtained during the Project will become foundations for future impact for innovation ecosystem in Rwanda. Creation of Rwandan incubation mechanism, creation of accountants and lawyers who are versed with Startups, creation of innovation centers in the secondary cities, strengthening and connecting Rwandan private sector companies to Japanese market/companies, providing capacity development support for the Policy makers, all these supports are expected to become important components for strengthening innovation ecosystem in Rwanda.
SUSTAINABILITY: WILL THE BENEFITS LAST?	Partial – future sustainability depends on reduction of cost and allocation of resources	Many of the Project activities were instrumental in creating foundational mechanisms for future expansion of innovation ecosystem in Rwanda. Rwandan incubation

		innovation mechanisms, creation of initial capacities for innovation centers, creation of innovation centers, supporting capacity building of counterpart policy makers, and creation of network between Japanese and Rwandan companies, are among those support which the Project will leave behind as assets. However, many of these mechanisms are costly to implement without further support from the development partners. While the Rwandan Government and counterparts have indicated that these initiatives will be supported and the next phase of the JICA Project will also support some of these initiatives, it will be critical to reduce the cost associated with these initiatives to make them more sustainable.

2 Key Factors Affecting Implementation and Outcomes

2-1 Flexibility of Project Activities

One of the main positive factors that facilitated the implementation of the Project was its built-in flexibility and ability to conduct many initiatives as trial basis. This flexibility was signature characteristics for the JICA's ICT support in Rwanda for the past decade and that has allowed JICA supported initiatives to accomplish many unplanned positive results and outcomes. The flexibility to have open discussions with stakeholders to define key performance indicators, quickly changing or adding activities which do not yield results, trying to accommodate counterparts' desire to try some new activities beyond originally defined scope. For example, initially, the Project wanted to limit the number of incubates for the 250STARTUPS but longer incubation period. This was suggested based on the experiences of Japanese and international incubators. However, Rwandan counterparts wanted to create a mechanism of creating much larger number of startups.

While the conventional wisdom was not at our side, the Project agreed to take on the challenges without having assurance of its success. The 250STARTUPS programme defied this conventional wisdom and successfully created a mechanism to allow 10 companies to be incubated at the same time in efficient and effective manners. This trial-and-error approach is very different from other donors who need assurance for concrete results of implemented activities. Another flexibility which JICA is known for is its ability to come up with solutions to different challenges. Existing schema, sometime, do not seem to allow implementation of different activities. However, JICA tries to find solutions to these challenges to allow implementation of different activities. These give confidences to the counterparts and allow them to try something new and challenging which may not be possible with other development partners.

This kind of built-in flexibility was unique for a technical assistance project which usually define more concrete outputs and activities prior to commencement of a project. However, this Project was embarking on a wholly new way of tackling developmental challenges which include creation of local incubation mechanism for startups through incubating startups themselves. The Project, in a way, was acting like a startup itself, trying new ways of constantly supporting counterparts' requests while implementing various different activities. This flexibility, however, was not necessarily easy for traditional scheme to support but by finding ways to enable this flexibility, the Project could tackle many initiatives which were not certain about their success. Support to create Rwandan incubation mechanism, POC with Japanese-Rwandan companies are some of the examples of these experimental initiatives which have attained concrete results but were not certain of success at the beginning of the Project. In the same token, some of the initially planned/proposed activities were modified with minimal delay when the Project and counterparts decided that they were no longer relevant or not achieving desired results. This kind of flexibility is not possible with many other development partners and the one which distinguished JICA's support and the one which was appreciated greatly from the counterparts.

2-2 Multi-stakeholder Approach:

Another factor which was positively affected the Project was the multi-stakeholder approach to the Project implementation and counterparts' strong ownership of the Project. The Project was unique in a sense that it had many counterparts. While this arrangement had a drawback of creating complex coordination process for the Project, having multi-stakeholder approach was instrumental in creating the Project ownership. Each and every output of the Project had involvement of counterparts in either or both at the conceptualization stage and also at the implementation stage. There was some concern about the Project about desire to have more counterparts' personnel involvement in the implementation of the Project. The concern was difficult to solve as the counterparts had limited number of personnel with many different tasks which made them difficult to get fully involved in the implementation process. The situation, however, was greatly improved during the course of the Project and it was instrumental in implementing the Project during the course of COVID-19 pandemic when the Japanese experts relied heavily on the counterparts' implementation support along with the Project hired national staffs.

2-3 Coordination Mechanism among counterparts:

Another factor which affected positively to the Project was creation of coordination and information sharing mechanism between the Project and the counterparts. Since the Project had many counterparts, information sharing and coordination about the Project was challenging. Upon consultation with the counterparts, the Project made an arrangement to create Project secretariat to spearhead the coordination and information sharing with representatives from different counterpart organizations. The Secretariat became an important factor which supported the often-complex Project implementation.

2-4 Procurement Challenges:

While the Project had many positive factors which contributed to obtaining results, negative factors affected the smooth implementation of the Project as well. One of the major factors which negatively affected the Project was problem regarding procurement. Since the technical assistance framework had limited resource allocation for equipment but the innovation centers in the secondary cities required substantial necessity to furnish equipment, the Project initially sought a complex arrangement for equipment procurement. However, the procurement process failed for the 1st batch of the innovation center equipment when the local vendor failed to fulfill contractual commitment and kept providing false information about the status of the

procurement process. The dishonest business practice of the vendor resulted delay of more than one year in procuring the equipment for the innovation center in Agahozo Shalom Youth Village. The delay cascaded for the procurement of other equipment and, as a result, implementation of Output 1.1 related activities was hampered substantially.

2-5 Effect of COVID-19 Pandemic:

Another major factor which negatively affected the Project was COVID-19 pandemic. The negative effects were not unique to the Rwanda innovation ecosystem strengthening project, but it nevertheless made it difficult for the Project to implement many activities. Japanese experts were unable to visit Rwanda for more than a year and the Project's resident sub-chief advisor had to evacuate from Rwanda and returned to Japan which made it difficult to support and monitor the activities. Moreover, many in-country activities were also restricted due to lock-down placed by the Government.

On a positive note, the Pandemic allowed the Project to have an extension of 17 months that gave opportunities to implement new activities in-line with Pandemic mitigation and recovery. Support to create PPE devices through FabLab, support the 250STARTUPS programme's 6th cohort, support the NINJA initiatives are some of the examples of new COVID-19 mitigation/recovery initiatives which were implemented by the Project.

3 Evaluation on the results of the Project Risk Management

The Project encountered various different risks which were not envisioned at the beginning of the Project. Potential procurement difficulty was envisioned at the beginning of the Project; however, the Project never anticipated the problem to take such long time to resolve. Since the procurement ceiling for the Project was expanded due to COVID-19 pandemic and moved to the Project's control, the procurement of the required equipment was completed. However, the delay incurred for the 1st batch of equipment had serious implications to the Output 1.1 related activities and outputs. The Project managed to complete all the activities and resultant outputs as have been specified under the latest PDM, however, the Project acknowledges that more activities could have been conducted in the area of capacity building if the procurement processes did not encounter this problem.

Another risk which the Project has encountered was COVID-19 pandemic and resultant difficulties in conducting activities and supporting and monitoring the implementation process by the Japanese experts. The Project and the counterparts managed to move forward with the Project implementations through local staffs and counterparts' personnel. This was the risk which the Project had never envisioned but the Project, while it was difficult and many delays in the implementation ensued due to prolonged lock-down and travel restrictions, managed to move the implementation forward.

4 Lessons Learned

Table III.2 Lessons Learned from Project Implementation

Output 1-1
Within the scope of the Output 1.1, some of the lessons learned from the Project implementations are the following: 1) Equipment (Procurement, Maintenance, and Trainings) Adequate procurement of machines and equipment was the key to successful

operationalization of FabLab in Innovation Hubs/Centers in the secondary cities. Machines and equipment were found to be challenging to procure locally within the country which led to equipment being procured from abroad. The Project tried to procure standard Fab-Foundation suggested equipment through using local vender, but the selected vendor failed to procure equipment which also damaged the relationship Rwanda FabLab and the Project had with Fab Foundation. This has forced the Project to procure equipment through Japanese trading companies which caused additional delay in procuring the necessary equipment.

While most of the equipment procured for the secondary city Innovation Hubs/Centers conform to the standard recommendations of the Fab Foundation, it is important to note that the machine and equipment should be procured at manageable level in terms of time framework, quantity, and should also consider skill-level of the local managers and users at the secondary cities. In other words, due to the fact that FabLab machines and equipment will incur higher risk of break-down with increasing number of new users, FabLab users need to be trained to become skillful enough to maintain and fix these equipment as part of FabLab's daily activities. As skillful human resources are scarce in secondary cities, having the same variety of equipment as FabLab Kigali is challenging to manage at Innovation Hub/FabLabs in the secondary cities.

Providing the secondary city Innovation Hubs/FabLabs with such a variety of machines and equipment certainly will lead to an empowerment of those Hubs/Centers-FabLabs and increased usefulness of these centers for the local communities. It is inevitable that such equipment will fail sometime in the future, but it is the nature of FabLab that its users solve the problem among themselves as their daily activities. In this regard, providing them with continued technical training for machine and equipment usage and maintenance are critical for their success.

Due to procurement challenges and associated delay, the Project could only implement the initial training and limited follow-up training for the use of FabLab machines and equipment. Provided training is far from enough in order to enable the Innovation Hubs/FabLabs in secondary cities to maintain and repair those machines and equipment by themselves. Therefore, comprehensive learning opportunities should be provided to these centers with combination of on-site follow-up mechanism, formulated local training programs for users, and also providing key power users with an opportunity to attend a comprehensive but localized technical course such as Fab-X (that is to be implemented in local language and longer duration to facilitate the trainees to complete the course without hindrances) when the course becomes available.

Furthermore, the Innovation Hubs/Centers should create platforms which would allow experiences and knowledge sharing among the Innovation Hubs/Centers-FabLabs. Each Innovation Hub/Center-FabLab could develop specialized skills on certain machines/equipment and could give the training and insights to other centers. For example, Huye could develop advanced users on embroidery machines while Musanze could excel in electronics. These specializations could build a culture of positive interrelations and contribute to their sustainability. ASYV has strengths in terms of curriculum development for the training, although the contents themselves may need contextualization for the users in other Innovation Hubs/Centers due to different target groups. However, the advantage of ASYV being an educational institution and having educational contents could give unique opportunities to Innovation Hubs/Centers-FabLabs specially for the youths, young men and women. It is these synergetic effects that the Innovation Hubs/FabLabs shall seek through

the coordination of RISA so that the local capacities can be increased and not necessarily dependent on the follow-up provided by the FabLab Kigali and Japanese experts.

2) Monitoring Framework of Fab Academy Candidates

Structurally speaking, the Project did not have direct control of monitoring the progress of the candidates of Fab Academy. The information regarding progress was dependent almost exclusively on what FabLab Kigali reported to the Project without having direct means to verify their claims. Some of the Project interviewed candidates claimed that no matter how much they tried to submit their assignments based on the comments of FabLab Kigali or Fab Academy HQ, they often could not finish these assignments on time since the comments were given very late and they were not given adequate time to complete the assignments. On the other hand, FabLab Kigali had also claimed that the candidates were responsible for finishing their work within the time frame in which they failed to do so. The Project did not have access to the Fab Academy database to see the real progress of the candidates and the action of their supervisors or evaluators. As a result, despite continued discussions and inquiries made to FabLab Kigali throughout the Project implementation period, the Project had no way of knowing the real situation between these candidates and the supervisors which often show vastly different perspectives

The Project tried to build additional capacities for the FabLab Kigali (Fab Academy Kigali) through dispatching Fabmaster/Fabtrainers (the graduates of the Fab Academy and the instructor of Fab Academy) to receive additional technical training in Hamamatsu, Japan. In spite of their additional technical skills, motivation, and sense of responsibilities, the management of the trainings was often challenging, resulting in disputes between the trainees and the trainers which resulted in lack of adequate remedies. In essence, Fab Academy's internal coordination and organization to conduct the trainings must be strengthened to enable them to provide more structured and effective Fab Academy training.

If the Project had an independent access to the monitoring system of the candidates' progress, it would have helped the Project to intervene and provide appropriate follow-ups to the candidates and the Fab Academy/FabLab Kigali. However, as an external organization, it was not possible for the Project to do so without the willingness of the Fab Academy/FabLab Kigali to disclose the information. While it may not be possible for the Fab Academy/FabLab Kigali to openly disclose the information to the Project as the information contains vital privacy data, a contractual agreement between the Project and the FabLab Kigali to have access to the database may have helped to mitigate the difficulties surrounding Fab Academy training.

Given the difficulties encountered by the Project even at the Kigali site, it may not be appropriate to provide only full-fledged Fab Academy training to the Innovation Hubs/Centers-FabLabs in the secondary cities. Rather, localized and contextualized training programme such as Fab-X programme, which is in a process of development by the FabLab Kigali, may be appropriate as it will lower the barriers associated with language and technological difficulties.

3) Collaboration with FabLab Kigali

Some of the Fab Masters/Fabtrainers of FabLab Kigali are the ex-trainees of the

Project's training program in Hamamatsu, and/or those graduated from the Fab Academy to which the Project provided financial support. In this sense, they were the beneficiaries of the Project. However, at the same time, they became necessary agents for the Project to provide technical assistance (training) to the managers and users of the Innovation Hubs/FabLabs in the secondary cities.

While this is a good outcome of the Project, it became difficult to define their position within the Project as recipients (direct beneficiaries) of the Project or the implementing agents. The Project pays them honorarium and travel allowance to conduct intensive training in secondary cities but without actually concluding strict contractual agreement. This has caused some disagreement about the expected outcomes of training offered by the FabLab Kigali and the recipient of their training at the Innovation Hubs/FabLabs in secondary cities. The FabLab Kigali reports that they have given adequate training while the recipients sometimes expressed their dissatisfaction for the training offered.

However, this is not to say that the FabLab Kigali should be subcontracted, as their organizational capacity may not be ready to provide such support. There are conflicting views among the stakeholders on this point. Some stakeholders have pointed out that the open competition in providing such training should be established with strict contractual terms and that the FabLab Kigali should compete for such contracts. In contrast to the previous view, there is also another opinion that the FabLab Kigali should be the delegate of public services in relation to the public policy framework as public goods rather than private assets.

As there are conflicting views by the counterparts on FabLab Kigali's organizational characteristics, it sometimes creates confusion and different expectations for its role and responsibilities. How FabLab Kigali will be positioning itself within the innovation ecosystem in Rwanda is dependent on how it defines itself and also how it establishes relationships with the Rwandan stakeholders.

4) Local Governance Mechanisms for Innovation Hubs/Centers-FabLabs

There is an ongoing discussion about how the Innovation Hubs/Centers-FabLabs in secondary cities will be supported by RISA and local Government. In order to effectively manage and to monitor their activities and progress need to be established in relation to a multitude of stakeholders such as the district Government, ICT Chamber, kLab/FabLab Kigali, RDB, Academic institutions, local cooperatives, and others.

Importance of constructing local governance mechanisms of the Innovation Hubs/Centers-FabLabs has been raised on many occasions including at the final JCC. To this regard, an elaboration and approval of localized action plan as project management (sometimes it is referred as business plan) is identified as a strategic path for success, especially by integrating the perspectives of innovation and entrepreneurship. Such local mechanisms, created through contextualized processes, will cater to the local needs while, at the same time, align itself to the national policy frameworks. Primary users of Innovation Hubs/FabLabs in secondary cities are the youth, identifying and incorporating their needs to create people-centered programme, in order to promote their participation in decision making processes.

For this reason, the tendency and characteristics of the users must be studied through basic data collection and reflected upon the training and other services that they may

receive. In this way, the Innovation Hubs/Centers-FabLabs can identify the other potential stakeholders to become their strategic partners to encourage innovations.

Output 1.2

In order to establish an ICT ecosystem in Rwanda, the project, in collaboration with ICT Chamber, developed an incubation program, 250STARTUPS, and contributed to increase the number of startups solving social challenges in Rwanda. Some of the startups graduated from the program are expanding the businesses and the project fostered the collaboration with other stakeholders (e.g., academia, other incubation centers). Some of the lesson learned from the implementation of Output1-2 are described as below.

1) Active involvement of the counterpart in operation

The project was successfully developed the capacity of the staff and established the cohesive team for operation of 250STARTUPS.However, it was mostly operated by local staff hired by the project, though the counterpart organizations have contributed whatever they can. Therefore, it may be unfortunately difficult to keep running the program after the project completion unless the counterpart organizations find a way to secure resources to keep the staff for the program. It would have been great if even one staff from the counterpart organizations was assigned to manage and operate the program.

2) Sustainability

Sustainability of the 250STARTUPS is a major concern for the Project. At the graduation ceremony of the 5th cohort of the 250STARTUPS held in December 2021, the JICA Chief Representative has requested the support from the Government for 250STARTUPS programme beyond the Project duration. For that, MINICT Minister Paula Ingabire has assured that the Government would support the initiative beyond the Project duration. The manager of the 250STARTUPS programme has been in continued discussion with the Permanent Secretary and the Director General of the MINICT, however, as of the composition of the report, the Government has yet to propose realistic support plan for the programme.

As this is a major concern for the project, the Project has also invited major development partners in the area of ICT to participate in the final report meeting of the Project and solicited consideration for supporting the initiative. Since the 250STARTUPS programme has been completely handed over to the counterpart from the JICA's auspice, it should be possible to receive support from other development partners, which has been difficult in the past. In fact, the 250STARTUPS programme has begun taking some consultancy work from other development partners, however, in order to incubate 10 companies in cyclical manner, the programme needs to secure substantial resources.

As the World Bank's new digital transformation projects has a component to support startup development, the project has proposed to the MINICT and RISA to use the 250SATRTUPS programme for that purpose. The project also supported the proper incorporation of the 250SATRTUPS programme, which is necessary for the programme to undertake such initiative from other partners. The World Bank's procurement process, however, is expected to be an open bidding process, and it is not clear whether the 250 STARTUPS programme will be selected (although the Project has advocated MINICT and RISA to press hard).

Many development partners are now keen on using the power of startups to solve

social and economic challenges, and the Project is hopeful that the number of development partners which want to use the services of the 250STARTUPS programme will increase in the future. In the future, 250 STARTUPS programme could also provide consultancy services to other countries which seek to establish similar programme.

In the next phase of the JICA project, 250STARTUPS could be used as a subcontracting entity to provide incubation services for the Project. One such support could be to provide simplified version of the 250STARTUPS incubation programme at the secondary city's innovation hubs, and the other is to outsource the incubation of startups which aspire to create data-driven services. Although it is necessary to discuss the level of companies that will be targeted for the second phase project (discussion needs to be conduct whether the new Project targets companies that have track-records of business, as in the NINNJA program conducted as part of COVID-19 mitigation measures, or should the Project fosters startups that have ideas of creating services based on data (MVPs), the 250STARTUPS programme could be used as an outsourcing partner to provide the necessary entrepreneurial support, while at the same time, it will allow the 250STARTUPS programme to strengthen its sustainability.

3) Utilization of local resources

The project once intended to provide a Japanese expert, who has rich experiences of incubating startups both in Japan and abroad, as a main instructor for the incubation program. However, it was found out that the understanding the local context and the startups is more important than having and expertise on incubation for the effective program implementation. The project realized these after the 1st cohort and shifted to toward utilization of local resources. As a result, 250STARTUPS was able to continue running the program even during COVID-19, when none of the Japanese experts were not allowed to travel to Rwanda. It is important to find the right local staff who can learn from and work together with Japanese experts and to utilize him/her as a facilitator of the program. Also, it is inevitable to work with local professions when it comes to teaching professional field like finance and law.

4) Importance of funnel structure (feeder mechanism)

Under the assumption that Rwanda has many pre-seed startups with ideas and prototypes but without knowing how to do business, the Project supported ICT Chamber to develop 250STARTUPS to grow startups from pre-seed to investable level. However, it was always a concern whether the program was able to secure 10 good startups per cohort as it was difficult to find startups at the right level for the program. Also, the startups completed our program, who successfully made a business plan and obtained some paying customers, still need support for the expansion of their businesses. Therefore, it is also important to increase the number of pre-seed level startups perhaps in collaboration with colleges and universities and to strengthen the connection with investors and other incubators, though the Project already supported the kLab to develop a potential feeder mechanism (kLab Startups Academy) and also developed the funnel structure with some of the academia and incubation organizations.

Output2

There are acute needs of capacity building in the area of policy formulation and implementation, as well as various trainings in the areas of soft skills for many of the officials working for the ICT issues. Many of these officials come from technical background with limited experiences and knowledge in the policy area. It is therefore important of continue to support the policy and soft-skill related capacity building support. This should be done in conjunction with direct policy advisory support and OJT type trainings, as well as more structured trainings to the targeted officials. Some of the lessons learned from the implementation of Output 2 (Policy advisory Support) are the following:

1) Use of Policy Analyst for Policy Support

Policy related support during in the Project was sub-divided into two main components. One is on the job (OJT) type training conducted by the Policy Analyst and Policy Advisor, and another one is more structured training conducted through online and offline training materials. The OJT type training is useful but ad-hoc basis of providing policy formulation support from policy analyst may not be used sorely for advisory support but may have been relied as an additional staff member of the ministry. Since the ministry is always short staffed, it is understandable that they would like to have an extra hand to support various different activities. While balance must be sought, since the JICA technical cooperation cannot be used to supplement staff member of the counterparts, the working arrangement should be made clear.

2) Online Trainings

The online self-paced training courses were useful during the COVID-19 pandemic when the in-person trainings were not possible. Self-paced learning through Udemy for Government attained initial results where officers from MINICT, RISA, and related agencies enjoyed building capacities in various different fields. The monitoring indicated that many of the officers took not only trainings in technical fields but soft skills such as project management skills, leaderships, etc. In addition to the Udemy for Government, public-academic partnership online training was also supported by the Project which was attended by PS and other high-level officials. While anecdotal evidence of satisfaction and capacity improvement are available through interviews, however, there exist no concrete mechanism to measures the positive improvement within job performance. This is not unique to the online trainings, but it would be ideal if some realistic measurement of performance improvement beyond certificates could be devised.

3) In-person trainings

In person training courses supported by the Project were delayed substantially due to COVID-19 lock-down and restrictions. However, counterparts have strongly expressed the importance and satisfaction toward in-person training. One of the difficulties for in-person training is to schedule the trainings to fit with trainees' busy schedule. This was especially true for high-level policy training for the leaderships of the Ministries and agencies. Despite the difficulty, in-person trainings should be continued as they are deemed more efficient and effective than sorely providing the on-line trainings.

Output 3
Notable achievements were signing of multiple MoUs and agreements between companies that participated at TICAD VII that took place in Japan in summer of 2019. Those MoUs diverse from IoT and its application, aerospace tech, energy, and drone amongst others. The project also collaborated with other institutions to enable this movement. Ministry of Internal Communications of Japan, MIC, United Nations Industrial Development Organizations ITPO Tokyo, UNDP, and Embassy of Japan in Rwanda and Embassy of Rwanda in Japan were the main partners through implementation of different events. Through different activities, while successful outcomes were witnessed, realization of sustainability of all activities provided by project can be raised as the expected challenges. In current form, financial support to teams both in Rwanda and Japan is secured, however, once the project is completed, such will not be secured unless counterparts in Rwanda create similar or same type of structure. In this regard, forming a council that formed by different stakeholders aiming to be core to monitor progress of engagements and discussions will be necessary. However, in order to set up such organ, deciding the leader to drive and make sure of the functionality while securing financial resources and ensuring continuous engagements with foreign companies will be few of points to be sorted out to realize sustainability. Although several MoUs have been signed, very few companies continue to invest or do business in Rwanda. On the Japanese side, one of the challenges is that the speed of decision making has not kept up with Rwandan expectations. In other words, unless business decision makers make a big commitment, this challenge cannot be overcome. On the Rwandan side, the challenge is stability and sustainability. This could be both on the business side and the communication side. On the business side, since partnerships that culminate into actual investments also tend to take a bit of more time, may be 2 to 5years, the company needs to have the basic strength to promote business with Japanese companies from a medium to long-term perspective. As for the difference in communication, if the company do not communicate with the partners continuously, it may lose touch with them and over the relationship. Furthermore, it would have to point out the limited market. Essentially, Japanese companies are interested in partnering with Rwandan Companies that can become a bridge to other African Markets. However, most of the Rwandan companies are still small or concentrated on the Rwandan market with less or not presence in other African Countries. It should also be noted that COVID-19 has drastically reduced the number of opportunities for Japanese and Rwandan companies to meet and communicate directly. The project once attempted to set up such council by inviting different stakeholders, however this attempt was not successful partly for reasons such as securing funds and ensuring continuous involvement with foreign companies. Moreover, another reason would be sense of designation. In the attempt, all invited had other engagements in their organizations which could have made it difficult to put continuous efforts and energy for function of the proposed taskforce. Thus, setting up a secretary with specific mandate that can monitor and manage daily engagements and also have and can create pipelines with other organizations whenever necessary will be highly important. The expectation of set up of such organ would be the expansion of range of engagement from being just between Japan and Rwanda but into a form that can be used by different Rwandan stakeholders to making sure of maximizing their engagements with foreign individuals and companies from different countries. Due to Rwanda’s continuous positive international media

attention resulting from President Paul Kagame's global visibility, Visit Rwanda Brand, Hosting of International Conferences and better global rankings in terms of doing business and corruption index, Rwanda receives a lot of business investors which makes it difficult for the responsible agencies to diligently follow up every business visitor. As a result, quite often some Japanese Business Visitors have not been accorded diligent follow up in terms of responding to their emails or requests for meetings.
Therefore, as the project has come to the end, in addition to the ongoing efforts of the private sector, support from public sector from both Rwandan Government and Japanese Government (JICA/JETRO), is needed. That Committee would have the following responsibilities;

- Liaison support to Japanese Investors coming or interested in investing into Rwanda
- Soliciting funds to support the Rwanda-Japanese companies
- Organizing seminars between Rwanda and Japanese companies.

Output 4

Advocacy, in general, is one of the weak points for JICA supports. The Project has conducted many advocacies related activities through international conferences such as Transform Africa Summit, Youthkonnekt Summit, TICAD-7, Africa Tech Summit, UN-IGF, and others. In addition, numerous private sector seminars and meetings were organized in Japan to advocate Project supported Startups and ICT sector opportunities in Africa through Rwanda. The Project has certainly helped strengthen Rwanda's external images as an innovation hub and ICT savvy nation.

1) Strategic approach to conducting Advocacy activities

   While the Project conducted many international advocacy activities, domestic advocacy support has been one of the weaker activities within the Project. The Project initially created draft advocacy strategy/plan which was presented to the Ministry and RISA as a guide to conduct advocacy activities. Ministry has incorporated this draft and created their own advocacy plan. The Project has asked the Ministry to give guidance to the execution of the advocacy activities of the Project to align with it, however, the coordination was not well executed, and resultant advocacy activities implementation was rather ad-oc. The Project hired national staff to support the activities but have not effectively utilized by the counterparts. This has been aggravated by high turn-over of the Project hired communications associates. The Project hired three different communications associates within the Project period which hindered the Project to conduct integrated and sustained advocacy efforts. Moreover, difficulties coordinating between the Project communications associate with Ministry of ICT and RISA communications officers were also one of the issues which made the advocacy activities more difficult.

   As the advocacy is very important, for the next phase of the Project, it would be essential to create concrete work-plan and independently and proactively implement communications activities while aligning but not relying on the counterparts' advocacy activities. In addition, it would also be essential to hire a dedicated communications associate who would be proactive to various advocacy opportunities and, at the same time, be responsive to the needs presented by the team of the Project.

2) Utilization of social media

   As for the use of social media, the Project utilized several different social media platforms to advocate the Project and its achievement. As of 8th of February 2022, Project Twitter has 1259 followers and 108 tweets. The Project Facebook has 652

followers with 605 “Likes.” 250STARTUPS Twitter has 2711 followers and 901 tweets. Facebook has 365 followers with 341 “Likes.” While all would agree the importance of utilizing social media, its effects were not measured effectively by the Project. The Project could capture simple reactions from the viewers but more in-depth data about the social media users were not captured properly. This is due mostly for not having business accounts of these services which provide rich analytics tools It would be recommended to utilize social media more strategically, including exploring decision to upgrade the social media accounts to business accounts, to better capture advocacy results s for the next Project.

Management/Operations

1) Importance of built-in flexibility for the Project implementation

The Project was designed from the beginning to be a complex one. The Project had many counterparts and many of the activities embarked by the Project were never implemented beforehand. Indeed, as the Project remarked in many occasions, the Project was like a Startup itself, embarking on many new initiatives without certainty if the Project will be successful or not. In this kind of experimental initiative, it was important for the Project to retain maximum flexibility to modify activities as needed. This arrangement also allowed the counterparts and the Project to conduct new activities with minimum procedures. This arrangement was a hallmark for JICA’s ICT support in Rwanda and it worked very well for the Project as well.

Since the technical assistance project is usually not designed to have this kind of flexibility, the Project RD and the initial PDM were made consciously simple to be modified in the subsequent JCCs. Another arrangement which worked well in the Project implementation was introduction of WBS and associated sub-activities. The WBS allowed the Project to modify and implement activities without going through formalized processes. This has allowed additional flexibility within often rigid technical assistance framework.

2) Importance of Project Secretariat

Another management process which worked well for the Project was establishment of Project secretariat that was led by the counterparts. Since the Project had many stakeholders, sharing information, coordinating activities, reporting results have been challenging. Establishment of strong Project secretariat with strong and highly competent counterpart personnel worked well for the implementation of the Project. This arrangement was also instrumental in mitigating the effect of COVID-19 pandemic which has caused significant difficulties in the Project implementation. Since the JICA cooperation framework does not allow establishment of a SPIU, creation of the Project secretariat was essential for the successful Project implementation.

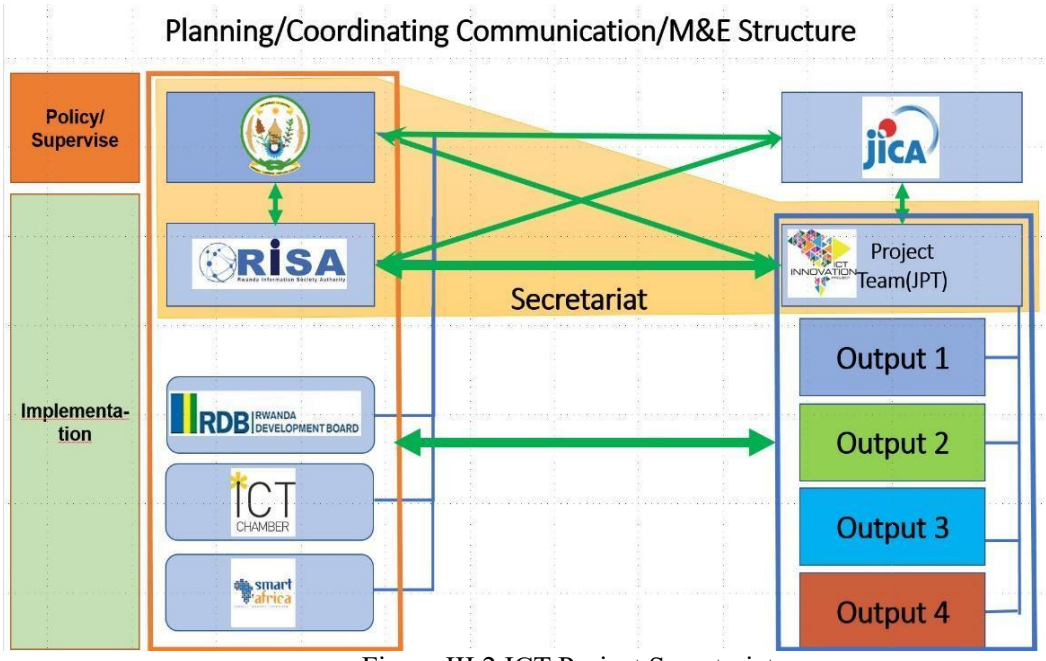


Figure III.2 ICT Project Secretariat
Source: ICT Project

The Project Secretariat was composed of all the Project counterparts and was chaired by the DG of the Ministry of ICT and innovations. and managed by the RISA manager and dedicated coordination staff from the Project at the Rwandan side.

The Project was fortunate to have dedicated RISA director assigned to coordinate the Project Secretariat. The director was replaced mid-way who have taking the lead in finding solutions to various different challenges encountered by the Project. This leadership of the counterpart was critical especially during the COVID-19 Pandemic. An arrangement of receiving strong counterpart personnel assigned to lead the secretariat would be critical for success of the next phase of the Project.

3) Human Resource constrains of the Project counterparts

There were, however, some management/operational arrangements which did not produce more fruitful results. One of the initial challenges which the Project encountered was limited human resource availability of the counterparts. Since JICA technical assistance framework rely on active involvement of counterparts to the implementation activities, it was not common to have so many national staff to be employed by the Project itself. This challenge was not the same as Project ownership, which was always present from the beginning, but it stemmed purely from the unavailability of appropriate human resources by the counterpart organizations. This issue is endemic to Rwanda as the Government organizations in Rwanda are very slim while tasks needed to be implemented are vast. This challenge will be difficult to solve but as part of the technical assistance project is to build capacity of the counterpart organizations, it would be preferred if JICA could request more counterpart personnel to intimately involved in the various implementation activities.

4) Potential risks of excessive development partner support

Creating right framework for support is another important consideration to be made for the next phase of the Project. The Project counterparts may argue otherwise, but overtime, the support that the development partners are given to Rwanda, especially to

the youth, began to resemble spoon-feeding by a silver spoon. There is an argument that these youths still need further support. At the same time, development partners support in Rwanda is resembling too easy to come by and the recipients of the support began to be complacent about receiving support. This is a dangerous development as these youths are not feeling "hungry" and "desperate" enough to work hard to be competitive against the regional and global competitors. If these trends continue, all the gains Rwanda has achieved in fostering human resources may be in vain. This is certainly partly the fault of the developing partners but the need to come up with better and more appropriate framework for support would be critical if Rwanda is to use local talents to build its competitive in the future.

IV For the Achievement of Overall Goals after the Project Completion

1 Remaining Challenges pertaining to strengthening ICT Innovation Ecosystem in Rwanda

Rwanda has been working on strengthening its Innovation ecosystem for the last decade. They have been strengthening different components which make up the complex innovation ecosystem in Rwanda. The Project utilized following major components to define innovation ecosystem and tackled

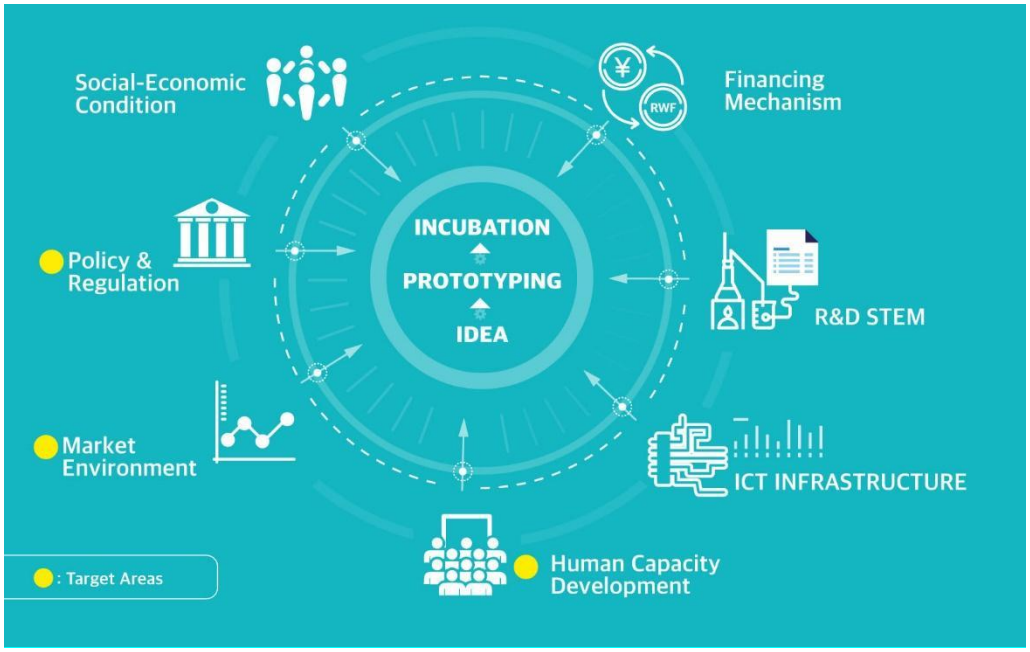


Figure IV.1 Diagram of Innovation Ecosystem in Rwanda
Source: ICT Project

Out of these components, the Project tried to strengthen 4 major components. One is the human resource development, second is the policy environment, third is the market environment. Although other components are also touched by the Project, the main concentration of the activities were concentrated in these three components. Obviously, the project alone could not complete the strengthening of these components. Many donors are supporting various aspects of these components to enable Rwanda's aspiration of becoming the continent's innovation hub. While Rwanda has been working diligently to make this aspiration a reality for the past 10 years, it needs to work even harder to maintain and to add on to its hard-earned position, as many other countries in Africa are poised to becoming the innovation hub of the continent.

Within last 10 years, Rwanda has seen many progresses is in the components which make up the innovation ecosystem. The ICT infrastructure certainly saw significant progress. The dividend of investing in the national fiber optical backbone was rewarded strongly which enabled big boost in the international Internet bandwidth and expansion of 4G LTE services. The smart device affordability and Internet affordability is still a major challenge for many of its citizens but underlying national ICT infrastructure is well established and, in this regards, Rwanda's progressive investment in the mid 2000's in the critical national ICT infrastructure was well rewarded. FTTH service is also growing rapidly in Kigali which is also one of the results from the well-established national and metropolitan fiber backbones. One of the potential concerns about the future expandability of the ICT infrastructure, however, is the introduction of the next generation mobile technologies. In order to expedite 4G LTE introduction, Rwanda has opted to give an exclusive arrangement for 25 years to one service provider for service provision for 4G technologies and beyond. While the service provider is restricted from providing consumer services by the regulatory

decision, this arrangement does not allow competition in the introduction of future mobile technologies. This may hinder smooth introduction of new mobile communication technologies which many other countries are embarking on.

Another component which Rwanda saw big improvement in the last decade is attracting premier STEM related R&D facilities/institutions of higher learning. African Institute of Mathematical Sciences (AIMS), Carnegie-Mellon University Africa (CMU-A), African Leadership University (ALU), East African Institute for Fundamental Research (EAIFR), and others are now establishing themselves in Africa. Rwanda is said to be negotiating with a leading vaccine research/manufacturing company to establish a vaccine facility in Rwanda as well. These facilities are attracting talents beyond Rwanda and if Rwanda will be successful in retaining these talents in Rwanda, it will certainly enhance Rwanda's capacity in the area of innovations.

Another component in the innovation ecosystem, social-economic condition remains to be strong. Many citizens understand the importance of ICT as a pillar of Rwanda's development, and this was certainly reinforced during the COVID-19 pandemic and resultant lock-down. The underlying ICT infrastructure and various different ICT enabled services were essential in continuing the socio-economic activities in Rwanda. During the lock-down, many citizens utilized mobile money for transactions and relied on public and private e-services. Some key ICT stakeholders, however, have pointed out potential waning of interests in the area of ICT enabled development by citing the examples of diversification of Rwanda's economic development strategies beyond ICT in the past 5 years. While the diversification is certainly true that such sectors as tourism, finance, and others are gaining importance in Rwanda, it is important to note that these sectors rely on foundational ICT infrastructures and services which Rwanda has invested heavily in the past 20 years.

While not as successful as other components, one component which has seen steady improvement in the past 5 years is financing. While many stakeholders still point out the weakness in this area, there are various different initiatives to mitigate this weakness. Much anticipated Innovation Fund was finally launched in November 2021 and some other financing initiatives have been steadily made available to Rwandan innovators. Rwanda's another ambition to become a financial hub for African continent is also expected to help mitigate the weak financing opportunities. In spite of this progress, many external investors are also looking at investing opportunities in other African countries. If Rwanda could not produce many investable opportunities, other knowledge economies in Africa could pose serious competitions for the financing opportunities and for the Rwandan innovation ecosystem.

The policy environment is a component of the innovation ecosystem which JICA has been supporting for more than a decade in Rwanda. During the past 10 years, Rwanda has seen positive developments in this area where more policies and regulations are formulated and implemented by the relevant Government institutions themselves without relying on consultants. However, many ICT related officers in the Government Ministries and the associated agencies came from technical backgrounds with limited knowledge in the policy area and in the leadership and management skills. As such, the capacities of the ministry officers need further strengthening to ensure that appropriate policies are formulated and implemented in Rwanda. Continuation of JICA support in the policy area, thus, should be beneficial. JICA is already taking the lead in the area through its support of Sector Working Group and having OJT and structured capacity development initiatives. As the needs are still numerous and various capacity building supports are provided to the counterpart institutions by different developmental partners, it is prudent to have the SWG to coordinate among the development partners to provide holistic but non-redundant capacity building supports.

Market environment is another area which has seen continued progress in the past 10 years, but more efforts need to be done. Rwandan Government made strategic decision and utilized its diplomatic ties fully to connect with various different African countries which wanted to learn from the Rwanda's progresses, especially in the area of ICT for Development. In the same token, Rwanda has utilized both regional and international organizations in the area of ICT to its strategic

advantage where it is giving international recognition of Rwanda as an "ICT-enabled nation." Co-chairmanship of UN Broadband commission, Chairmanship of Smart Africa Secretariat, membership of strategic positions at the International Telecommunications Union (ITU) and the African Telecommunications Union (ATU) are some of the examples of these strategic regional and international connections which the Government have been forging and the ones which have brought in market connections. There are some encouraging results based on these connections where some Rwandan ICT companies have been expanding their services to countries such as Cote d'Ivoire, Ghana, Congo Brazaville, etc.

Connection with Japanese technologies markets/companies, which JICA has been supporting for the past 10 years, considerable visibilities have been made which attracted great interests from both Rwandan ICT sector and Japanese ICT sector. This development has been evident when typing "Rwanda" in Japanese at a web search engine would bring much brighter images of Rwanda along with the title, "ICT enabled country." Continuous efforts by both Rwandan and Japanese private, public, municipality, and academic stakeholders made this positive change possible and JICA's support has been the catalyst for this positive changes. The ICT Project itself also promoted connections between these two markets through organizing visits by both Rwandan and Japanese ICT companies and conducting innovative POC support for joint initiative to forge closer ties between Rwandan and Japanese companies. These support initiatives have certainly elevated the notion of Rwanda as a gateway to the African Market and POC country in Japan. However, due partly by the restrictions and slow-down posed by the COVID-19 pandemic, concrete next steps beyond the POC conducted, and MOU and LOI signed between Rwandan and Japanese companies have been difficult to materialize.

Some other development partners such as Germany, China, and Israel have also followed JICA's initiative and seek to connect Rwandan companies, services, and products to their respective markets either through electronic means (e.g.; e-commerce) or forging ties between technology companies. These initiatives are encouraging for Rwanda; however, Rwanda needs to establish itself as the African Gateway for foreign markets which is yet to be materialized. While the expectations are high, concrete cases of foreign companies to partner with Rwandan companies to enter into other African markets are still few. Companies such as BboxX, Zipline, Babyl, Inkomoko are some of the examples which successfully utilized Rwanda as POC venue and now expanded their businesses to other African markets. These examples need to be expanded through furnishing proper incentive mechanisms as many foreign companies currently seem to see limited benefits of going through Rwanda to enter into other African markets. The situation may improve when the Kigali International Financial Center and Kigali Innovation City mature and could provide appropriate incentives that would enable both African and foreign companies to establish their subsidiaries and/or headquarters in Rwanda. However, Rwanda needs also to fight for this position as many other countries are seeking similar position and lure foreign companies with different incentive mechanisms.

One of the components which Rwanda has continuously and diligently been working on for over two decades is the human capacity development and talents development. This component requires many layers of strengthening and require vast amount of resources. There were many strategies and policies to support the implementation of ICT capacity development initiatives which range from pre-primary to globally competitive high-skilled ICT professionals. With this emphasis, many development partners have continuously supported IT related human capacity development initiatives. While Rwanda has seen impressive advance in creating these capacities, the component remains to be one of the weakest within the innovation ecosystem.

Rwanda is steadily producing talents from higher-level education institutions which include both private and public education institutions such as IPRCs, University of Rwanda (UR), Adventist University, Carnegie-Mellon University Africa (CMU-A), African Leadership University (ALU), African Institute of Mathematical Science (AIMS) and other premier institutions. However, the quality and the number of the talents are not matching the demands. Many international investors

and firms have looked into Rwanda to recruit more high-skilled talents and invest in startups but are struggling to find these talents. The JICA Project has tackled this challenge and help Rwanda to create 250STARTUPS, an in-house startups incubation mechanism, and supported POC initiative by kLab to create feeder mechanism of idea to MVPs. These mechanisms are certainly helpful to create overall talent pool and companies with future growth potentials. The results of the past 4 years of the Project support have been encouraging with many of the companies have survived and thrived after the incubation. However, continued and more concerted efforts by the Rwandan counterparts need to be conducted to grow talents pool and investable companies.

In order to augment some the shortage of domestic talents, Rwanda has been working on recruiting talents from other African countries to both study in these institutions and to engage in the professional activities which include establishing startups. This strategy has been taken by other countries such as Morocco and Tunisia so it is not new, but it may be well suited for Rwanda as these talents also bring-in market and business connections to their home countries. Already many talents come to Rwanda to attend world-class academic and research institutions in Rwanda and these talents need to be encouraged and facilitated to either start businesses in Rwanda or to work in Rwanda to expand the much-needed talent pool in Rwanda.

Anecdotal evidence also suggests that during the COVID-19 pandemic, growing number of African professionals who decided to conduct "work-ation" in Rwanda. As Rwanda had strict measures of controlling pandemic along with being a country with safe, clean, and working infrastructure, many professionals opted to be in Kigali. Creating conducive regulations to encourage more of these professionals to establish in Rwanda could also be ways to expand the talent pools in Rwanda.

One point of concern in Rwanda is waning "hungriness" of youth. Over the past 10 years, it has been observed that the eagerness of Rwandan youth to fight to get various different opportunities seem to be slowing down. The situation needs to be studied more closely as it is anecdotal evidence and different contexts, such as gap between urban and rural youth and socio-economic backgrounds of these youth, need to be factored in. Having said that, in contrast to a decade ago, there seems to be less eager youth and students who are going out of their ways to seek out different opportunities to enrich their skills and/or to enhance their careers. Instead, many youth seems to cherry pick opportunities and, unless there are extra incentives beyond the contents of the services offered, they are less eager to take these opportunities. This may be partly the fault of the development and other external supporters which are too eager to support Rwanda in the area of ICT development. However, this could be dangerous trend as youth in other African countries are aggressively asserting to get any opportunities available for them to excel. If Rwandan youth falls into a pitfall of thinking these supports as entitlement, rather than privileges, all the gains that Rwanda diligently accumulated during the last 20 years could be in vain and will be quickly taken over by other aspiring countries.

While as a stakeholder it is not explicitly specified within the ecosystem components, the role of ICT private sector in Rwanda as a major driver for the innovation ecosystem in Rwanda should deserve special recognition. ICT Private sector was not as organized as where it currently is a decade ago but is now recognized as one of the most active sectors in the country. The role of ICT industrial association, the ICT Chamber, also grew steadily as an able and trusted partner of Rwanda's development in the past decade. It is worth mentioning that JICA has been supporting the ICT sector to organize itself from its inception and was instrumental in helping the ICT private sector plays increasingly important roles in shaping and developing the ICT related strategies, policies and innovation ecosystem as a whole in Rwanda. The active role of which the ICT chamber and the sector as a whole take in Rwanda has been recognized by several other countries where the private sector has not had a similar role. The relationship between Government and the ICT chamber in Rwanda, for example, is not simple dichotomy between private sector and public sector. Rather the relationship is symbiotic, and the sector is regarded as a major development partner to the country's development.

Lastly, the role of Government and the lasting support of the top-leadership for the ICT led development are very unique in Rwanda and that had contributed greatly to the recognition of Rwanda as one of the leading ICT savvy countries in the world. During the turn of the last century, many developing countries have attempted to use ICT as a key pillar for their development. However, after many development partners waned their support in 2005 when the World Summit on Information Society (WSIS) process ended, many developing countries shifted their development pillar to other sectors. Rwanda, on the other hand, kept ICT as a pillar of its development and even expanded the investment in the area during that time. This was made possible by the strong supports from the top leaderships in the Government which included President. If Rwanda did not have this level of support from the top-leaderships, many infrastructure projects between 2005-2010 would not have materialized and Rwanda would have had difficult time capitalizing these ICT infrastructures to further ICT led development gains in the subsequent decade of 2010-2020. Another critical activity which the Government has continued to implement is advocacy about the importance of ICT to both domestic and international stakeholders. These advocacy activities were instrumental in gaining sustained support from its citizens about the country's investment in the area of ICT, as well as getting continued support from the development partners for Rwanda's ICT initiatives when many of the development partners slowed down in their support in the ICT area.

Rwandan Government as a lead in ICT led development and digital transformation is continuing to play important role now. The Government's generally strategic approaches to promoting the ICT sector and digital transformation have been instrumental in receiving much needed investments and development partner support. Another important aspect of Rwanda is that these investments and supports are being properly utilized and most of the intended outcomes and impacts could be obtained without too many hindrances. These give confidences to the external partners about investing/supporting Rwanda's ICT for development/digital transformation activities.

2 Prospects to achieve Overall Goal

Innovation Ecosystem is constantly evolving with many stakeholders and actors are pushing its boundary. No one stakeholder could achieve creation and strengthening of the innovation ecosystem in one country and, thus, it is very important to create an environment of co-competition among the stakeholders. In this respect, it is important to strengthen various different components of the innovation ecosystem which would become foundation for the stakeholders to build onto it. The Project identified 3 key components within the innovation ecosystem and supported their development. In the area of human capacity building, the Project supported creation of innovation centers in the secondary cities and academic institution to spur future growth of innovation from countryside. These centers are expected to foster future innovators and entrepreneurs who would realize their idea into creating new services and products to solve various social challenges and to contribute to economic gain through monetizing these solutions. In the same token, creation of ideation and innovation mechanisms through kLab and 250STARTUPS programme were seen as an important step to expand the capable human resource base in Rwanda and resultant emergence of innovative companies in the future. The Project also supported creation of high skilled Fabmasters. While the completion rate for the Fabmaster course was less than stellar, the skills acquired from the course works are hoped to be utilized to support Innovation communities in Rwanda.

Strengthening the Government capacity for policy formulation and implementation is also one of the supports which is hoped to have prolonged positive effects to the innovation ecosystem in Rwanda. The Project used mix of online and off-line (physical) trainings for the relevant Government officers. Understanding of policy formulation processes which were learned both on the job type training and online/offline structured trainings within the Project are essential for many of the Government officials who came from non-policy technical background. It is hoped that the skills acquired will be used to formulate and implement appropriate policies to strengthen innovation ecosystem.

The Project's support to strengthen Rwandan private sector and to connect them with Japanese companies is also expected to have lasting impact. The networking initiative itself was carried over from the previous JICA support but amount of resources and activities which the Project has supported are unprecedented. Over the course of the year, JICA support to advocate Rwanda's ICT potential to the Japanese market has been well recognized. Rwanda's reputation as a premier innovation country in Africa is growing especially among the innovation related companies in Japan. Some of the POC initiatives which the Project supported between Japanese and Rwandan companies are also moving to the next stage of expansion which were not possible without the initial support provided from the POC scheme. Many Japanese companies are risk averse and the POC scheme certainly helped them to take first steps of entering African market and working with Rwandan companies. Due to the COVID-19 pandemic and difficulty conducting joint initiatives, the POC may not have achieved more success than initially thought, however, the scheme and also the experiences of connecting with Japanese market and companies can be expanded beyond Japanese market to other markets which would support Project's overall goal of strengthening ICT sector which contribute to the economic growth in Rwanda.

Advocacy activities within in the Project has also been instrumental in promoting the Project's results and Rwanda's potential as a POC country and regional innovation hub. Such international fora as Transform Africa Summit, TICAD-7, IGF, and others have been used to advocate to the international audiences. Domestic advocacy was not as advanced as international advocacy opportunities, however, toward the end of the Project implementation, several domestic advocacy initiatives were made in support of the Japanese embassy and JICA country office. The domestic advocacy to the citizens is important to receive continuous support for expanding ICT enabled development in Rwanda. The domestic advocacy also showcased how ICT was instrumental in the past 20 years of Rwanda's development as well as how it was instrumental in mitigating the effects of COVI-19 Pandemic. The popular support for the ICT enabled development is important to enable the results attained by the Government and the Project to be further expanded.

As has been explained in this section, the Project has attained various different results which would be used as foundations to further strengthen the innovation ecosystem in Rwanda. Some of the Project results (e.g.; innovation center action plan) have already shown some multiplier effects when they are used by the counterpart organizations to receive more support from development partners to the innovation ecosystem.

3 Plan of Operation and Implementation Structure of the Rwandan side to achieve Overall Goal

The Project is leaving behind several concrete schema to advance many innovation-oriented initiatives to move forward. The Ministry of ICT and innovations, for example, has promised to make the 250STARTUPS programme to continue beyond the project duration and the innovation centers in the secondary cities (except the one established at the ASYV which is supported by the school itself) are also supported by RISA, RDB, and local Government for their continued operations beyond the Project duration. Many of these initiatives, however, need to find additional resources to be able to make them fully functional and sustainable. While the JICA's second phase ICT Technical Assistance Project will continue to extend support for several of these initiatives, it is essential for Rwandan counterparts to seek additional support from different development partners. The Project acknowledges that the possibility of further supports is already being discussed with several different partners. This effort should be accelerated to not lose the momentum of the initiatives.

As for the equipment procured under the Project, the Project will hand them over to RISA which will take responsibility of the equipment. In addition, an arrangement is being signed between RISA, FabLab Kigali, and the Project to provide concrete support to the fab community in the innovation centers in the secondary cities in lieu of reimbursing the Fabmaster course's scholarship for participants who have failed to finish the course.

4 Recommendations for the Rwandan counterparts

In order to continue some of the gains attained by the Project and to further strengthen innovation ecosystem, it is important that Rwandan side to actively involved in implementation and necessary resource mobilization, both monetary and human resources, for the various different initiatives. It is particularly important to secure adequate resources for the Output 1.1, Output 1.2, and Output 3 related activities. JICA's second phase project is expected to cover some of the activities within the Output 1.1 (e.g.; support for further training and use of the innovation centers) but its modality is still uncertain and the Rwandan side needs to take a lead in supporting the centers. In the same manner, while the Ministry has promised JICA that the 250STARTUPS programme within the Output 1.2 would continue to be supported, seeing how difficult it was to secure permanent venue of the 250STARTUPS programme, Rwandan side needs to step up its efforts to secure necessary resources, including soliciting other development partners to provide resources, to continue and strengthen the Rwandan national incubation mechanism.

As for the Output3, main support within the ICT Project for strengthening partnerships between Japanese and Rwandan companies came to fruition. There are several other mechanisms within JICA office to promote Japanese private sector to expand its outreach to Rwanda and that could be tied with partnering with Rwandan ICT companies. However, direct support to connect ICT Sectors of these two countries, which were provided by this and previous ICT Projects, is not expected to continue in the same manner. As the support has been carried out in Rwanda for more than 8 years, it is high time for the Rwandan side to take over the partnership initiative from Project format and to further elevate these partnerships to a new level.

As for the Output 4, Rwanda Model of ICT for Development is compiled into a format of primer (and associated infographics) which consists of 5 volumes consisting of 5 themes which are ICT Policy, ICT Institutions, ICT Infrastructure, Human Resource Development, and Private Sector Development. The format was chosen to facilitate understanding by both domestic stakeholders, envisioned mainly as a learning tool for the new leaderships and officers of the Government who have little knowledge of history and background of Rwanda's ICT for Development journey, and for the international stakeholders which would like to learn from the experiences and lesson-learned from Rwandan journey. The 5 volume primers will bring the readers backwards from the year 1998, when Rwanda began its ICT ambitions to the year 2020 when it has attained remarkable achievement. The primers document blend of the key strategic actions which the Government of Rwanda has undertaken during the course of last two decades from testimonials of key movers and pushers who were behind these actions.

The Primers are expected to be distributed in variety of fora both internationally and domestically. Through sharing Rwandan past experiences and lessons learned with other countries, it is also expected that the position of Rwanda as an innovation hub for the continent will be strengthened as a forerunner of ICT led transformation in the continent.

Reflecting above recommendations, during the Project's final reporting meeting on 11th of February 2022, following JCC recommendations were adapted as follow-up activities beyond the Project duration:

Output 1: Promotion of ICT Innovation

[1-1 Innovation Centers Expansion/Strengthening]

1. Complete creation of action/business-oriented plan for each Innovation Hub/FabLabs:
The project/business-oriented plan shall be built onto the project supported action plans with specific goal and potential sustainability scheme that would also contribute to the collective goal among all three innovation hubs in a long run.

2. Strengthen capacities of three Innovation Hubs/FabLabs both individually and collectively to enable management of the Hubs sustainably:
These include logistics such as a flow of consumables, maintenance mechanism, control of membership and registration of users, and finally to establish overall governance framework for each Hub.
3. Create culture of innovations and entrepreneurships at each Innovation Hubs/FabLabs:
It is important to mainstream both Innovation and entrepreneurship at both Hub's management level and at individual FabLab users' level.
4. Establish mechanism for maintenance of FabLab machines and equipment in all Innovation Hubs:
Create mechanism which would allow Hub staff and power-members to maintain equipment themselves.
5. Create community of Innovation Hubs/FabLabs users:
Community of users shall have fundamental rules and regulations of conducts as well as organizational culture of mentorship and sense of community in each Innovation Hub towards better care of equipment and machine.
6. Share skills and knowledge based on the experiences of all Innovation Hubs/FabLabs:
The sharing knowledge shall include all hubs that include FabLab Kigali through open dialogue, workshops and continuous on-site trainings.
7. Create local training program to be run at each Innovation Hub/FabLabs:
The training program at each Innovation Hub/FabLabs shall be created in coordination with the forthcoming Fab-X (in-country contextualized program.

[1-2/1-3 Incubation Support [250STARTUPS]

1. Seek active involvement of the counterpart in operation:
The project was successfully developed the capacity of the staff and established the cohesive team for operation of 250STARTUPS. However, it was mostly operated by local staff hired by the project, though the counterpart organizations have contributed whatever they can. Therefore, it may be unfortunately difficult to keep running the program after the project completion unless the counterpart organizations find a way to secure resources to keep the staff for the program.
2. Create funnel structure (feeder mechanism for innovators):
Under the assumption that Rwanda has many pre-seed startups with ideas and prototypes but without knowing how to do business, the Project supported ICT Chamber to develop 250STARTUPS to grow startups from pre-seed to investable level. However, it was always a concern whether the program was able to secure 10 good startups per cohort as it was difficult to find startups at the right level for the program. Also, the startups completed our program, who successfully made a business plan and obtained some paying customers, still need support for the expansion of their businesses. Therefore, it is important to increase the number of pre-seed level startups perhaps in collaboration with colleges and universities and to strengthen the connection with investors and other incubators, though the Project already developed the funnel structure with some of the academia and incubation organizations.

Output 2: Formulation of Policy Framework

[Institutional Capacity Building/Formulation of Policy Framework]

1. Support Policy, Management, Leadership and Team-building related trainings/sessions in intensive manners for the Ministerial officers and relevant stakeholders:
2. Establish strong SWG coordination mechanism along with clear sector work plan:

The SWG is a key to coordinating different initiatives supported by donor partners

Output 3: Business Matching b/w Rwanda and Japan

[Business Matching between Rwanda and Japan]

1. Continue Business ties with Japan through private sector initiatives:
Forming a council that formed by different stakeholders aiming to be core to monitor progress of engagements and discussions will be necessary.
2. Replicate POC between Rwandan companies and companies outside:
The POC was a novel way of forging partnerships between different economies. This may be replicated by other partners

Output 4: Disseminating Experience of the Project

[Disseminate experiences of the Project]

1. Disseminate ICT for Development experiences of Rwanda in the past 20 years both internal stakeholders and external partners:
Disseminating Rwandan experience to other countries could allow other countries learn from Rwandan experiences and at the same time would allow Rwanda to reinforce its position as an ICT/POC hub of the continent. Moreover, the experience could be utilized as a reflection of Rwandan achievements internally and become basis for discussion to formulate how Rwanda should proceed with ICT enabled development in the next decade.

General: Management Structure of the Project
[Management structure of the Project]

1. Continue activities with Project Secretariat to prepare for forthcoming second phase Project:
Project Secretariat was instrumental in coordinating the Project. The Project Secretariat should continue its activities and create a plan for the second phase project to allow smooth commencement of the second phase of the Project

Implementation of these recommendations by the Project counterparts are essential to continue and expand the results obtained by the Project and also to prepare for the smooth launch of the forthcoming second phase of the JICA supported ICT/Digital Transformation Project.

5 Monitoring Plan from the end of the Project to Ex-post Evaluation

As the ICT Innovation Ecosystem Strengthening Project will have second phase of the Project, which is planned to start on May 2022, some of the activities conducted by the current phase of the Project will be either strengthened or have close linkage with future activities. In particular, innovation centers are expected to have further assistance in terms of strengthening their operational capacities (most notably human resource capacity building activities). In the same manner, capacity building activities for the Policy makers and implementers, and utilization of private sector (including startups) to come up with innovative service and products using data have linkage with the current Project's Output 1.2 and Output 2 related activities. Since the new Project is expected to build onto the results of the current Project, it is expected that the new Project will continue to monitor the Project's results beyond the current Project.

For the Output 3 related activities, since the new Project will not directly cater for this part, JICA Rwanda country office's private sector support team may be able to monitor the development of Japan-Rwanda private sector partnerships in the area of ICT. There are already several Japanese ICT companies which benefits from JICA's SME/SDG business support mechanism in Rwanda

and some of them continued Rwandan and African opportunities through conducting POC scheme under the Project.

ANNEXES

ANNEX-1： List of Experts
ANNEX-2： List of Counterpart
ANNEX-3： List of Training
ANNEX-4： List of Equipment
ANNEX-5： List of Products
ANNEX-6： PDM
ANNEX-7： PO
ANNEX-8： Minutes of JCC Meeting

ANNEX-1： List of Experts

Title		Name		Person-month	
1	Chief Advisor /ICT	1.	Atsushi Yamanaka	18.18	18.38
2	Socio-Economic Research/Project Management	2.	Takuya Okada	4.50	9.04
		3.	Ryuichi Nishiyama	4.54	
3	Incubation Support 1	4.	Shinobu Shimokoshi	15.72	15.72
4	IOT System	5.	Tomoaki Watanabe	0.33	0.33
5	Designer 1 (Corporate Branding, Corporate Strategy for Japan)	6.	Hiroshi Nakamura	1.83	1.83
6	Designer 2 (Design Thinking)	7.	Atsushi Suzuki	1.23	1.23
7	⑦ Sector Specialist 2_ ICT Business	8.	Kenji Fukuoka	2.46	2.46
8	⑧ Sector Specialist 3_ Product Development	9.	Caven Cade Mitchell	3.20	3.20
9	⑩Sector Specialist 4_Agriculture	10.	Naoto Nitta	0.70	0.70
10	Open Innovation	11.	Tomoaki Watanabe	3.72	3.72
11	Digital Fabrication	12.	Shohei Aoki	0.97	4.43
		13.	Masato Takemura	3.46	
12	Investment Promotion Advisor	14.	Yasushi Sawamura	1.27	8.70
		15.	Samuel Imanishimwe	7.43	
13	Networking/Project Coordinator	16.	Sumyung Kaise	14.07	14.07
14	Case Study Survey / Training Coordinator1	17.	Rena Mizuno	1.70	1.70
15	Case Study Survey / Monitoring	18.	Rena Mizuno	0.90	0.90
16	Training Coordinator2/ Project Coordinator	19.	Takahiro Umeda	2.30	2.30
17	Training Coordinator	20.	Takahiro Umeda	3.40	9.22
		21.	Shinga Kimura	2.65	
		22.	Maki Mitsuoka	3.17	
18	Procurement Coordinator	23.	Aiko Hatano	1.90	1.90
19	Rwanda Model	24.	Tsuyoshi Kano	1.00	1.00
(Total)				100.63	100.63

ANNEX-2 : List of Counterpart

(1) **Ministry of ICT and Innovation (MINICT)**

Name	Organisation
Mr. Yves Iradukunda	Project Director of GEMS Secretary General
Ms. Esther Kunda	Director General of Innovation & Emerging Technologies
Mr. Diane Kamili	Sector Working Group Coordinator

(2) **Rwanda Information Society Authority (RISA)**

Name	Organisation
Mr. Muhizi Bagamba Innocent	Chief Executive Officer
Mr. Antoine SEBERA	Government Chief Innovation Officer
Dr. Said Ngoga Rutabayiro	Division Manager, Technology Innovations

(3) **Rwanda Development Board (RDB)**

Name	Organisation
Mr. Guy Baron	Chief Innovation Officer
Ms. Tesi Rusagara	Managing Director of Kigali Innovation City

(4) **ICT Chamber**

Name	Organisation
Mr. Clement Uwajeneza	Chairman
Mr. Alex Ntale	Chief Executive Officer
Mr. Danny Bizimana	Managing Director of FabLab
Ms. Yeetah Kamikazi	Managing Director of kLab

(5) **External Advisors**

Name	Organisation
Mr. Didier Nkurikiyimfura	Chief Technology and Innovation Officer of Smart Africa
Mr. Grace Nyakanini	Project Manager of Smart Africa
Dr. Ernest Nsabimana	Director General of Rwanda Utilities Regulatory Authority (RURA)
Dr. Eugene Mutimura	Executive Secretary of National Council for Science and Technology (NCST)
Dr. Ignace Gatare	Principal of UR College of Science and Technology
Dr. Tim Brown	Director of Academics & Research of Carnegie Mellon University Africa

ANNEX-3： List of Training

Training in Japan

Training Name	Period	Participants
Trip to Japan (250STARTUPS 1st Cohort)	19 January to 27 January 2019	Raisin Ltd.: Mr. Kalisa Olivier Rinda Hatch Plus Ltd.: Mr. Imani Bora eJobu Ltd.: Mr. Samuel Tuyizere Extra Technologies Ltd.: Mr. Frank Muhiza O'genius Priority Ltd.: Mr. Igiraneza Origene
Trip to Japan (250STARTUPS 2nd Cohort)	7 September to 15 September 2019	HealthEdu Ltd.: Ms. Agnes Kubwimana North Harvest Ltd.: Mr. Iragena Segond Fidens SOLVE IT Ltd.: Mr. Semafara Joseph Techadopter Ltd.: Mr. Niyonshuti Israel IOTAR Ltd.: Mr. Rindiro Guy Bruce Olado Business Group Ltd.: Ms. Uwizeye Tadhim
Trip to Japan (250STARTUPS 3rd Cohort)	17 January to 27 January 2020	FarmPal Ltd.: Mr. Mateso Lumiere Materne Aqua Safi Ltd.: Mr. Safari Eric Moilla Ltd.: Ms. Nyimawumuntu Yvonne Codeck Ltd.: Ms. Mwangaza Nuriath Ikizamini Online Ltd.: Mr. Muhigirwa Elisha
FabLab Technical Training in Hamamatsu Japan	18 January to 26 January 2020	Mr. Bizimana Danny (Rwandan Fab Manager) Mr. Rulindana Lambert (Rwandan Fab Instructor)

Training in Third Country Third Country)

Training Name	Period	Participants
Trip to Participate in the BRIDGE East Africa 2018 (250STARTUPS 1st Cohort)	19 January to 27 January 2019	Learners Hub: Mr. Richard Twahirwa Hafitek: Mr. Mwebesa Kenneth Twaza Logistics: Mr. Bazimya Saphani

Training in Rwanda

Date (start)	Date (end)	Venue	Training/Activity Title	No. of trainees	Type of Training	Trainees	Trainer
Output 1-1							
2018 / 1	2018 / 11	Online	Fab Academy Program 2018	5	Technical	Ziadi Nsabimana Reine Imanishimwe Jean Claude Hakizimana Samantha Ruzibiza Fred Rwema Inyarubuga	Fab Foundation
2019 / 1	2019 / 11	Online	Fab Academy Program 2019	5	Technical	Ariane Umuringa Danny Bizimana Kyomugisha Pamella Munyantebe Heritier NDACYAYISABA Raymond	Fab Foundation
2020 / 1	2020 / 11	Online	Fab Academy Program 2020	3	Technical	Samuel Rutunda Valens Muhayimana Dominique Savio UWAYEZU	Fab Foundation
2019 / 9 / 30	2019 / 10 / 3	Westerwelle Startup Haus Kigali	Innovation Hub Management Training Program	11	Management	Potential future management staff of the Rwanda's Innovation Hubs	JICA Expert
2021 / 3	2021 / 3	Innovation Hub/Center ASYV	Installation Assistance ASYV	3	Technical	Innovation Hub Manager and its staff	FabLab Kigali
2021 / 4	2021 / 4	Innovation Hub/Center Huye	Installation Assistance Huye	7	Technical	Innovation Hub Manager and its staff	FabLab Kigali
2021 / 12	2022 / 1	Innovation Hub /Center Musanze	Installation Assistance Musanze	13	Technical	Innovation Hub Manager and its staff	FabLab Kigali
2021 / 10	2021 / 10	Conference Room ASYV	Capacity Building Training for Huye, ASYV and Musanze	28	Workshop Seminar	FabLab Users, and Hub Manager and ICT technician	RISA JICA Experts FabLab Kigali

Date (start)	Date (end)	Venue	Training/Activity Title	No. of trainees	Type of Training	Trainees	Trainer
2021 / 11	2021 / 12	Innovation Hub/Center ASYV	Initial Training for ASYV	9	Technical	FabLab Users, and Hub Managers and ICT technician	FabLab Kigali
2021 / 6	2021 / 6	Innovation Hub/Center Huye	Initial Training for Huye	15	Technical	FabLab Users, and Hub Manager and ICT technician	FabLab Kigali
2021 / 12 / 20	2022 / 1 / 14	Innovation Hub /Center Musanze	Initial Training for Musanze	19	Technical	FabLab Users, and Hub Manger and ICT technician	FabLab Kigali
2022 / 2	2022 / 2	Innovation Hub/Center ASYV	Follow Up Training ASYV	3	Technical	FabLab Users, and Hub Manager and ICT technician	FabLab Kigali
2022 / 2	2022 / 2	Innovation Hub/Center Huye	Follow Up Training Huye	13	Technical	FabLab Users, and Hub Manager and ICT technician	FabLab Kigali
2022 / 2	2022 / 2	Innovation Hub/Center Musanze	Follow Up Training Musanze	12	Technical	FabLab Users, and Hub Manager and ICT technician	FabLab Kigali
2021 / 10	2022 / 1	kLab	kLab-StartUp Academy-	45	Technical	7 tech entrepreneurs and 38 university students.	FabLab Kigali
Output 1-2							
2018 / 6 / 25	2018 / 12 / 19	Incubation center Kicukiro	250STARTUPS Incubation Support Program 1st Cohort	8 companies	Incubation	8 Startup Companies	JICA Expert RUMA Consulting KIRUNGI & CO. National Consultant External Trainer
2019 / 3 / 4	2019 / 8 / 16	Incubation center Telecom House	250STARTUPS Incubation Support Program 2nd Cohort	10 companies	Incubation	10 Startup Companies	JICA Expert National Consultant External Trainer
2019 / 7 / 16	2020 / 1 / 15	Incubation center	250STARTUPS Incubation Support Program 3rd Cohort	10 companies	Incubation	10 Startup Companies	JICA Expert National Consultant External Trainer

Date (start)	Date (end)	Venue	Training/Activity Title	No. of trainees	Type of Training	Trainees	Trainer
		Telecom House					
2020 / 1 / 16	2020 / 10 / 15	Incubation center Telecom House	250STARTUPS Incubation Support Program 4th Cohort	10 companies	Incubation	10 Startup Companies	JICA Expert National Consultant External Trainer
2021 / 1 / 11	2021 / 10 / 31	Online/Incubation center Remera Corner	250STARTUPS Incubation Support Program 5th Cohort	10 companies	Incubation	10 Startup Companies	JICA Expert National Consultant External Trainer
2021 / 10 / 8	2022 / 1 / 31	Incubation center Remera Corner	250STARTUPS Incubation Support Program 6th Cohort	10 companies	Incubation	10 Startup Companies	JICA Expert National Consultant External Trainer
Output 2							
2020 / 2 / 27	2020 / 2 / 28	Pension Plaza RSSB	Effective Writing Class	10	Management	Officers of MINICT	Kumva Consluting
2020 / 3 / 5	2020 / 3 / 6	Mariotte Hotel	Policy Development Training	16	Management	Officers of MINICT, RISA, RURA, NIDA, KIC, NPOA	Strathmore University Business School (SBS)
2020 / 3 / 13	2020 / 3 / 13	Pension Plaza RSSB	Research and Data Analysis	6	Management	Officers of MINICT	EPRN
2020 / 4 / 21	2021 / 3 / 15	Online	For MINICT- JICA Training Program Leadership Essentials	37	Management	Officers of MINICT, RISA, Other affiliated agencies	Udemy for Government
2021 / 2 / 18	2021 / 2 / 19	Online	Leadership Training	14	Management	Officers of MINICT	KORA Coaching Group Limited
2020 / 11 /	2021 / 2	Online	Project Management Training	8	Management	Officers of MINICT, RISA	Imvano Resource Center (IREC)
2021 / 2	2021 / 2	Online	Building University-Industry Relationships	5	Management	MINIC NCST NIRDA	Oxenia

Date (start)	Date (end)	Venue	Training/Activity Title	No. of trainees	Type of Training	Trainees	Trainer
						University of Rwanda	
Output 3							
2019 / 1 28	2019 / 5 / 30	Kigali Serena Hotel	Consultancy to Implement Corporate Governance to Enhance Member Entity Profiling of the ICT Chamber	15	Management	15 Rwandan Private Companies	PricewaterhouseCoopers Rwanda Limited
2019 / 6 13	2019 / 6 / 21	Digital Transformation Center Kigali	Company Branding Strategy	15	Management	15 Rwandan Private Companies	JICA Expert

Event & Seminar

Date	Organizer / Logistic Support/	Event Name	No. of participant	Country	Venue
2018/05/08-05/11	Facilitator/Panelist/exhibition	Transform Africa Summit 2018	4,000	Rwanda	Kigali
2018/7/24-7/25	Logistic Support	The Public Private Sector Joint Mission for Promoting Trade and Investment in Africa	50	Rwanda	Kigali
2018/10/08-2018/10/10	Exhibition	Youthconnekt 2018	10,000	Rwanda	Kigali
2018/11/10-11/13	Logistic Support	Kobe Africa Business Mission visits Rwanda	20	Rwanda	Kigali
2019/1/6-1/13	Logistic Support	INVEST-KIC TOKYO 2019 Roadshow	40	Japan	Tokyo
2019/5/15	Organizer	Japan-Rwanda ICT Business Matching Event	50	Rwanda	The Residence of Ambassador of Japan to Rwanda
2019/05/14-05/17	Facilitator/Panelist/exhibition	Transform Africa Summit 2019	4,000	Rwanda	Kigali
2019/8/26	Co-Organizer with UNIDO	Rwanda ICT & Innovation Forum	80	Japan	Tokyo (United Nations University)
2019/8/28-8/30	Organizer	TICAD7 Business Mission	23	Japan	Yokohama
2019/10/09-10/12	Exhibition	Youthconnekt 2019	10,000	Rwanda	Kigali

Date	Organizer / Logistic Support/	Event Name	No. of participant	Country	Venue
2020/2/3-2/7	Organizer	Japan-Rwanda Business Mission	7	Rwanda	Kigali
2020/06/24-06/25	Panelist	Africa Cyber Defense Forum	4,000+	Virtual (Kenya)	Online
2020/8/19, 8/26,9/9,9/10	Organizer	Online Business Matching Seminar	343	Rwanda & Japan	Online
2020/11/09-11/12	Panelist	Africa Tech Festival 2020	10,000+	Virtual (South Africa)	Online
2021/12/01	Panelist	IGF 2021 WS #121 Platform economy: (post-pandemic) chances for SMEs	10,300	Virtual (Poland)	Hybrid
2021/12/11	Organization Support	Hanga Pitch Festival 2021	Few thousands	Rwanda	Kigali

ANNEX-4 : List of Equipment

Equipment Procured by ICT Project

No.	Equipment Name	Model	Quanti ty
1	Large Size CNC Router	ZK1325	2
2	Laser Cutter	LT-460L	2
3	Plasma Cutter	LT-1212	2
4	Small CNC Mill	4030Z	2
5	Vinyl Cutter	SDX1200	2
6	3D Scanner	Sense TM	2
7	Professional Grade 3D Printer （Brule ink Ultimaker3)	Ultimaker 3	2
8	Hobby Grade 3D Printer （Prusa i3 MK3S)	MK3S	6
9	Oscilloscope	SDS1202X-E	2
10	Power Supply 30V	HY3003D	2
11	LED Magnifying Lamp	L-678	2
12	Soldering Station	RX-802AS	4
13-1	Computerized Sewing Machine	PR670EC	2
13-2	Software for Embroidery and Sewing Machine	-	
13-3	Lock Sewing Machine	BL69WJ	
13-4	Sewing Machine	Exim-Pro 9600	
14	Laser Cutter	LT-460L	1
15	Small CNC Mill	4030Z	1
16	Vinyl Cutter	SDX1200	1
17	3D Scanner	Sense TM	1
18	Professional Grade 3D Printer	Ultimaker 3	1
19	Hobby Grade 3D Printer	MK3S	3
20	Oscilloscope	SDS1202X-E	1
21	Power Supply 30V	HY3003D	1
22	LED Magnifying Lamp	L-678	1
23	Soldering Station	RX-802AS	2
24-1	Computerized Sewing Machine	PR670EC	1
24-2	Software for Embroidery and Sewing Machine	-	
24-3	Lock Sewing Machine	BL69WJ	
24-4	Sewing Machine	Exim-Pro 9600	
25	Laptop Computer	HP Probook Intel Corei5 8CG50605SS	1
26	Laptop Computer	HP Probook Intel Corei5 5CD7340TOM	1

ANNEX-5 : List of Products

Periodical Reports

Title	Language	Year
Work Plan -Initial Plan	Japanese	2017
Monitoring Sheet No. 1	English	2018 (Jun)
Monitoring Sheet No. 2	English	2018 (Sep)
Monitoring Sheet No. 3	English	2019 (Mar)
Monitoring Sheet No. 4	English	2019 (Oct)
Monitoring Sheet No. 5	English	2020 (Aug)
Monitoring Sheet No. 6	English	2020 (Dec)
Monitoring Sheet No. 7	English	2021 (Feb)
Monitoring Sheet No. 8	English	2021 (Jun)

Output 1-1

Title	Language	Year
Action Plan for Tech-enabled Innovation Hubs/Centers and Expansion Strategy	English	2019
Q&M Manual (CNC Maintenance Manual, Laser Cutter Maintenance Manual)	English	2019
Equipment Training in Hamamatsu	English	2019
Management Training	English	2019
Capacity Building Training	English	2021
Awareness Program	English	2021
Initial Training	English	2021-2022
Follow-Up Training	English	2022
Fab Academy	English	2021-2022
Musanze Renovation	English	2021
Installation of Machine and Equipment	English	2021
Inspection and Hand Over document	English	2022
Basic Spar Parts and Security Measure	English	2022
CNC Router Maintenance Sheet	English	2022
Laser Cutter Maintenance Sheet	English	2022
Tutorial on the software for 2D design (Basic)	English	2022
Tutorial on software for 2D design (Advance)	English	2022
Inkscape Tutorial（Embroadery Machine、Laser Cutter、Data construction for cutting machine）	English	2022
Fusion360 Tutorial (Laser Cutter, Large CNC, Data construction for Plasma Cutter	English	2022
KLAB STARTUPS ACADEMY - Final Report	English	2022

Output 1-2

Title	Language	Year
1st Demo Day Presentations (1st cohort)	English	2018
2nd Demo Day Presentations (2nd cohort)	English	2019
3rd Demo Day Presentations (3rd cohort)	English	2020
4th Demo Day Presentations (4th & 5th cohort)	English	2021
5th Demo Day Presentations (6th cohort)	English	2022
List of MoUs concluded by 250STARTUPS	English	2022
Tracer Report (1st-3rd cohort)	English	2019-2021
Institutional framework	English	2022

Output 2

Title	Language	Year
ICT SECTOR WORKING GROUP COORDINATION_MANUAL	English	2022 (update)
Capacity Building Plan for MINICT	English	2019
MINICT English Assessment Final Report	English	2020
MINICT Policy Development Training Report	English	2020
MINICT Data Analysis Training Report	English	2020
MINICT Online Capacity Building Report Udemy_Government	English	2021
High_Level_Leadership_KORRA_Coaching Program).pdf	English	2021
Oxentia_online Building University-Industry Relationships Programme	English	2021

Output 3

Title	Language	Year
Business Trip Report by Yasushi Sawamura	English	2018
15 Rwandan Companies Profiling by PwC	English	2019
Assessment of Rwandan Companies	English	2019
Business Mission Report (Doreming, Gaiax, Landport, Rocket Battery/Cold Storage Japan)	English	2020
Pilot Project Final Report (Allm)	English	2019
Pilot Project Final Report (Beno Holdings)	English	2020
Pilot Project Final Report (D-Energy)	English	2021
Pilot Project Final Report (Guez Show)	English	2021
Pilot Project Final Report (GO)	English	2021
Pilot Project Final Report (ArkEdge)	English	2022
Pilot Project Final Report (HarakaMeds)	English	2022

Pilot Project Final Report (Location Mind)	English	2022
Pilot Project Final Report (NEC)	English	2022
Pilot Project Final Report (NYEREKA TECH)	English	2022
Promotional Booklet-LEAP FROGGING FROM "TRAGEDY OF AFRICA" TO "MIRACLE OF AFRICA"	English	2019
Report on the Rwanda Japan Online Business Matching Seminar	English	2020
MoU List	English	2020

Output 4

Title	Language	Year
(Draft) Rwanda Model ICT for Development Journey Conceptual Framework (infographics)	English	2022
(Draft) Rwanda Model ICT for Development Journey Primer vol.1 – ICT Policy	English	2022
(Draft) Rwanda Model ICT for Development Journey Primer vol.2 – ICT Institutions	English	2022
(Draft) Rwanda Model ICT for Development Journey Primer vol.3 – ICT Infrastructure	English	2022
(Draft) Rwanda Model ICT for Development Journey Primer vol.4 – ICT Human Resource	English	2022
(Draft) Rwanda Model ICT for Development Journey Primer vol.5 – ICT Private Sector	English	2022

ANNEX-6 : PDM

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project **Version 1**

Implementing Agency: Ministry of Information Technology and Communications (MiTEC) (Former Ministry of Youth and ICT) **Dated 14, June, 2018**

Target Group: 1) Officials of MiTEC, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entrepreneurs with in th Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from October 2017 to October 2020)

Project Site: Kigali, Rwanda Model Site: Kigali City

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal			
ICT sector's economic contribution to GDP in Rwanda is increased through enhancing the ICT Innovation Ecosystem.	- ICT sector's contribution to GDP (%)	- Official GDP statistics.	GDP statistics definition is unchanged. There is no unexpected rapid growth of GDP in other fields.
Project Purpose			
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan (SRMP).	- Increased number of entrepreneurs in ICT sector - Increased number of employees in ICT sector - Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	- ICT official profile of the GoR. - SRMP official monitoring report.	SRMP is continuously applied as GoR's strategic master plan.
Outputs			
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. kLab, FabLab etc.)	- User records of incubation spaces.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.
	1-2 Increased number of newly established ICT companies in line with "Start up 250" initiative.	- "Start up 250" statistics.	
	1-3 Increased number of newly launched services/products enabled by ICT.	- ICT Chamber's Data	

Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	- Official GoR policy data.	Same as above.
	2-2 Increased positive side reaction of ICT entrepreneurs.	- Comparison with base-line data.	
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	- Comparison with base-line data.	Same as above.
	3-2 Increased Foreign Direct Investment in ICT/ innovation sector from Japanese institutions.	- Comparison with base-line data.	
Output4 Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice.	- Comparison with base-line data.	
	4-2 Increased visit to learn Rwanda-like ICT use development practice from other countries).	- Comparison with base-line data.	

Activities	Inputs		Pre-Conditions
	Japanese Side	Rwandan Side	
Activity 1.1 **Supporting activity for ICT start-ups**	*Currently, most of the supporting activities for ICT Start-ups are based on incubation supports, related to Activity 1.3.*	*Various different initiatives have been organized by the C/Ps and stakeholders to facilitate activities of ICT Start-ups. The Project is cooperating with different initiatives to maximize the results.*	
1.1.1 Understand the status of the incubation facilities	Two Japanese professors from Keio University SFC, have visited Rwanda to conduct initial assessments and analysis of incubation facilities (separate from project resource).	Innovation/ incubation facilities are collaborating with the Project to establish Baselines.	
1.1.2 HRD for improving incubation management (kLab, FabLab)	Two professors have conducted initial assessments and analysis of managment structure of the innovation facilities (kLab/FabLab). They have been supporting FabLab in other countries in various different capacities. These experts will join the Project as JICA experts and continue facilitating the process of strengthening appropriate management.	The C/P has committed to the needs of incubation center management strengthening. Both the board and management understand the needs for furnishing more sustainable management structure through effective training	Innovation and start-up enabling policies (including corresponding regulations) are effectively implemented in accordance with the Smart Rwanda Master Plan (SRMP).
1.1.3 Support for Fab-academy training course (MIT)	Provided logistic and financial support to enroll five Fab-master candidates to MIT's online Fab-academy training course. The candidates are now undergoing the training course.	Created selection criteria and conducted rigorous selection process for Fabmaster candidates. Provide support for capacity building process	
1.1.4 Conduct overseas training on FabLab management	N/A	N/A	
1.1.5 Procure equipment for incubation centers	N/A	N/A	
Activity 1.2 **Organizing/ attending events for ICT start-ups**	*The Project experts attended various different events/ stakeholders meeting to advocate the Project and network with different partners.*	*The C/P and stakeholders have been sharing information about relevant events/meetings in the area of ICT start-ups.*	
1.2.1 Support for ICT related major events	Supported realization of TAS 2018; support in preparation for the TAS2018 and the Japan Pavillion.	Facilitated realization of Japan Pavillion setup and kick-starting event for the 250 Start-up.	
1.2.2 Conduct overseas study tour for ICT entrepreneurs	Identification of suitable location are under consideration in collaboration with the C/Ps.	Suitable location are under consideration in collaboration with the Project.	**Issues and Countermeasures**
Activity 1.3 **Conducting pilot projects for ICT innovation**	*Various different preparations (including sub-contracting arrangements for service provisions) were made to facilitate 1st batch incubation process to begin in June.*	*Various different supports were provided (especially ICT Chamber) to enable 1st batch incubation of 10 start-ups to begin in June.*	
1.3.1 Select target sectors and develop implementation framework/ procedure	Target sector has been identified in collaboration with the C/Ps and key stakeholders. The sectors are: agriculture, education, energy (alternative/micro), fintech, and health Initially, the Project recommended to focus on one sector per batch but with strong desire from the C/Ps, first batch was made open to all the five sectors.	Target priority sectors have been identified. C/Ps also made decision to open up candidacy for the five sectors in the first batches	Potential budget shortfall may affect smooth implementation of the Project. To prevent this unexpected situation, active resource mobilization measure will be made with local, regional, and international stakeholders and partners.
1.3.2 Pilot incubation of ICT entrepreneurs for six month (max. 10 incubatees/ batch for 2018)	Rigorous and transparent selection process has been taken to choose five incubatees for the 1st batch incubation process. Along with the second call for proposals, it is expected that the project will support ten start-ups during the 1st batch and the incubation process will start in mid-June. Various different sub-contracting arrangements were made to initiate the incubation process.	Provided support in preparing and selecting five initial candidates at the TAS 2018 event. Another five candidates were selected by the C/P.	

Activity 2.1 **Support for organizing/ coordinating ICT-SWG**	*Support for forward looking JSR and composition of ICT SSP has been made. Currently JICA Country Office Program Manager and the Project's sub-chief advisor are following up to support B-JSR expected to be organized in early*	*Organized FL-JSR and composition of various different policy related materials (e.g.; FLJSR report, SSP, etc.)*
2.1.1 Capacity building support for planning skills	Project has begun discussion with C/P to conduct capacity development measures. Business process analysis and formulation of corresponding reengineerig plan is expected to start in the Q3 of 2018.	The C/Ps support institutional capacity development initiatives through expending personnel for on the job training and support the Project to conduct business process identification and reengineering.
2.1.2 Assist to coordinate ICT-SWG	The SWG secretariat is currently being created with national expert who will also be the national advisor to the Minister. TOR has been created for the post and currently waiting for recruitment process to commence. Monthly informal networking meeting to be starting soon to share information and coordinate activities in the area of ICT (June 2018).	TOR for the national expert has been created. Recruitment process for the position has commenced. The SWG secretariat to be hosted at MiTEC
Activity 2.2 **Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem**	*Policy advisory support has been provided as needed throughout first seven moths of the Project implementation. The interventions were limited during the time when the project team was present in Rwanda. The situation will improve as the new deputy chief advisor will be stationed in Rwanda full time to provide support in this area.*	*The C/Ps have provided their policy related contributions as required (for different policies, action plans, and strategies under formulation).* *The C/Ps informed the Project of important policy related consultation opportunities for participation.*
2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries	Specific policy focus and targeting countries for the research are being articulated with the C/Ps. Actual research is planned to be conducted in the Q3	C/P has expressed strong interest in the research. Discussion to articulate scope of the research is being discussed with the project C/Ps.
2.2.2 Support MiTEC (and other C/Ps) to formulate policies	Ongoing support is being provided as needed (e.g.; ICT SSP, Regulatory Sandbox, e-commerce Strategy, etc.)	Policy formualtion exercise is ongoing
Activity 3.1 **Matching support between Rwandan and Japanese ICT companies**	*Matching support services have been provided ad-hoc basis during the initial stage of the Project. TAS 2018 was one of the major events covering activities and results within Output 3. The Project's core members were present to support the event.*	*It is reported the C/Ps and other companies/ organizations signed various different MOU with Japanese companies/ organizations/ agencies during the TAS 2018.*
3.1.1 Understand the current situation and advice organizational structure to promote investments	No specific inputs have been made so far. Japan Investment Strategy will be formulated through dispatching trade/investment experts in the Q2/Q3 2018	RDB and the ICT Chamber have endorsed the creation of investment strategy for Japanese companies.
3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	Supported TAS2018 organization which includes Japan Pavilion at the TAS 2018. Facilitated B2B meetings between Japanese companies and Rwandan companies. Facilitated different Japanese companies with information and connecting to Rwandan companies.	ICT Chamber facilitated Japanese companies to connect with Rwandan companies during and after TAS 2018. RDB is planning to send high level delegation to Japan to promote Kigali Innovation City on October 2018.
3.1.3 Conduct networking tour from Rwanda to Japan (3-times), and from Japan to Rwanda (3-times)	Date and scope of the networking tour is being discussed with the C/Ps.	Date and scope of the networking tour is being discussed with the project.
Activity 3.2 **Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda**	*Discussion with C/Ps ongoing and some advocacy has been conducted both Japanese and Rwandan companies.*	*C/Ps endorsed the idea but no significant activities were conducted during first seven months of the project implementation.*
3.2.1 Develop pilot business concept, and identification of joint business group	No significant activities conducted within this area. More active discussion will be held at later stage of the Project.	Same as left.
3.2.2 Implement pilot projects (3-cases) for 4 months while monitoring and review	No significant activities conducted within this area for the first seven months of the Project implementation. Active discussion will be held at later stage of the Project to implement the activity.	Same as left.

Activity 4.1 **Collecting good practices in ICT-use and modeling cases for promotion**	*vide infra*	*vide infra*
4.1.1 Collect ICT-use good practices and modeling cases for promotion	Initial collection of innovative ICT businesses in potential sectors have been made by the Project expert and presented to the stakeholders for inputs. Collection and analysis of innovative ICT business and practices will be made through following the experiences of incubating start-ups.	No significant inputs were made in this area from the C/Ps RISA, in collabotration with the Project, is expected to collect analyze potential innovative ICT use cases for replication in Rwanda. The C/Ps will support the Project's activity to collect and analyze innovative ICT business models and practices which emerge from the Project implementation.
Activity 4.2 **Disseminating the case studies through international/ regional organization and appropriate fora**	*vide infra*	*vide infra*
4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.)	Initial research of good ICT practices, innovation center analysis, and thematic analysis (agriculture) were presented among the C/Ps and stakeholders.	The C/Ps supported organizations of stakeholders meetings.
Pre-Activity **(Preparation for Project Implementation)**	Provided core Japanese experts for the Project preparation/ initial assessments (agriculture, innovation centers, etc.), Supported for formulating the Project Implementation Unit, and Procured different services to facilitate the Project implementation.	Provided personnel to assist various different activities implemented by the Project (including high level members of JCC), Provided premise for the Project team (RISA), and Facilitated information and logistic support.

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project

Version 2.0

Dated 05 August 2020

Implementing Agency: Ministry of ICT and Innovation (Former Ministry of Information Technology and Communications (MiTEC): until October 2018) (Former Ministry of Youth and ICT: until Aug 2017)

Target Group: 1) Officials of MINICT, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entrepreneurs within th Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from October 2017 to March 2021)

Project Site: Kigali, Rwanda Model Site: Kigali City

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal					
ICT sector's economic contribution to GDP in Rwanda is increased through enhancing the ICT Innovation Ecosystem.	- ICT sector's contribution to GDP (%)	- Official GDP statistics.	GDP statistics definition is unchanged. There is no unexpected rapid growth of GDP in other fields.	Baseline data collected - 1.31% (based on BLS: limited to telecom sector and hardware sales).	Apart from official ICT contribution to GDP (limited to telecom sector and hardware sales), there may be someway to capture wider ICT contribution to the economy (ex. Inter-industry analysis/ Input-output analysis). This shall be considered further and maybe introduced in lieu of the arbitrary GDP data.
Project Purpose					
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan (SRMP).	- Increased number of entrepreneurs in ICT sector - Increased number of employees in ICT sector - Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	- ICT official profile of the GoR. - SRMP official monitoring report.	SRMP is continuously applied as GoR's strategic master plan.	The number of entrepreneurs in ICT sector has been collected using statistics from RDB (8,169 as of 2018). The number of employees in ICT sector was collected through questionnaires for ICT entrepreneurs registered in ICT Chamber (5,607 as of 2018). The number of stakeholders involved in the Rwanda ICT Innovation Ecosystem need further elaboration as the indicator is difficult to attain.	RDB does not have a concrete data for the number of employees in ICT sector. Therefore, as a proxy indicator, the Project collected the total number of employees in ICT companies registered in ICT Chamber. Real number of stakeholders involved in the Rwanda ICT Innovation Ecosystem is hard to be identified. Need to modify this indicator or need to clearly define what constitute stakeholders.
Outputs					
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. kLab, FabLab etc.)	- User records of incubation spaces.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.	The number of incubation space users has been collected using statistics from partner organizations. Questionnaire for kLab and FabLab users were conducted as a baseline for their motivation to their projects and satisfaction for the Labs (kLab: 1,865, FabLab: 90).	Project expects that user base to steadily increase through proper interventions. However, the growth rate will be subject to the "Tech-enabled innovation center action plan/guideline and their implementation." It is
	1-2 Increased number of newly established ICT companies in line with "250Startups" initiative.	- "250Startups" statistics.		1st batch: 8 startups graduated 2nd batch: 10 startups graduated 3rd batch: 10 startups graduated 4th batch: 10 startups are expected to graduate	Necessary to define and agree with definition of what constitutes "new" companies. In order to accurately assess the Project intervention, it may be proposed the entrepreneurs in the incubation programme as a newly established ICT companies in line with "250Startups".
	1-3 Increased number of newly launched services/products enabled by ICT.	- ICT Chamber's Data		Baseline data has been collected using questionnaire (2.07 products/ services were produced on average per company per year in 2017).	Regular assessment will be made to measure the progress

Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	- Official GoR policy data.	Same as above.	Policy related advisory supports have been provided which led to ICT related policies (6 policies formulated so far, e.g.; ICT SSP, e-commerce strategy, ITES strategy, regulatory sandbox, Sector Profile, JSRs, etc.)	Number of policies may have logical correlation with the capacity building aspects of C/P institutions.
	2-2 Increased positive side reaction of policy reviewers.	- Comparison with base-line data.		Comparison exercise has not been started	After the Project activity started, this outputs will be assessed by interviewing with the policy reviewers or people affected by given policies.
	2-3 Increased positive side reaction of ICT entrepreneurs.	- Comparison with base-line data.		Baseline data (satisfaction with SRMP) has been collected using questionnaire for ICT entrepreneurs. - Satisfaction level in ICT capability and capacity: average 5.96 out of 7 (max. score) - Satisfaction level in governance and management: average 6.28 out of 7 (max. score) - Satisfaction level in ICT infrastructure: average 6.14 out of 7 (max. score)	ICT Chamber will provide facilitation to conduct annual survey to its member companies. In addition, ICT related policy review is suggested to be undertaken by the policy experts with assembling suitable experts for that.
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	- Comparison with base-line data.	Same as above.	Analysis will be conducted to assess number of partnerships (MOU and other concrete partnerships) concluded at the end of the year/beginning of 2019	The number of companies which discontinued the partnership with Rwandan company will not be considered. Measurement of this Output only focus on the number of companies which will make new partnership with Rwanda.
	3-2 Increased Foreign Direct Investment in ICT/ innovation sector from Japanese institutions.	- Comparison with base-line data.		FDI from Japanese entities recorded in RDB is only three companies and there is no data of FDI to the ICT sectors.	RDB is expected to continue collecting and releasing this data, otherwise this indicator may needs to be modified to assess the progress more suitably.
Output4 Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond. -> Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and	4-1 Increased recognition of Rwanda's ICT use development practice.	- Comparison with base-line data.		2,620,000 hits in Google search by the word of 'Rwanda ICT business.' 7,300,000 hits as of September 24th 2019.	A simple comparison with neighboring countries or countries with similar socio-economical circumstances may be a way to measure the performance by the Project.
	4-2 Increased visit to learn Rwanda-like ICT use development practice from other countries).	- Comparison with base-line data.		N/A.	No relevant Project activity has been conducted during the reporting period.

Activities	Inputs		Pre-Conditions
	Japanese Side	Rwandan Side	
Activity 1.1 **Supporting activity for ICT start-ups**	*Workshops and corresponding action plan/ guideline formulation activities for strengthening the Labs operation have been undertaken by the JICA experts (covering 1.1.1, 1.1.2). Procurement of 2nd batch equipment needed for Labs expansion is ongoing (1.1.5) in line with the action plan/ guideline. Fab-academy training course (1.1.3) is underway (2018-2019 batch is completed and 2020 batch is slated to be completed by September 2020).*	*Various different initiatives have been organized by the C/Ps and stakeholders to facilitate Activity 1.1. RISA is taking the lead in securing the budget and necessary logistic arrangements (identifying sites and support recruitment to strengthen and expand the centers in the secondary cities (2019 budget secured for one centre - Agahozo Shalon Youth Village and more funding are being requested to enable two more centres). The Project is cooperating with different initiatives organized by stakeholders to maximize the results and explore better sustainability model of these centers.*	Innovation and start-up enabling policies (including corresponding regulations) are effectively implemented in accordance with the Smart Rwanda Master Plan (SRMP).
1.1.1 Understand the status of the incubation facilities	Two Japanese professors (experts) from Keio University SFC undertook the related works (initial assessment and analysis of incubation facilities, mapping of innovation facilities in Kigali) which was completed by June 2018. A series of workshops have been organized based on the findings/ lessons learned, involving the relevant stakeholders from the Rwandan side to compile an Action Plan/ Operational Guideline of Innovation Hubs/ Centers Expansion in Rwanda. After the retreat on November 2019, the final draft of the "Tech-enabled innovation center expansion plan" and corresponding guideline has been delivered to RISA for finalization and submission to relevant authorities for budget request and allocation.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the documents. RISA has been instrumental in utilising the Action Plan and the corresponding guidline to secure public funding to enable operation of new centers in the secondary cities.	
1.1.2 HRD for improving incubation management (kLab, FabLab)	The 1st Management training was conducted for FabLab and KLab for masters and potential future center manager on October 2019 .Along with the kLab, FabLab managment teams, new centres managment teams (including potential candidates), stakeholders, and Fabacademy participants are invited to attend an intensive one week training session to horn managment skills for the innovation centres Training for FabLab masters on operation and maintenance of fablab equipments was conducted in Hamamtsu, Japan on January 2020. As an output of the training O&M manuals of Chinese fabricated CNC router and Lasor cutter were prepared.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (e.g., selection of center location, recruitment of human resource, allocation of appropriate financial resource, advocacy, etc.). Identification of potential centre personnel (or key stakholders) have been completed and these personeels are invited to the HRD training in Setpmenr/October	
1.1.3 Support for Fab-academy training course (MIT)	The project provided financial support for 1-2 batch of Fab academy for 2018-2019, and currently supporting 3rd batch of Fab academy. 3 candidates were selected an Training in ongoing online basis despite the lock down. However, students are currently facing internet problems.	The C/Ps and innovation centres have supported the project in the selection process of the candidates to undertake the managment training. It is expected that these human resources will be dispatched in the future as resource person to the FabLab/ kLab in the secondary cities as technical resources.	
1.1.4 Conduct overseas training on FabLab management	As agreed in the previous JCCs' and within the scope of the said Action Plan/ Operational Guideline that an overseas study tour should be conducted some time in 2020 to visit the Philippines, India or Georgia where the FabLab is reported to be utilized for local economy development. The selection process of the both participants and the location will be completed in due course with the C/Ps.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the action plan and the guideline to strengthen and expand Tech-enabled Innovation Centers in Rwanda. The overseas training decision (place, scope, and schedule) will be made in careful consultations with the C/Ps after sometime when the secondary cities' centers become operational and accumulated initial experiences of operation.	

1.1.5 Procure equipment for incubation centers	Compilation of the 2nd batch equipment list has been completed. Pre-quotation (for reference price) has been prepared. JICA HQ cleared all the items to be procured for two enters (big items). Bidding process is about to commence since declared state of emergency of Japan was lifted already. The progress of the procurement process will be regularly shared with the secretariat.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (human resource, financial resource, etc.). RISA has been spearheading the process. Confirmation of centres locations (one location in Huye has been identified) and necessary resource allocations will be expected to be facilitated by RISA prior to equipments arrival.	
Activity 1.2 **Organizing/ attending events for ICT start-ups**	*The Project has been supporting ICT startups and established ICT companies indirectly/ technically for participating in the relevant events/ meetings, mainly TAS2019, TICAD VII, and a study tour to Japan.*	*The C/P and stakeholders have been sharing information about relevant events/meetings in the area of ICT start-ups in Rwanda and its surrounding countries.*	
1.2.1 Support for ICT related major events 1.2.2 Conduct overseas study tour for ICT entrepreneurs	The Project has supported the established ICT companies to attend and develop network with Japanese companies at TAS 2019 and TICAD VII (mentioned also at 4.2). Several startups also were selected as one of those established companies and participated in networking events with Japanese companies. The Project also has supported the incubates (1.3.2) to promote their busienss at Startups Study Tour in Japan (Sep. 2019 and Jan 2020) (mentioned also at 4.2).	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been working together with the Project for facilitating those participation.	**Issues and Countermeasures**
Activity 1.3 **Conducting pilot projects for ICT innovation**	*The relevant activities are currently underway, in collaboration with the ICT Chamber, mostly as scheduled, involving ten startup incubates selected for each 2nd and 3rd batches. The 2nd batch incubation process started in Dec. 2018 and the graduation will be on Oct. 4. The 3rd batch process started in Apr. 2019 and the program will start in July.*	*Various different supports were provided (especially by ICT Chamber) in the course of the 2nd batch implementation. For the 3rd batch incubation of 10 start-ups, necessary support has been given too.*	Active coordination by the Project secretariat will be critical in moving several key issues (e.g.; advocacy) forward. In addition, allocation of appropriate resources from the C/Ps will be critically important to maker sure that the project will implement smoothly.
1.3.1 Select target sectors and develop implementation framework/ procedure	The 1st batch finished in Dec.2018 with eight incubates successfully graduated from the training program. For the 2nd batch, two specific sectors are targeted after discussion with the relevant stakeholders C/Ps, namely agriculture and education. From the 3rd batch, 250Startups will not focus on specific sectors. The implementation framework/ procedure is currently under development based on the past batch experiences.	RISA provides 1st floor of Telecom House to 250Startups for the 3rd batch and onward. Also, it decided to bear the cost of internet from December 2019, which makes the implementation of 250Startups much more effective and sustainable.	
1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)	The Project intensively assigned both local and Japanese experts for smooth and efficient implementation of the incubation activities. For the selected first and second batch incubates, opportunities have been provided to participate in overseas/ domestic events for pitching and/or presentation about their business.	ICT Chamber has been proactively supporting and mentoring the incubates' growth. Also, provided support in preparing and selecting ten startups for the 3rd batch. Challenge of recruitment has been pointed out by different stakeholders. More collaboration with insitututions which conduct workshops for ideation level startups.	

Activity 2.1 **Support for organizing/ coordinating ICT-SWG**	*JICA Country Office Program Manager, the Project's sub-chief advisor, and the SWG coordinator/Technical Advisor to the Minister have been following up on the issues related to support ICT-SWG and other policy related*	*C/Ps conducted various policy related activities which include ICT-SWG and other policy related activities.*
2.1.1 Capacity building support for planning skills -> Recruit SWG Coordiantor (based on 4th JCC and corresponding PDM amendament) - Completed	Recruitment has been completed. The project and C/P assisted rectuirment process conducted by the JICA CO.	Recruitment has been completed. The project and C/P assisted rectuirment process conducted by the JICA CO.
2.1.2 Assist to coordinate ICT-SWG	The SWG coordinator/Technical Advisor to the Minister has been following up the related activities. December SWG was joined by the Chief Advisor. Q1 and Q2 2020 SWGs were not conduted due to COVID-19 Pandemic. In addition to the SWGs, in the last 8 months, both BLJSR and FLJSR were supported by the Project and the JICA CO. Monthly SWG will be conducted from July 2020 in response to the request given by the Donors at the SWG in December 2020 which will be supported by the Project.	The SWG coordinator/Technical Advisor is assiting Ministry in the area of SWG and other issues (including JSR).
2.1.3 Development of Operational Manual ICT-SWG	The SWG coordinator/Technical Advisor is compiling Operational Manual for the ICT SWG. The Project is giving inputs into the development of the manual	The draft Operation Manaul will be reviewed by the C/P before finalized into an operational manual.
Activity 2.2 **Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem**	*New Policy Specialist has been recruited to provide policy related capacity building support to the Ministry as the support by the Policy Advisor/Chief Advisor could provide mostly distant based support during the reporting period. In addition, as has been in the previous period, resident sub-chief advisor and SWG/Technical Advisor, along with the JICA's Programme manager, provided continuous resident support to the Ministry.*	*Since the reorganization of the MITEC to MINICT, the Ministry is in the process of creating a new institutional setup. It is imperative to monitor the process of the Ministry complete the process as it will become the base for the Project's institutional strengthening support.* *Meanwhile, C/P has been concentrating their work on such priority project as KIC, formulation of priority strategies/plans, advocacy, etc. These priority initiatives have been supported by the Project.* *During the reporting period, C/Ps have also actively provided their policy related support at SWG meetings and other fora.*
2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries Create Common Vision for ICT Innovation Ecosystem in Rwanda (*changed after the 2nd JCC*)	As part of the Innovation Center Expansion Action Plan and Guideline formulation processes, common vision of ICT innovation Ecosystem (within the context of innovation centers) has been formulated.	The exercise was completed as part of the ICT innovation center expansion action plan with key stakeholders. The vision and the holistic innovation center expansion plan has been submitted to the Government through RISA.
2.2.2 Support MITEC MINICT (and other C/Ps) to formulate policies	Ongoing support is being provided as needed (e.g.; review of JSR, added inputs of KIC Hub Strategy, KIC related activities, editing/inputs provided to priority ICT sector strategies, etc.) Policy specialist has been hired under the project is also has began providing facilitation support in teh area. A new request has been made from the C/P to have support in the area of Cybersecurity which is being discussed by JICA HQ.	Policy formulation and review exercises are ongoing under the leadership of the ministry. However, some of the priority strategies need further work
2.2.3 Recruit Policy Specialist for OJT style Policy Advisory Support with the MINICT Team.	From April 2020, Policy specialist has been hired under the project. She is continuing support in the area as well as coordinating on-line training initiative through Udemy for Government. Also She is coorddinating off-line training through orginizers. However, PJ with MINICT have done two off-line training course in March,2020.	Policy Specialist recruitment has been supported by the C/P.

Activity 3.1 **Matching support between Rwandan and Japanese ICT companies**	*The activities in Output 3 continue to focus on practical activities that follow business promotion and follow-up.* *TICAD7 held last summer accelerated the business relationship between Rwanda and Japanese companies. In order to further strengthen the partnership made at TICAD7, the project conducted a business tour in February 2020 and worked to improve the level of their business.* *Also, under the outbreak of COVID-19, the project seeks to create matching opportunities by online so as not to stagnate these partnerships.*	*C/Ps expect to have networking opportunities to lead to concreate business matching between Japan-Rwanda companies. C/Ps also co-sponsored capacity building inititaitves for member companies which have represented Rwanda during the TICAD7.*
3.1.1 Understand the current situation and advice organizational structure to promote investments	Project continued to support Rwandan ICT companies and relevant C/Ps institutions to connect with the relevant Japanese and other foreign markets.	Centered on Rwandan companies that participated in TICAD Ⅶ, C/Ps are trying to establish and operate mutual aid association in the ICT private sector under the leadership of PSF.
3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	The book (Japanese version) that introduced Rwanda companies published for TICAD7 and it provided an opportunity for many Japanese companies to know about Rwanda companies. The project is now preparing English version to promote Rwandan companies not only to Japanese companies but also to companies around the world. The book is almost complete, leaving the final design adjustments.	C/Ps and Rwandan companies actively responded to interviews and provided necessary information to contribute the booklet.
3.1.3 Conduct networking tour from Rwanda to Japan, and from Japan to Rwanda	The project conducted business networking tour in February. Five Japanese companies joined this tour and they attended Africa tech Summit in Kigali and networking event supported by the project. Through those activities, they had a lot of opportunities of business talk with Rwandan companies. What was effective was that the Japanese companies made appointments with Rwanda companies in advance, because of that, the business talk between those companies were smooth. In order to keep and further accelerate the momentum, continuous efforts will be required. Due to the outbreak of the COVID-19, it has been difficult for the project to conduct business visits of Japanese to Rwanda and of Rwandans to Japan. With that fact, planning of an engagement type of event is also difficult. However, as different organizations are using webinar and other virtual solutions, the project also would consider achieving following targets by organizing a virtual event: 1)Provide a platform to introduce and provide more information of each countries' business environment and private sector; 2)Organize interactive sessions aiming for new partnerships 3)To create new business opportunities. Since the online event is not restricted by location, the event is expected to reach and invite new companies and persons that are interested in Africa and Rwanda in particular.	C/Ps and Rwandan companies welcomed and cooperated with the visit of Japanese companies. And they prepared interviews with Japanese companies and participated in networking events. In particular, some Rwanda companies actively invited Japanese companies to their offices to have valuable business opportunities. The C/Ps gave them the instruction of the challenges and possibilities for Japanese companies doing business in Rwanda.
Activity 3.2 **Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda**	*The project has actively recruited participating companies for the pilot project.* *Based on the lessons learned from the completed pilot project, the project will summarize the challenges and possibilities for Rwandan business.*	*C/Ps provide support to connect appropriate parties to the companies conduct pilot projects.*
3.2.1 Develop pilot business concept, and identification of joint business group	The Project renewed the application process of pilot project to "rolling bases". This makes the process a flexible and quick so that Japanese companies that submit proposals can immediately move on to the review process without a specific recruitment period	The C/Ps endorsed the process and provided inputs for selection process which was designed by the Project.
3.2.2 Implement pilot projects (6*-cases) for 4 months while monitoring and review *(increased from 3 to 6 after the 2nd JCC)*	The project carried out a rigorous selection process with the C/Ps and adopted companies of case3-case5. Due to COVID-19, start was delayed but the three projects have been active since mid-May. The final case-6 has not been finalized due to concerns about the companies that applied. This will be decided soon.	The C/Ps involved in the selection process and endorsed the result of selecting company.

Activity 4.1 **Collecting good practices in ICT-use and modeling cases for promotion**	*During the last six months, several good practices of the Project have been compiled into Multimedia contents, Book, and experience sharing through participating different events. Some of the highlighted fora in the past 6 months include the TAS2019, TICAD7, 250 Startups Visit, etc.*	*C/Ps have been involved support in the process of compiling such knowledge product as Rwanda ICT/Innovation Companies' Guide and Multimedia products. In addition, C/Ps have been providing knowledged learned from the project's implementation through different fora which include TAS2019, TICAD7, and 250 Startups visit to Japan, etc.*	
4.1.1 Collect ICT-use good practices and modeling cases for promotion.-> 4.1.1 Define and Compile "Rwanda model" of success (ICT for Development) (Modified based on 4th JCC and PDM Amendament)	Case study on innovation labs, which was compiled with the relevant stakeholders, has been reflected in the Action Plan drafted in Feb. 2019. Currently, a lessons-learned review is underway for the 1st batch incubation support. Lessons learned from the review shall be shared by the end of Mar. 2019. These lessons learned need to be shared at suitable venues under activity 4.2 The said activity has been modified based on 4th JCC nad amendamanet to PDM to reflect more precise KPI. Based on the JCC discussion, more concise KPI was called for and the new Rwanda Model compilation activity was added to the PDM. The compilation work, however, was delayed due to internal coordination issue within the C/P organization, COVID-19 Pandemic, and MINICT restructuring.	The C/Ps recommended JCC to amend the PDM to be aligned closely to the actual activities and results. As such, new activity of "Rwanda Model" has been added to the Projet. Some of the activities and results attained in the original 4.1.1 activity has been moved to 4.1.2 and 4.2	
4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar) (Modified based on 4th JCC and PDM Amendament)	Draft advocacy plan to spearhead the activity was completed after organizing Advocacy Retreat to get stakholders inputs. However, the plan has not been finalized by the Project C/P. In addition, new PR officer who has been recruited for the project and PR associate have both left the Project in March to pursue other opportunities. The Covid-19 Pandemic is putting new urgent need for domestic advocacy as ICT played critical roles in the pandemic mitigation and the C/P would like to cease the opportunity to advocate power of ICT as tools to mitigate socio-economic challenges.	Project is awaiting for a one page concept note from Secretariat to focus on ICT sector achievements which mitigated the effect of COVID-19 Pandemic. Upon receiving the concept note, TOR for the PR officer will be amended and new PR officer will be recruited. With the new PR officer, even when the Project Team is not present in Rwanda, PR activities will be conducted.	
Activity 4.2 **Disseminating the case studies through international/ regional organization and appropriate fora -> Extract and share lesson learned from the Project activities (Modified based on 4th JCC and PDM Amendament)**	*Various different knowledge learned materials through the Project implementation have been shared in various different format at different fora both within and beyond Rwanda.*	*Same as left.*	
4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.) -> 4.2.1 Summarize lesson learned from the Project activities (Modified based on 4th JCC and PDM Amendament)	Lessons learned are being compiled by the team responsible for the different outputs. For example, 250Startups are conducting tracer survey for the first 3 batches of the incubatees, 30 Rwandan ICT company book is now being produced in English, and other lesson learned materials are being compiled by the team. In the same manner, some of the lessons learned from other outputs are being compiled and utilized to further improve the respective outputs. However these materials need to be put into format conducive format to be able to dessiminate to both domestic and international audiences.	C/P will help review lessons-learned materials to be packaged into appropriate format to be used by various media outlets both domestically and internationally.	
4-2.2 Share lessons learned through various medium (Modified based on 4th JCC and PDM Amendament)	Project continue to share lessons learned at every available opportunities (e.g.; 250 Startups pitching mission to Japan and other fora). The Praejct was anticipating TAS 2020 as a major event to showcase Rwanda Model and other lessons learned from the project. However, due to Pandemic, the TAS 2020 was postponed with date not yet determined. In addition, the Project also was considering GSMA Africa 2020 to be a potential venue to share the lessons learned, however, this event is also being postponed.	The Project is in talk with C/P to prioritize dometic media campaign (as per 4.1.2 mandate) as sharing Pandemic mitigation experience using ICT could be good lessons learned materials for both domestic and international (e.g.; Webminar and on-line networking session between Japanese and Rwandan companies).	

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project

Implementing Agency: Ministry of ICT and Innovation (Former Ministry of Information Technology and Communications (MiTEC): until October 2018) (Former Ministry of Youth and ICT: until Aug 2017)

Target Group: 1) Officials of MINICT, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entrepreneurs with in the Innovation Ecosystem in Rwanda

Period of Project: 4 Years and 5 months (from October 2017 to March 2022 (February 2022 for terminating implementation activities))

Project Site: Kigali, Rwanda　　Model Site: Kigali City

Version 3.0

Dated 17 December, 2020

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Input		Important Assumption
Overall Goal				Japanese Side	Rwandan side	
ICT sector's economic contribution to in Rwanda's economy is increased through enhancing the ICT Innovation Ecosystem.		- Increased Number of entrepreneurs in ICT sector - Increased Number of employees in ICT sector	- Database in RDB - Questionnaire for ICT entrepreneurs registered in ICT Chamber	• Japanese Experts (Chief Advisor, Sub-Chief Advisor, Project Manager, Project Coordinator, Investment Advisor, Incubation Advisor, Open Innovation Advisor, Digital Fabrication Advisor, Product development Advisor, Branding Advisor, Business Advisor, Entrepreneurship Advisor, Innovation Hub Coordinator, M&E Specialist, and others) • Equipment (Necessary equipment for project activities) • Capacity Development for Counterpart Personnel (on-line, in country, in Japan, and in Third country) • Local cost for the activities for Japanese Experts • Local consultants (ICT-SWG coordinator, Incubation Coordinator, Innovation Center Coordinator, Investment Advisor, Communication Specialist, and others)	• Allocation of Counterpart Personnel (focal point) from MINICT, RISA, RDB, ICT Chamber, and Smart Africa Secretariat • Office space for Japanese experts and other space necesary for the project implementation • Necesaary data • Organization support for ICT-SWG and other meetings • Local cost (Maintenance/Repairing cost for the existing equipment that are not covered by JICA support, preparation cost for conference, running expenses necessary for the Project and Others).	SRMP is continuously applied as GoR's strategic master plan.
Project Purpose						
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of SRMP, ICT Sector Strategic Plan (SSP) and National Strategy for Transformation (NST-1)		- Start-up support mechanism is established. - Partnership (MOU and other concrete partnerships) between Rwandan and Japanese companies are made.	-Handing-over Start-up support mechanism (250 Startups Programme) -List of MoU/LOI and similar documents signed between Japan and Rwanda during the Project period (at least 25 partnership agreements)			
Outputs	**Activity**					Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	**1.1 Create and strengthen facilities to encourage innovation**					
	1.1.1 Understand the status of the incubation facilities 1.1.1.1 Conduct research on current status of innovation centers 1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline 1.1.2 Plan and conduct management training on innovation center management (kLab, FabLab) and on-site technical training 1.1.2.1 Support local innovation centers through additional management capacity building trainings 1.1.2.2 Support technical training for local innovation centers (Fabacademy-X) 1.1.2.3 Support competition events among innovation centers to raise capacity and foster ownership among the community 1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community 1.1.4 Conduct overseas training on innovation center management 1.1.5 Furnish appropriate equipment for three regional innovation centers 1.1.5.1 Procure equipment for three innovation centers in the secondary cities/rural area 1.1.5.2 Procure additional equipment and consumables for initial operation and for training needs	15 people (5 people * 3 years) graduate successfully from the Fab-academy training course. - 3 innovation centers with equipment are established. - All participants of the training course show more than 70% of understanding on the training contents about innovation center management.	- Certificate of graduation of Fab-academy training course - List of training centers - Questionnaire conducted after the training.			
	1.2 Organizing/ attending events for ICT start-ups					
	1.2.1 Support for ICT related major events 1.2.2 Conduct overseas study tour for ICT entrepreneurs	- More than 5 ICT related events are supported - At least 3 overseas study tour for ICT entrepreneurs are conducted	- List of events -Study tour report (Training Report)			
	1.3 Conducting pilot projects for ICT innovation					
	1.3.1 Select target sectors and develop implementation framework/ procedure 1.3.2 Pilot incubation of ICT entrepreneurs for six months ((limited support for 6th batch in-line with priority needs of intra/post COVID-19 society) 1.3.3 Support preparation for local 250 Startups programme to be rolled out in the future 1.3.4 Monitor the progress of Ninja post COVID-19 business innovation POC programme	- 6 batches of incubations are implemented - Rwandan model of early incubation programme established and handed over - Progress of NINJA COVID-19 Business Innovation POC companies was monitored	- Evaluation report of each cohort of the 250 Startups including result of the questionnaire used to track alumni			

Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	**2.1 Support for organizing/ coordinating ICT-SWG**					
	2.1.1 Recruit ICT-SWG coordinator 2.1.2 Assist Ministry of ICT and Innovation to coordinate ICT-SWG 2.1.3 Develop Operation Manual for organizing ICT-SWG	-At least 6 ICT-SWG (twice per year) are supported -SWG Operation Manual is handed-over.	- Minutes of ICT SWG - Operation Manual			
	2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem					
	2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda 2.2.2 Support MINICT (and other C/Ps) to formulate policies 2.2.3 Recruit Policy Specialist for OJT style Policy advisory support with the MINICT team	-More than 15 policies and related documents are reviewed and advised..	-List of reviewed/advised Policies and related documents			
	2.3 Conduct Capacity Development Support to the Ministry and relevant agencies to raise their capacity to plan, formulate, coordinate and implement policies					
	2.3.1 Create Human Capacity Develoment plan 2.3.2 Conduct Hybrid type training (online/offline) as a POC 2.3.3 Conduct additional training in the form of "on the job training"	- HRD Plan created and implemented as a POC. - 30 participants obtain certificate of training completion	- HRD handed over and POC implmented -Certificate of training completion - Analysis/report of POC training course			
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	**3.1 Matching support between Rwandan and Japanese ICT companies**					
	3.1.1 Understand the current situation of ICT business environment in Rwanda 3.1.2 Promote Rwandan ICT companies to foreign market (especially Japanese) by compiling promotional materials 3.1.3 Support networking tour to/from Rwanda from/to Japan, and conduct follow up activities 3.1.3.1 Conduct additional physical networking tours to/from Rwanda from/to Japan	-15 companies profiling sheets are compiled. -Promotional booklet including 30 Rwandan companies information is published (Japanese/English) -More than 30 Rwandan and 50 foreign companies are followed-up for matching opportunities.	-Companies profiling sheet -Promotional booklet -List of companies followed-up			
	3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda					
	3.2.1 Develop supporting program for Japan-Rwanda Joint venture pilot projects. 3.2.2 Support Implementation of pilot projects 3.2.2.1 Increase POC support between Japan and Rwandan Companies	-Implementation of 6 pilot projects are supported. -Implementaion of additional 5 pilot projects supported	-Pilot Project Report			
Output4 Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and beyond.	**4.1 Define Rwanda Model of Success and Advocate Activities and Outputs**					
	4.1.1- Define and compile "Rwanda model" of success (ICT for Development) 4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar) 4.1.3 Synthesize Rwanda Model of ICT for Development (including JICA's contribution) to be applicable for other countries - building on to current Rwandan ICT model	- "Rwanda model of ICT for development journey" compiled into concise materials - Project activities and outputs are promoted through at least 4 types of medium (e.g. conference/seminar, radio, printing medium, video, social media etc.) - Synthesis of Rwandan model of ICT for development created from the initial "Rwanda ICT4D journey" compilation to be used as a potential tool for JICA's support model in other African countries.	- Concise Rwanda model of success (ICT for Development) booklet (and other medium) -List of types of medium used for dessimination			
	4.2 Extract and share lesson learned from the Project activities					
	4.2.1 Summarize lesson learned from the Project activities 4.2.2 Share lessons learned through various medium.	- Summary of lessons learned are created. - Lesson learned are promoted through at least 4 types of medium (e.g. conference/seminar, radio, printing medium, video, social media etc.)	- Summary of lesson learned - List of types of medium used for dessimination			
						Precondition
						Necessary policy formulation and regulatory management are carried out continously and subjectively based on the Smart Rwanda Master Plan, ICT Sector Strategic Plan, and NST-1
						<Issues and Countermeasures>

Activities	Inputs		Pre-Conditions
	Japanese Side	Rwandan Side	
1.1 **Create and strengthen facilities to encourage innovation**			
1.1.1 Understand the status of the incubation facilities 1.1.1.1 Conduct research on current status of innovation centers 1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline	Two Japanese professors (experts) from Keio University SFC undertook the related works (initial assessment and analysis of incubation facilities, mapping of innovation facilities in Kigali) which was completed by June 2018. A series of workshops have been organized based on the findings/ lessons learned, involving the relevant stakeholders from the Rwandan side to compile an Action Plan/ Operational Guideline of Innovation Hubs/ Centers Expansion in Rwanda. After the retreat on November 2019, the final draft of the "Tech-enabled innovation center expansion plan" and corresponding guideline has been delivered to RISA for finalization and submission to relevant authorities for budget request and allocation.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the documents. RISA has been instrumental in utilising the Action Plan and the corresponding guidline to secure public funding to enable operation of new centers in the secondary cities.	
1.1.2 Plan and conduct managment training on innovation center management (kLab, FabLab) and on-site technical training	The 1st Management training was conducted for FabLab and KLab for masters and potential future center manager on October 2019. Along with the kLab, FabLab managment teams, new centres managment teams (including potential candidates), stakeholders, and Fabacademy participants are invited to attend an intensive one week training session to horn managment skills for the innovation centres Training for FabLab masters on operation and maintenance of fablab equipments was conducted in Hamamtsu, Japan on January 2020. As an output of the training O&M manuals of Chinese fabricated CNC router and Laser cutter were being prepared. It is expected that once the equipment has arrived at the Huye and ASYV, next round of trainings will be conducted to prepare these centers to commence operations.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (e.g.; selection of center location, recruitment of human resource, allocation of appropriate financial resource, advocacy, etc.). Through dialogues between RISA and Local Government, Huye has assigned a manager/technical lead to commence the operation upon arrival of the equipment. ASYV has also assigned 2 personnel to operate the center. Musanze has budget issue which made them difficult to assign a person until next fiscal year and has asked the Project to support a personnel for a limite duration (until June 2021). The Project has agreed to support such a personel and train him/her with the agreement that the local Government will secure necessary funding to continue hiring the lab personnel.	
1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community	The project provided financial support for 1-2 batch of Fab academy for 2018-2019, and currently supporting 3rd batch of Fab academy. 3 candidates were selected an Training in ongoing online basis despite the lock down. However, students are currently facing internet problems.	The C/Ps and innovation centres have supported the project in the selection process of the candidates to undertake the managment training. It is expected that these human resources will be dispatched in the future as resource person to the FabLab/ kLab in the secondary cities as technical resources. Currently, the third and the last batch of the Project secretariat under RISA is vigorously monitoring the process of the students for their progress. FabAcademy has indicated that the extension was given to all the Fabacademy globally until next May to submit final project (the Secretariat has asked an official communique in this respect) but the Rwandan Fabacademy students are urged to complete their courses and assignments no later than a couple months from the original deadline.	
1.1.4 Conduct overseas training on innovation center management	As agreed in the previous JCCs' and within the scope of the said Action Plan/ Operational Guideline that an overseas study tour should be conducted some time in 2020 to visit the Philippines, India or Georgia where the FabLab is reported to be utilized for local economy development. However, due to spreading Covit-19 pandemic all over the world, the training planning process has been interrupted since March 2020 currently waiting for the situation to improve to restart the planning.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the action plan and the guideline to strengthen and expand Tech-enabled Innovation Centers in Rwanda. The overseas training decision (place, scope, and schedule) will be made in careful consultations with the C/Ps after sometime when the secondary cities' centers become operational and accumulated initial experiences of operation. COVID-19 has effectively banned all international travel globally. This activity has been postponed until the Pandemic situation improves	

1.1.5 Procure equipment for three innovation centers in the secondary cities/rural area	Procurement of 2 batch group of equipment is ongoing. Currently some of major equipment such as CNC routers and laser cutters have already been reached to local innovation centers. Procurement of 3 batch group of equipment also ongoing completing the bidding process and waiting for local innovation centers to be ready to receive the equipment before shipping from Japan by air. The progress of the procurement process will be regularly shared with the secretariat. The project also is in preparation to support some part of renovation of local centers as well as installing internet networking and electricity.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (human resource, financial resource, etc.). RISA has been spearheading the process. Currently the Secretariat under RISA is facilitating clearance process of arrived equipment and distribution of these equimpent to the local centers. Smaller equipment for the Musanze center will be ordered upon verificaiton of progress of the renovation of the center (as the rest of the equipment will be arriving on air and has very short lead time).	
Activity 1.2 **Organizing/ attending events for ICT start-ups**	*Due to COVID-19, various events including a business trip to Japan for the 4th cohort was either cancelled or postponed.*	*The C/P and stakeholders have been sharing information about relevant events/meetings in the area of ICT start-ups in Rwanda and its surrounding countries.*	Innovation and start-up enabling policies (including corresponding regulations) are effectively implemented in accordance with the Smart Rwanda Master Plan (SRMP).
1.2.1 Support for ICT related major events	The project held the online seminars in August and September 2020 to promote business relationships between Japanese and Rwandan companies (see 3.1.3 for details).	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been working together with the Project for facilitating those participation.	
1.2.2 Conduct overseas study tour for ICT entrepreneurs	The Project identified the top 5 startups from the 4th cohort and awarded to take them to a business trip to abroad. Due to COVID-19, however, the trip has been pending for some time. Some almuni startups were invited to participate in different events, though the project didn't directly support it.		
Activity 1.3 **Conducting pilot projects for ICT innovation**	*The relevant activities are currently underway, in collaboration with the ICT Chamber, involving ten startup incubates selected for 4th cohort. The 4th cohort completed its program in October despite of the difficulty to run it due to COVID-19.*	*For the 4th batch incubation of 10 start-ups, support has been given when necessary.*	
1.3.1 Develop implementation framework/ procedure	From the 3rd batch, 250Startups will not focus on specific sectors as long as the solutions utilize ICT technologies. The implementation framework/ procedure is currently under development based on the past batch experiences.	RISA provides 1st floor of Telecom House to 250Startups for the 3rd batch and onward. Also, RISA bears the cost of internet from December 2019, which makes the implementation of 250Startups much more effective and sustainable.	
1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)	The Project intensively assigned both local and Japanese experts for smooth and efficient implementation of the incubation activities. For the selected 4th batch incubates, opportunities will be provided to participate in overseas/ domestic events for pitching and/or presentation about their business. COVID-19 Pandemic has delayed the progress of recuitment process but 5th Cohorts recruitment process is almost done and the 5th cohort will start in January 2021.	RISA and ICT Chamber provided support in preparing and selecting ten startups for the 5th cohort. Challenge of recruitment has been pointed out by different stakeholders. More collaboration with insitututions which conduct workshops for ideation level startups. As the project commenee 5th batch incubation process, C/P clarity is needed as how to make the 250Startups mechanism more sustimable beyond the Project duration.	
Activity 2.1 **Support for organizing/ coordinating ICT-SWG**	*JICA Country Office Program Manager, the Project's sub-chief advisor, and the SWG coordinator/Technical Advisor to the Minister have been following up on the issues related to support ICT-SWG and other policy related activities.*	*C/Ps conducted various policy related activities which include ICT-SWG and other policy related activities.*	
2.1.1 Recruit SWG Coordiantor (based on 4th JCC and corresponding PDM amendament) - Completed	Recruitment has been completed. The project and C/P assisted rectuirment process conducted by the JICA CO. SWG coordinator has indicated his desire to end his contract. New coordinator need to be recruited to take over his portfolio.	Recruitment has been completed. The project and C/P assisted rectuirment process conducted by the JICA CO.	

2.1.2 Assist to coordinate ICT-SWG	The SWG coordinator/Technical Advisor to the Minister has been following up the related activities. December SWG was joined by the Chief Advisor. Q1 and Q2 2020 SWGs were not conducted due to COVID-19 Pandemic. In addition to the SWGs, in the last 8 months, both BLJSR and FLJSR were supported by the Project and the JICA CO. Monthly SWG will be conducted from July 2020 in response to the request given by the Donors at the SWG in December 2019. Regular monthly coordination meeting is being conducted by the SWG coordinator and JICA CO (*host of the meeting became rotational among the stakeholders).	The SWG coordinator/Technical Advisor is assiting Ministry in the area of SWG and other issues (including JSR).	
2.1.3 Support development of Operational Manual ICT-SWG	The SWG coordinator/Technical Advisor is compiling Operational Manual for the ICT SWG. The Project is giving inputs into the development of the manual. Final version of the manual need to be verified before current SWG coordinator's departure.	The draft Operation Manaul will be reviewed by the C/P before finalized into an operational manual.	**Issues and Countermeasures**
Activity 2.2 **Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem**	*New Policy Specialist has been recruited to provide policy related capacity building support to the Ministry as the support by the Policy Advisor/Chief Advisor could provide mostly distant based support during the reporting period. In addition, as has been in the previous period, resident sub-chief advisor and SWG/Technical Advisor, along with the JICA's Programme manager, provided continuous resident support to the Ministry.*	*Since the reorganization of the MiTEC to MINICT, the Ministry is in the process of creating a new institutional setup. It is imperative to monitor the process of the Ministry complete the process as it will become the base for the Project's institutional strengthening support.* *Meanwhile, C/P has been concentrating their work on such priority project as KIC, formulation of priority strategies/plans, advocacy, etc. These priority initiatives have been supported by the Project.* *During the reporting period, C/Ps have also actively provided their policy related support at SWG meetings and other fora.*	Active coordination by the Project secretariat will be critical in moving several key issues (e.g.; advocacy) forward. In addition, allocation of appropriate resources from the C/Ps will be critically important to maker sure that the project will implement smoothly.
2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda *(changed after the 2nd JCC)* - Completed	As part of the Innovation Center Expansion Action Plan and Guideline formulation processes, common vision of ICT innovation Ecosystem (within the context of innovation centers) has been formulated.	The exercise was completed as part of the ICT innovation center expansion action plan with key stakeholders. The vision and the holistic innovation center expansion plan has been submitted to the Government through RISA.	
2.2.2 Support MiTEC MINICT (and other C/Ps) to formulate policies	Ongoing support is being provided as needed (e.g.; review of JSR, added inputs of KIC Hub Strategy, KIC related activities, editing/inputs provided to priority ICT sector strategies, etc.) This activities have continued during the COVID-19 from remotely. Policy specialist has been hired under the project is also has began providing facilitation and continue support in the area.	Policy formulation and review exercises are ongoing under the leadership of the ministry. However, some of the priority strategies need further work	
2.2.3 Recruit Policy Specialist for OJT style Policy Advisory Support with the MINICT Team.	From April 2020, Policy specialist has been hired under the project. She is continuing support in the area as well as coordinating on-line training initiative through Udemy for Government. Also She is coorddinating off-line training through orginizers. However, PJ with MINICT have continued despite some delay caused by COVID-19 pandemic and resultant lock-down. 2nd Leadership trining will be conducted in January 2021 (postoponed from December 2020).	Policy Specialist recruitment has been supported by the C/P.	

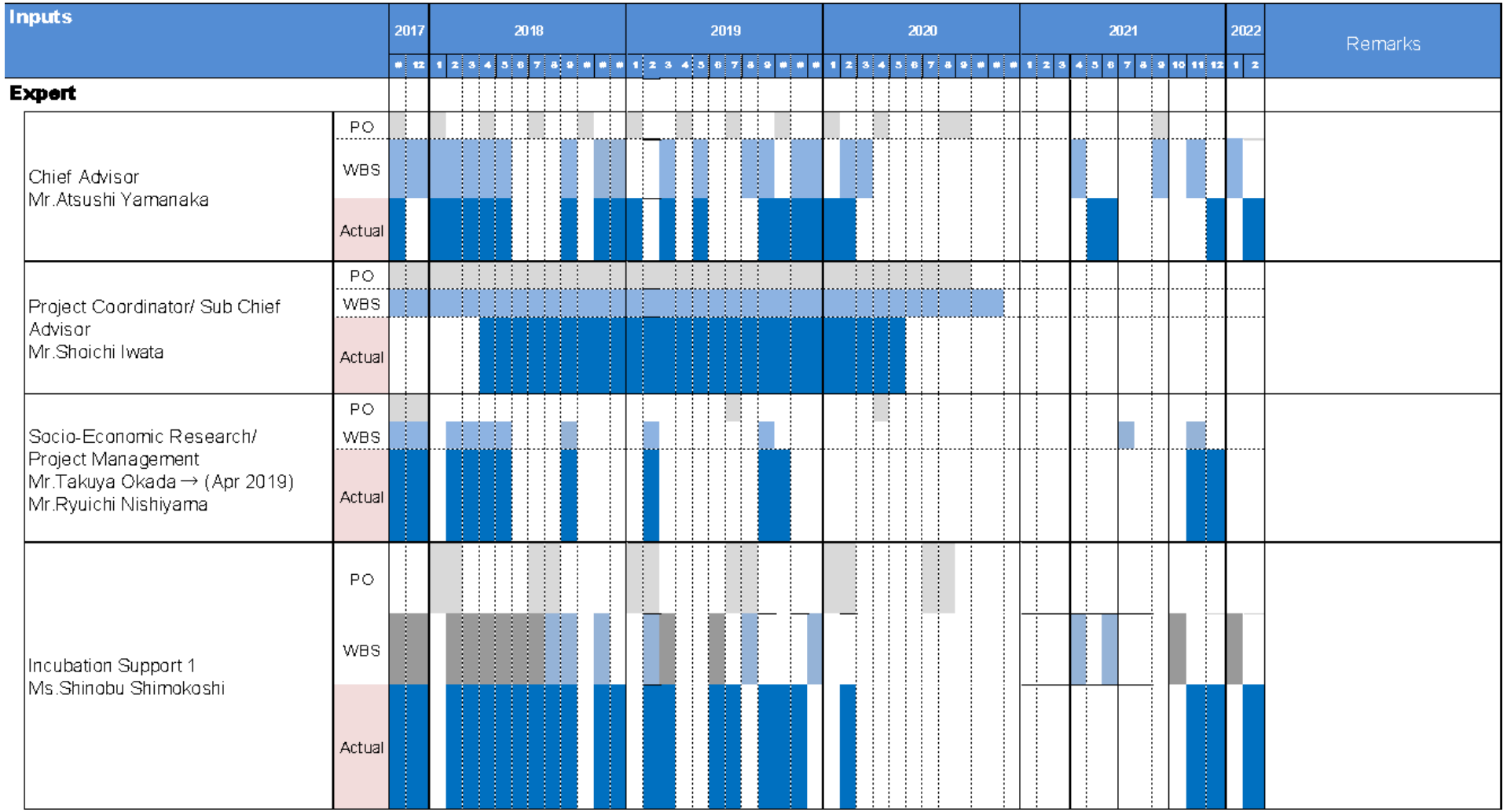
Activity 3.1 **Matching support between Rwandan and Japanese ICT companies**	*The activities in Output 3 continue to focus on practical activities that follow business promotion and follow-up.* *Under the outbreak of COVID-19, the project conducted online business seminar including a matching event so as not to stagnate the partnerships between Rwandan/Japanese companies.* *Also, the pilot project has reached its final phase, and in order to lead to more outcomes, the project will improve the next pilot project by utilizing lesson learned so far.*	*C/Ps expect to have networking opportunities to lead to concreate business matching between Japan-Rwanda companies. C/Ps also co-sponsored capacity building inititatives for member companies which have represented Rwanda during the TICAD7.*	
3.1.1 Understand the current situation and advice organizational structure to promote investments	Project continued to support Rwandan ICT companies and relevant C/Ps institutions to connect with the relevant Japanese and other foreign markets.	Centered on Rwandan companies that participated in TICAD VII, C/Ps are trying to establish and operate mutual aid association in the ICT private sector under the leadership of PSF.	
3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	In addition to the book introducing Rwandan companies published for TICAD7 (Japanese version), the project has edited an English version to promote Rwandan companies not only to Japanese companies but also to companies around the world. The book is available online (PDF) from the project homepage.	C/Ps and Rwandan companies actively responded to interviews and provided necessary information to contribute the booklet.	
3.1.3 Conduct networking tour from Rwanda to Japan, and from Japan to Rwanda	Due to the outbreak of the COVID-19, it has been difficult for the project to conduct business visits of Japanese to Rwanda and of Rwandans to Japan. With that fact , the project held the online seminars in August and September 2020 to promote business relationships between Japanese and Rwandan companies. The online seminar was held four times. In the first session, the Rwandan government explained the business environment in Rwanda, and in the second session, the business experiences of Japanese companies already doing business in Rwanda were shared. In the third session, Japanese companies (2 companies) and Rwandan companies (5 companies) each pitched their business online. The fourth was an online matching event where companies could communicate with each other in a virtual space using innovative tools. A total of nearly 200 people participated in the four-day event.	C/Ps and Rwandan companies welcomed and cooperated with the visit of Japanese companies. And they prepared interviews with Japanese companies and participated in networking events. In particular, some Rwanda companies actively invited Japanese companies to their offices to have valuable business opportunities. The C/Ps gave them the instruction of the challenges and possibilities for Japanese companies doing business in Rwanda.	
Activity 3.2 **Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda**	*The project has actively recruited participating companies for the pilot project.* *Based on the lessons learned from the completed pilot project, the project will summarize the challenges and possibilities for Rwandan business.*	*C/Ps provide support to connect appropriate parties to the companies conduct pilot projects.*	
3.2.1 Develop pilot business concept, and identification of joint business group	In order to respond to the operational challenges of the pilot project so far and to lead to further outcomes, the project will revise the operation method of the next pilot project. Specifically, the selected companies will set more specific goals and set feasible business plans, and the projects will support them to commit to the results by regularly monitoring them.	The C/Ps endorsed the process and provided inputs for selection process which was designed by the Project.	
3.2.2 Implement pilot projects (6*-cases) for 4 months while monitoring and review *(increased from 3 to 6 after the 2nd JCC)*	Due to COVID-19, the pilot project of case-3 to 5 started late but those three pilot projects are about to close. The planned case-6 was not adopted this time because there was no company suitable for adoption. The case-6 will be integrated into the five new pilot projects that will be added in the next phase. The next pilot project will be open to the public in January and is scheduled to start in February. In the next pilot project, in addition to the previous business sectors, the project plan to adopt the pilot project specializing in the space industry.	The C/Ps involved in the selection process and endorsed the result of selecting company.	

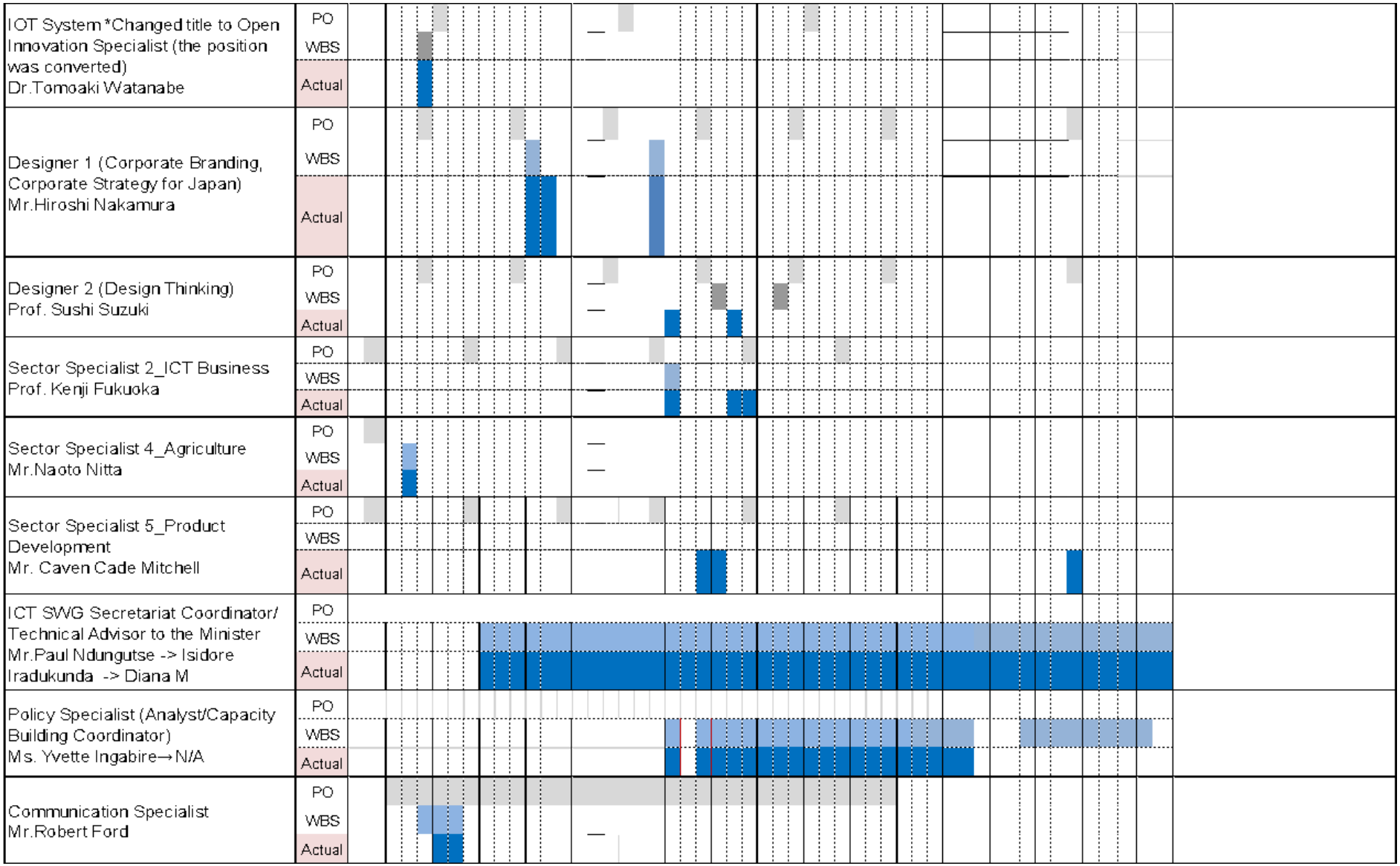
Activity 4.1 **Collecting good practices in ICT-use and modeling cases for promotion**	*During the last six months, several good practices of the Project have been compiled into Multimedia contents, Book, and experience sharing through participating different events. Some of the highlighted fora in the past 6 months include the TAS2019, TICAD7, 250 Startups Visit, etc.*	*C/Ps have been involved support in the process of compiling such knowledge product as Rwanda ICT/Innovation Companies' Guide and Multimedia products. In addition, C/Ps have been providing knowledged learned from the project's implemetation through different fora which include TAS2019, TICAD7, and 250 Startups visit to Japan, etc.*
4.1.1 Define and Compile "Rwanda model" of success (ICT for Development) (Modified based on 4th JCC and PDM Amendament)	Case study on innovation labs, which was compiled with the relevant stakeholders, has been reflected in the Action Plan drafted in Feb. 2019. Currently, a lessons-learned review is underway for the 1st batch incubation support. Lessons learned from the review shall be shared by the end of Mar. 2019. These lessons learned need to be shared at suitable venues under activity 4.2 The said activity has been modified bsaed on 4th JCC nad amendamanet to PDM to reflect more precise KPI.Based on the JCC discussion, more concise KPI was called for and the new Rwanda Model compilation activity was added to the PDM. The compilation work, however, was delayed due to internal coordinatoin issue within the C/P organization, COVID-19 Pandemic, and MINICT restructuring. The work has began in December 2020 and expected to compile first draft at the end of Q1	The C/Ps recommended JCC to amend the PDM to be aligned closely to the actual activities and results. As such, new activity of "Rwanda Model" has been added to the Projet. Some of the activities and results attained in the original 4.1.1 activity has been moved to 4.1.2 and 4.2 MINICT has compiled letters of request to the interviwees to commence the initiative.
4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar) (Modified based on 4th JCC and PDM Amendament)	Draft advocacy plan to spearhead the activity was completed after organizing Advocacy Retreat to get stakholders inputs. However, the plan has not been finalized by the Project C/P. In addition, new PR officer who has been recruited for the project and PR associate have both left the Project in March to pursue other opportunities. The Covid-19 Pandemic is putting new urgent need for domestic advocacy as ICT played critical roles in the pandemic mitigation and the C/P would like to cease the opportunity to advocate power of ICT as tools to mitigate socio-economic challenges. New PR Associate has been hired and spearheading this initiative with Communication officer at the MINICT	Project is awaiting for a one page concept note from Secretariat to focus on ICT sector achievements which mitigated the effect of COVID-19 Pandemic. Upon receiving the concept note, TOR for the PR officer will be amended and new PR officer wil lbe recruited. With the new PR officer, even when the Project Team is not present in Rwanda, PR activities will be conducted. MINICT Communication officer is working with ne PR associate to spearhead the advocacy initiative.

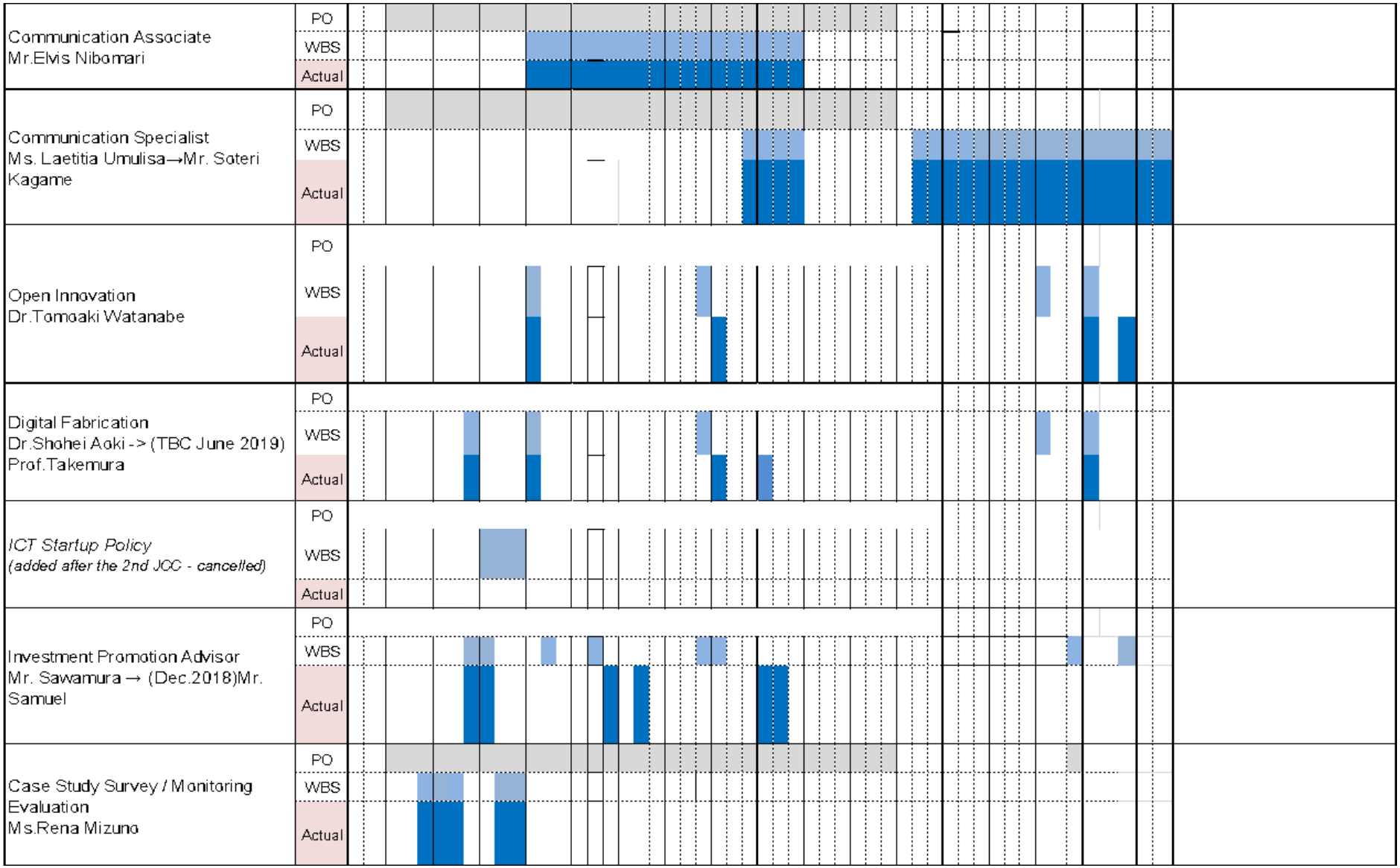
Activity 4.2 **Disseminating the case studies through international/ regional organization and appropriate fora -> Extract and share lesson learned from the Project activities (Modified based on 4th JCC and PDM Amendament)**	*Various different knowledge learned materials through the Project implementation have been shared in various different format at different fora both within and beyond Rwanda.*	*Same as left.*	
4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.) -> 4.2.1 Summarize lesson learned from the Project activities (Modified based on 4th JCC and PDM Amendament)	Lessons learned are being compiled by the team responsible for the different outputs. For example, 250Startups are conducting tracer survey for the first 4 batches of the incubatees, 30 Rwandan ICT company bookhas been compiled in English, and other lesson learned materials are being compiled by the team inlcuding lessons-learned of using online tools for networking initiatives. In the same manner, some of the lessons learned from other outputs are being compiled and utilized to further improve the respective outputs. In addiiton, JICA has asked to compile lessons-learned from JICA's past 10 years support in Rwanda in the area of ICT. The new lessons-learned format is currently under development and the associated acitivites are put into new suggested activities under the Project extension.	C/P will help review lessons-learned materials to be packaged into appropriate format to be used by various media outlets both domestically and internationally.	
4-2.2 Share lessons learned through various medium (Modified based on 4th JCC and PDM Amendament)	Project continue to share lessons learned at every available opportunities (e.g.; 250 Startups pitching mission to Japan and other fora). The Proejct was anticipating TAS 2020 as a major event to showcase Rwanda Model and other lessons leanred from the project. However, due to Pandemic, the TAS2020 was postponed with date not yet determined. However, through various on-line conferences (e.g.; Cyber Defense Forum September, Africa Tech Festival in Movember 2020, etc.) Project information was shared alongwith the specific topics of discussions.	The Project is in talk with C/P to prioritize dometic media campaign (as per 4.1.2 mandate) as sharing Pandemic mitigation experience using ICT could be good lessons learned materials for both domestic and international (e.g.; Webminar and on-line networking session between Japanese and Rwandan companies).	

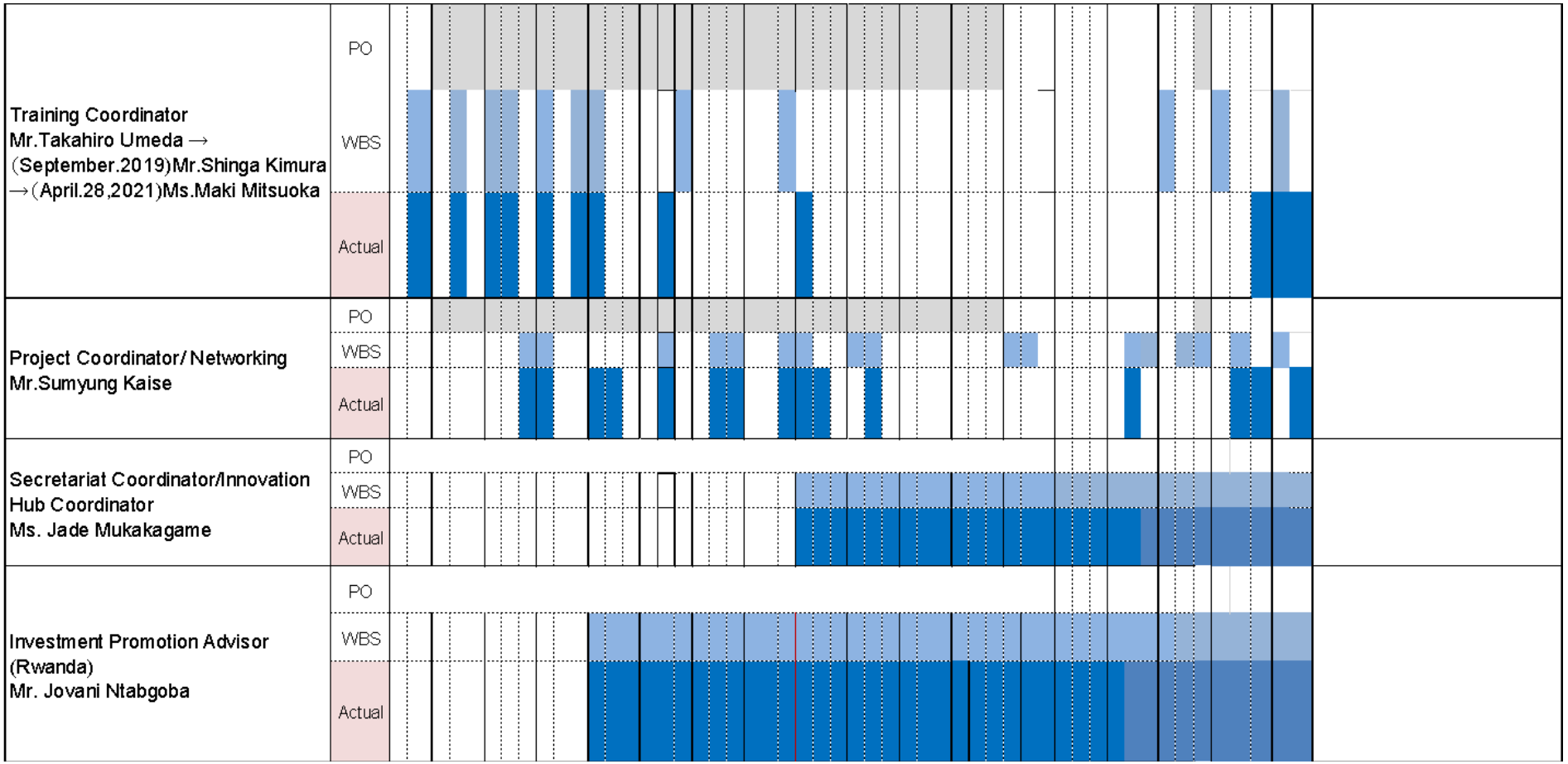
ANNEX-7 : PO

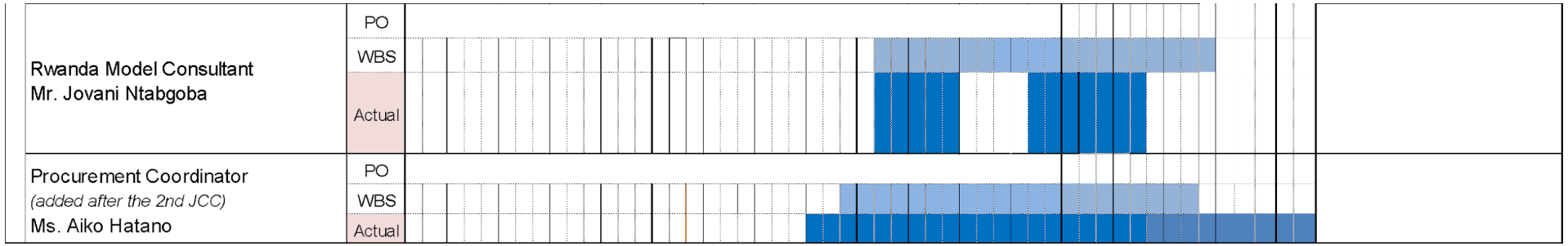
Project Title: ICT Ecosystem Innovation Strengthening Project

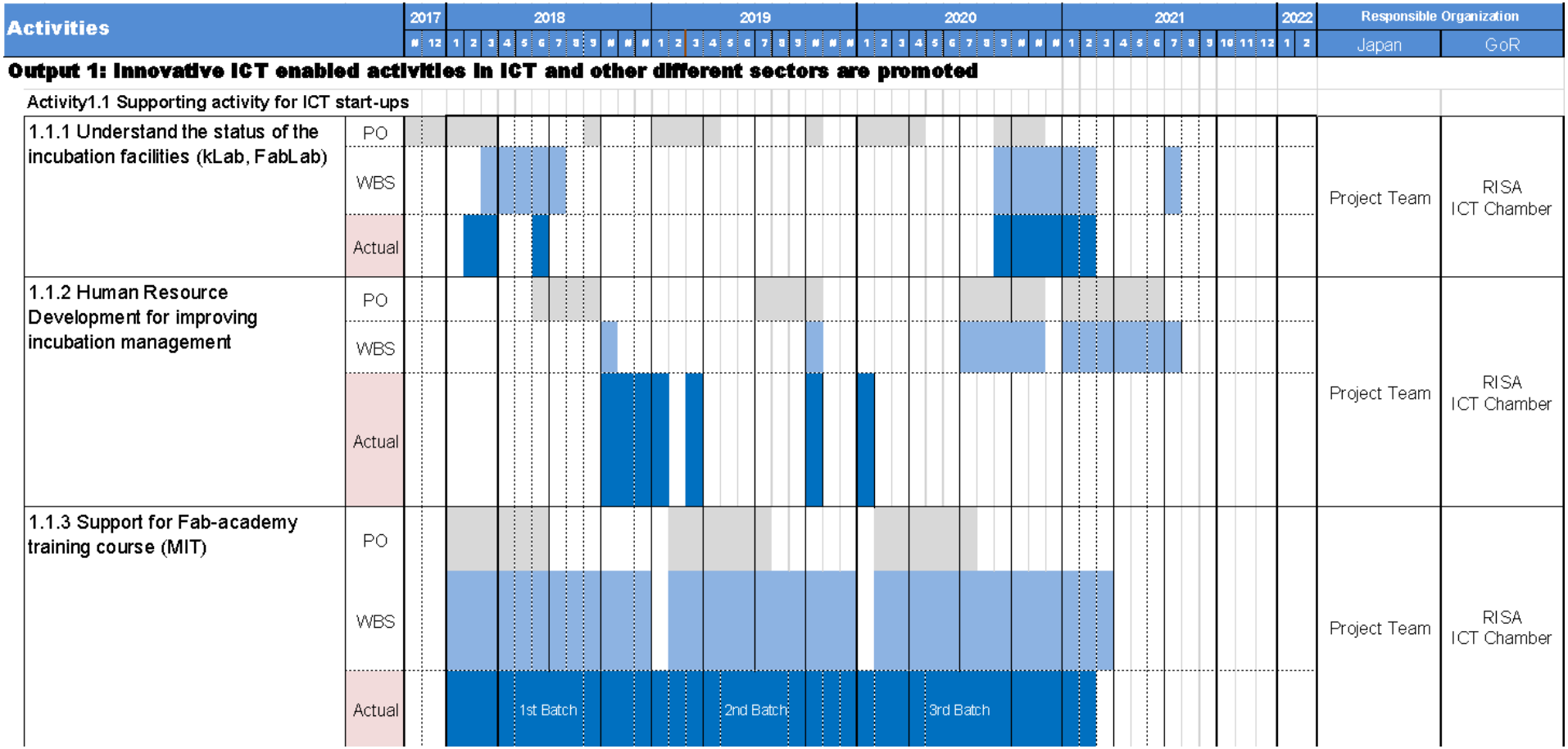


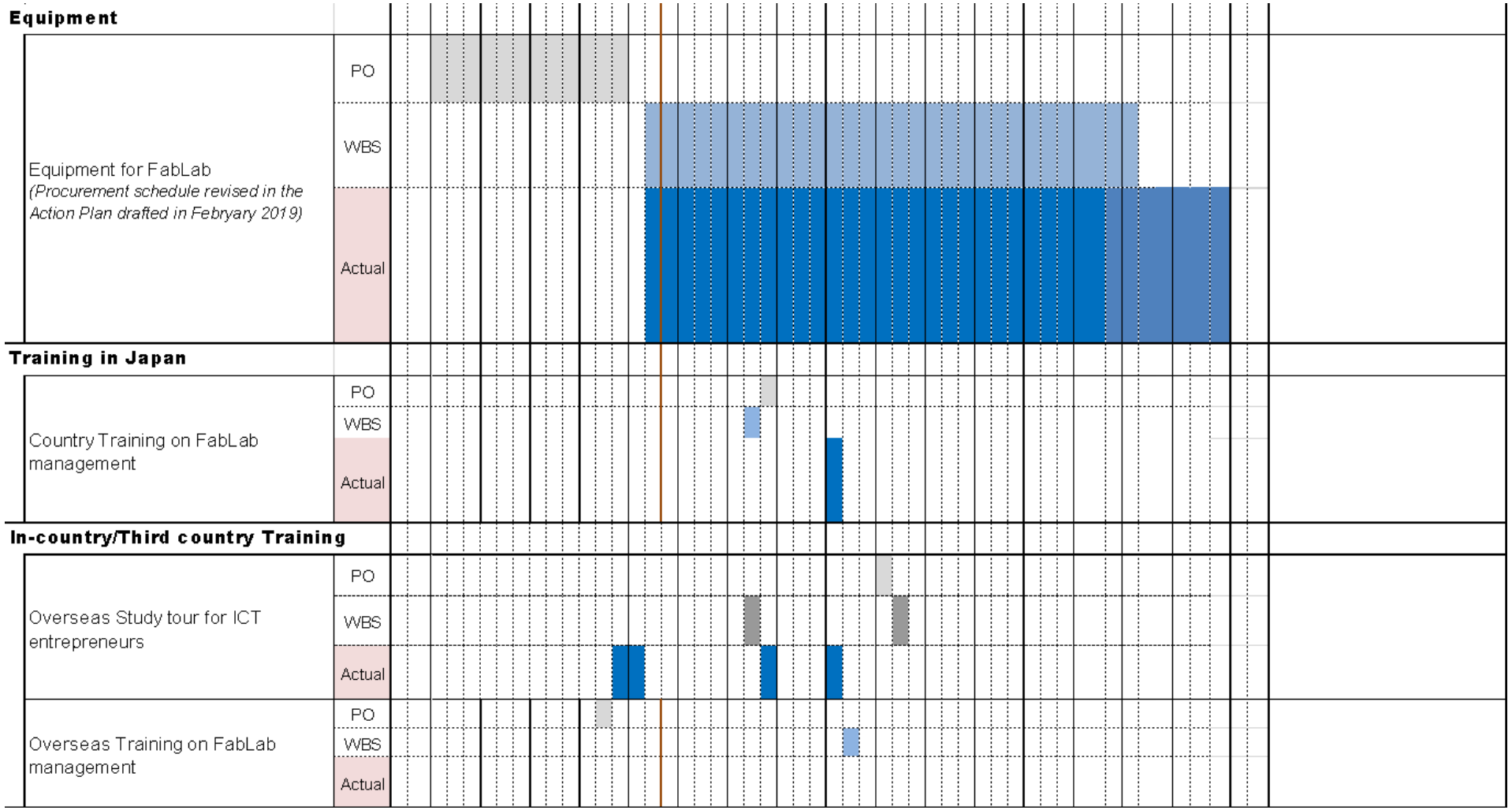

IOT System *Changed title to Open Innovation Specialist (the position was converted)
Dr.Tomoaki Watanabe
PO
WBS
Actual
Designer 1 (Corporate Branding, Corporate Strategy for Japan)
Mr.Hiroshi Nakamura
PO
WBS
Actual
Designer 2 (Design Thinking)
Prof. Sushi Suzuki
PO
WBS
Actual
Sector Specialist 2_ICT Business
Prof. Kenji Fukuoka
PO
WBS
Actual
Sector Specialist 4_Agriculture
Mr.Naoto Nitta
PO
WBS
Actual
Sector Specialist 5_Product Development
Mr. Caven Cade Mitchell
PO
WBS
Actual
ICT SWG Secretariat Coordinator/ Technical Advisor to the Minister
Mr.Paul Ndungutse -> Isidore Iradukunda -> Diana M
PO
WBS
Actual
Policy Specialist (Analyst/Capacity Building Coordinator)
Ms. Yvette Ingabire→ N/A
PO
WBS
Actual
Communication Specialist
Mr.Robert Ford
PO
WBS
Actual

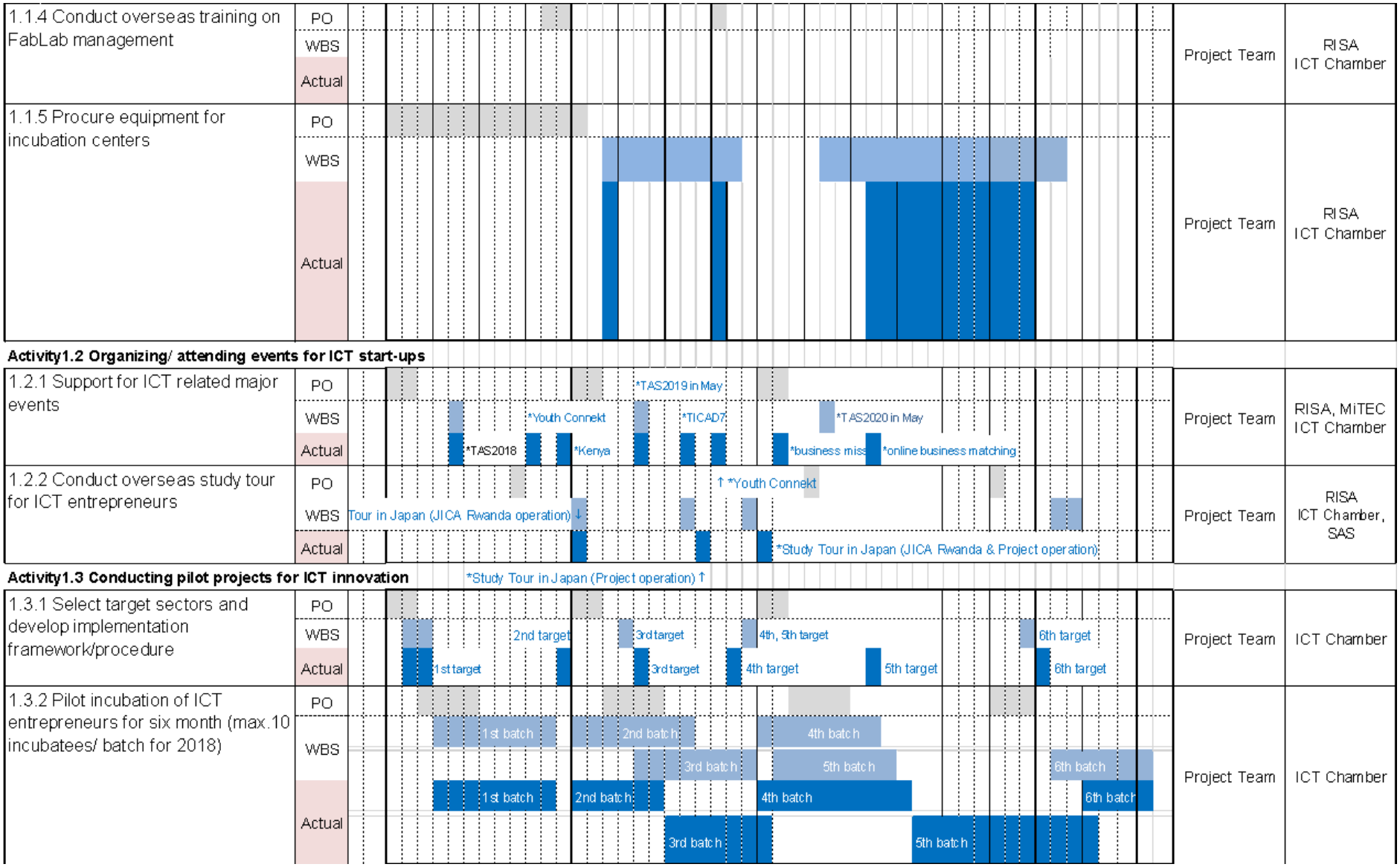

Communication Associate
Mr.Elvis Nibomari
PO
WBS
Actual
Communication Specialist
Ms. Laetitia Umulisa→Mr. Soteri Kagame
PO
WBS
Actual
Open Innovation
Dr.Tomoaki Watanabe
PO
WBS
Actual
Digital Fabrication
Dr.Shohei Aoki -> (TBC June 2019)
Prof.Takemura
PO
WBS
Actual
ICT Startup Policy
(added after the 2nd JCC - cancelled)
PO
WBS
Actual
Investment Promotion Advisor
Mr. Sawamura → (Dec.2018)Mr. Samuel
PO
WBS
Actual
Case Study Survey / Monitoring Evaluation
Ms.Rena Mizuno
PO
WBS
Actual


Training Coordinator
Mr.Takahiro Umeda →
(September.2019)Mr.Shinga Kimura
→(April.28,2021)Ms.Maki Mitsuoka
PO
WBS
Actual
Project Coordinator/ Networking
Mr.Sumyung Kaise
PO
WBS
Actual
Secretariat Coordinator/Innovation
Hub Coordinator
Ms. Jade Mukakagame
PO
WBS
Actual
Investment Promotion Advisor
(Rwanda)
Mr. Jovani Ntabgoba
PO
WBS
Actual

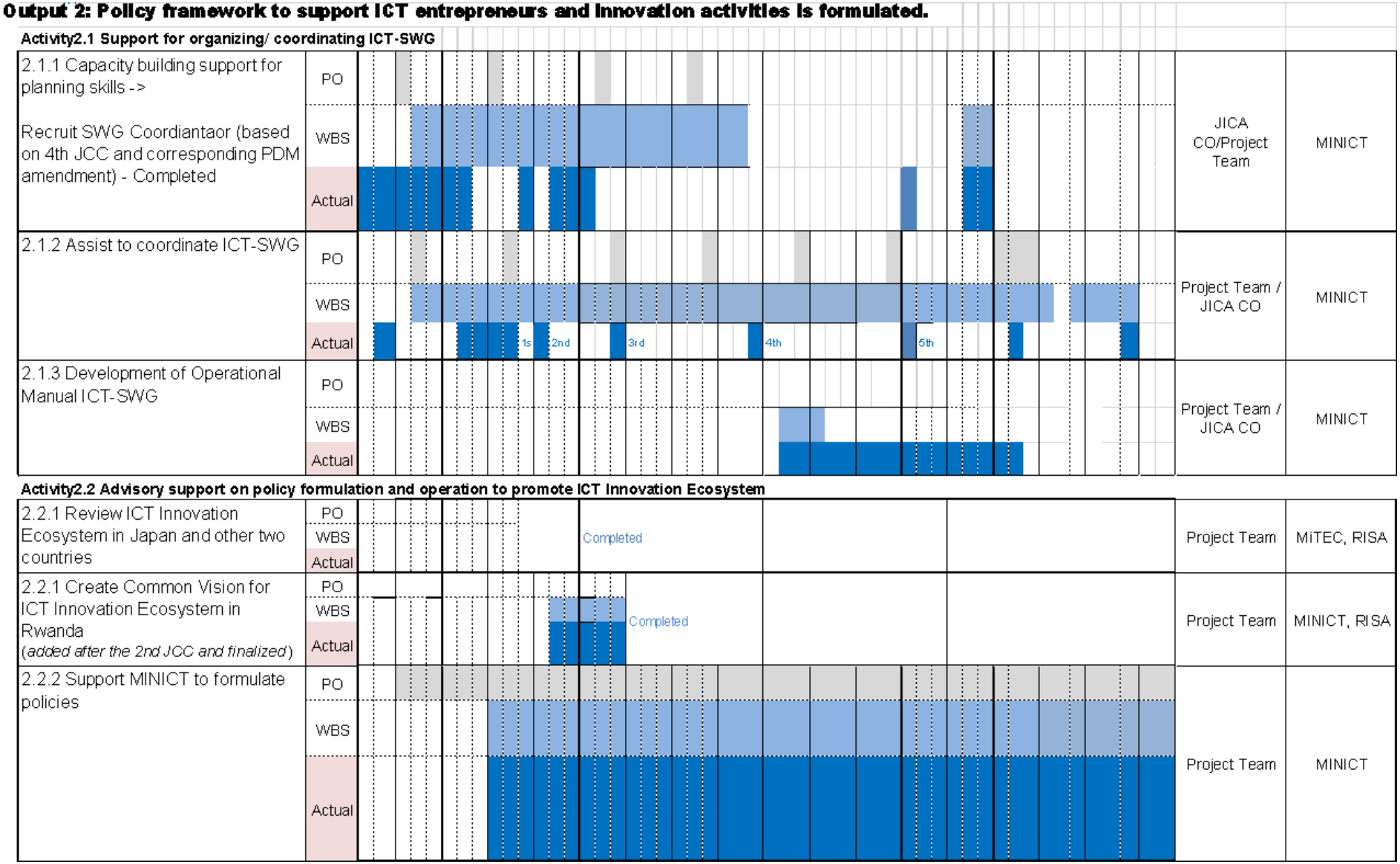

Rwanda Model Consultant
Mr. Jovani Ntabgoba
PO
WBS
Actual
Procurement Coordinator
(added after the 2nd JCC)
Ms. Aiko Hatano
PO
WBS
Actual


Activities
2017
2018
2019
2020
2021
2022
Responsible Organization
Japan
GoR
Output 1: Innovative ICT enabled activities in ICT and other different sectors are promoted
Activity1.1 Supporting activity for ICT start-ups
1.1.1 Understand the status of the incubation facilities (kLab, FabLab)
PO
WBS
Actual
Project Team
RISA
ICT Chamber
1.1.2 Human Resource Development for improving incubation management
PO
WBS
Actual
Project Team
RISA
ICT Chamber
1.1.3 Support for Fab-academy training course (MIT)
PO
WBS
Actual
1st Batch
2nd Batch
3rd Batch
Project Team
RISA
ICT Chamber

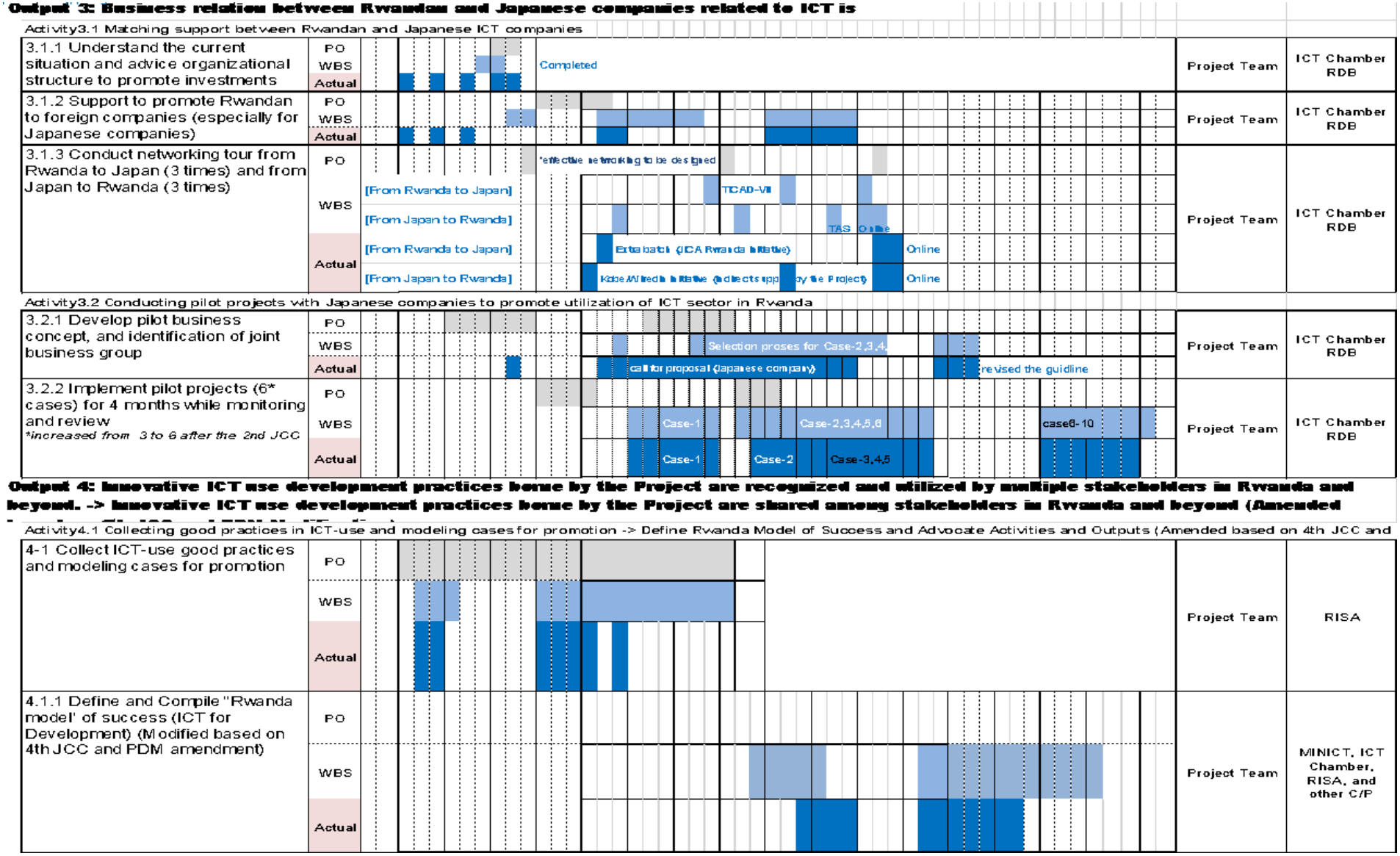

Equipment
Equipment for FabLab
(Procurement schedule revised in the Action Plan drafted in Febryary 2019)
PO
WBS
Actual
Training in Japan
Country Training on FabLab management
PO
WBS
Actual
In-country/Third country Training
Overseas Study tour for ICT entrepreneurs
PO
WBS
Actual
Overseas Training on FabLab management
PO
WBS
Actual

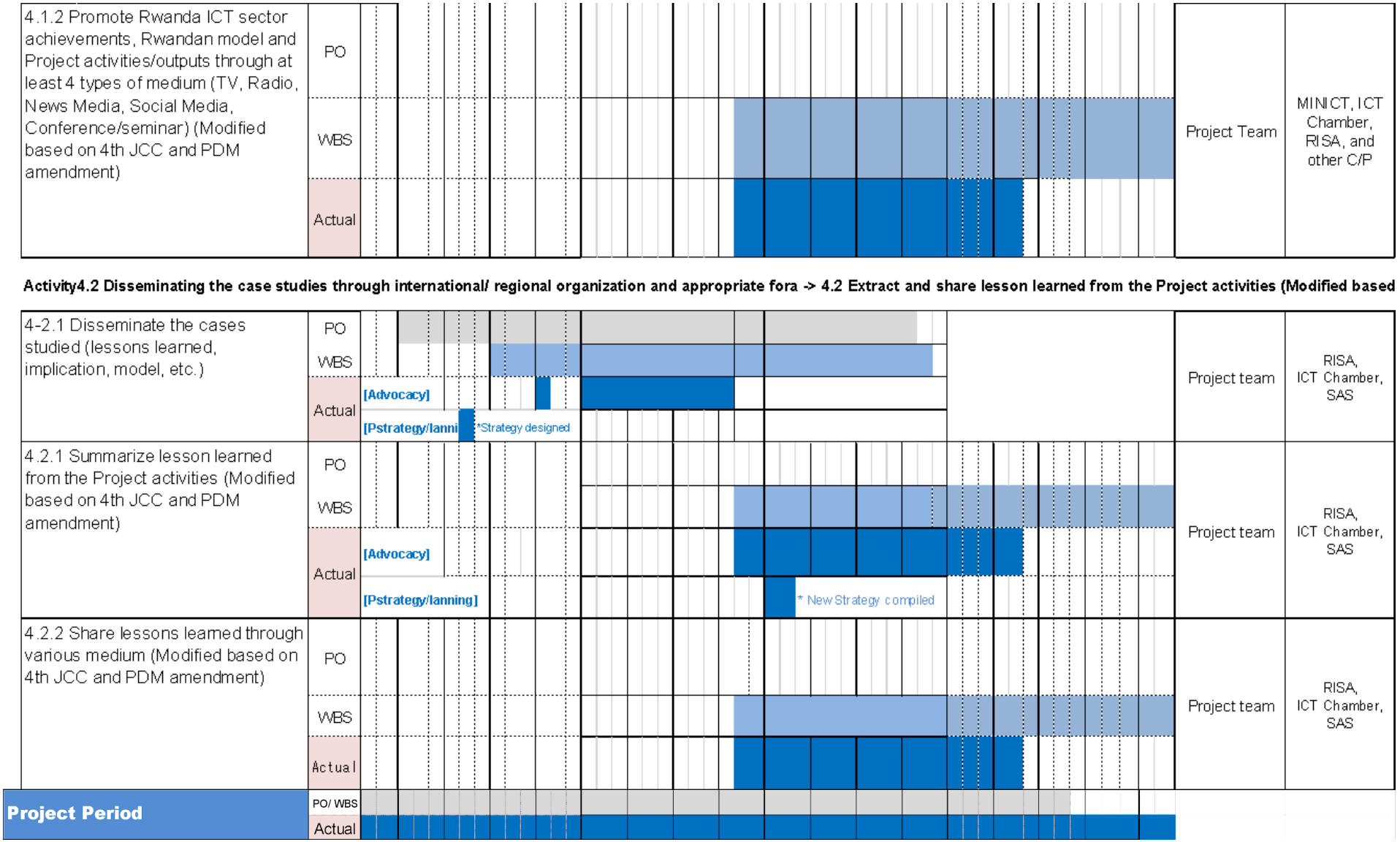

1.1.4 Conduct overseas training on FabLab management
PO
WBS
Actual
Project Team
RISA
ICT Chamber
1.1.5 Procure equipment for incubation centers
PO
WBS
Actual
Project Team
RISA
ICT Chamber
Activity1.2 Organizing/ attending events for ICT start-ups
1.2.1 Support for ICT related major events
PO
WBS
Actual
*TAS2019 in May
*Youth Connekt
*TICAD7
*TAS2020 in May
*TAS2018
*Kenya
*business miss
*online business matching
Project Team
RISA, MiTEC
ICT Chamber
1.2.2 Conduct overseas study tour for ICT entrepreneurs
PO
WBS
Actual
↑ *Youth Connekt
Tour in Japan (JICA Rwanda operation) ↓
*Study Tour in Japan (JICA Rwanda & Project operation)
Project Team
RISA
ICT Chamber, SAS
Activity1.3 Conducting pilot projects for ICT innovation
*Study Tour in Japan (Project operation) ↑
1.3.1 Select target sectors and develop implementation framework/procedure
PO
WBS
Actual
2nd target
3rd target
4th, 5th target
6th target
1st target
3rd target
4th target
5th target
6th target
Project Team
ICT Chamber
1.3.2 Pilot incubation of ICT entrepreneurs for six month (max.10 incubatees/ batch for 2018)
PO
WBS
Actual
1st batch
2nd batch
4th batch
3rd batch
5th batch
6th batch
1st batch
2nd batch
4th batch
6th batch
3rd batch
5th batch
Project Team
ICT Chamber

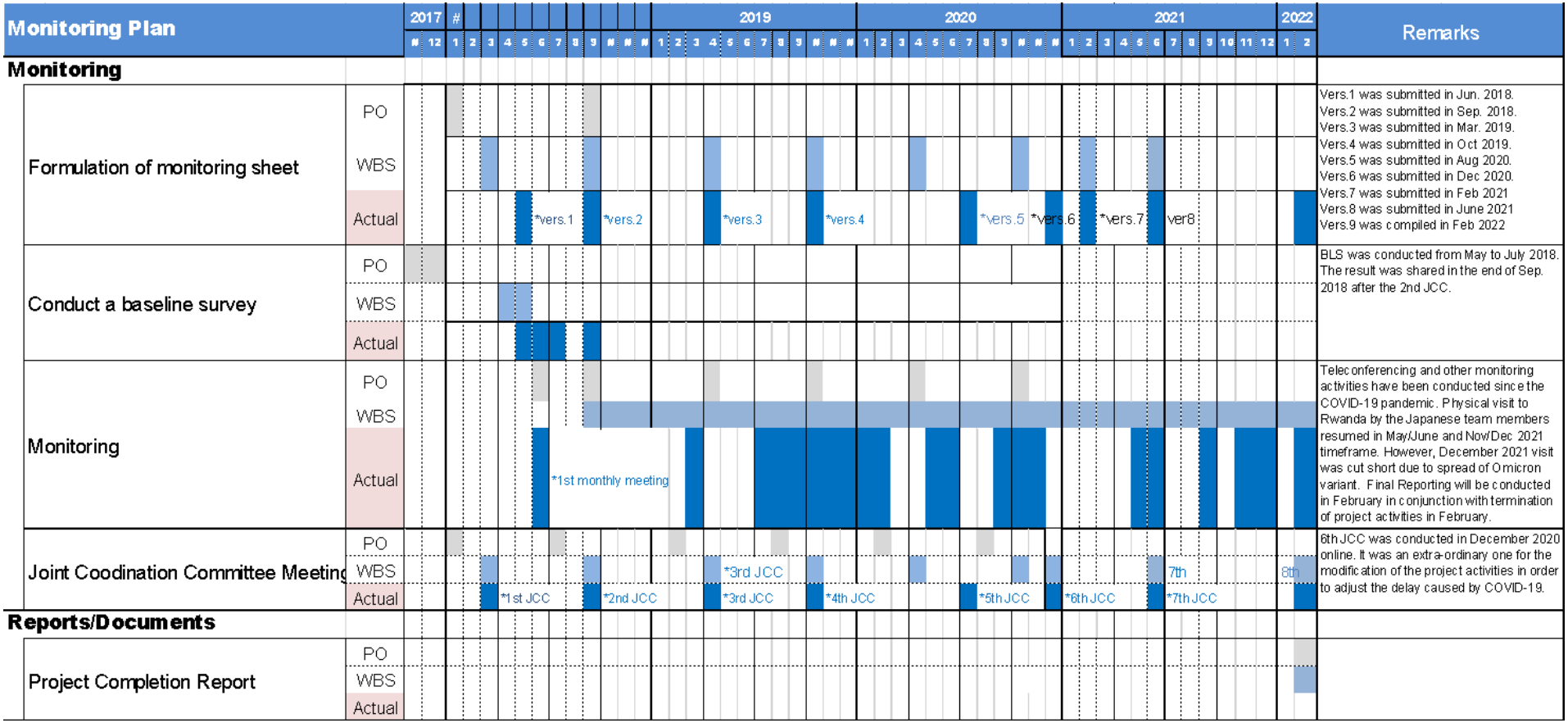
Output 2: Policy framework to support ICT entrepreneurs and Innovation activities is formulated.



2.2.3 Recruit Policy Specialist for OJT style Policy Advisory Support with the MINICT Team.	PO WBS Actual	Project Team	MINICT
Activity2.3 Conduct Capacity Development Support to the Ministry and relevant agencies to raise their capacity to plan, formulate, coordinate, and implement policies.			
2.3.1 Create Human Capacity develpment Plan (Completed and capacity develpment is being conducted according to the plan)	PO WBS Actual Completed	Project Team	MINICT, RISA
2.3.2 Conduct Hybrid type training (online/offline) as a POC	PO WBS Actual	Project Team	MINICT


Output 3: Business relation between Rwandan and Japanese companies related to ICT is
Activity3.1 Matching support between Rwandan and Japanese ICT companies
3.1.1 Understand the current situation and advice organizational structure to promote investments
PO
WBS
Actual
Completed
Project Team
ICT Chamber RDB
3.1.2 Support to promote Rwandan to foreign companies (especially for Japanese companies)
PO
WBS
Actual
Project Team
ICT Chamber RDB
3.1.3 Conduct networking tour from Rwanda to Japan (3 times) and from Japan to Rwanda (3 times)
PO
WBS
Actual
[From Rwanda to Japan]
[From Japan to Rwanda]
[From Rwanda to Japan]
[From Japan to Rwanda]
TICAD-VII
TAS
Online
Online
Project Team
ICT Chamber RDB
Activity3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda
3.2.1 Develop pilot business concept, and identification of joint business group
PO
WBS
Actual
Selection proses for Case-2,3,4
call for proposal (Japanese company)
revised the guidline
Project Team
ICT Chamber RDB
3.2.2 Implement pilot projects (6* cases) for 4 months while monitoring and review
*increased from 3 to 6 after the 2nd JCC
PO
WBS
Actual
Case-1
Case-2,3,4,5,6
case6-10
Case-1
Case-2
Case-3,4,5
Project Team
ICT Chamber RDB
Output 4: Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond. -> Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and beyond (Amended
Activity4.1 Collecting good practices in ICT-use and modeling cases for promotion -> Define Rwanda Model of Success and Advocate Activities and Outputs (Amended based on 4th JCC and
4-1 Collect ICT-use good practices and modeling cases for promotion
PO
WBS
Actual
Project Team
RISA
4.1.1 Define and Compile "Rwanda model' of success (ICT for Development) (Modified based on 4th JCC and PDM amendment)
PO
WBS
Actual
Project Team
MINICT, ICT Chamber, RISA, and other C/P


4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar) (Modified based on 4th JCC and PDM amendment)
PO
WBS
Actual
Project Team
MINICT, ICT Chamber, RISA, and other C/P
Activity4.2 Disseminating the case studies through international/ regional organization and appropriate fora -> 4.2 Extract and share lesson learned from the Project activities (Modified based
4-2.1 Disseminate the cases studied (lessons learned, implication, model, etc.)
PO
WBS
Actual
[Advocacy]
[Pstrategy/lanni
*Strategy designed
Project team
RISA, ICT Chamber, SAS
4.2.1 Summarize lesson learned from the Project activities (Modified based on 4th JCC and PDM amendment)
PO
WBS
Actual
[Advocacy]
[Pstrategy/lanning]
* New Strategy compiled
Project team
RISA, ICT Chamber, SAS
4.2.2 Share lessons learned through various medium (Modified based on 4th JCC and PDM amendment)
PO
WBS
Actual
Project team
RISA, ICT Chamber, SAS
Project Period
PO/ WBS
Actual


Monitoring Plan
2017
2019
2020
2021
2022
Remarks
Monitoring
Formulation of monitoring sheet
PO
WBS
Actual
*vers.1
*vers.2
*vers.3
*vers.4
*vers.5
*vers.6
*vers.7
ver8
Vers.1 was submitted in Jun. 2018.
Vers.2 was submitted in Sep. 2018.
Vers.3 was submitted in Mar. 2019.
Vers.4 was submitted in Oct 2019.
Vers.5 was submitted in Aug 2020.
Vers.6 was submitted in Dec 2020.
Vers.7 was submitted in Feb 2021
Vers.8 was submitted in June 2021
Vers.9 was compiled in Feb 2022
Conduct a baseline survey
BLS was conducted from May to July 2018. The result was shared in the end of Sep. 2018 after the 2nd JCC.
Monitoring
*1st monthly meeting
Teleconferencing and other monitoring activities have been conducted since the COVID-19 pandemic. Physical visit to Rwanda by the Japanese team members resumed in May/June and Nov/Dec 2021 timeframe. However, December 2021 visit was cut short due to spread of Omicron variant. Final Reporting will be conducted in February in conjunction with termination of project activities in February.
Joint Coodination Committee Meeting
*1st JCC
*2nd JCC
*3rd JCC
*4th JCC
*5th JCC
*6th JCC
*7th JCC
7th
8th
6th JCC was conducted in December 2020 online. It was an extra-ordinary one for the modification of the project activities in order to adjust the delay caused by COVID-19.
Reports/Documents
Project Completion Report

ANNEX-8： Minutes of JCC Meeting

Minutes of Meeting
of
The First Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

The First Joint Coordinating Committee (JCC) for the ICT Innovation Ecosystem Strengthening Project in the Republic of Rwanda (hereinafter referred to as "the ICT Project") was held on 14th March 2018 at Kigali Marriott Hotel in Rwanda with Committee from the parties concerned.

Through a series of discussion and exchanging views and opinions, the Committee members concurred that the Project shall be implemented in accordance with the Project Design Matrix (PDM, version 0.0) agreed on 26th July 2017 between the Ministry of Information Technology and Communications (hereinafter referred to as "MiTEC") and Japan International Cooperation Agency (hereinafter referred to as "JICA"), while bearing in mind the agendas as listed herewith in the Attachment-1.

Kigali, 14th March 2018

François Régis GATARAYIHA

Chairperson,
The Joint Coordinating Committee

Permanent Secretary, MiTEC

Atsushi YAMANAKA

Chief Advisor
JICA ICT Innovation Ecosystem
Strengthening Project

Attachment-1: Main agendas agreed
Attachment-2: List of Participants
Attachment-3: Project Design Matrix (PDM version 0.0)
Attachment-4: Organizational structure for the project implementation
Attachment-5: List of sub-activity (WBS: work breakdown structure)
Attachment-6: List of proposed KPIs and Objectively Verifiable Indicators (PDM)

Attachment 1: Main agendas agreed in the First JCC Meeting

Agenda 1: Project Sub-activities and Performance Indicators

The Project shall be implemented based on the sub-activities detailed in the work breakdown structure (WBS) (see Attachment-5), while setting appropriate key performance indices (KPIs) in the activity level. The project activities would be monitored routinely to measure and review the progress by referring to the agreed KPIs. In this connection, there was a discussion about the logical connection between these KPIs and the original "Objective Verifiable Indicators" listed under the PDM. In particular, suggestion was made whether to incorporate some of the KPIs to be incorporated into the original PDM replacing/adding to the "Objectively Verifiable Indicators." While the Committee understood and agreed the need to revisit the "Objective Verifiable Indicators" in the future, the Committee has agreed to commence the project activities and start measuring the "Objective Verifiable Indicators" and KPIs; baseline data for the measurement of these indicators will be taken in the month of April 2018 (see Attachment-6).

Agenda 2: Organizational Framework for the Project Implementation

The Committee agreed that the success of the Project requires active and close collaboration between public and private sectors. With that understanding in mind, the Project proposed an organizational structure which constitutes active involvement of relevant public and private sector institutions (see Attachment-4). The Committee also noted that the composition of the JCC members and Working Groups may be altered if necessary based on the progress of the project and the recommendation of majority of the JCC members.

Agenda 3: Challenges to be addressed in Pilot Projects for ICT Entrepreneur Incubation

The Committee agreed to conduct the start-up incubation activities in three-yearly stages (1 batch in 2018, 2 batches in 2019 and remaining 2 batches in 2020). The incubation support activities will be implemented to synthesize viable and local mechanism that would accelerate the growth of competent and business-savvy ICT start-ups in Rwanda. In order to create this mechanism, the project will incubate start-ups with necessary technical and business support services which would allow them to have competitive business model and be ready for investments. These incubating companies will be selected based on certain criteria which include that their businesses will help mitigate certain socio-economic challenges that are prioritized within the national policies and strategies (i.e., VISION 2020, National Strategy for Transformation-1, Smart Rwanda Master Plan, ICT Sector Strategy Paper, etc.).

During the JCC meeting, the Committee made recommendations to closely monitor the progress of the incubated companies with set-evaluation criteria. Moreover, the Committee also advised to add "market development" to connect the start-ups to "real clients" as part of the incubation support services. The project will incorporate these recommendations into the project activities to garner more results from the incubation processes.

Understanding this, the Committee agreed to approve five priority sectors for the first year of the project, namely agriculture, health, finance, and energy (distributed/nano/micro/alternative), and education within the project. Four of these priorities were recommended during the consultation retreat on 4th of March and the "Education" sector was added through thoughtful suggestion made by the MiTEC P.S. during the JCC meeting. For the second and third year, the priority sectors may be modified through consultation with key stakeholders and approval of Joint Coordination Committee.

Agenda 4: Effectively expanding Japan-Rwanda Partnership

The Committee agreed for the need to create a framework for ICT investment promotion from Japanese Market. Committee members recommended to have focused approach when creating the framework. In particular, mapping exercise for Rwandan companies/talents should be made in conjunction with exercise to seek specific area of interests from Japanese Market. The recommendation will be incorporated into the framework for ICT investment promotion to better attract prospective Foreign Direct Investments (FDIs) and partnerships.

(end)

Attendance List

ICC at the Marriott Hotel at Kigali

Meeting with:	~~Retreat at the Golden Tulip Hotel in Nyamata~~
Date:	~~3~~. March.2018 – ~~4~~. March. 2018
Time:	

#	Names	Organization	Position	Phone number	Signature (14.03.2018)
1	Didier NKURIKIYUMFURA	SAS	Head of Technology & Innovation	078 830 3310	
2	Steve MUTABAZI	RDB	Chief Investment Strategist - ICT	078 654 2360	
3	Patric NYIRISHEMA	RURA	Director General	0788305154	
4	Manasse MBONYE	NCST	Executive Secretary	078 830 4263	
5	Ignace GATARE	UR	Principal	078 830 0083	
6	Innocent MUHIZI	RISA	Chief Executive Officer		
7	Alex NTALE	ICT Chamber	Chief Executive Officer	078 496 8343	
8	Clement UWAJENEZA	ICT CHamber	Chairman	0788383771	
9	Timothy X Brown	CMUA	Associate Director for Academic Affairs	078 767 4062	
10	Tomonori NAGASE	JICA	Senior Representative	078 830 1725	
11	Masayuki FURUKAWA	JICA	Program Manager	078 830 0747	

Attachment 2: List of Committee

Signature ↓

12	Jiro Makimoto	JICA	Program Advisor	0788316196	
13	Immaculate MUTESI	JICA	Program Officer	078 863 4429	
14	Atsushi Yamanaka	JPT	Chief Advisor	078 045 8899	
15	Takuya Okada	JPT	Project Manager	078 030 3068	
16	Shinobu Shimokoshi	JPT	Incubation Advisor	078 030 3070	
17	Rena Mizuno	JPT	ICT Business Researcher	078 053 0992	
18	Takahiro Umeda	JPT	Project Coordinator	078 030 3069	
19	Umuganwa M. Rose	JPT	Project Secretary	078 846 1616	
20	François Régis GATARAYIHA	MITEC	Permanent Secretary		
21	MARTIN SAINT	CARNEGIE MELLON	PROFESSOR/ADVISOR	0787386804	
22	Dema Djibril	Smart Africa	Expert Project	0732301022	
23	Philomene HARIMANA	MITEC	M&E Officer	0788516151	
24	René KABALISA	RISA	Principal R&D	0788770826	
25	Gaspard Twagirayezu	NCST	Analyst	0785532833	
26	GATARAYIHA Régis	MITEC	PS	0788302554	
27	HABUMUREMYI Emmanuel	MITEC	Advisor to the Minister	0788487899	
~~28~~	~~Jiro MAKIMOTO~~	~~JICA.~~			

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project

Version 0.0

Implementing Agency: Ministry of Youth and ICT

Dated 26, July, 2017

Target Group:1) Officails of MYICT, RDB, and RISA, 2) Member staff of ICT Chamber, and 3)ICT SMEs and Entrepreneurs within the Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from the date of 1st JICA expert dispatched.)

Project Site: Kigali, Rwanda. **Model Site: Kigali City**

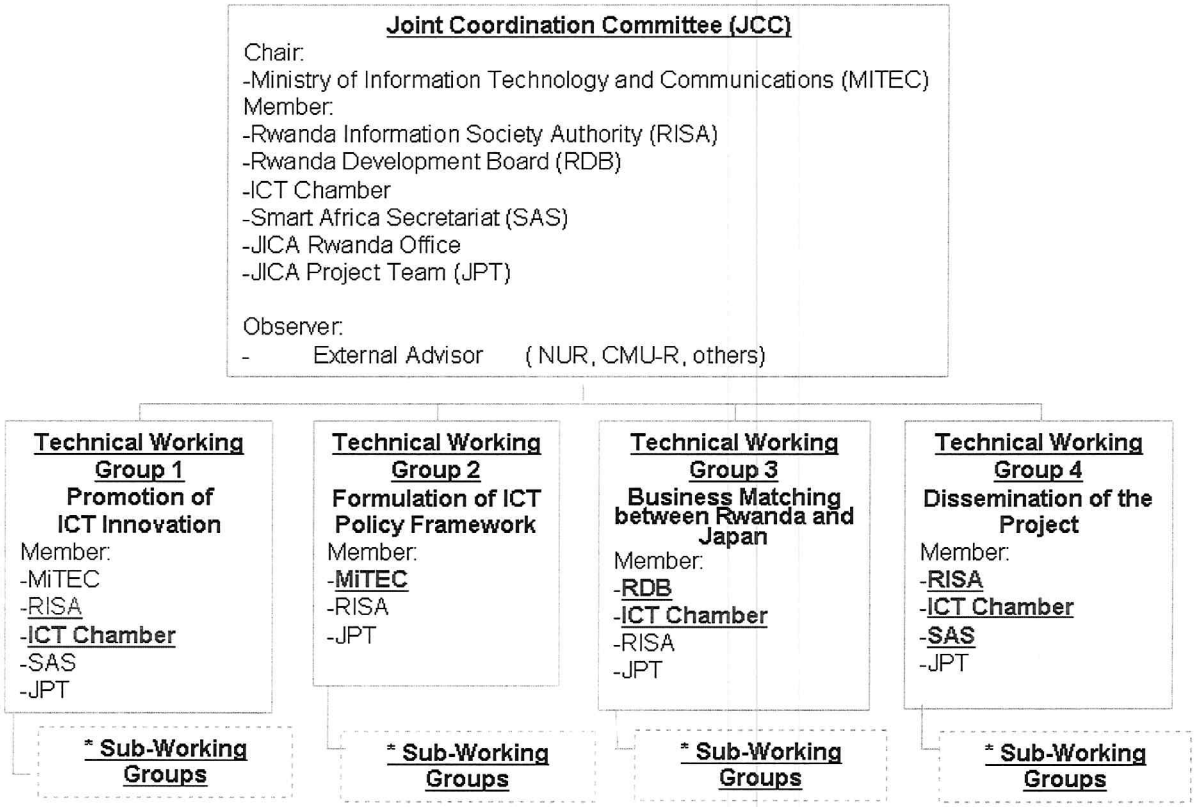
Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal					
ICT sector's economic contribution to GDP in Rwanda are increased through the enhancing the ICT innovation ecosystem.	ICT sector's contribution to GDP (%)	Official GDP statistics.	GDP statistics difinition is unchanged. There is no unexpected rapid growth of GDP in other fields.		
Project Purpose					
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan.	Increased number of entrepreneurs in ICT sector, Increased number of employees in ICT sector, Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	ICT official profile of the GoR. SRMP offical monitoring report.	SRMP is continuously applied as GoR's strategic master plan.		
Outputs					
Output1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. K-Lab, Fab Lab etc.) 1-2 Increased number of newly established ICT companies in line with "Start up 250" initiative 1-3 Increased number of services/products enabled by ICT.	User records of incubation spaces. "Start up 250" statistics. Official ICT sector investment record.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.		
Output2: Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s). 2-2 Increased positive side reaction of ICT entrepreneurs.	Official GoR policy data. Comparison with base-line data.			
Output3: Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships. 3-2 Increased Foreign Direct Investment in ICT/innovation sector from Japanese institutions	Comparison with base-line data. Comparison with base-line data.			
Output4: Innovative ICT use development practices bone by the Project are recognized and effectively utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice. 4-2 Increased utilization of Rwanda-like ICT use development practice in other country(s).	Comparison with base-line data. Comparison with base-line data.			

Attachment 3: Project Design Matrix (PDM version 0.0)

Activities	Inputs		Important Assumption
	The Japanese Side	The Rwandan Side	
[1-1] Supporting activities for ICT start-ups (e.g. K-Lab/Fab Lab/ "Start up 250" initiatives) [1-2] Organizing/Attending events projects for ICT start-ups [1-3] Conducting pilot projects for promoting ICT and ICT enabled Innovation [2-1] Support for organizing/coordinating ICT-SWG [2-2] Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem [3-1] Matching support between Japanese companies and Rwanda ICT companies [3-2] Conducting pilot projects with the Japanese companies to promote utilization of ICT in different sectors [4-1] Collecting ICT-use good practices and modeling the case to promote [4-2] Disseminating the case studies through International/ Regional organizations and appropriate fora	1 Japanese Experts (Chief Advisor, ICT-SWG, Project Cordinator, Incubation Support, Fab Lab Operation, IOT, Desiner, Socio Economic Survey, Sector specialist, Communication Specialist, Case Study Survey and others) 2 Equipment (Necessary equipment and facility for project activities.) 3 Training for Counterpart Personnel (in Japan, in a third country) 4 Local cost for the activity of Japanese Experts 5 Local Consultants (Communication Specialist and others)	1 Allocation of Counterpart Personnel from MYICT, RDB, RISA and ICT Chamber 2 Office space for Japanese experts 3 Necessary data 4 Organizing ICT-SWG priodically 5 Local cost (maintenance/repairing cost for the existing equipment that are not coverd by JICA support, preparation cost for the conference, running expenses necessary for the Project and others)	**Pre-Conditions** Necessary policy formulation and regulatory management are carried out continuously and subjectively based on the Smart Rwanda Master Plan **<Issues and countermesures>**

Attachment 4: Organizational Structure for the Project implementation

The Project on Strengthening the ICT Innovation Ecosystem in Rwanda
- Implementation Structure -



* Sub-Working Groups may be created if necessary

Attachment 5: List of Sub-activity (Work Breakdown Structure: WBS)

Output-1: Promotion of ICT Innovation

Sub-activity	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Supporting activity for ICT start-ups												
• Understand the status of the incubation facilities												
• HRD for improving incubation management (kLab, FabLab)					HRD Plan	Training Module Design	Training schedule shall be determined in the HRD Plan					
• Support for Fab-academy training course (MIT)	1st batch					2nd batch			3rd batch			
• Conduct overseas training on FabLab management					Third country				Japan			
• Procure equipment for incubation centers					to be scheduled							
Organizing/ attending events for ICT start-ups												
• Support for ICT related major events	TAS event											
• Conduct overseas study tour for ICT entrepreneurs												
Conducting pilot projects for ICT innovation												
• Select target sectors and develop implementation framework/ procedure	Target selection				Target selection				Target selection			
• Pilot incubation of ICT entrepreneurs for six month (max. 10 incubatees/ batch for 2018)	Proposal application / Incubation				Proposal application / Incubation (2 batches)				Proposal application / Incubation (2 batches)			

Output-2: Formulation of Policy Framework

Sub-activity	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Support for organizing/ coordinating ICT-SWG												
• Capacity building support for planning skills												
• Assist to coordinate ICT-SWG												
Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem												
• Review ICT Innovation Ecosystem in Japan and other two countries												
• Support MiTEC to formulate policies												

Output-3 : Business Matching b/w Rwanda and Japan

Sub-activity	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Matching support between Rwandan and Japanese ICT companies												
• Understand the current situation and advice organizational structure to promote investments												
• Support to promote Rwandan to foreign companies (especially Japanese)												
• Conduct networking tour from Rwanda to Japan (3-times), and from Japan to Rwanda (3-times)					from Rwanda to Japan → 1st batch / from Japan to Rwanda → 1st batch				2nd batch / 2nd batch			
Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda									3rd batch / 3rd batch			
• Develop pilot business concept, and identification of joint business group												
• Implement pilot projects (3-cases) for 4 months while monitoring and review												

Output-4 : Disseminating Experience of the Project

Sub-activity	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Collecting good practices in ICT-use and modeling cases for promotion												
• Collect ICT-use good practices and modeling cases for promotion												
Disseminating the case studies through international/ regional organization and appropriate fora												
• Disseminate the cases studied (lessons learned, implication, model, etc.)												

Attachment 6: List of Proposed KPIs and Objectively Verifiable Indicators (PDM)

Key Performance Indicators (KPIs) at the Project output level

Output	Key Performance Indicator (KPI)
Output-1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	Innovation Facility ♦ Establishment of innovation space management with training module (15 persons for kLab, 15 persons for FabLab) ♦ Expansion of innovation centers (minimum 3 centers) Incubation Support ♦ Creation of incubation scheme/ mechanism ♦ Number of companies incubated (up to 10 companies for the 1st batch in 2018)
Output-2: Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	♦ Mapping of MiTEC institution and operation procedures ♦ Formulation of the Standard Operation Procedure (SOP)
Output-3: Business relation between Rwandan and Japanese companies related to ICT is strengthened.	♦ Creation of investment promotion framework for Japanese market ♦ Strengthening business partnership between Rwanda and Japan
Output-4: Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.	♦ Sharing experiences through major events organized in Rwanda (e.g TAS) ♦ Sharing experiences through participating in events organized regionally/ internationally

Objectively Verifiable Indicators listed in the original PDM

Suggestions based on discussions on 8th March 2018

* Red color is the suggestion for the change in PDM indicators in the future (2nd JCC?)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Data to be collected	Data Source	Limitation	Actions to be taken
Overall Goal						
ICT sector's economic contribution to GDP in Rwanda are increased through the enhancing the ICT innovation ecosystem.	ICT sector's contribution to GDP (%)	Official GDP statistics.	The data from Official GDP Statistics made by "National Institute of Statistics of Rwanda" every year (Calculate as GDP in IT sector divided by GDP in all sectors)	http://www.statistics.gov.rw/statistical-publications/newest/gross-domestic-product-%28gdp%29	The proportion of contribution of IT sector to GDP can be grasped by simple division. However, ICT can contribute to other sectors and/or provides benefits without any costs, both of which are not shown in the statistics. Therefore, it is difficult to grasp the exact IT contribution to GDP resulting in severe underestimation of the change.	
Project Purpose						
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan.	Increased number of entrepreneurs in ICT sector,	ICT official profile of the GoR. SRMP official monitoring report	The total number of companies in ICT sector registered in RDB.	RDB	The number of companies which was discontinued may not be reflected.	
	Increased number of employees in ICT sector,		1. (If RDB has the data) The total number of employees in ICT Sector 2. (If RDB does not have the data) The total number of employees in ICT companies registered in ICT Chamber	(If RDB does not have data) Ask ICT Chamber to add "the number of employees" in the registration (update) form which registered companies submit to ICT Chamber yearly.	1. ICT Chamber statistics may not be comprehensive. 2. ICT Chamber member companies profile update process may not be smooth for struggling company. 3. In-house ICT staff in other sectors are not captured.	1. Verify RDB if they have the data available 2. Verify RISA about the situation of LMIS (Labour management information system) as source of statistics https://197.243.50.38/LMIS_intranet/ http://www.lmis.gov.jm/common/ViewDocument/e4e8de9a-3654-4cf6-9cb7-01761725aa22 3. Verify if any agencies/institutions are taking employment data in ICT sector
	Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.		The number of members in Facebook Group made by the Project (Baseline is zero).	SNS Service Group (Facebook or something which is equivalent)		Create SNS service Group (eg. Facebook Group)
Outputs						
Output1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. K-Lab, Fab Lab etc.)	User records of incubation spaces.	The number of users	Obtain the list of kLab and FabLab from ICT Chamber and make phone calls to them		
	1-2 Increased number of newly established ICT companies in line with "Start up 250" initiative.	"Start up 250" statistics.	The total number of companies newly registered in ICT Chamber	ICT Chamber	The word "newly established" needs to be defined more clearly (newly established within 5 years or 10 years, etc.) as the Project will support the companies which already started-up, but stuck in their business.	
	1-3 Increased number of newly launched services/products enabled by ICT.	ICT Chamber's Record.	The number of newly launched services/products in all companies registered in ICT Chamber and selectees of Start-up 250 per year	ICT Chamber * This information can be taken from the registration form yearly submitted to ICT Chamber (If not possible, visit is necessary).	The number of "services" may be counted differently from company to company.	Ask ICT Chamber to make sure the data (No. of employees and No. of newly launched services/products) will be submitted to ICT Chamber yearly.
Output2: Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	Official GoR policy data.	the number of policies under MITEC	MITEC	The increase in the number of policy does not necessarily mean positive effect. However, using WGI (Word Bank Governance Indicator) and GCI (Global Competitiveness Index) is not good ideas as they are too complex and do not necessarily focus on ICT.	Ask MITEC if they have the list of policies
	2-2. Increased positive reaction of Policy reviewer.	Comparison with base-line data.	Rate of evaluation by PS and/of Directors from MITEC and any other related institutions	List the significant points to be considered for ICT policy based on the sub-activity 2-2-1, and ask policy experts how well Rwanda achieves the points.		
	2-3 Increased positive side reaction of ICT entrepreneurs.	Comparison with base-line data.	Rate of Satisfaction of all ICT entrepreneurs in ICT Chamber.	Registration Form in ICT Chamber. If it is difficult to grasp it by the form, Interview data	Satisfaction may be changed by impressions which can be easily influenced by media. Besides, people may not be familiar with the policy itself.	Ask ICT Chamber to make sure this can be submitted to ICT Chamber yearly.
Output3: Business relation between Rwandan and Japanese ICT companies is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	Comparison with base-line data.	The total number of Japanese companies which newly made MoU, Contracts with Rwandan company or established local company in Rwanda.	Japanese Embassy	The number of companies which discontinued the partnership with Rwandan company will not be considered. This indicator only focus on the number of companies which newly made the partnership with Rwanda. Besides, the current partnership already made before the Project will not be considered (Purely count the number of companies newly made the partnership after the Project)	
	3-2 Increased Foreign Direct Investment in ICT/innovation sector from Japanese institutions	Comparison with base-line data.	RDB has the data? If they do not have the data, this indicator should be deleted.	?		Ask RDB if they have the data
Output4: Innovative ICT use development practices bone by the Project are recognized and effectively utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice.	Comparison with base-line data.	The number of news in English and French which can be searched by a combination of following words with the period of 1 year. 1. Rwanda ICT business 2. Rwanda ICT innovation	Google Search	News in other languages (such as Spanish, Chinese) will not be considered.	
	4-2 Increased visit to learn Rwanda-like ICT use development practice from other country(s).	Comparison with base-line data.	1. The number of participants in TAS 2. The number of students groups and investors group visited Rwanda to learn ICT situation in Rwanda	1. Smart Africa 2. ICT Chamber		

Memorandum of Consent

on

Project Monitoring Sheet version 2

As an initial deliverable of the ICT Innovation Ecosystem Strengthening Project in the Republic of Rwanda (the Project), the Ministry of Information and Technology (MiTEC) and the Project Team agreed with the contents of the second semi-annual mid-term report in the form of Project Monitoring Sheet I (Form 3-2: Revision of Project Design Matrix) and the Project Monitoring Sheet II (Form 3-3: Revision of Plan of Operation), while bearing in mind that the Project has been implemented mostly as agreed based on the mutually confirmed project status at the Second Joint Coordinating Committee held on 26th September 2018.

Accordingly, both parties also agreed the aforementioned Sheets shall be submitted to JICA under the name of the Project Team in line with the requirements set forth by JICA.

Kigali, 01st October 2018

Francois Regis GATARAYIHA

Chairperson,
The Joint Coordinating Committee

Permanent Secretary, MiTEC

Atsushi YAMANAKA

Chief Advisor,
JICA ICT Innovation Ecosystem
Strengthening Project

Minutes of Meeting
of
The Second Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The 2nd JCC meeting was held on 26th September, 2018 where the progress of the Project was confirmed and the relevant discussions and guidance related to the current challenges and remedies were made among the JCC members, based on the meeting materials including the Monitoring Sheets ver2. The main points of discussion and the issues addressed for further improvement of the Project implementation are as follows:

Recommended Improvement for the Project Implementation

	Thing to Improve
Overall	- Creation of planning/ coordinating/ communication/ M&E Secretariat to facilitate the Project implementation by the C/Ps, - Continuation of monthly Project Progress Meeting for better coordination among the C/Ps, - Management of recruitment process for new experts with the C/Ps involvement (e.g.; creation of ToR, teleconferencing with potential candidates, etc.), - Recruitment of local experts to form a professional team within each output (to maximize the external experts as well as to build local human capacity).
Output 1: Promotion of ICT Innovation	<u>kLab/ FabLab Strengthening</u> - Creation of Guideline (with mission/framework/guidelines/action plan) in lieu of simple management improvement plan through participatory process. These will align to overall concept of Rwandan ICT Innovation Ecosystem (by end of October/beginning of November), - Revisiting and incorporating franchise model for greater expansion within the Guideline; the model was advocated by previous kLab Board, - The Guideline to incorporate operational manual and resource requirement to be relevant as a tool for resource mobilization through the "Resource Basket Model", - Provide assistance to MiTEC and RISA in its exploration for expansion of Kigali based Lab (maintaining openness and implement core mission of the innovation centers). Requesting MiTEC and RISA to inform the Project about the decision to expand the innovation center in Kigali, as soon as the decision is made, to enable support from the Project under current fiscal year, - Make certain that the local expert under the Project to vigorously follow up the implementation process during the absence of the Project experts, - Procurement of needed services/equipment shall be completed by Q1

	2019 (expansion / strengthening). Incubation Support - Consolidation of branding of the initiative to "250 startups", - Organizing big graduation/ pitching event at the end of the 1st incubation process to solicit participation into "Resource Basket", - Providing opportunities for the startups to share experiences and pitch in regional events and in Japan, - Evaluation of current batch process to be ongoing process and make sure that the compiled lessons learned will be applied for the next batch, - Undertaking targeted approach for the next 2 batches (theme: Agriculture and Education), - Covering 10 incubatees each within 2nd and 3rd cohorts in 2019. In order to reduce burden, these two batches will not start concurrently, - Reconfirming the number of total incubates under the Project to be 50, substantial increase from the original 15 to 50 as agreed in the 1st JCC meeting. Accordingly, the Project is requested to advocate securing the necessary resource for the implementation.
Output 2: Formulation of Policy Framework	Support for Organizing/ Coordinating ICT-SWG - Institutional capacity building activities need further coordination with MiTEC but it has agreed that combination of Japanese expert (with ample knowledge of Rwanda) and local expert should tackle the activity, - Individual training needs of officers will be identified through the above exercise. - Endorsing further strengthening of SWG through organizing theme-based meetings to create strong community of practice. Advisory Support on Policy Formulation and Operation to Promote ICT Innovation Ecosystem - Modifying the activity from comprehensive study to creating creation of common concept of Rwandan Innovation Ecosystem in line with ICT Hub Strategy (exercise to be done in November), - Recognizing that the innovation ecosystem concept should be the guiding principles for other relevant policies to be formulated and implemented. - Supporting ICT sector to advocate measures to strengthen local industry to MiTEC and other Government institutions (e.g.; procurement and information sharing policy to build capacity for Government procurement). - Continuously providing necessary policy advisory support to MiTEC and other relevant institutions through Project experts and JICA.
Output 3: Business Matching b/w Rwanda and Japan	Matching Support between Rwandan and Japanese ICT Companies - Concentrating on specific items of the drafted Action Plan, based on the recommendation made in the retreat session: i) No specific needs exist for item 1 (ICT Market Survey) and item 4 (ICT Investment Promotion Strategy), ii) Concentrate on promoting Rwandan ICT companies to Japan. - Recruitment of Experts will be conducted with the C/Ps. Conducting Pilot Projects with Japanese Companies to Promote Utilization of ICT Sector in Rwanda - Creation of assistance scheme will be formulated by November to be

	revealed at Kobe/ Wiredin Rwandan Business Tour, - The proposed scheme will be created by taking applicable points from the existing support scheme (e.g.; JETRO assistance scheme) and the one developed by ICT Chamber in 2015 for promoting BPO in Rwanda, - The number of cases supported under the scheme will increase from the original 3 to 6. - Encouraging Rwandan ICT industry to reach international level through forging private sector partnership and market opportunities with Japan
Output 4: Disseminating Experience of the Project	<u>Collecting Good Practices in ICT-use and Modeling Cases for Promotion</u> - Modifying Media Strategy/ Action Plan using the inputs/ recommendations gathered at the JCC retreat held on 14th~15th September 2018, - Content creation and dissemination should be conducted through recruiting local specialist, <u>Disseminating the Case Studies through International/ Regional Organization and Appropriate Fora</u> - Organizing large scale graduation/ pitching event for the 1st incubation startups to share lessons learned and to seek stakeholders' participation into Resource Basket, - Supporting Startups to participate and share experiences in Rwanda based international events, - Supporting most advanced startups to be given opportunities to pitch at regional pitching event and in Japan, - Exploring possibilities of sharing Project experiences at similar fora.

2. The JCC, taking into account the aforementioned points, would recommend the Project Team and JICA to take appropriate and timely improvements, especially to cope with the issues as follows:

- It is strongly requested to take relevant measures as quickly as practicable in order to advance the Project activities that remained undecided.

- Among others, i) ICT entrepreneur incubation supporting program (Output-1), ii) Labs operation strengthening program (resource mobilization for the Lab strengthening and in-country/overseas training program) (Output-1),) iii) Rwandan-Japanese joint business development support program (Output-3) are highly prioritized requests to JICA when the Retreat Session has been held on 14th-15th September 2018 at the Golden Tulip Hotel in Nyamata, where most participants from the key stakeholder institutions perceived and requested the necessity of appropriate and timely resource arrangement (human and financial resources).

- More specifically, the list of the JCC recommendations to JICA and the Project Team are as follows:

Recommendations to JICA Team from the JCC

	Recommendations
ICT entrepreneur incubation supporting program	- Requesting for necessary financial resource to be secured to enable the Project to cover the number of startups, which will increase to 50 from the originally targeted 15, - Endorsing the idea to dispatch some selected Rwandan startups, which is assessed investable after graduation of the incubation program, to Japan for them to learn incubation system in Japan and pitching demonstration. This may be conducted in relation to the Output 3 activity.
Labs operation strengthening program	- Requesting smooth equipment and service procurement, after the Guideline is made, to be processed as fast as possible to meet the JICA's fiscal operation for 2018. - Requesting the support for innovation center expansion in Kigali; upon reaching consensus among the stakeholders. The support shall be covered within the resource allocated for the expansion of three secondary centers.
Rwandan-Japanese joint business development support program	- Requesting to provide advisory support (including potential timing that may coincide with Presidential visit to Japan in November and providing other relevant information related to potential KIC investments) to the planned RDB organized KIC roadshow in Japan - Requesting to secure necessary financial resource for conducting Rwandan-Japanese business networking tours and assisting joint business development by joint Rwandan-Japanese companies - Endorsing the joint business development support to joint Rwandan-Japanese companies to be increased to 6 cases from the originally planned 3. - Requesting to utilize the Output3 induced opportunities to strengthen Rwandan ICT industry to internationally competitive level.
Others in General	- Requesting recruitment of more local experts to partner with Japanese experts for more smooth operation of and capacity building through the Project, - Recognizing the needs for the Project Secretariat and provide necessary support to the secretariat for its operation.

3. For 2019, TAS is scheduled to be organized in May and TICAD VII will be held in August in Tokyo. The JCC recommends that the Project Team should make use of those opportunities for advocating the Project's achievements. The advocacy materials should be in the form of lessons learned/success story, in accordance with the specific theme such as STI, Academic partnership, and PPP.

For the effective and efficient advocacy, relevant action plans for advocacy should be implemented based on the strategy paper which was drafted as part of the Output 4 activities. Accordingly, the Project team and JICA are requested to take active roles in disseminating useful knowledge/lessons

learned from the Project to wider audiences.

4. The JCC recognizes the importance of timely information sharing and close communication among and between the Rwandan and Japanese stakeholders. For this reason, the JCC has appointed the Rwanda Information Society Authority (RISA), MiTEC, and the Project to create the Project Secretariat to plan, coordinate, communicate, and monitor the Project implementation. For the rest of the Project duration, the Secretariat is expected to play a key role in these functions to enable smooth implementation and obtaining results. The Secretariat shall be staffed appropriately by assigning capable human resources from both the Rwandan and Japanese side.

(end)

ICT Innovation Ecosystem Strengthening Project

2nd Floor Telecom House, 8 KG7 Avenue
Kacyiru Kigali, Rwanda

Memorandum of Consent
on
Project Monitoring Sheet version 3

As the third deliverable of the ICT Innovation Ecosystem Strengthening Project in the Republic of Rwanda (the Project), the Ministry of ICT and Innovation (MINICT) (former Ministry of Information Technology and Communication: MiTEC) and the Project Team agreed with the contents of the third semi-annual mid-term report in the form of Project Monitoring Sheet I (Form 3-2: Revision of Project Design Matrix) and the Project Monitoring Sheet II (Form 3-3: Revision of Plan of Operation), while bearing in mind that the Project has been implemented mostly as scheduled based on the mutually confirmed project status at the Second Joint Coordinating Committee held on 26th September 2018.

Accordingly, both parties also agreed the aforementioned Sheets shall be submitted to JICA under the name of the Project Team in line with the requirements set forth by JICA.

Kigali, 21st March, 2019

MINISTRY OF ICT AND INNOVATION
REPUBULIKA Y'U RWANDA

Claudette Irere

Chairperson,
The Joint Coordinating Committee
Permanent Secretary, MINICT

Atsushi YAMANAKA

Chief Advisor,
JICA ICT Innovation Ecosystem Strengthening Project

Attachment;

1. Monitoring Sheet I Form 3-2 (Revision of PDM)
2. Monitoring Sheet II Form 3-3
3. Minutes of Meeting of the 3rd JCC (20th March, 2019 at Onomo Hotel, Kigali)

Project Monitoring Sheet I Form 3-2 (Revision of Project Design Matrix) (1/2)

Project Title: The ICT Innovation Ecosystem Strengthening Project

Implementing Agency: Ministry of ICT and Innovation (Former Ministry of Information Technology and Communications (MiTEC): until October 2018) (Former Ministry of Youth and ICT: until Aug 2017)

Target Group: 1) Officials of MINICT, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entrepreneurs with in th Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from October 2017 to October 2020)

Project Site: Kigali, Rwanda Model Site: Kigali City

Version 3

Dated 15 March, 2019

No change made in PDM (goal, purpose and outputs) from the previous version (version 2: dated 15 September, 2018).
Substantial change may be made after the intermediate evaluation which is scheduled to be conducted in mid 2019.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal ICT sector's economic contribution to GDP in Rwanda is increased through enhancing the ICT Innovation Ecosystem.	- ICT sector's contribution to GDP (%)	- Official GDP statistics.	GDP statistics definition is unchanged. There is no unexpected rapid growth of GDP in other fields.	Baseline data collected - 1.31% (based on BLS: limited to telecom sector and hardware sales).	Apart from official ICT contribution to GDP (limited to telecom sector and hardware sales), there may be someway to capture wider ICT contribution to the economy (ex. Inter-industry analysis/ Input-output analysis). This shall be considered further and maybe introduced in lieu of the arbitrary GDP data.
Project Purpose ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan (SRMP).	- Increased number of entrepreneurs in ICT sector - Increased number of employees in ICT sector - Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	- ICT official profile of the GoR. - SRMP official monitoring report.	SRMP is continuously applied as GoR's strategic master plan.	The number of entrepreneurs in ICT sector has been collected using statistics from RDB (8,169 as of 2018). The number of employees in ICT sector was collected through questionnaires for ICT entrepreneurs registered in ICT Chamber (5,607 as of 2018). The number of stakeholders involved in the Rwanda ICT Innovation Ecosystem need further elaboration as the indicator is difficult to attain.	RDB does not have a concrete data for the number of employees in ICT sector. Therefore, as a proxy indicator, the Project collected the total number of employees in ICT companies registered in ICT Chamber. Real number of stakeholders involved in the Rwanda ICT Innovation Ecosystem is hard to be identified. Need to modify this indicator or need to clearly define what constitute stakeholders.
Outputs **Output1** Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. kLab, FabLab etc.)	- User records of incubation spaces.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.	The number of incubation space users has been collected using statistics from partner organizations. Questionnaire for kLab and FabLab users were conducted as a baseline for their motivation to their projects and satisfaction for the Labs (kLab: 1,865, FabLab: 90).	Project expects that user base to steadily increase through proper interventions. However, the growth rate will be subject to the "Tech-enabled innovation center action plan/guideline and their implementation." It is
	1-2 Increased number of newly established ICT companies in line with "Start up 250" initiative.	- "Start up 250" statistics.		N/A	Necessary to define and agree with definition of what constitutes "new" companies. In order to accurately assess the Project intervention, it may be proposed the entrepreneurs in the incubation programme as a newly established ICT companies in line with "start up 250".
	1-3 Increased number of newly launched services/products enabled by ICT.	- ICT Chamber's Data		Baseline data has been collected using questionnaire (2.07 products/ services were produced on average per company per year in 2017).	Regular assessment will be made to measure the progress
Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	- Official GoR policy data.	Same as above.	Policy related advisory supports have been provided which led to ICT related policies (6 policies formulated so far, e.g.; ICT SSP, e-commerce strategy, ITES strategy, regulatory sandbox, etc.)	Number of policies may have logical correlation with the capacity building aspects of C/P institutions.
	2-2 Increased positive side reaction of policy reviewers.	- Comparison with base-line data.		Comparison exercise has not been started	After the Project activity started, this outputs will be assessed by interviewing with the policy reviewers or people affected by given policies.

	2-3 Increased positive side reaction of ICT entrepreneurs.	- Comparison with base-line data.		Baseline data (satisfaction with SRMP) has been collected using questionnaire for ICT entrepreneurs. - Satisfaction level in ICT capability and capacity: average 5.96 out of 7 (max. score) - Satisfaction level in governance and management: average 6.28 out of 7 (max. score) - Satisfaction level in ICT infrastructure: average 6.14 out of 7 (max. score)	ICT Chamber will provide facilitation to conduct annual survey to its member companies. In addition, ICT related policy review is suggested to be undertaken by the policy experts with assembling suitable experts for that.
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	- Comparison with base-line data.	Same as above.	Analysis will be conducted to assess number of partnerships (MOU and other concrete partnerships) concluded at the end of the year/beginning of 2019	The number of companies which discontinued the partnership with Rwandan company will not be considered. Measurement of this Output only focus on the number of companies which will make new partnership with Rwanda.
	3-2 Increased Foreign Direct Investment in ICT/ innovation sector from Japanese institutions.	- Comparison with base-line data.		FDI from Japanese entities recorded in RDB is only three companies and there is no data of FDI to the ICT sectors.	RDB is expected to continue collecting and releasing this data, otherwise this indicator may needs to be modified to assess the progress more suitably.
Output4 Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice.	- Comparison with base-line data.		2,620,000 hits in Google search by the word of "Rwanda ICT business".	A simple comparison with neighboring countries or countries with similar socio-economical circumstances may be a way to measure the performance by the Project.
	4-2 Increased visit to learn Rwanda-like ICT use development practice from other countries).	- Comparison with base-line data.		N/A	No relevant Project activity has been conducted during the reporting period.

Project Monitoring Sheet I Form 3-2 (Revision of Project Design Matrix) (2/2)

Activities	Inputs		Pre-Conditions
	Japanese Side	Rwandan Side	
Activity 1.1 **Supporting activity for ICT start-ups**	*Workshops and corresponding action plan/ guideline formulation activities for strengthening the Labs operation have been undertaken by the JICA experts (covering 1.1.1, 1.1.2 and 1.1.4). Procurement of 1st batch equipment needed for Labs expansion has commenced supported by the JICA Rwanda operation (1.1.5) in line with the action plan/ guideline. Fab-academy training course (1.1.3) is underway with the second batch of five persons selected.*	*Various different initiatives have been organized by the C/Ps and stakeholders to facilitate Activity 1.1. RISA is taking the lead in securing the budget necessary to strengthen and expand the centers in the secondary cities. The Project is cooperating with different initiatives organized by stakeholders to maximize the results and explore better sustainability model of these centers.*	
1.1.1 Understand the status of the incubation facilities	After two Japanese professors from Keio University SFC undertook the related works (initial assessment and analysis of incubation facilities, mapping of innovation facilities in Kigali) by June 2018, a series of workshops have been organized based on the findings/ lessons learned, involving the relevant stakeholders from the Rwandan side to compile an Action Plan/ Operational Guideline of Innovation Hubs/ Centers Expansion in Rwanda. After the retreat on November 2019, the final draft of the "Tech-enabled innovation center expansion plan" and corresponding guideline has been delivered to RISA for finalization and submission to relevant authorities for budget allocation.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the documents.	
1.1.2 HRD for improving incubation management (kLab, FabLab)	Training programs for HRD have been proposed in the aforementioned Action Plan/ Operational Guideline, which are currently under contemplation by the C/Ps including necessary budget arrangement for the implementation in 2019 and onward. It is expected that the activities will commence in September 2019 upon receiving budget allocation, completion of the selection process for both the center location and management team, and installation of the procured equipment	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (e.g.; selection of center location, recruitment of human resource, allocation of appropriate financial resource, advocacy, etc.).	
1.1.3 Support for Fab-academy training course (MIT)	Upon successful completion of FabMaster's course by 5 individuals in 2018, the Project is currently providing logistic and financial support to enroll additional five Fab-master candidates to MIT's online Fab-academy training course for 2019 (the 2nd batch Fab-master trainees in the Project). All candidates are expected to finish the course by November 2019. It is expected that the Fab-masters trained through the Fab-academy training course will become core supporters (trainers) of the innovation centers strengthening initiatives which include expansion of innovation centers in secondary cities.	The FabLab has cooperated the selection process of the candidates along with ICT Chamber. It is expected that these human resources will be dispatched in the future as resource person to the FabLab/ kLab in the secondary cities as technical resources.	Innovation and start-up enabling policies (including corresponding regulations) are effectively implemented in accordance with the Smart Rwanda Master Plan (SRMP).
1.1.4 Conduct overseas training on FabLab management	As agreed in the 2nd JCC (Sep. 2018), scope of this overseas training has been sharpened to visit and learn cases on how Labs contribute to/ support local economy and industry, while a tour in Japan is cancelled out by incorporating in-country trainings for Labs management. It is advised in the said Action Plan/ Operational Guideline that an overseas study tour should be conducted some time in 2020 to visit the Philippines, India or Georgia where the FabLab is reported to be utilized for local economy development. The selection process of the both participants and the location will be completed in due course with the C/Ps.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the action plan and the guideline to strengthen and expand Tech-enabled Innovation Centers in Rwanda. The overseas training decision (place, scope, and schedule) will be made in careful consultations with the C/Ps after sometime when the secondary cities' centers become operational and accumulated initial experiences of operation.	
1.1.5 Procure equipment for incubation centers	List of equipment and other details pertaining to the activity were specified within the context of the Action Plan/ Operational Guideline. Subsequently, the 1st batch of procurement process has commenced in February 2019 supported by the JICA Rwanda operation. This 1st batch procurement is scheduled to complete by End of July 2019 (due to more economical shipment option), and expected to be followed by the 2nd batch (June~October 2019) and 3rd batch (April~July 2020).	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (human resource, financial resource, etc.). RISA has been spearheading the process.	
Activity 1.2 **Organizing/ attending events for ICT start-ups**	*After TAS 2018 (May 2018), the Project has been supporting ICT start-ups indirectly/ technically for participating in the relevant events/ meetings by making use of financial assistance rendered by the JICA Rwanda.*	*The C/P and stakeholders have been sharing information about relevant events/meetings in the area of ICT start-ups in Rwanda and its surrounding countries.*	
1.2.1 Support for ICT related major events	After TAS 2018, the Project, in coordination with the financial assistance from the JICA Rwanda, has supported the incubates (1.3.2) to attend and promote their	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been working together with the Project for facilitating those participation.	

			Issues and Countermeasures
1.2.2 Conduct overseas study tour for ICT entrepreneurs	initiatives at Youth Connekt (Oct. 2018) and Startups Study Tour in Japan (Jan. 2019), while directly supported in Startups Event in Kenya (Dec. 2018).		
Activity 1.3 **Conducting pilot projects for ICT innovation**	*The relevant activities are currently underway, in collaboration with the ICT Chamber, mostly as scheduled, involving ten startup incubates selected for the 2nd batch with focuses on agriculture/education sectors. The 2nd batch process had 67 initial applicants. The 2nd batch incubation process starts in March 2019 with 10 cohorts.*	*Various different supports were provided (especially by ICT Chamber) in the course of the 1st batch implementation. For the 2nd batch incubation of 10 start-ups to begin in March 2019, necessary support has been given too.*	
1.3.1 Select target sectors and develop implementation framework/ procedure	The 1st batch finished in Dec.2018 with eight incubates successfully graduated from the training program. For the 2nd batch, two specific sectors are targeted after discussion with the relevant stakeholders/ C/Ps, namely agriculture and education. The implementation framework/ procedure is currently under review based on the 1st batch experience, of which the result shall be shared by the end of March 2019.	Target priority sectors have been identified in line with the national priority. Some of the kLab space has been converted as incubation place for the 2nd batch.	
1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)	The Project intensively assigned both local and Japanese experts for smooth and efficient implementation of the incubation activities. For the selected first batch incubates, opportunities have been provided to participate in overseas/ domestic events for pitching and/or presentation about their business models.	ICT Chamber has been proactively supporting and mentoring the incubates' growth. Also, provided support in preparing and selecting ten candidates for the 2nd batch. Challenge of recruitment has been pointed out by different stakeholders. More active advocacy is needed to ensure that subsequent batches would have active application. Strong coordination by the secretariat is needed to conduct such activity as "Information Caravan" which was planned in Q4 2018 but has not been realized.	
Activity 2.1 **Support for organizing/ coordinating ICT-SWG**	*JICA Country Office Program Manager, the Project's sub-chief advisor, and the SWG coordinator/Technical Advisor to the Minister have been following up on the issues related to support ICT-SWG and other policy related activities.*	*C/Ps conducted various policy related activities which include ICT-SWG and other policy related activities.*	
2.1.1 Capacity building support for planning skills	The project has been discussing with C/P to conduct capacity development measures. However, the business process analysis, which was conducted with the support of the Project's sub-chief advisor and SWG/Technical Advisor, has suspended due to the C/P organization's restructuring taken place in Oct. 2018. Concrete analysis of work-flow and corresponding improvement plan must be created for initiating actual capacity building program. Given this situation the Chief Advisor is going to accelerate the necessary process by undertaking the expert position for ICT startup policy.	Before the organization restructured, the primary C/P for the initiative has indicated enthusiastic response to the institutional capacity development initiatives. However, due to the restructuring, detailed activities and training needs have not been decided yet.	
2.1.2 Assist to coordinate ICT-SWG	The SWG coordinator/Technical Advisor to the Minister has been following up the related activities. The 1st SWG was conducted in August 2018, the 2nd was held in October 2018, and the 3rd has been organized in February 2019. Additionally, Project's policy advisor gave editing/expert advisory support for the BL-JSR report which was submitted in October 2018.	Since the recruitment in Aug 2018, the SWG Coordinator/Advisor has established an indispensable position in the Ministry. He has been supporting the Project as a valuable intermediary with the Ministry, facilitating communication and substantive activities.	
Activity 2.2 **Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem**	*During the course of Q3 2018~Q1 2019, significant development occurred around the Ministry which is primary beneficiary of the Activity 2.2. The MiTEC has been reorganized to become Ministry of ICT and Innovation (MINICT) with new minister and new P.S. While the leadership shuffle showed even more commitments to the strengthening of innovation ecosystem in Rwanda, planned institutional strengthening tasks will see some delays pending on new institutional arrangement of the Ministry.* *There has been several concrete policy advisory related supports provided by the Project, however, during the period. As has been in the previous period, resident sub-chief advisor and SWG/Technical Advisor, along with the JICA's Programme manager, provided continuous resident support to the Ministry while the Policy Advisor/Chief Advisor provided mostly distant based support. Support pertaining to KIC Roadshow, establishment of innovation center action plan, Priority Strategies compilation, and other support have been provided throughout the period by utilizing both teleconferencing tools as well as physical meeting.*	*Since the reorganization of the MiTEC to MINICT, the Ministry is in the process of creating a new institutional setup. It is imperative that the Ministry complete the process as it will become the base for the Project's institutional strengthening support.* *Meanwhile, C/P has been concentrating their work on such priority project as KIC, formulation of priority strategies/plans, advocacy, etc. These priority initiatives have been supported by the Project.* *During the reporting period, C/Ps have also actively provided their policy related support at SWG meeting and other fora.*	

2.2.1 ~~Review ICT Innovation Ecosystem in Japan and other two countries~~ Create Common Vision for ICT Innovation Ecosystem in Rwanda *(changed after the 2nd JCC)*	As part of the Innovation Center Expansion Action Plan and Guideline formulation processes, common vision of ICT innovation Ecosystem (within the context of innovation centers) has been formulated. Currently, the document is undergoing its final editing by the C/P to be accepted as an official plan	The exercise was conducted as part of the ICT innovation center expansion action plan with key stakeholders. The vision and the holistic innovation center expansion plan is under final review/edit by RISA for submission to the Government (as of early march 2019).	Active coordination by the Project secretariat will be critical in moving several key issues (e.g.; advocacy) forward. In addition, allocation of appropriate resources from the C/Ps will be critically important to maker sure that the project will implement smoothly.
2.2.2 Support ~~MiTEC~~ MINICT (and other C/Ps) to formulate policies	Ongoing support is being provided as needed (e.g.; review of 2018 October BL-JSR, added inputs of KIC Hub Strategy, KIC related activities, editing/inputs provided to priority ICT sector strategies, etc.)	Policy formulation and review exercises are ongoing under the leadership of the ministry. However, some of the priority strategies need further work	
Activity 3.1 **Matching support between Rwandan and Japanese ICT companies**	*Following the advise given in the 2nd JCC (Sep.2018), the Project determined to replace the expert in charge of investment promotion. A new expert has been recruited domestically and in Japan to engage in the activities. Following the change, activity in the Output 3 is more focused on practical activities in line with business matching promotion and follow-ups. Active support has been provided by the project to support Rwanda's priority initiative such as KIC Roadshow in Japan during the course of the reporting period.*	*C/Ps have made strong desires to deepen Japan-Rwanda Business relationship through this project and other initiatives. During the course of the Presidential visit in January 2019, Kigali Innovation City Roadshow has been organized and conducted in Japan.*	
3.1.1 Understand the current situation and advice organizational structure to promote investments	The 2nd JCC (Sep.2018) concluded that ToR for investment promotion should more focus on practical actions for business matching instead of spending the Project's resources to capacity building of the relevant institutions. Given this conclusion, strategic/holistic support within this sub-activity item is no longer effective. However, individual and ad-hoc supports within this area has been provided in such occasions as KIC Road-show (preparation, during, and follow-up) and other Japan-Rwanda Networking Opportunities.	Same as left.	
3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	During the course of the reporting period, active promotion of Rwandan companies to Japanese companies were made in such occasions as Presidential Visit/ KIC Roadshow in January 2019. The Project in coordination with JICA CO supported ICT Chamber CEO's visit to Japan during the period to prepare for the Roadshow. This is in addition to the support provided by the Project team before, during, and after the roadshow. Furthermore, in collaboration with the ICT Chamber, the Project contracted PwC Rwanda to conduct a training program for the selected ICT entrepreneurs in Jan. 2018. Subsequently, a booklet shall be edited/ issued under the name of ICT Chamber and other relevant institutions for introducing competent Rwandan ICT companies to Japan. This booklet is scheduled to be published in Japanese language for the opportunity of TICAD-VII (Aug. 2018).	RDB has supported resources to enable KIC Roadshow and Presidential Business Forum in Tokyo. MINICT has been actively facilitating KIC roadshow as a leading institution pushing for the strong connection between Rwandan and Japanese companies. As for the professional training course for the ICT Chamber member companies, the ToR and selection of contractor have been made in collaboration with the ICT Chamber.	
3.1.3 Conduct networking tour from Rwanda to Japan (3-times), and from Japan to Rwanda (3-times)	The Project supported the Rwanda networking tours organized by several Japanese partners which include both in-country and follow-up support. In addition, as part of the Presidential Visit/ KIC Roadshow, various different networking support has been provided by the Project. Through these support, the Project obtained lists of both Japanese/ Rwandan companies as potential target for the pilot projects (Activity 3.2)	MINICT conducted a business tour to promote Kigali Innovation City in Jan. 2019 (KIC Roadshow). Some of the Rwandan ICT companies joined the delegation and had opportunity to meet with Japanese companies.	
Activity 3.2 **Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda**	*The Project has entered to preparatory stage of the pilot project, after engaging another expert for investment promotion (who is rich in experiences for business matching programs).*	*C/Ps compiled new TOR and endorsed the recruitment of new experts for investment promotion.*	
3.2.1 Develop pilot business concept, and identification of joint business group	The Project, upon instituting a mechanism necessary for application and evaluation criteria, made a call for proposal to the potential Japanese companies to apply for the scheme. Initially contacted companies have had some association with Rwanda but due to short time span for application, only one company has applied for the scheme (as of February 2019). In order to furnish more flexibility, the Project will make the application process at "rolling bases" and actively solicit more companies for application, especially for those companies which participated in different Rwandan Business networking events.	The C/P endorsed the process and provided inputs for selection process which was designed by the Project.	
3.2.2 Implement pilot projects (6*-cases) for 4 months while monitoring and review *(increased from 3 to 6 after the 2nd JCC)*	Currently, the Project is in the final negotiation stage with one company which has applied to the support scheme (under 3.2.1). First pilot initiative is expected to commence in April. 2018 for six months.	The C/P endorsed the result of selecting company.	

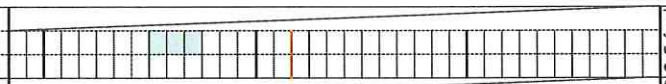
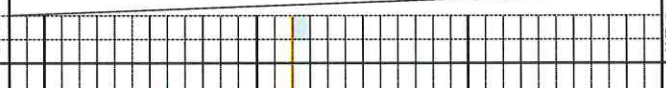
Activity 4.1 **Collecting good practices in ICT-use and modeling cases for promotion**	*During the last six months, case study on innovation Labs/ Hubs has been done as part of Activity 1.1, facilitated by the experts.*	*C/Ps have been involved in the process of the case study.*	
4.1.1 Collect ICT-use good practices and modeling cases for promotion	Case study and mapping on innovation labs was completed in cooperation with the relevant stakeholders and the result was reflected in the Action Plan and Operational Guideline of Tech-enabled Innovation Hubs/ Centers Expansion Plan (Feb 2019). Currently, a review study is underway after the 1st batch incubation support program. Lessons learned to be obtained from the review shall be shared by the end of Mar. 2019.	The C/Ps supported the Project's activity to collect, analyze, and provide inputs of the innovative ICT business models and practices which emerge from the Project implementation.	
Activity 4.2 **Disseminating the case studies through international/ regional organization and appropriate fora**	*The Project has been supporting the incubates to show case their experiences at suitable international/ domestic fora in coordination with the relevant stakeholders and the JICA Rwanda Office as well. In addition, the Project is creating a new incubation model through output-1 implementation.*	*Same as left.*	
4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.)	In the last six months, the Project's outline was introduced taking opportunities of several startup events, such as Youth Connekt (Oct.2018), Startup Event in Kenya (Dec.2018), and Startup Study Tour in Japan (Jan.2019). Following the recommendation from the previous JCC, dissemination of lessons learned was conducted a large scale graduation/pitching event for the first cohort of the 250 startups. Dissemination of lessons learned is expected to be done in an appropriate form, at the time of TAS 2019/ TICAD VII, based on the case studies/ review studies mentioned above.	The C/Ps have been supporting the incubates directly/ indirectly to show case their experiences at suitable international fora.	

Monitoring Sheet II (Form 3-3)

Version 3
Dated: 15 March, 2019

Project Title: ICT Ecosystem Innovation Strengthening Project

Inputs		2017	2018	2019	2020	Remarks	Monitoring	
							Issue	Solution
Expert								
Chief Advisor	PO					Dispatched mostly as planned, including supporting activity for KIC (Kigali Innovation City) Roadshow to Japan (Jan. 2019)		
	WBS							
	Actual							
Project Coordinator/ Sub Chief Advisor	PO					Directly dispatched by JICA, in parallel with the Project, working mainly for procurement of equipment (lab expansion), study tour to Japan, and overall project coordination.		
	WBS							
	Actual							
Socio-Economic Research/ Project Management	PO					Dispatched mostly as planned.	Research work was undertaken by the other experts ("Open Innovation" and "Digital Fabrication") as part of action planning for lab expansion.	
	WBS							
	Actual							
Incubation Support 1	PO					The 1st cohort of incubation support program ended in December 2018. Out of the 10 incubatees, 8 has completed/ graduated. The 2nd cohort has launched on 4 March 2019.	Additional Rwandan expert has been recruited to strengthen more hands-on support and smoother operation.	
	WBS							
	Actual							
IOT System	PO					A professor was assigned to this position in March 2018. He was shifted to the position of "Open Innovation".		Other person(s) may be assigned in the future, if needed.
	WBS							
	Actual							
Designer 1	PO					An expert for corporate branding was assigned to this position in Oct-Nov 2018 for organizing lecture and workshop for the selected incubatees	The same specialist may be assigned further in the course of the pilot incubation process.	
	WBS							
	Actual							
Designer 2	PO					No assignment so far	A suitable expert may be assigned in the course of the incubation process.	
	WBS							
	Actual							
Sector Specialist 1_TBD	PO					No assignment so far	A suitable sector specialist may be assigned in the course of the pilot incubation process.	
	WBS							
	Actual							
Sector Specialist 2_TBD	PO					No assignment so far	A suitable sector specialist may be assigned in the course of the pilot incubation process.	
	WBS							
	Actual							
Sector Specialist 3_TBD	PO					No assignment so far	A suitable sector specialist may be assigned in the course of the pilot incubation process.	
	WBS							
	Actual							
Sector Specialist 4_Agriculture	PO					An agricultural specialist was assigned for conducting supply chain study in Feb 2018.	The same specialist may be assigned further in the course of the pilot incubation process.	
	WBS							
	Actual							
Sector Specialist 5_TBD	PO					No assignment so far	A suitable sector specialist may be assigned in the course of the pilot incubation process.	
	WBS							
	Actual							
ICT SWG Secretariat Coordinator/ Technical Advisor to the Minister	PO					Contracted by JICA Rwanda Office for supporting ICT SWG Secretariat, as technical advisor to Minister of MiTEC (current MINICT).		
	WBS							
	Actual							
Communication Specialist	PO					Contracted by JICA Rwanda Office for designing a communication strategy.		
	WBS							
	Actual							
Open Innovation	~~PO~~					A professor was assigned to this position in Oct. 2018 for undertaking workshops on strengthening the Labs operation, including case study.	Further field works should be scheduled in line with the Action Plan/ Operational Guideline for Labs expansion.	
	WBS							
	Actual							
Digital Fabrication	~~PO~~					same as above	same as above	
	WBS							
	Actual							

ICT Startup Policy *(added after the 2nd JCC)*	~~PO~~ WBS Actual		This position was added after the 2nd JCC (Sep.2018) and its role shall be undertaken by the identical expert who is engaged in the Chief Advisor.	
Investment Promotion Advisor	~~PO~~ WBS Actual		After the 1st assignment of this position, the expert has been replaced by another expert, having advices in the 2nd JCC. The successor shall be assigned officially from March 2019.	
Case Study Survey / Monitoring Evaluation	PO WBS Actual		Dispatched mostly as planned. The result of Baseline survey was shared among the C/Ps in late September 2018. The expert shall undertake an intermediate progress monitoring in mid 2019.	
Training Coordinator	PO WBS Actual		Dispatched mostly as planned.	The expert should be assigned futher in pace with the dispatch schedules of "open innovation" and "digital fabrication".
Project Coordinator/ Networking	PO WBS Actual		Dispatched mostly as planned, while additional field work assignment was made in Oct-Nov 2018 on the consultant's expenses.	
Procurement Coordinator *(added after the 2nd JCC)*	~~PO~~ WBS Actual		This position was added after the 2nd JCC (Sep.2018) for handling equipment procurement which would be scheduled for 2019 under the Project budget.	
Equipment				
Equipment for FabLab *(Procurement schedule revised in the Action Plan drafted in Febryary 2019)*	PO WBS Actual		Delayed from the PO. The procurement is scheduled to be done in 3 batches. The 1st batch has started in Feb. 2019 under the operation of JICA Rwanda. The 2nd batch shall follow in Jun-Oct 2019 under the Project, and the 3rd may follow in 2020.	Necessary budget for the 3rd batch (to be done by the JICA Rwanda Office) should be secured in a timely manner.
Training in Japan				
~~Country Training on FabLab management~~	PO WBS Actual		Training in Japan was cancelled after the 2nd JCC (Sep.2018). Instead, in-country trainings shall be conducted in relation with the tech-enabled hubs/centers action plan as well as its operational guideline.	
In-country/Third country Training				
Overseas Study tour for ICT entrepreneurs	PO WBS Actual		Two times of overseas trainings have been conducted in Dec.2018 (Startup event in Kenya) and Jan.2019 (Study tour in Japan) respectively, led by the JICA Rwanda intiative. Two times of trainings shall be scheduled for 2019 and 2020.	The country/ region to visit are possibly Israel and Singapore, as they are reported advanced in terms of ICT startup, while there is a possibility to use one of them for tour in Japan in connection with TICAD-VII (Aug. 2019)
Overseas Training on FabLab management	PO WBS Actual		Third country training for FabLab management shall be scheduled for early 2020. Candidate countries are the Philippines, India or Geogia where FabLabs are allegedly active in stimulating local economy.	

Activities	2017	2018	2019	2020	Responsible Organization: Japan	Responsible Organization: GoR	Achievements	Issue & Countermeasures
	11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11				
Output 1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private								
Activity1.1 Supporting activity for ICT start-ups								
1.1.1 Understand the status of the incubation facilities (kLab, FabLab)	PO WBS Actual				Project Team	RISA ICT Chamber	After the research work for strengthening Labs operation undertaken by the Open Innovation expert, Digital Fabrication expert, and Training Coordinator (1.1.1), a series of workshops were organized in late 2018, and the Action Plan and Operational Guideline for Innovation Hubs/ Centers have been drafted and shared to the stakeholders in Feb. 2019 (1.1.2). The 1st batch of Fab-academy training course (1.1.3) finished in late 2018, and the 2nd batch has started in Jan. 2019 with the five persons selected. Overseas training on FabLab management (1.1.4) has been reduced in frequency after the 2nd JCC. Training in Japan was cancelled while training in third country shall be scheduled for 2020. Procurement shall be done in 3 batches. The 1st batch started in Feb. 2019 under the JICA Rwanda operation. The 2nd batch shall follow in Jun-Oct 2019 by the Project, and the 3rd may follow in 2020.	1st batch equipment procurement commenced with delivery of the equipment in line with the planned opening of the 1st secondary city innovation center. The delay has been attributed to the C/P's desire to compile a comprehensive action plan and guideline. As the C/P now could utilize the action plan to accelerate establishment of these centres, it is important to closely monitor the C/P's resource allocation to support the centre expansion in more expedited manner. As the project marks half way point for its implementation, it is important to carefully push the further procurement and cpacity development initiatives (for the center staff) in cooperation with the C/Ps and the JICA Rwanda Office as well.
1.1.2 Human Resource Development for improving incubation management	PO WBS Actual				Project Team	RISA ICT Chamber		
1.1.3 Support for Fab-academy training course (MIT)	PO WBS Actual		1st Batch / 2nd Batch		Project Team	RISA ICT Chamber		
1.1.4 Conduct overseas training on FabLab management	PO WBS Actual			Third Country	Project Team	RISA ICT Chamber		
1.1.5 Procure equipment for incubation centers	PO WBS Actual				Project Team	RISA ICT Chamber		
Activity1.2 Organizing/ attending events for ICT start-ups								
1.2.1 Support for ICT related major events	PO WBS Actual	*TAS2018 / *Youth Connekt / *Kenya / *TAS2019 in May		*TAS2020 in May	Project Team	RISA, MiTEC ICT Chamber	After TAS 2018 (May 2018)(1.2.1), the Project supported (either for orgnizations or support for participation by Rwandan companies) ICT related events such as Youth Connekt (Oct. 2018), Startup Event in Kenya (Dec. 2018) and	Overseas training for ICT entreprenures (1.2.2) may be planned under the Project's initiative as part of the Activity 1.3 below. However, since the effectiveness of sending initial-startups to overseas trip need to be evaluated carefully, it

1.2.2 Conduct overseas study tour for ICT entrepreneurs	PO WBS Actual	*Study Tour in Japan (JICA Rwanda operation)	Project Team	RISA ICT Chamber, SAS	Study Tour in Japan (Jan. 2019) . Organization of more established companies' Japan tour need to be organized in conjunction with Output 3 activities.	may be better to combine with organization of more established Rwandan ICT entrepreneurs in line with Output 3 activity.
Activity1.3 Conducting pilot projects for ICT innovation						
1.3.1 Select target sectors and develop implementation framework/procedure	PO WBS Actual	1st target; 2nd target; 3rd target; 4th, 5th target	Project Team	ICT Chamber	The 1st batch compeleted in Dec. 2018, in which 8 out of 10 selected incubatees (trainees) graduated successfully, having opportunity for pitching in front of potential investors/ startup supporting organizations in Dec. 2018. Subsequently, the 2nd batch launched in March 2019 with ten incubatees selected from 67 applicants with focus on agriculture and education sector. The remaining batches should be organized efficiently in time management so that all the batches could complete by the Project ends. One issue which was raised during the second batch recuitment process was advocacy. While the Project was ready to coduct "information caravan", the initiative was never implemented due to lack of coordination.	Advocacy needs to be improved to attract better applicants. It is recommended to do more advocacy work such as proposed "information caravan." As the aim of the activity is to create viable mechanism for startups, lessons learned from each batches are carefully analayzed and applied to improve the
1.3.2 Pilot incubation of ICT entrepreneurs for six month (max.10 incubatees/ batch for 2018)	PO WBS Actual	1st batch; 2nd	Project Team	ICT Chamber		
Output 2: Policy framework to support ICT entrepreneurs and innovation activities is formulated.						
Activity2.1 Support for organizing/ coordinating ICT-SWG						
2.1.1 Capacity building support for planning skills	PO WBS Actual		Project Team	MiTEC	The chief advisor and sub-chief advisor have been working on this, in colalboration with an expert for capacity building who is hired by the JICA Rwanda as ICT SWG Secretariat Coordinator/ Technical Advisor to Minister of MiTEC (current MINICT). The 1st ICT-SWG meeting was held in Aug. 2018, the 2nd was in Oct. 2018, and the 3rd was in Feb. 2019.	
2.1.2 Assist to coordinate ICT-SWG	PO WBS Actual	1st; 2nd; 3rd	Project Team	MiTEC		
Activity2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem						
~~2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries~~	~~PO~~ ~~WBS~~ ~~Actual~~		~~Project Team~~	~~MiTEC, RISA~~	This original sub-activity item was cancelled after the 2nd JCC (Sep. 2018). Instead, a new item on "Create Common Vision for ICT Innovation Ecosystem in Rwanda" was agreed to be added for carrying out.	
2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda *(added after the 2nd JCC)*	~~PO~~ WBS Actual		Project Team	MiTEC, RISA	The task was completed through organizing stakeholders retreat to formulate "tech-enabled innovation centre expansion plan." The finalization and validation ot the concept and the document have been tasked to RISA.	Advocate RISA to expedite the finalization and validation process of the "tech-enabled innovation centre expansion plan which contains this vision."
2.2.2 Support MiTEC to formulate policies	PO WBS Actual		Project Team	MiTEC	In order to mitigate the Ministry's capacity challenges, the Project's policy advisor and experts others have been providing inputs to the editing/finalization of priority policy documents and reports throughout the reporting period alongwith the staff of the C/P institution. C/P has requested if the project could provide more readily available resource in the area of policy formulation support.	Since the Project's policy advisor is only available during the time of his mission, in order to fill the gap, the Project has agreed to recruit a national expert (policy advisor) to support the Ministry's Policy formulation tasks. The national expert will be stationed at MINICT at part time basis to provide policy related support
Output 3: Business relation between Rwandan and Japanese companies related to ICT is strengthened.						
Activity3.1 Matching support between Rwandan and Japanese ICT companies						
3.1.1 Understand the current situation and advice organizational structure to promote investments	PO WBS Actual		Project Team	ICT Chamber RDB	This sub-activity was undertaken by the previous expert assigned for investment promotion. However, that output was not meeting the requirment of the project and C/P.	The 2nd JCC concluded that ToR for investment promotion should more focus on practical actions for business networking instead of spending the Project's resource to capacity building of the relevant institutions
3.1.2 Support to promote Rwandan to foreign companies (especially for Japanese companies)	PO WBS Actual		Project Team	ICT Chamber RDB	In collaboration with the ICT Chamber, the Project contracted PwC Rwanda to conduct a training program for the selected ICT entrepreneurs. Subsequently, a booklet shall be edited/ issued for introducing competent Rwandan ICT companies to Japan, taking opportunity of TICAD-VII (Aug. 2019). As for networking tour, the Project supported the external initiatives and obtained list of both Japanese/ Rwandan companies as potential target for pilot projects.	As for the networking, the Project shall collaborate with other networking initiatives between Rwanda and Japan, so that the Project's resource could more focus on joint business pilot projects (3.2.2). Organising strong follow-up activities to the networking activities which occured during the course of the past 6 months (inlcuding Kobe Networking tour, KIC Roadshow, etc.) are must to improve concrete business ties. The Project is also supporting TAS 2019 which include advocating more Japanese companies to participate in the event and the proposed japan pavilion. The Project is also organising a private sector networking event during the TAS2019 as well. The Project is planning to support Rwanda to send strong deligation of ICT compannies to the the forthcoming TICAD-VII. While the selectio criteria and support criteria need to be discussed further.
3.1.3 Conduct networking tour from Rwanda to Japan (3 times) and from Japan to Rwanda (3 times)	PO WBS Actual	*effective networking to be designed; [From Rwanda to Japan]; [From Japan to Rwanda]; TICAD-VII; [From Rwanda to Japan]; Extra batch (JICA Rwanda initiative); [From Japan to Rwanda]; Kobe/Wired in initiative (indirect support by the Project)	Project Team	ICT Chamber RDB		
Activity3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda						
3.2.1 Develop pilot business concept, and identification of joint business group	PO WBS Actual	call for proposal (Japanese company)	Project Team	ICT Chamber RDB	The Project has entered to preparatory stage of the pilot project. A call for proposal has been made to the potential Japanese companies (who have ever participated in events related to Rwanda at least). Currently, the Project is in the negotiation stage with a most potential company. The remaining cases should be organized efficiently in time management so that all the cases could complete by the Project ends.	More active advocacy to solicit application and providing flexibility of the application cycle are planned to improve the number of applicants. More specifically, active solicitations to those companies which have participated in the previous networking events and/or visited Rwanda by themselves have been targetted for solicitation. During the TAS 2019, active promotion of the scheme will also be planned. In terms of the flexibility, the Project will accept application at a "rrolling-basis" to provide added flexibility for the applicants.
3.2.2 Implement pilot projects (6* cases) for 4 months while monitoring and review **increased from 3 to 6 after the 2nd JCC*	PO WBS Actual		Project Team	ICT Chamber RDB		

Output 4: Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.

Activity4.1 Collecting good practices in ICT-use and modeling cases for promotion

4-1 Collect ICT-use good practices and modeling cases for promotion	PO WBS Actual	presentation at consultation meeting Review study on Incubation support	Project Team	RISA	Case study on innovation labs, which was compiled with the relevant stakeholders, has been reflected in the Action Plan drafted in Feb. 2019. Currently, a lessons-learned review is underway for the 1st batch incubation support. Lessons learned from the review shall be shared by the end of Mar. 2019. These lessons learned need to be shared at suitable venues under activity 4.2	

Activity4.2 Disseminating the case studies through international/ regional organization and appropriate fora

4-2 Disseminate the cases studied (lessons learned, implication, model, etc.)	PO WBS Actual	[Advocacy] [Dissemination] *Strategy designed	Project team	RISA, ICT Chamber, SAS	In the last six months, the Project's outline was introduced taking opportunities of several events, such as Youth Connekt (Oct. 2018), Startup event in Kenya (Dec. 2018) and Startup study tour in Japan (Jan. 2019). More appropriate dissemination of lessons learned is expected to be done based on the case studies/ review study compiled under activity 4.1. In addition to the dessimination of lessons learned, the Project is actively promoting the Project activities through Social Media. In addition, the Project is also supporting ICT Radio Show to advocate ICT initiatives in the country.	The Project is in talk with relevant stakeholders to share the Project's lessons learned at appropriate venues. Lessons learned from output 1 and 3 will be presented at appropriate for a during the TAS 2019. It is also planned that the lessons learned will be shared at appropriate fora during the TICAD-VII as well.

Project Period	PO/ WBS Actual		Mostly as planned		

Monitoring Plan		2017	2018	2019	2020	Remarks	Issue	Solution
		11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12			
Monitoring								
Formulation of monitoring sheet	PO WBS Actual		*vers 1 *vers 2	*vers 3		Vers.1 was submitted in Jun. 2018. Vers.2 was submitted in Sep. 2018. Vers.3 is currently under preparation to be submitted in the end of Mar. 2019		
Conduct a baseline survey	PO WBS Actual			*Intermediate progress monitoring *Final Eval		BLS was conducted from May to July 2018. The result was shared in the end of Sep. 2018 after the 2nd JCC.	An intermediate progress aevaluation shall be scheduled to be undertaken in the mid 2019 for reviewing the Project's overall progress in referrence to the indicators to evaluate.	
Monitoring	PO WBS Actual		*1st monthly meeting	*2nd monthly meeting		Two times of monthly meetings have been organized so far led by RISA.	The 2nd JCC (Sep. 2018) recommended to continuously hold monitoring meeting. However, during the last six months, only two times of meeting have been held.	RISA/Project Secretariat is requested to be more diligent in organizing monthly meetings to allow nformation about the Project's progress will be shared among the relevant stakeholders in a timely manner.
Joint Coodination Committee Meetings	PO WBS Actual		*1st JCC *2nd JCC	*3rd JCC		The 1st JCC was held in March 2018. The 2nd JCC was held in Sep 2018. The 3rd JCC is going to be held in the end of March 2019		
Reports/Documents								
Project Completion Report	PO WBS Actual							

Remark

1 The purpose of the sheet is to monitor the actual progress of the Project activities with compared to the original PO and the WBS (Work Breakdown Structure) which was modified based on the agreement made in the 1st JCC in March 2018 and the 2nd JCC in September 2019.

2 Titles of the experts and activities are modified based on the agreement made in July 2018 after the 1st JCC (March, 2018) and the 2nd JCC (September, 2019). Some words and expressions look different from the original but it does not mean to reduce the inputs and/or activities.

3 The "Planned" schedule of each item on the "Inputs", "Activities" and "Monitoring Plan" follows the original PO and the WBS which was confirmed in the 1st JCC held in March 2018 as well as the 2nd JCC held in September 2019.

Minutes of Meeting
of
The Third Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The 3rd JCC meeting was held on 20th March, 2019 where the progress of the Project was confirmed and the relevant discussions and guidance related to the current challenges and remedies were made among the JCC members, based on the meeting materials including the Monitoring Sheets ver3. Overall, most of the recommendations given by the 2nd JCC were implemented with the exceptions of those items which were no longer deemed relevant by the C/Ps. The main points of discussion and the issues addressed for further improvement of the Project implementation are as follows:

Recommendations from the 3rd JCC Meeting for the Project Implementation

	Thing to Improve
Output 1: **Promotion of ICT Innovation**	**[1-1 kLab/FabLab Strengthening /Innovation Centers Expansion]** • **Recommendation 1**: Request RISA to expedite finalization of the draft "Tech enabled Innovation Centers Expansion Action Plan and Guideline." The documents are needed to secure resources to strengthen (budget allocation, location selection, etc.) for kLab/ FabLab as well as the planned centers in the secondary cities. • **Recommendation 2:** Request MINICT to support Custom Duty (and VAT) exemption for the FabLab equipment for the innovation centers. This is necessary to effectively use the budget supported by JICA. • **Recommendation 3:** Request RISA to support measures to enable planned expansion and Human Capacity Development which would allow capacity development measures in line with the prescribed schedule. **[1-2/1-3 Incubation Support for 250 Startups]** • **Recommendation 4:** Request C/Ps, through coordination of the secretariat, to secure appropriate space for 250startups cohorts by end of May. Given that the current kLab space, currently utilized partially for supporting the 2nd Cohort, will not be sufficient to accommodate next 3rd Cohort. • **Recommendation 5:** Recommend opening up the theme of 3rd Cohort to be "unrestricted." This is due to potentially limited candidacy for the 250Startups applicants.

	• **Recommendation 6:** Request making vigorous advocacy campaign (e.g.; info caravan) to be coordinated by the Secretariat. • **Recommendation 7:** Recommend C/Ps to include idea of creating platform to furnish sustainability within the proposed business plan. Some of these recommendations include: - Facilitate creation of "syndicate of angel investors" which could satisfy the financing needs of early stage startups - Institute "company limited by Guarantees with not for profit charter" for the 250Startups that should satisfy the needs of legal requirement. - Coordinate with other programs (e.g.; NCST, kLab, DSSD, etc.) that introduces students to a project while in school that would become a feeder mechanism for the 250Startup program - Involve line-Ministries/Agencies (and other sector stakeholders) to the 250Startups program, which would allow incubatees' businesses could effectively address the nation's socio-economic issues/ challenges.
Output 2: **Formulation of Policy Framework**	**[Institutional Capacity Building/Formulation of Policy Framework]** • **Recommendation 8:** Recommend Capacity Building initiatives to the MINICT should commence without waiting for the finalization of the institutional reform. In order to maximize the resources, e-learning services should be explored with appropriate facilitator. • **Recommendation 9:** Request MINICT to define areas where it needs capacity building support, so that the relevant support can be availed by the Project. • **Recommendation 10:** Request MINICT to share draft ToRs for the proposed part-time policy advisor position, so that the Project can proceed for hiring a national expert who will work together with the Japanese expert (if necessary coordinate with RISA to incorporate their needs).
Output 3: **Business Matching b/w Rwanda and Japan**	**[Business Matching between Rwanda and Japan]** • **Recommendation 11:** Recommend setting up a joint team to increase the achievement ratio of business matching (investors coming to Rwanda and investing not just touring and leaving). The entity may be coordinated by RDB and shall be engaged in creation of explanatory materials to answer the basic investment related questions in Japanese. The material should incorporate items such as average salary/office space structure, benefits, tax incentives, etc.

	• **Recommendation 12:** Recommend Several technical suggestions as follows to increase effective business matching: - Formulate matrix/ database which indicates specifically the progress/ stage of communication, business negotiation, signing for investment, and so on between Rwandan company and Japanese company, while paying careful attention not to be shared openly outside the Project (confidential list), - Offer branding and marketing support to the Rwandan entrepreneurs (those participating in the PwC training) by assigning the Japanese expert, so that they can improve their capability to attract more Japanese companies/ investors. - Follow up with JETRO on how best to provide an avenue for Rwandan Innovations (including KIC) could be showcased during TICAD 7. This follows Minister of MINICT's prior request to have African Innovation Ecosystem presented at KIC Roadshow.
Output 4: **Disseminating Experience of the Project**	[**Disseminate experiences of the Project**] • **Recommendation 13:** Recommend maximizing opportunities of TAS 2019 and TICAD7 to showcase information based on the lesson learned obtained during the course of Project implementation (e.g.; lessons learned from the 1st batch of 250 Startups, lessons learned/ KFS for attracting Japanese companies/ investors to Rwanda, etc.). • **Recommendation 14:** Request Secretariat to be responsible for maintaining the Project Website which has been designed and published recently for information sharing among the stakeholders. Project shall support technically in producing the contents such as video, photos, and compilation of other contents. • **Recommendation 15:** Recommend revisiting draft media strategy and devise ways of disseminating the project experiences in more innovative ways (e.g.; reality show type format, Ted, etc.)
Overall/Others	[**KPI**] • **Recommendation 16:** Recommend modifying KPIs which do not capture the results of the Project fully: - Modify KPI "2-1number of policies" to "how many policies drafted in-house given the support of the project." - Eliminate KPI "2-2 increased positive reaction of policy reviewer." Since positive reaction from the stakeholders which are affected by the policy are most important and reviewing and consultations to the

	policy reviewers are standard part and parcel of policy formulation. - Retain KPI "4-2 Increased visit to learn Rwanda-like ICT use development practice from other country(s)" to keep track the number of visits to kLab and MINICT as a result of the Project through the visits to 250Startups. **[Coordination]** • **Recommendation 17:** Request strengthening the Project's secretariat and include MINICT as a fulltime member. It is requested to convene monthly project progress meetings which would allow timely inputs/ guidance to the matters pertaining to the Project implementation and set priorities. **[Others]** • **Recommendation 18:** Request C/Ps to present the progress at the proceeding JCCs, in lieu of the Project Staff, to reconfirm the ownership of the Project.

2. The 3rd JCC, taking into account the aforementioned points, would recommend the Project Team and JICA to take appropriate and timely improvements with C/Ps.

3. The JCC recommends that the Project Team should make use of those opportunities fully for advocating the Project's achievements and lessons learned.

4. The JCC recognizes the importance of timely and close information sharing/communication and coordination among and between the Rwandan and Japanese stakeholders. During the 2nd JCC, it was decided to create a Project Secretariat which will plan, coordinate, communicate, and monitor the Project implementation. However, during the 3rd JCC, it was recognized from both the Project and the C/Ps that the operations of the Secretariat need further strengthening for better coordinate and implement some of the activities. Accordingly, it was agreed to appoint a dedicated person of MINICT to be the core members of the Secretariat along with RISA and the Project. Furthermore, it was requested to assign an additional person to conduct M&E activities from RISA. As the strong Secretariat is a key to enable smooth implementation and obtaining results of the Project, it is essential that the Secretariat shall be staffed appropriately by assigning capable and responsive human resources from both the Rwandan and Japanese side.

(end)

Memorandum of Consent

on

Project Monitoring Sheet version 4

As the third deliverable of the ICT Innovation Ecosystem Strengthening Project in the Republic of Rwanda (the Project), the Ministry of ICT and Innovation (MINICT) and the Project Team agreed with the approval of modified PDM (Project Logframe) and the contents of the third semi-annual report in the form of Project Monitoring Sheet I (Form 3-2: Revision of Project Design Matrix) and the Project Monitoring Sheet II (Form 3-3: Revision of Plan of Operation), while bearing in mind that the Project has been implemented mostly as scheduled based on the mutually confirmed project status at the Fourth Joint Coordinating Committee held on 02nd of October 2019.

Accordingly, both parties also agreed the aforementioned Sheets shall be submitted to JICA under the name of the Project Team in line with the requirements set forth by JICA.

Kigali, 14th of October, 2019

Claudette Irere

Chairperson,
The Joint Coordinating Committee
Permanent Secretary, MINICT

Atsushi YAMANAKA

Chief Advisor,
JICA ICT Innovation Ecosystem
Strengthening Project

Attachment;

1. Monitoring Sheet I Form 3-2
2. Monitoring Sheet II Form 3-3
3. Original PDM ver.0
4. Modified and approved PDM ver.1
5. Minutes of Meeting of the 4th JCC (2nd of October, 2019 at Onomo Hotel, Kigali)

ANNEX I Monitoring Sheet I form 3-2

Project Monitoring Sheet I Form 3-2 (Revision of Project Design Matrix) (1/2)

Project Title: The ICT Innovation Ecosystem Strengthening Project

Implementing Agency: Ministry of ICT and Innovation (Former Ministry of Information Technology and Communications (MITEC): until October 2018) (Former Ministry of Youth and ICT: until Aug 2017)

Target Group: 1) Officials of MINICT, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entregreneurs with in th Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from October 2017 to October 2020)

Project Site: Kigali, Rwanda **Model Site: Kigali City**

Version 4.0

Dated 02 October, 2019

No change made in PDM (goal, purpose and outputs) from the previous version (version 2: dated 15 September, 2018).
Substantial revision will be envisioned at the intermediate evaluation at JCC which is scheduled for the 2nd of October 2019.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal					
ICT sector's economic contribution to GDP in Rwanda is increased through enhancing the ICT Innovation Ecosystem.	- ICT sector's contribution to GDP (%)	- Official GDP statistics.	GDP statistics definition is unchanged. There is no unexpected rapid growth of GDP in other fields.	Baseline data collected - 1.31% (based on BLS: limited to telecom sector and hardware sales).	Apart from official ICT contribution to GDP (limited to telecom sector and hardware sales), there may be someway to capture wider ICT contribution to the economy (ex. Inter-industry analysis/ Input-output analysis). This shall be considered further and maybe introduced in lieu of the arbitrary GDP data.
Project Purpose					
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan (SRMP).	- Increased number of entrepreneurs in ICT sector - Increased number of employees in ICT sector - Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	- ICT official profile of the GoR. - SRMP official monitoring report.	SRMP is continuously applied as GoR's strategic master plan.	The number of entrepreneurs in ICT sector has been collected using statistics from RDB (8,169 as of 2018). The number of employees in ICT sector was collected through questionnaires for ICT entrepreneurs registered in ICT Chamber (5,607 as of 2018). The number of stakeholders involved in the Rwanda ICT Innovation Ecosystem need further elaboration as the indicator is difficult to attain.	RDB does not have a concrete data for the number of employees in ICT sector. Therefore, as a proxy indicator, the Project collected the total number of employees in ICT companies registered in ICT Chamber. Real number of stakeholders involved in the Rwanda ICT Innovation Ecosystem is hard to be identified. Need to modify this indicator or need to clearly define what constitute stakeholders.
Outputs					
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. kLab, FabLab etc.)	- User records of incubation spaces.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.	The number of incubation space users has been collected using statistics from partner organizations. Questionnaire for kLab and FabLab users were conducted as a baseline for their motivation to their projects and satisfaction for the Labs (kLab: 1,865, FabLab: 90).	Project expects that user base to steadily increase through proper interventions. However, the growth rate will be subject to the "Tech-enabled innovation center action plan/guideline and their implementation." It is
	1-2 Increased number of newly established ICT companies in line with "250Startups" initiative.	- "250Startups" statistics.		1st batch: 8 startups graduated 2nd batch: 10 startups will graduate 3rd batch: 10 startups are expected to graduate	Necessary to define and agree with definition of what constitutes "new" companies. In order to accurately assess the Project intervention, it may be proposed the entrepreneurs in the incubation programme as a newly established ICT companies in line with "250Startups".
	1-3 Increased number of newly launched services/products enabled by ICT.	- ICT Chamber's Data		Baseline data has been collected using questionnaire (2.07 products/ services were produced on average per company per year in 2017).	Regular assessment will be made to measure the progress
Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	- Official GoR policy data.	Same as above.	Policy related advisory supports have been provided which led to ICT related policies (6 policies formulated so far, e.g.; ICT SSP, e-commerce strategy, ITES strategy, regulatory sandbox, Sector Profile, JSRs, etc.)	Number of policies may have logical correlation with the capacity building aspects of C/P institutions.
	2-2 Increased positive side reaction of policy reviewers.	- Comparison with base-line data.		Comparison exercise has not been started	After the Project activity started, this outputs will be assessed by interviewing with the policy reviewers or people affected by given policies.

	2-3 Increased positive side reaction of ICT entrepreneurs.	- Comparison with base-line data.		Baseline data (satisfaction with SRMP) has been collected using questionnaire for ICT entrepreneurs. - Satisfaction level in ICT capability and capacity: average 5.96 out of 7 (max. score) - Satisfaction level in governance and management: average 6.28 out of 7 (max. score) - Satisfaction level in ICT infrastructure: average 6.14 out of 7 (max. score)	ICT Chamber will provide facilitation to conduct annual survey to its member companies. In addition, ICT related policy review is suggested to be undertaken by the policy experts with assembling suitable experts for that.
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	- Comparison with base-line data.	Same as above.	Analysis will be conducted to assess number of partnerships (MOU and other concrete partnerships) concluded at the end of the year/beginning of 2019	The number of companies which discontinued the partnership with Rwandan company will not be considered. Measurement of this Output only focus on the number of companies which will make new partnership with Rwanda.
	3-2 Increased Foreign Direct Investment in ICT/ innovation sector from Japanese institutions.	- Comparison with base-line data.		FDI from Japanese entities recorded in RDB is only three companies and there is no data of FDI to the ICT sectors.	RDB is expected to continue collecting and releasing this data, otherwise this indicator may needs to be modified to assess the progress more suitably.
Output4 Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice.	- Comparison with base-line data.		2,620,000 hits in Google search by the word of 'Rwanda ICT business.' 7,300,000 hits as of September 24th 2019.	A simple comparison with neighboring countries or countries with similar socio-economical circumstances may be a way to measure the performance by the Project.
	4-2 Increased visit to learn Rwanda-like ICT use development practice from other countries).	- Comparison with base-line data.		N/A	No relevant Project activity has been conducted during the reporting period.

Project Monitoring Sheet I Form 3-2 (Revision of Project Design Matrix) (2/2)

Activities	Inputs		Pre-Conditions
	Japanese Side	Rwandan Side	
Activity 1.1 **Supporting activity for ICT start-ups**	*Workshops and corresponding action plan/ guideline formulation activities for strengthening the Labs operation have been undertaken by the JICA experts (covering 1.1.1, 1.1.2). Procurement of 1st batch equipment needed for Labs expansion is ongoing (1.1.5) in line with the action plan/ guideline. Procuremnet of 2nd batch equipment has began as well. Fab-academy training course (1.1.3) is underway (2018 batch is completed and 2019 batch is slated to be completed by November).*	*Various different initiatives have been organized by the C/Ps and stakeholders to facilitate Activity 1.1. RISA is taking the lead in securing the budget and necessary logistic arrangements (identifying sites and support recruitment to strengthen and expand the centers in the secondary cities (2019 budget secured for one centre - Agahozo Shalon Youth Village and more funding are being requested to enable two more centres). The Project is cooperating with different initiatives organized by stakeholders to maximize the results and explore better sustainability model of these centers.*	
1.1.1 Understand the status of the incubation facilities	Two Japanese professors (experts) from Keio University SFC undertook the related works (initial assessment and analysis of incubation facilities, mapping of innovation facilities in Kigali) which was completed by June 2018. A series of workshops have been organized based on the findings/ lessons learned, involving the relevant stakeholders from the Rwandan side to compile an Action Plan/ Operational Guideline of Innovation Hubs/ Centers Expansion in Rwanda. After the retreat on November 2019, the final draft of the "Tech-enabled innovation center expansion plan" and corresponding guideline has been delivered to RISA for finalization and submission to relevant authorities for budget request and allocation.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the documents. RISA has been instrumental in utilising the Action Plan and the corresponding guidline to secure public funding to enable operation of new centers in the secondary cities.	
1.1.2 HRD for improving incubation management (kLab, FabLab)	Training programs for HRD of the have been proposed in the aforementioned Action Plan/ Operational Guideline and the Professors are currently compiling the training materials to be used in the first training session which will be conducted in late September/Warly October 2019. Along with the kLab, FabLab managment teams, new centres managment teams (including potential candidates), stakeholders, and Fabacademy participants are invited to attend an intensive one week training session to horn managment skills for the innovation centres.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (e.g.; selection of center location, recruitment of human resource, allocation of appropriate financial resource, advocacy, etc.). Identification of potential centre personnel (or key stakholders) have been completed and these personeels are invited to the HRD training in Setpmenr/October	
1.1.3 Support for Fab-academy training course (MIT)	Upon successful completion of FabMaster's course by 5 individuals in 2018, the Project is currently providing logistic and financial support to enroll additional five Fab-master candidates to MIT's online Fab-academy training course for 2019 (the 2nd batch Fab-master trainees in the Project). All candidates are expected to finish the course by November 2019. It is expected that the Fab-masters trained through the Fab-academy training course will become core supporters (trainers) of the innovation centers strengthening initiatives which include expansion of innovation centers in the secondary cities.	The C/Ps and innovation centres have supported the project in the selection process of the candidates to undertake the managment training. It is expected that these human resources will be dispatched in the future as resource person to the FabLab/ kLab in the secondary cities as technical resources.	Innovation and start-up enabling policies (including corresponding regulations) are effectively implemented in accordance with the Smart Rwanda Master Plan (SRMP).
1.1.4 Conduct overseas training on FabLab management	As agreed in the previous JCCs' and within the scope of the said Action Plan/ Operational Guideline that an overseas study tour should be conducted some time in 2020 to visit the Philippines, India or Georgia where the FabLab is reported to be utilized for local economy development. The selection process of the both participants and the location will be completed in due course with the C/Ps.	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been involved in the process of drafting the action plan and the guideline to strengthen and expand Tech-enabled Innovation Centers in Rwanda. The overseas training decision (place, scope, and schedule) will be made in careful consultations with the C/Ps after sometime when the secondary cities' centers become operational and accumulated initial experiences of operation.	

1.1.5 Procure equipment for incubation centers	Potential list of equipment and other details pertaining to this activity were specified within the context of the Action Plan/ Operational Guideline. Subsequently, the 1st batch of procurement process has commenced in February 2019 supported by the JICA Rwanda operation. This 1st batch equipment is slated to arrive in late September/Early October to be able to prepare for the official opening of the innovation centre in Agahozo Shalom Youth Village (ASYV). Major equipments procurement of 2nd and 3rd innovation centres have commenced which will be supplemented by equioments and materials which will be procured under the	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been making efforts to realize the action plan by securing necessary resources for implementation (human resource, financial resource, etc.). RISA has been spearheading the process. Confirmation of centres locations (one location in Huye has been identified) and necessary resource allocations will be expected to be facilitated by RISA prior to equipments arrival.	
Activity 1.2 **Organizing/ attending events for ICT start-ups**	*The Project has been supporting ICT startups and established ICT companies indirectly/ technically for participating in the relevant events/ meetings, mainly TAS2019, TICAD VII, and a study tour to Japan.*	*The C/P and stakeholders have been sharing information about relevant events/meetings in the area of ICT start-ups in Rwanda and its surrounding countries.*	
1.2.1 Support for ICT related major events 1.2.2 Conduct overseas study tour for ICT entrepreneurs	The Project has supported the established ICT companies to attend and develop network with Japanese companies at TAS 2019 and TICAD VII (mentioned also at 4.2) Several startups also were selected as one of those established companies and participated in networking events with Japanese companies. The Project also has supported the incubates (1.3.2) to promote their busienss at Startups Study Tour in Japan (Sep. 2019) (mentioned also at 4.2).	The relevant stakeholders (MINICT, RISA, ICT Chamber) have been working together with the Project for facilitating those participation.	**Issues and Countermeasures**
Activity 1.3 **Conducting pilot projects for ICT innovation**	*The relevant activities are currently underway, in collaboration with the ICT Chamber, mostly as scheduled, involving ten startup incubates selected for each 2nd and 3rd batches. The 2nd batch incubation process started in Dec. 2018 and the graduation will be on Oct. 4. The 3rd batch process started in Apr. 2019 and the program will start in July.*	*Various different supports were provided (especially by ICT Chamber) in the course of the 2nd batch implementation. For the 3rd batch incubation of 10 start-ups, necessary support has been given too.*	
1.3.1 Select target sectors and develop implementation framework/ procedure	The 1st batch finished in Dec.2018 with eight incubates successfully graduated from the training program. For the 2nd batch, two specific sectors are targeted after discussion with the relevant stakeholders C/Ps, namely agriculture and education. From the 3rd batch, 250Startups will not focus on specific sectors. The implementation framework/ procedure is currently under development based on the past batch experiences.	RISA provides 1st floor of Telecom House to 250Startups for the 3rd batch and onward. Also, it decided to bear the cost of internet from December 2019, which makes the implementation of 250Startups much more effective and sustainable.	
1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubates/ batch x 5 batches)	The Project intensively assigned both local and Japanese experts for smooth and efficient implementation of the incubation activities. For the selected first and second batch incubates, opportunities have been provided to participate in overseas/ domestic events for pitching and/or presentation about their business.	ICT Chamber has been proactively supporting and mentoring the incubates' growth. Also, provided support in preparing and selecting ten startups for the 3rd batch. Challenge of recruitment has been pointed out by different stakeholders. More collaboration with insitututions which conduct workshops for ideation level startups.	
Activity 2.1 **Support for organizing/ coordinating ICT-SWG**	*JICA Country Office Program Manager, the Project's sub-chief advisor, and the SWG coordinator/Technical Advisor to the Minister have been following up on the issues related to support ICT-SWG and other policy related activities.*	*C/Ps conducted various policy related activities which include ICT-SWG and other policy related activities.*	
2.1.1 Capacity building support for planning skills	The project has been discussing with the Government C/P how best to conduct capacity development measures. However, the business process analysis, which was intended with the support of the Project's sub-chief advisor and SWG/Technical Advisor, has been suspended due to the C/P organization's restructuring. Concrete analysis of work-flow and corresponding improvement plan, which will be critical for steramlined operation and career plan management of the Government C/Ps to initiate effective capacity building program may not be possible for a while. Alternatively, Project is suggesting to conduct pilot initiative of utilizing Udemy for Government (or equivalent digital services) to advance capacity builidng and career plan managment of the targetted officers. The suggestion will be presented to the JCC for approval.	Before the organization restructured, the primary C/P for the initiative has indicated enthusiastic response to the institutional capacity development initiatives. However, due to the restructuring, detailed activities and training needs have not been decided yet.	

2.1.2 Assist to coordinate ICT-SWG	The SWG coordinator/Technical Advisor to the Minister has been following up the related activities. The 1st SWG was conducted in August 2018, the 2nd was held in October 2018, and the 3rd has been organized in February 2019. Additionally, Project's policy advisor gave editing/expert advisory support for the JSRs and other policy related materials	Since the recruitment in Aug 2018, the SWG Coordinator/Advisor has established an indispensable position in the Ministry. He has been supporting the Project as a valuable intermediary with the Ministry, facilitating communication and substantive activities.	
Activity 2.2 **Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem**	*New Policy Specialist has been recruited to provide policy related capacity building support to the Ministry as the support by the Policy Advisor/Chief Advisor could provide mostly distant based support during the reporting period. In addition, as has been in the previous period, resident sub-chief advisor and SWG/Technical Advisor, along with the JICA's Programme manager, provided continuous resident support to the Ministry.*	*Since the reorganization of the MiTEC to MINICT, the Ministry is in the process of creating a new institutional setup. It is imperative to monitor the process of the Ministry complete the process as it will become the base for the Project's institutional strengthening support.* *Meanwhile, C/P has been concentrating their work on such priority project as KIC, formulation of priority strategies/plans, advocacy, etc. These priority initiatives have been supported by the Project.* *During the reporting period, C/Ps have also actively provided their policy related support at SWG meetings and other fora.*	
2.2.1 ~~Review ICT Innovation Ecosystem in Japan and other two countries~~ Create Common Vision for ICT Innovation Ecosystem in Rwanda *(changed after the 2nd JCC)*	As part of the Innovation Center Expansion Action Plan and Guideline formulation processes, common vision of ICT innovation Ecosystem (within the context of innovation centers) has been formulated.	The exercise was completed as part of the ICT innovation center expansion action plan with key stakeholders. The vision and the holistic innovation center expansion plan has been submitted to the Government through RISA.	
2.2.2 Support ~~MiTEC~~ MINICT (and other C/Ps) to formulate policies	Ongoing support is being provided as needed (e.g.; review of JSR, added inputs of KIC Hub Strategy, KIC related activities, editing/inputs provided to priority ICT sector strategies, etc.) Policy specialist hired under the project is also has began providing facilitation support in teh area.	Policy formulation and review exercises are ongoing under the leadership of the ministry. However, some of the priority strategies need further work	
Activity 3.1 **Matching support between Rwandan and Japanese ICT companies**	*The activities in Output 3 continue to focus on practical activities that follow business promotion and follow-up.* *Active support has been provided by the project to support Rwanda's priority initiative such as ICT Business Roadshow in Japan (part of TICAD7 pre-event)by organizing the relavent buisness forum in Tokyo. In preparation for the TICAD7, capacity building initiatives for the ICT Chamber member companies have been made.*	*C/Ps expect to have networking opportunities to lead to concreate business matching between Japan-Rwanda companies. C/Ps also co-sponsored capacity building inititaitves for member companies which have represented Rwanda during the TICAD7.*	
3.1.1 Understand the current situation and advice organizational structure to promote investments	Project continued to support Rwandan ICT companies and relevant C/Ps institutions to connect with the relevant Japanese and other foreign markets.	Centered on Rwandan companies that participated in TICAD VII, C/Ps are trying to establish and operate mutual aid association in the ICT private sector under the leadership of PSF.	
3.1.2 Support to promote Rwandan to foreign companies (especially Japanese)	The project supported two ICT company training sessions. The first training session was strengthening business management including company profiling for 15 Rwandan companies by PwC. Another training was implemented for 30 Rwanda companies which were the candidates for partcipataion in TICADVII(Aug. 2019). The session was onducted by Mr Nakamura, a Japanese Branding specialist. The training focused on investment trend in Japanese startup economy, how to attract Japanese investors and how to make a pitch to Japanese clients. As part of promotional activities for TICAD VII, the project supported creation of a booklet which introduces Rwandan Leap-frogging 30 ICT companies. This booklet was distributed to many Japanese companies during TICAD VII. The project organized the TICAD7 pre-event ICT & Innovation Forum on 26th August 2019 as a follow up to the KIC Roadshow held in Japan in January 2019.This forum, which was participated by 24 Rwandan companies, provided input to about 80 Japanese companies on business opportunities in Rwanda and also conducted networking session between Rwandan and Japanese companies.	MINICT, RDB, and ICT chamber have been actively facilitating KIC roadshow as a leading institutions pushing for the strong connection between Rwandan and Japanese companies. In particular, during TICAD VII, C/Ps solicited Japanese companies to participate in the KIC Road Show and promoted investment in Rwanda.	Active coordination by the Project secretariat will be critical in moving several key issues (e.g.; advocacy) forward. In addition, allocation of appropriate resources from the C/Ps will be critically important to maker sure that the project will implement smoothly.

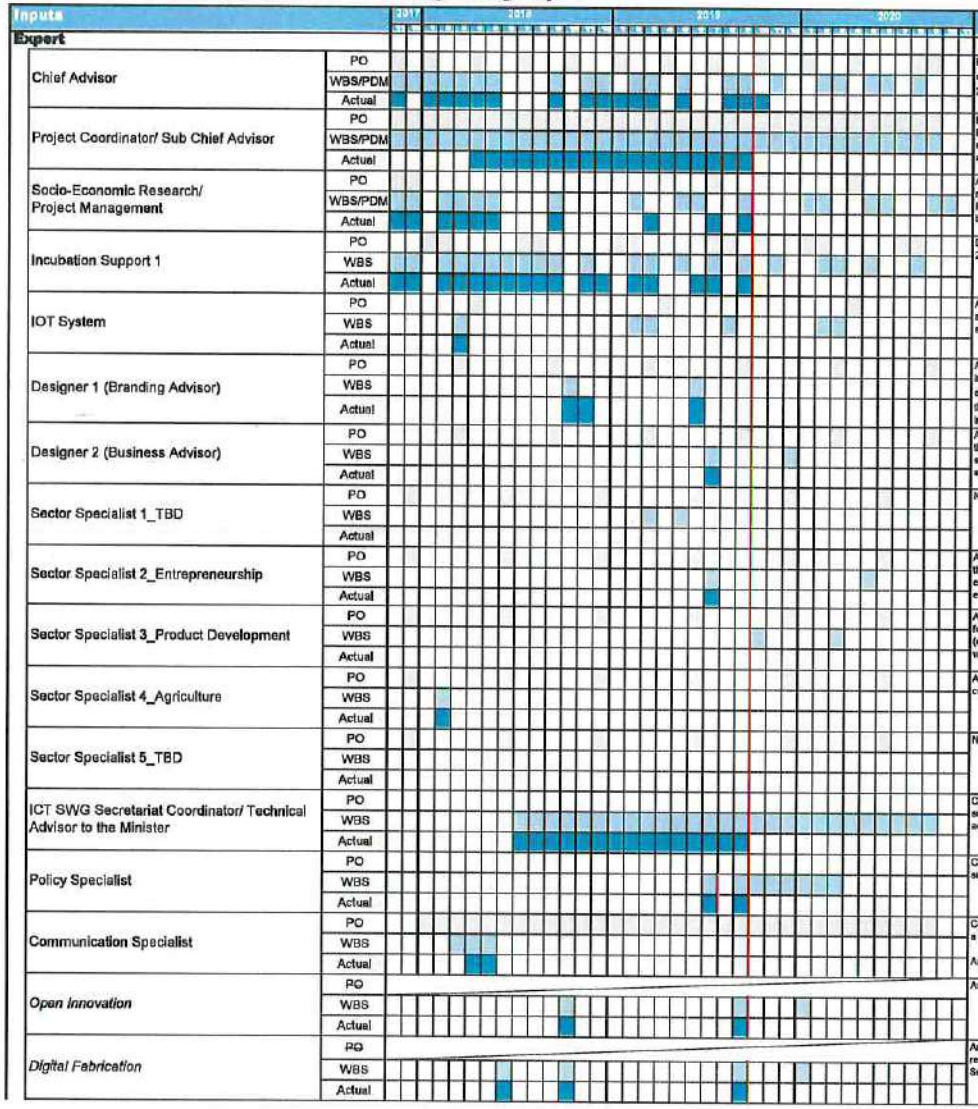
3.1.3 Conduct networking tour from Rwanda to Japan, and from Japan to Rwanda	The project supported TAS 2019 with Japan Pavillion and different networking opportunities. About 70 Japanese participants from 30 companies attended TAS2019. Such as DMM.com, Otowa Electric, NEC, HAPSMobile, Sumitomo Electric Industries, NTT Data, Toyota Moto. The project hosted a Business matching event with Rwandan companies and there were more than 120 participants. Companies like HAPSMobile is currently looking at the possibility to invest and enter Rwanda market to expand to another African region. The project took TICAD-VII as an opportunity and supported total of 24 Rwandan companies to visit Japan to solicit concrete opportunites. The project hosted ICT & Innovation Forum, a pre-event of TICAD-VII, jointly with UNIDO, providing a networking opportunity for Rwandan and Japanese companies. During TICAD-VII, the project also supported business matching between Rwandan and Japanese companies in terms of their communication. Besides, on August 30, 2019, a matching house party was hosted by Mr Nakamura, a branding expert. This house party many Japanese investors and companies participated was not only the opportunity to exchange business information between Rwandan and Japanese companies but also the time to learn Japanese culture for the Rwandan companies. The project is also planning a business tour from Japan to Rwanda to promote further business matching.	Created and strengthened follow-up mechanism for each visits and missions. After TAS 2019, focal group consists from ICT Chamber, ICT Project, RISA, Ministry of ICT and Innovation, RDB, KIC, was created and was active for preparation of TICAD preparation and is expected to be a platform to share more business related information that is gathered from different players to match and identify follow-up mechanism. In August 2019, the ICT & Innovation Forum was held in Tokyo as a follow-up event for the KIC Road Show held in January 2019. Some of the Rwandan ICT companies joined this forum and had opportunity to meet with Japanese companies.
Activity 3.2 **Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda**	*The project has actively recruited participating companies for the pilot project. Based on the lessons learned from the completed pilot project, the project will summarize the challenges and possibilities for Rwandan business.*	*C / Ps provide support to connect appropriate parties to the companies conduct pilot projects.*
3.2.1 Develop pilot business concept, and identification of joint business group	The Project renewed the application process of pilot project to "rolling bases". This makes the process a flexible and quick so that Japanese companies that submit proposals can immediately move on to the review process without a specific recruitment period	The C/P endorsed the process and provided inputs for selection process which was designed by the Project.
3.2.2 Implement pilot projects (6*-cases) for 4 months while monitoring and review *(increased from 3 to 6 after the 2nd JCC)*	The 1st pilot project was completed at the end of August 2019 and currently, the 2nd pilot project has been adopted. There are still four application slots for pilot projects.	The C/P endorsed the result of selecting company.
Activity 4.1 **Collecting good practices in ICT-use and modeling cases for promotion**	*During the last six months, several good practices of the Project have been compiled into Multimedia contents, Book, and experience sharing through participating different events. Some of the highlighted fora in the past 6 months include the TAS2019, TICAD7, 250 Startups Visit, etc.*	*C/Ps have been involved support in the process of compiling such knowledge product as Rwanda ICT/Innovation Companies' Guide and Multimedia products. In addition, C/Ps have been providing knowledged learned from the project's implemetation through different fora which include TAS2019, TICAD7, and 250 Startups visit to Japan, etc.*
4.1.1 Collect ICT-use good practices and modeling cases for promotion	A review study is underway after the 1st batch incubation support program. Lessons learned to be obtained from the review was shared in July. 2019 to the C/Ps 30 Leap-frogging ICT companies' profiles and over-view of ICT sector in Rwanda have been compiled into a book (Japanese) which was distributed at TICAD7 and related pre-event. English version is currently being edited and will be put into e-book (pdf) format. ICT sector video was compiled which was aired at the occasion of TICAD7 and the video is expected to be used for variety of other fora. 250 Startups multimedia footage is being compiled as part of gathering lessons learned and promotion. The multimedia footage is expected to be aired at different fora. More work need to be done, in order to	The C/Ps supported the Project's activity to collect, analyze, and provide inputs of the innovative ICT business models and practices which emerge from the Project implementation.

Activity 4.2 **Disseminating the case studies through international/ regional organization and appropriate fora**	*Various different knowledge learned materials through the Project implementation have been shared in various different format at different fora both within and beyond Rwanda.*	*Same as left.*	
4.2.1 Disseminate the cases studied (lessons learned, implication, model, etc.)	In the last six months, the Project dessminated various different knowledge materials, experiece sharing, and information of the Project's and Rwanda's achievemnents at different fora. In May 2019, TAS2019 which included Japan Pavillion and knowledge sharing sessions which included project's lessons-leanred. In August 2019, in conjunction with TICAD7, the Project organized pre-event which featured Rwandan opportunities to Japanese market and participated in various different networking and side-events. In addition, 250Startups second cohort made study tour to Japan where the Rwandan incubation mechaism and other information about Rwanda's Tech scene.	The C/Ps have been supporting the Rwanda's experiences both directly/ indirectly to show-case Rwanda's opportunities in the area of innovation and ICT and their experiences at suitable international fora. These include several key activities and lessons-learned from the project supported initaitives.	

Annex II Monitoring Sheet II Form 3-3

Monitoring Sheet II (Form 3-3)

Project Title: ICT Ecosystem Innovation Strengthening Project



Inputs		Remarks	Monitoring	
			Issue	Solution
Expert				
Chief Advisor	PO			
	WBS/PDM	Dispatched mostly as planned, including supporting activity for TICADVII to Japan (Aug. 2019)		
	Actual			
Project Coordinator/ Sub Chief Advisor	PO			
	WBS/PDM	Directly dispatched by JICA, in parallel with the Project, working mainly for procurement of equipment (lab expansion), study tour to Japan, and overall project coordination.		
	Actual			
Socio-Economic Research/ Project Management	PO			
	WBS/PDM	Assigned expert has been replaced for personal reason from 3rd JCC. The replacement, Rwandan expert, has been approved by C/Ps and being dispatched.		
	Actual			
Incubation Support 1	PO			
	WBS	Dispatched based on the schedule of 250Startups program.		
	Actual			
IOT System	PO			
	WBS	An open innovation specialist (professor) was assigned to this position in March 2018. He was shifted to the position of "Open Innovation".		
	Actual			
Designer 1 (Branding Advisor)	PO			
	WBS	An expert for corporate branding was re-assigned in June 2019 to do more specific training for established companies towards TICADVII since there was a huge gap in his lecture and incubatees levels.		
	Actual			
Designer 2 (Business Advisor)	PO			
	WBS	An expert has been assingned in July 2019 for the workshops on design thinking and lean startups and individual consultations with each startup		
	Actual			
Sector Specialist 1_TBD	PO			
	WBS	No assignment so far	The need of this particular specialist is being questioned.	If the specialist deemed unnecessary, assignment days will be shifted to other specilists.
	Actual			
Sector Specialist 2_Entrepreneurship	PO			
	WBS	An expert has been assingned in July 2019 for the session on lessons learnt to be a successful entrepreneur and individual consultation with each startup	The same specialist may be assigned further in the course of the pilot incubation process.	If the specialist requires additional assignment days, it will be added from truncating assignments of other specialists.
	Actual			
Sector Specialist 3_Product Development	PO			
	WBS	An expert has been assingned in October 2019 for providing the lecture on product development (especially UI / UX) and individual consultation with each startup		
	Actual			
Sector Specialist 4_Agriculture	PO			
	WBS	An agricultural specialist was assigned for conducting supply chain study in Feb 2018.	According to the trend of the 250startups, it was deemed unnecessary to provide Japanese expert's support in the area	Assignment
	Actual			
Sector Specialist 5_TBD	PO			
	WBS	No assignment so far	The need of this particular specialist is being questioned.	If the specialist deemed unnecessary, assignment days will be shifted to other specilists.
	Actual			
ICT SWG Secretariat Coordinator/ Technical Advisor to the Minister	PO			
	WBS	Contracted by JICA Rwanda Office for supporting ICT SWG Secretariat, as technical advisor to Minister of MINICT (current MINICT).		
	Actual			
Policy Specialist	PO			
	WBS	Contracted by JICA Rwanda Office for supporting capacity building of MINICT staff		
	Actual			
Communication Specialist	PO			
	WBS	Contracted by JICA Rwanda Office for designing a communication strategy.		
	Actual	Assignment is completed		
Open Innovation	PO			
	WBS	Assignment commenced in September 2019		
	Actual			
Digital Fabrication	PO			
	WBS	An expert has been replaced with another expert reason/ New assignment commenced in September 2019.		
	Actual			

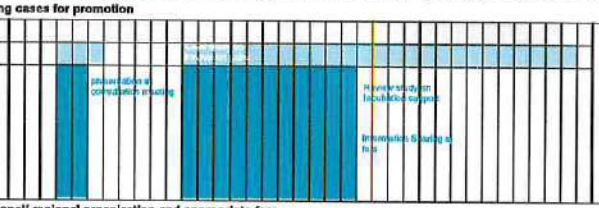
ICT Startup Policy *(added after the 2nd JCC)*	PO WBS Actual		This position was added after the 2nd JCC (Sep.2018) and its role shall be undertaken by the identical expert who is engaged in the Chief Advisor.		
Investment Promotion Advisor (Japan)	PO WBS Actual		After the 1st assignment of this position, the expert has been replaced by another expert, having advices in the 2nd JCC. The successor has been assigned officially from March 2019.		
Investment Promotion Advisor (Rwanda)	PO WBS Actual		After the 1st assignment of this position, the expert has been replaced by another expert, having advices in the 2nd JCC. The successor has been assigned officially from March 2019.		
Case Study Survey / Monitoring Evaluation	PO WBS Actual		Dispatched mostly as planned. The result of Baseline survey was shared among the CPs in late September 2018. The expert shall undertake an intermediate progress monitoring in mid 2019.	Scope of the monitoring and evaluation and methodology need to be clarified prior to undertaking further mission	With C/Ps and JICA, scope of the M&E need to be evaluated to form a new TOR
Training Coordinator	PO WBS Actual		An expert has been replaced with another expert reason/ New assignment commenced in September 2019.	The expert should be assigned futher in pace with the dispatch schedules of "open innovation" and "digital fabrication".	M/Ms and trips may be reallocated from those allocated to the expert for "IoT System", in consideration of further assignment schedule of "IoT System".
Project Coordinator/ Networking	PO WBS Actual		Dispatched mostly as planned.		
Procurement Coordinator *(added after the 2nd JCC)*	PO WBS Actual		This position was added after the 2nd JCC (Sep.2018) for handling equipment procurement which would be scheduled for 2019 under the Project budget.		
Equipment					
Equipment for FabLab *(Procurement schedule revised in the Action Plan drafted in February 2019)*	PO WBS Actual		Delayed from the PO. The procurement is scheduled to be done in 3 batches. The 1st batch has started in Feb. 2019 under the operation of JICA Rwanda. The 2nd and 3rd batch procurement process has commenced	1st batch procurment was delayed due to logistical difficulty.	1st batch equipment is slated arrive in early October in preparation for official opening of 1st expanded center at ASYV.
Training in Japan					
~~Country Training on FabLab management~~	PO WBS Actual		Training in Japan was cancelled after the 2nd JCC (Sep.2018). Instead, In-country trainings shall be conducted in relation with the tech-enabled hubs/centers action plan as well as its operational guideline.		
In-country/Third country Training					
Overseas Study tour for ICT entrepreneurs	PO WBS Actual		The country/region to visit was Israel and Singapore. However, in order to strengthen the relationship between Rwanda and Japan, the project decided to organize one tour per cohort of 250Startups.		
Overseas Training on FabLab management	PO WBS Actual		Third country training for FabLab management shall be scheduled for early 2020. Candidate countries are the Philippines, India or Geogia where FabLabs are allegedly active in stimulating local economy.		

Activities		Responsible Organization: Japan	Responsible Organization: GoR	Achievements	Issue & Countermeasures
Output 1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private					
Activity1.1 Supporting activity for ICT start-ups					
1.1.1 Understand the status of the incubation facilities (kLab, FabLab)	PO WBS Actual	Project Team	RISA ICT Chamber	After the research work for strengthening Labs operation undertaken by the Open Innovation expert, Digital Fabrication expert, and Training Coordinator (1.1.1), a series of workshops were organized in late 2018, and the Action Plan and Operational Guideline for Innovation Hubs/ Centers have been drafted and shared to the stakeholders in Feb. 2019 (1.1.2). The Action Plan has been utilized by RISA to secure 1st batch support for the ASYV center. The 1st batch of Fab-academy training course (1.1.3) finished in late 2018, and the 2nd batch has started in Jan. 2019 which will end in November 2019. The third and final batch is expected to commence with new expanded Fablab Management in the secondary cities. Overseas training on FabLab management (1.1.4) has been reduced in frequency after the 2nd JCC. Training in Japan was cancelled while training in third country training is currenly scheduled for March 2020. Procurement of the equipment is ongoing. The 1st batch started in Feb. 2019 under the JICA Rwanda operation but has been marred with logistical difficulty. The equipment is now expected to be installed in the early October . The 2nd batch and the 3rd batch	1st batch equipment procurement saw various different logistical difficulties. However, the equipment is expeted to be installed by early October for the ASYV in time for the official opening. In recognizing the procurement difficulty, the second and third batch procurement has commenced with different process. Major equipment will be procured together for the 2nd and 3rd batches and other materials and equipment deemed locally sorceable or not urgent will be procured in dus source to enable smooth opening of the center. While RISA is pushing for more resources to enable sustainable and impactful operation of the innovation centers,securing more resources are needed to ensure that goal. New time table has been shared by RISA for rollout.
1.1.2 Human Resource Development for improving incubation management	PO WBS Actual	Project Team	RISA ICT Chamber		
1.1.3 Support for Fab-academy training course (MIT)	PO WBS Actual	Project Team	RISA ICT Chamber		
1.1.4 Conduct overseas training on FabLab management	PO WBS Actual	Project Team	RISA ICT Chamber		
1.1.5 Procure equipment for incubation centers	PO WBS Actual	Project Team	RISA ICT Chamber		
Activity1.2 Organizing/ attending events for ICT start-ups					
1.2.1 Support for ICT related major events	PO WBS Actual	Project Team	RISA, MINICT ICT Chamber, SAS	TAS2019 Matching tour to Japan for established ICT companies are organized during TICAD VII in conjunction with Output 3 activities. Selected 2nd batch of 250Startups visited Fukuoka,	

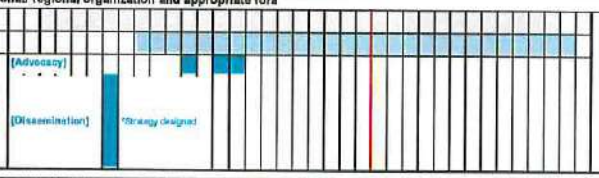
Activity	Plan	Schedule notes	Responsible	Partner	Achievements	Issues and countermeasures
1.2.2 Conduct overseas study tour for ICT entrepreneurs	PO		Project Team	RISA ICT Chamber	Kobe, Kyoto, and Tokyo to showcase their business in Japan. Three of the startups concluded Letter of Intent.	
	WBS	*Study Tour in Japan (JICA Rwanda operation)				
	Actual	*Study Tour in Japan (2nd batch)				
Activity1.3 Conducting pilot projects for ICT Innovation						
1.3.1 Select target sectors and develop implementation framework/procedure	PO		Project Team	ICT Chamber	The 10 startups from the second batch will be graduating on October 4, selected 6 startups visited Japan to showcase their business in September. Subsequently, the 3rd batch launched in July 2019 with ten incubatees. The remaining batches should be organized efficiently in time management so that all the batches could complete by the Project ends. One issue which was raised during the second batch recruitment process was lack of candidates startups for 250Startups.	Collaborating with institutions which organize workshop for idiation stage startups is essential to secure sufficient number of candidates for 250Startups.
	WBS	2nd target, 3rd target, 4th, 5th target				
	Actual	1st target, 2nd target, 3rd target				
1.3.2 Pilot incubation of ICT entrepreneurs for six month (max.10 incubatees/ batch for 2018)	PO		Project Team	ICT Chamber		
	WBS	2nd batch				
	Actual	1st batch, 2nd batch, 3rd batch				
Output 2: Policy framework to support ICT entrepreneurs and innovation activities is formulated.						
Activity2.1 Support for organizing/ coordinating ICT-SWG						
2.1.1 Capacity building support for planning skills	PO		Project Team	MINICT	The chief advisor and sub-chief advisor have been supporting this activity alongwith the JICA Rwanda Country Office, In collaboration with an expert for capacity building who is hired by the JICA Rwanda as ICT SWG Secretariat Coordinator/ Technical Advisor to Minister of MINICT (current MINICT). The ICT SWG has been organized qustetly with specific topics to ensure relevancy of the SWG.	
	WBS					
	Actual					
2.1.2 Assist to coordinate ICT-SWG	PO		Project Team	MINICT		
	WBS					
	Actual	1st, 2nd, 3rd				
Activity2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem						
~~2.2.1 Review ICT Innovation Ecosystem in Japan and other two countries~~	PO		~~Project Team~~	~~MINICT, RISA~~	This original sub-activity item was cancelled after the 2nd JCC (Sep. 2018). Instead, a new item on "Create Common Vision for ICT Innovation Ecosystem in Rwanda" was agreed and carried out as part of the Innovation Center Action Plan.	
	WBS					
	Actual					
2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda *(added after the 2nd JCC)*	PO		Project Team	MINICT, RISA	The task was completed through organizing stakeholders retreat to formulate "tech-enabled innovation centre expansion plan."	
	WBS					
	Actual					
2.2.2 Support MINICT to formulate policies	PO		Project Team	MINICT	In order to mitigate the Ministry's capacity challenges, the Project's policy advisor have been providing inputs to the editing/finalization of priority policy documents and reports throughout the reporting period alongwith the staff of the C/P Institution. Based on the request of the request from the Ministry, new local Policy Analyst has been hired to support the Ministry in terms of OJT style capacity building.	In order to have more outreach to furnish basic management, writing, leadership, and communication skills among the Government officers, it is suggested to try out online learning platform tailored to the needs of the Government. Already many leading netoinal and municipal Governments have been utilizing such system for their officers' cpacity building needs. Since Rwanda is promoting for the e-enabled learning, it is recommended that a POC trial be conducted to
	WBS					
	Actual					
Output 3: Business relation between Rwandan and Japanese companies related to ICT is strengthened.						
Activity3.1 Matching support between Rwandan and Japanese ICT companies						
3.1.1 Understand the current situation and advice organizational structure to promote investments	PO		Project Team	ICT Chamber RDB	This sub-activity was undertaken by the previous expert assigned for investment promotion. However, that output was not meeting the requirment of the project and C/P.	The 2nd JCC concluded that ToR for investment promotion should more focus on practical actions for business networking instead of spending the Project's resource to capacity building of the relevant institutions.
	WBS					
	Actual					
3.1.2 Support to promote Rwandan to foreign companies (especially for Japanese companies)	PO		Project Team	ICT Chamber RDB	To promote Rwandan companies to Japan, a booklet for introducing competent Rwandan ICT companies to Japan issued and distributed it during TICAD-VII (Aug. 2019). As for networking tour, Transform Africa Summit (TAS) 2019 held in Kigali was utilized fully as an opportunity, the Project organized a networking event for the Japanese companies participated in TAS and Rwandan companies to create matching opportunities. Also, the Project supported 24 Rwandan companies to Japan under business delegation to attend and network on the occassion of TICADVII (including pre-event) held in Japan in August 2019.	*As for the networking, the Project shall collaborate with other networking initiatives between Rwanda and Japan, so that the Project's resource could more focus on joint business pilot projects (3.2.2). Organising strong follow-up activities to the networking activities which occured during the course of the past 9 months (inlcuding Kobe Networking tour, KIC Roadshow, etc.) are must to improve concrete business ties. Summarize the lessons learned from networking events and tours it have conducted so far and the Project shall support to coordinate more effective networking tour. Also, the Project shall continue to actively follow up Rwanda-Japanese companies that participated in these networking events and promote business
	WBS					
	Actual					
3.1.3 Conduct networking tour from Rwanda to Japan (3 times) and from Japan to Rwanda (3 times)	PO	*effective networking to be designed	Project Team	ICT Chamber RDB		
	WBS	[From Rwanda to Japan] [From Japan to Rwanda] TICAD-VII				
	Actual	[From Rwanda to Japan] [From Japan to Rwanda] Extra batch (JICA Rwa Kobe/Wireda 1 TICADVII TAS 2019				
Activity3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda						
3.2.1 Develop pilot business concept, and identification of joint business group	PO		Project Team	ICT Chamber RDB	The Project has entered to accelerating stage of the pilot project. A call for proposal has been published to the potential Japanese companies. Currently, the Project has completed supporting for the 1st pilot project and has adopted the 2nd pilot project. The remaining cases continue to call for proposal and it should be organized efficiently in time management so that all the cases could complete by the Project ends.	More active advocacy to solicit application and providing flexibility of the application cycle are planned to improve the number of applicants. More specifically, active solicitations to those companies which have participated in the previous networking events and/or visited Rwanda by themselves have been targetted for solicitation. Also, in order to create synergy accross different project activities, the Pilot project may also promote the opportunity for partnership with 250startups incubatees.
	WBS					
	Actual	company)				
3.2.2 Implement pilot projects (6* cases) for 4 months while monitoring and review **Increased from 3 to 6 after the 2nd JCC*	PO		Project Team	ICT Chamber RDB		
	WBS	Case 1				
	Actual					

Output 4: Innovative ICT use development practices borne by the Project are recognized and utilized by multiple stakeholders in Rwanda and beyond.

Activity4.1 Collecting good practices in ICT-use and modeling cases for promotion

4-1 Collect ICT-use good practices and modeling cases for promotion	PO		Project Team	RISA	Case study on innovation labs, which was compiled with the relevant stakeholders, has been reflected in the Action Plan drafted in Feb. 2019 and has been used as a resource to resolve GoR support for the secondary city innovation centers. Various different knowledge products such as booklet, multimedia materials, and analysis (in conjunction with Swiss-Connect and GIZ) has been created in support of the project and which were also dessiminated in various different medium and fora. The lessons-learned review is underway for the 1st batch incubation support wes also circulated among the CPs. Lessons learned from the review shall be shared by the end of Mar. 2019.	It has been remarked that it may lead to come up with clearer definition of "Rwanda model" for success with corresponding expediences. Also, while Smart Africa Secretariat is helpful in terms of dessiminating lessons learned to other African countries, the model needs to be established with the lessons-learned to enable more efficient and effective knowledge sharing. It is suggested to engage with Rwandan Cooperation Initiative for a potential partnership to solve the challenge.
	WBS					
	Actual					

Activity4.2 Disseminating the case studies through international/ regional organization and appropriate fora

4-2 Disseminate the cases studied (lessons learned, implication, model, etc.)	PO		Project team	RISA, ICT Chamber, SAS	In the last six months, the Project's outline was introduced taking opportunities of several high-level events, such as TAS2019, TICADVI (during pre-event, side-events, and post-event). In addition, 250startups' Japan visit was also used as a venue to share project's lessons-learned. More appropriate dissemination of lessons learned is expected to be done based on the case studies/ review study compiled under activity 4.1. In addition to the dessimination of lessons learned, the Project is actively promoting the Project activities through Social Media as well as traditional	As the project saw more than 1/2 year mark for its implementation, more coherent approaches of compiling knowledge products (including aforementioned "Rwandan model") are needed. Active discussion with the C/Ps are needed to ensure that objective is met within the project duration.
	WBS					
	Actual					

Project Period	PO/ WBS		Mostly as planned	
	Actual			

Monitoring Plan		2017	2018	2019	2020	Remarks	Issue	Solution
Monitoring								
Formulation of monitoring sheet	PO					Vers.1 was submitted in Jun. 2018, Vers.2 was submitted in Sep. 2018. Vers.3 is submitted in Mar.2019. Ver.4 will be submitted after 4th JCC which will be held on 2nd of October 2019.		
	WBS			*Vers.3				
	Actual		*Vers.1 *Vers.2					
Conduct a baseline survey	PO					BLS was conducted from May to July 2018. The result was shared in the end of Sep. 2019 after the 2nd JCC.		It is determined that mid-term review needs to be through through. Carefully defining what to measure must be established before conducting the review for effective M&E process. It is also important to have coherence with the idea of defining "Rwanda model."
	WBS			*Intermediate progress monitoring *Final Eval				
	Actual							
Monitoring	PO					Monthly reporting meetings are held but not regularly as expected.	The 2nd and 3rd JCC (Sep. 2018) recommended to continuously hold monitoring meeting (monthly meetings). While the meetings are held, it is not regularly conducted which need to be remedied	Project Secretariat is requested to be more diligent in organizing monthly meetings to allow information about the Project's progress will be shared among the relevant stakeholders in a timely manner.
	WBS							
	Actual		*1st monthly meeting	*2nd monthly meeting				
Joint Coodination Committee Meetings	PO					The 1st JCC was held in March 2018. The 2nd JCC was held in Sep 2018. The 3rd JCC was held on March 2019. The 4th JCC was held on 2nd of Oct 2019.		In order to clarify the project's impacts, outcomes, outputs, activities, and KPIs, the project proposed PDM modification (as has been suggested under 3rd JCC). The JCC approved the modification of the PDM.
	WBS			*3rd JCC				
	Actual		*1st JCC *2nd JCC					
Reports/Documents								
Project Completion Report	PO							
	WBS							
	Actual							

Remark

1 The purpose of the sheet is to monitor the actual progress of the Project activities with compared to the original PO and the WBS (Work Breakdown Structure) which was modified based on the agreement made in the preceeding JCCs.

2 Titles of the experts and activities are modified based on the agreement made in July 2018 after the 1st JCC (March, 2018) and the 2nd JCC (September, 2019). Some words and expressions look different from the original but it does not mean to reduce the inputs and/or activities.

3 The "Planned" schedule of each item on the "Inputs", "Activities" and "Monitoring Plan" follows the original PO and the WBS which was confirmed in the preceeding JCCs.

Annex III Original PDM Ver.0

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project

Version 0.0

Implementing Agency: Ministry of Youth and ICT

Dated 26, July, 2017

Target Group:1) Officails of MYICT, RDB, and RISA, 2) Member staff of ICT Chamber, and 3)ICT SMEs and Entrepreneurs within the Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from the date of 1st JICA expert dispatched.)

Project Site: Kigali, Rwanda. **Model Site: Kigali City**

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal					
ICT sector's economic contribution to GDP in Rwanda are increased through the enhancing the ICT innovation ecosystem.	ICT sector's contribution to GDP (%)	Official GDP statistics.	GDP statistics difinition is unchanged. There is no unexpected rapid growth of GDP in other fields.		
Project Purpose					
ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of Smart Rwanda Master Plan.	Increased number of entrepreneurs in ICT sector, Increased number of employees in ICT sector, Increased number of stakeholders involved in the Rwanda ICT Innovation Ecosystem.	ICT official profile of the GoR. SRMP offical monitoring report.	SRMP is continuously applied as GoR's strategic master plan.		
Outputs					
Output1: Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	1-1 Increased number of incubation spaces users (e.g. K-Lab, Fab Lab etc.)	User records of incubation spaces.	Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.		
	1-2 Increased number of newly established ICT companies in line with "Start up 250" initiative	"Start up 250" statistics.			
	1-3 Increased number of services/products enabled by ICT.	Official ICT sector investment record.			
Output2: Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	2-1 Newly formulated GoR's related policy(s).	Official GoR policy data.			
	2-2 Increased positive side reaction of ICT entrepreneurs.	Comparison with base-line data.			
Output3: Business relation between Rwandan and Japanese companies related to ICT is strengthened.	3-1 Increased number of Rwanda-Japan business partnerships.	Comparison with base-line data.			
	3-2 Increased Foreign Direct Investment in ICT/innovation sector from Japanese institutions	Comparison with base-line data.			
Output4: Innovative ICT use development practices bone by the Project are recognized and effectively utilized by multiple stakeholders in Rwanda and beyond.	4-1 Increased recognition of Rwanda's ICT use development practice.	Comparison with base-line data.			
	4-2 Increased utilization of Rwanda-like ICT use development practice in other country(s).	Comparison with base-line data.			

Activities	Inputs		Important Assumption
	The Japanese Side	**The Rwandan Side**	
[1-1] Supporting activities for ICT start-ups (e.g. K-Lab/Fab Lab/ "Start up 250" initiatives) [1-2] Organizing/Attending events projects for ICT start-ups [1-3] Conducting pilot projects for promoting ICT and ICT enabled Innovation [2-1] Support for organizing/coordinating ICT-SWG [2-2] Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem [3-1] Matching support between Japanese companies and Rwanda ICT companies [3-2] Conducting pilot projects with the Japanese companies to promote utilization of ICT in different sectors [4-1] Collecting ICT-use good practices and modeling the case to promote [4-2] Disseminating the case studies through International/ Regional organizations and appropriate fora	1 Japanese Experts (Chief Advisor, ICT-SWG, Project Cordinator, Incubation Support, Fab Lab Operation, IOT, Desiner, Socio Economic Survey, Sector specialist, Communication Specialist, Case Study Survey and others) 2 Equipment (Necessary equipment and facility for project activities.) 3 Training for Counterpart Personnel (in Japan, in a third country) 4 Local cost for the activity of Japanese Experts 5 Local Consultants (Communication Specialist and others)	1 Allocation of Counterpart Personnel from MYICT, RDB, RISA and ICT Chamber 2 Office space for Japanese experts 3 Necessary data 4 Organizing ICT-SWG priodically 5 Local cost (maintenance/repairing cost for the existing equipment that are not coverd by JICA support, preparation cost for the conference, running expenses necessary for the Project and others)	**Pre-Conditions** Necessary policy formulation and regulatory management are carried out continuously and subjectively based on the Smart Rwanda Master Plan **<Issues and countermesures>**

Annex IV Modified and approved PDM Ver.1

Project Design Matrix

Project Title: The ICT Innovation Ecosystem Strengthening Project

Implementing Agency: Ministry of ICT and Innovation (Former Ministry of Information Technology and Communications (MITEC): until October 2018) (Former Ministry of Youth and ICT: until Aug 2017)

Target Group: 1) Officials of MINICT, RDB and RISA, 2) Member staff of ICT Chamber, and 3) ICT SMEs and Entrepreneurs with in the Innovation Ecosystem in Rwanda

Period of Project: 3 Years (from October 2017 to October 2020)

Project Site: Kigali, Rwanda — **Model Site: Kigali City**

Version 1.0

Dated 2 October, 2019

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Input		Important Assumption
				Japanese Side	Rwandan side	
Overall Goal ICT sector's economic contribution to in Rwanda's economy is increased through enhancing the ICT Innovation Ecosystem.		- Increased Number of entrepreneurs in ICT sector - Increased Number of employees in ICT sector	- Database in RDB - Questionnaire for ICT entrepreneurs registered in ICT Chamber	• Japanese Experts (Chief Advisor, Sub-Chief Advisor, Project Manager, Project Coordinator, Investment Advisor, Incubation Advisor, Open Innovation Advisor, Digital Fabrication Advisor, Product development Advisor, Branding Advisor, Business Advisor, Entrepreneurship Advisor, Innovation Hub Coordinator, M&E Specialist, and others) • Equipment (Necessary equipment for project activities) • Capacity Development for Counterpart Personnel (on-line, in country, in Japan, and in Third country) • Local cost for the activities for Japanese Experts • Local consultants (ICT-SWG coordinator, Incubation Coordinator, Innovation Center Coordinator, Investment Advisor, Communication Specialist, and others)	• Allocation of Counterpart Personnel (focal point) from MINICT, RISA, RDB, ICT Chamber, and Smart Africa Secretariat • Office space for Japanese experts and other space necessary for the project implementation • Necessary data • Organization support for ICT-SWG and other meetings • Local cost (Maintenance/Repairing cost for the existing equipment that are not covered by JICA support, preparation cost for conference, running expenses necessary for the Project and Others).	SRMP is continuously applied as GoR's strategic master plan.
Project Purpose ICT Innovation Ecosystem in Rwanda is systematically enhanced to supplement the realization of SRMP, ICT Sector Strategic Plan (SSP) and National Strategy for Transformation (NST-1)		- Start-up support mechanism is established. - Partnership (MOU and other concrete partnerships)between Rwandan and Japanese companies are made.	-Handing-over Start-up support mechanism (250Startups Programme) -List of MoU/LOI and similar documents signed between Japan and Rwanda during the Project period (at least 25 partnership agreements)			
Outputs	**Activity**					
Output1 Innovative ICT enabled activities in ICT and other different sectors are promoted especially through private sector.	**1.1 Create and strengthen facilities to encourage innovation**	- 15 people (5 people * 3 years) graduate successfully from the Fab-academy training course. - 3 innovation centers with equipment are established. - All participants of the training course show more than 70% of understanding on the training contents about innovation center management.	- Certificate of graduation of Fab-academy training course - List of training centers - Questionnaire conducted after the training.			Innovation promotion is continuously kept as a key driver of Rwanda's ICT sector enhancement.
	1.1.1 Understand the status of the incubation facilities 1.1.1.1 Conduct research on current status of innovation centers 1.1.1.2 Compile Innovation Center Action Plan with stakeholders to be used as a national guideline 1.1.2 Plan and conduct managment training on innovation center management (kLab, FabLab) and on-site technical training 1.1.3 Support Rwandan Fab community leaders to undertake MIT academy training course and support Fab community 1.1.4 Conduct overseas training on innovation center management 1.1.5 Procure equipment for three innovation centers in the secondary cities/rural area					
	1.2 Organizing/ attending events for ICT start-ups	- More than 5 ICT related events are supported - At least 3 overseas study tour for ICT entrepreneurs are conducted	- List of events -Study tour report (Training Report)			
	1.2.1 Support for ICT related major events 1.2.2 Conduct overseas study tour for ICT entrepreneurs					
	1.3 Conducting pilot projects for ICT innovation	- 5 batches are implemented.	- Evaluation report of each cohort of the 250 Startups including result of the questionnaire used to track alumni			
	1.3.1 Select target sectors and develop implementation framework/ procedure 1.3.2 Pilot incubation of ICT entrepreneurs for six months (max. 10 incubatee/ batch x 5 batches)					
Output2 Policy framework to support ICT entrepreneurs and innovation promotion activities is formulated.	**2.1 Support for organizing/ coordinating ICT-SWG**	-At least 6 ICT-SWG (twice per year) are supported -Operation Manual is handed-over.	- Minutes of ICT SWG - Operation Manual			
	2.1.1 Recruit ICT-SWG coordinator 2.1.2 Assist Ministry of ICT and Innovation to coordinate ICT-SWG 2.1.3 Develop Operation Manual for organizing ICT-SWG					
	2.2 Advisory support on policy formulation and operation to promote ICT Innovation Ecosystem	-More than 15 policies and related documents are reviewed and advised..	-List of reviewed/advised Policies and related documents			
	2.2.1 Create Common Vision for ICT Innovation Ecosystem in Rwanda 2.2.2 Support MINICT (and other CPs) to formulate policies 2.2.3 Recruit Policy Specialist for OJT style Policy advisory support with the MINICT team					
	2.3 Conduct Capacity Development Support to the Ministry and relevant agencies to raise their capacity to plan, formulate, coordinate and implement policies	- HRD Plan created and implemented as a POC. - 30 participants obtain certificate of training completion	- HRD handed over and POC implemented •Certificate of training completion - Analysis/report of POC training course			
	2.3.1 Create Human Capacity Development plan 2.3.2 Conduct Hybrid type training (online/offline) as a POC					

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Input		Important Assumption
Output3 Business relation between Rwandan and Japanese companies related to ICT is strengthened.	**3.1 Matching support between Rwandan and Japanese ICT companies**					
	3.1.1 Understand the current situation of ICT business environment in Rwanda 3.1.2 Promote Rwandan ICT companies to foreign market (especially Japanese) by compiling promotional materials 3.1.3 Support networking tour to/from Rwanda from/to Japan, and conduct follow up activities	-15 companies profiling sheets are compiled. -Promotional booklet including 30 Rwandan companies information is published (Japanese/English) -More than 30 Rwandan and 50 foreign companies are followed-up for matching opportunities.	-Companies profiling sheet -Promotional booklet -List of companies followed-up			
	3.2 Conducting pilot projects with Japanese companies to promote utilization of ICT sector in Rwanda					
	3.2.1 Develop supporting program for Japan-Rwanda Joint venture pilot projects. 3.2.2 Support implementation of pilot projects	-Implementation of 6 pilot projects are supported.	-Pilot Project Report			
Output4 Innovative ICT use development practices borne by the Project are shared among stakeholders in Rwanda and beyond.	**4.1 Define Rwanda Model of Success and Advocate Activities and Outputs**					
	4.1.1- Define and compile "Rwanda model" of success (ICT for Development) 4.1.2 Promote Rwanda ICT sector achievements, Rwandan model and Project activities/outputs through at least 4 types of medium (TV, Radio, News Media, Social Media, Conference/seminar)	- Define and compile "Rwanda model" of success into a booklet - Project activities and outputs are promoted through at least 4 types of medium (e.g. conference/seminar, radio, printing medium, video, social media etc.)	- Concise Rwanda model of success (ICT for Development) booklet (and other medium) -List of types of medium used for dessimination			
	4.2 Extract and share lesson learned from the Project activities					
	4.2.1 Summarize lesson learned from the Project activities 4.2.2 Share lessons learned through various medium.	-Summary of lessons learned are created. -Lesson learned are promoted through at least 4 types of medium (e.g. conference/seminar, radio, printing medium, video, social media etc.)	- Summary of lesson learned - List of types of medium used for dessimination			
						Precondition
						Necessary pobcy formulation and regulatory management are carried out continously and subjectively based on the Smart Rwanda Master Plan, ICT Sector Strategic Plan, and NST-1
						<Issues and Countermeasures>

CT

Annex V Minute of Meeting of the 4th JCC (2nd of October, 2019 at Onomo Hotel, Kigali)

Minutes of Meeting
of
The Fourth Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The 4th JCC meeting was held on 2nd of October, 2019 where the progress of the Project was confirmed and the relevant discussions and guidance related to the current challenges and remedies were made among the JCC members. Overall, most of the recommendations given by the 3rd JCC were implemented but it was also agreed that some challenges remained which need to be mitigated toward the latter half of the project's duration.

2. One of the main discussion points during the 4th JCC was mid-term modification to the PDM (Log-frame) of the Project. JCC agreed the needs of clarifying some of the outputs and corresponding activities and, as such, the modification to the PDM with due inputs was approved by the JCC. Modified PDM and the original PDM are attached as Annex to this meeting minute.

3. In addition, active discussions were made based on the progress report of the Project. The main points of discussion and JCC recommendations to improve the Project implementation by the Project Counterparts and the Project are as follow:

Recommendations from the 4th JCC Meeting for the Project Implementation

	Thing to Improve
Output 1: **Promotion of ICT Innovation**	**[1-1 kLab/FabLab Strengthening /Innovation Centers Expansion]** 1) Support creation and institutionalization of Fabacademy-X course (lighter version of the technical training tailored for the country context) to increase the number of technically proficient personnel in the secondary cities. 2) Recruit a local coordinator/facilitator to spearhead coordination as the activities is increasingly becoming challenging with the centers being expanded into secondary cities and more partners/stakeholders getting onboard. 3) Request RISA to continue to seek resources to enable effective and sustainable operation of the innovation centers. 4) Reflect lessons-learned from previous initiatives such as telecenters to make the tech-enabled innovation center operation more

	sustainable, appropriate, and open to cater to local businesses such as Agakiriro. **[1-2/1-3 Incubation Support for 250 Startups]** 5) Clarify Governance structure of the programme for improved implementation, 6) Establish 250Startups as a stand-alone "brand" to seek wider partnerships/supports beyond current JICA support. 7) Request final decision for the permanent venue of the programme to be made by MINICT and RISA by mid-October to allow sufficient time for renovation. 8) Seek greater collaboration among different partners (incl. different incubation initiatives and such institution as BDF) for wider resource mobilization and co-creation of innovation ecosystem. 9) Request MINICT to advocate and involve other Ministries and institutions to seek wider impact. 10) Request ICT Chamber to formulate an action-plan and to begin implementing the plan ensure 250Startups programme to flourish beyond the official hand-over in one year time.
Output 2: **Formulation of Policy Framework**	**[Institutional Capacity Building/Formulation of Policy Framework]** 11) Recommend instituting Capacity Building initiatives through comprehensive plan which utilize variety of tools (draft plan to be compiled by mid-October) and initiate POC initiative based on the plan.
Output 3: **Business Matching b/w Rwanda and Japan**	**[Business Matching between Rwanda and Japan]** 12) Enable Rwandan companies (with Japanese Joint Venture Partners) to be able to apply for the Project's "Pilot Project" scheme. 13) Improve selection process of the Project's "Pilot Project" with more C/Ps involvement.

	14) Recommend C/Ps to come up with Japan Strategy with an aim of fostering Japanese business matching services beyond project's duration. 15) Encouraging Rwandan companies with MOU and LOI with Japanese companies to apply for different support scheme. 16) Compile different Japanese private sector support schema and organize briefing sessions to the stakeholders.
Output 4: **Disseminating Experience of the Project**	**[Disseminate experiences of the Project]** 17) Define and compile "Rwanda Model of ICT for Development" based on the lessons learned to be shared with the domestic audiences and international partners. 18) Recommend utilizing Smart Africa's "Best Practices" sharing mechanism to the 28 other African Countries. 19) Coordinate with Smart Africa Secretariat to commence disseminating some of the lessons learned already compiled from Rwanda. 20) Conduct Vigorous Public Advocacy campaign for domestic stakeholders to show-case project's achievements and the benefits of using ICT for development.
Overall/Others	**[Coordination]** 21) Request clarifying Governance structure of the project and further strengthen/streamline the Project's secretariat's coordination and information sharing function. Ensure the Secretariat to report to JCC consistently to enable timely inputs/ guidance to help the Project implementation. 22) Create mail-groups for JCC and secretariat to ease communication **[Others]** 23) Minimize ad-hoc requests and always ensure requests and decisions are taken at the secretariat level.

3. The 4th JCC, taking into account the aforementioned points, would recommend the Project Team

and JICA to take appropriate and timely improvements with C/Ps.

4. The JCC instructed the Project Team to vigorously advocates the Project's achievements and lessons learned to domestic audiences as well as international partners.

5. The JCC recognizes the critical importance of timely and close information sharing/communication and coordination among and between the Rwandan and Japanese counterparts. While measures have been taken to improve the operations of the Secretariat, it needs further strengthening and streamlining to attain even better coordination and effective implementation of the Project. Since the last JCC, a coordinator was appointed at MINICT which improved information sharing with the MINICT. However, since the RISA appointed coordinator has left the service, due to continuing study, certain information sharing tasks became more difficult. RISA has since appointed a new coordinator for the secretariat who is expected to improve the situation. As the strong Secretariat is a key to enabling smooth implementation and obtaining concrete results of the Project, it is essential that the Secretariat shall be staffed appropriately by assigning capable and responsive human resources from both the Rwandan and Japanese side.

(end)

Minutes of Meeting
of
The Fifth Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The extra-ordinary JCC meeting was convened on 17th of December, 2020 via teleconferencing tool where further extension of the project and resultant modification of the PDM was proposed to the JCC members for their review and approval. Organization of the JCC at this time was an extra-ordinary request as the regular JCC is planned to be held in Q1 2021, as has been agreed at the 5th JCC which was organized in August 2020.

2. The main focus of the discussion was proposed 2nd extension of the project which would extend the implementation period of the project until March 2022 (with all the implementation activities to be finalized by the end of February 2022). The Project has explained rational for the extension to be 1) and 2) . In addition, the Secretariat has presented summary of activities which the project has conducted in the last 3 months and the Project has presented proposed new activities to be implemented at the extension phase of the project.

3. Due to continued Global COVID-19 Pandemic, the extra-ordinary JCC was organized through teleconference system. Normally, the JCC is organized with prior technical committee retreat to review the project activities and get inputs/recommendations to the JCC but this was also not possible due to the Pandemic. Instead, the Secretariat held a teleconferencing with the technical committee members prior to the JCC with PS present. and asked to provide inputs through e-mail to the proposed new activities during the extension.

4. During the extra-ordinary JCC, the comments/inputs from the technical committee and initial responses from the project were presented to the JCC members. The inputs provided by the technical committee reflect many real challenges which some of the project supported initiatives are facing or will be facing in the future (e.g.; having competent personnel to manage the innovation centers). Some of the recommendations, however, are difficult to entertain by the Project alone as they fall in the area of recruitment of local human resources.

5. The project and JICA have pleaded the counterparts to lead the process of sustainability of these centers and advocate local partners (local Government and others for securing adequate resources) for securing resources pertaining to the operational cost of the centers, as these components will be difficult to entertain from the project due to the principle of the technical assistance framework.

6. Having pleaded for securing operational budget in the future, the Project explained that due to difficulty securing budget during the middle of the budget year and budget shortfall caused by the Pandemic, the Project has agreed to support limited renovation work at the Musanze Innovation

Center location to make sure that the operation of the innovation center could start with proper security (current set up has no wall in the proposed center which makes it not ideal for equipment security). This is in addition to the network and electricity installations which the Project has agreed to support at the Huye and Musanze center. In addition, due also to the mid-year difficulty, the Project has agreed to hire local technical/management personnel in the Q1 2021 until the end of June 2021at the proposed Musanze center with an agreement that the recruited and trained person will continue to support the Musanze center through local Government resource.

7. JCC members have also asked several points to be considered during the extension. One of the item is to come up with the strong sustainability plan for the 250Startups beyond 5th batch and strong operationalization of the local innovation centers. It has been noted that the joint team of MINICT, RISA, ICT Chamber, and 250Startups will spearhead the compilation of sustainability plan and will present initial idea in January 2021. The Project and JICA fully endorse the move and, in this respect, it is ideal that the Project extension will give the 250Startups with ample transition period.

8. JICA has proposed that it may be able to support 250Startups 6th batch to seek innovative solutions to support Rwanda's Pandemic Economic Recovery Plan (ERP). While the term of the support still needs to be discussed among the stakeholders, it is expected that the support will be aligned to further furnish independence of the 250Startups programme.

9. The reference of "limited support" was made for the 6th batch during the extra-ordinary JCC and some of the JCC members questioned the description. However, the intention of mentioning 'limited support' was to push the programme into more autonomous entity for anticipated project completion. It is anticipated that the scope of the 6th batch will be made available at the next ordinary JCC for discussion and approval.

10. After the JCC, some technical committee members have expressed some clarification regarding the localized incubation mechanism. While during the JCC, it was mentioned that to prepare for the "localized 250Startups at the regional centers" but it is in fact meant as activities pertaining to preparation for "incubation/entrepreneurship support" at the regional centers. Part of the reason for mentioning the name of 250Startups is that during the 5th JCC in August, there was a suggestion for the incubation program such as the 250STARTUPS programme to be part of the future national incubation standard to be adopted at various different institutions in Rwanda (e.g.; academic institutions, regional innovation centers, etc.). The idea was to reduce unnecessary overhead for creating different programme and have clear pathway toward different incubation stages and access to investment opportunities. However, as the recommendation is beyond the scope of the Project, amendment to the PDM was made to clarify the point.

11. While the ideal preparation process for the local incubation/entrepreneurship support still needs to be discussed among the stakeholders, it is envisioned that a similar approach will be taken as

compilation process of Innovation Center action plan where the local counterparts and stakeholders will be compiling a potential plan to be approved and adopted to be used as a future guidance.

12. There was also a recommendation from the JCC member about possibility of supporting renovation at Huye center. The Huye center has already been renovated by local Government budget and the Government has also assigned personnel to be part of the center. The Project has agreed to conduct networking installation and electricity installation as part of its renovation process to make sure that the center is operational. As the Project provides consumables as part of the training process, it is expected that the local innovation centers will design and build furniture as part of their training regimen.
13. Other proposed activities had no significant comments/inputs from the technical committee and has been incorporated into the PDM (the activities and resultant PDM has been simplified as many of the sub-activities could be conducted within future Work Break Down Structure/Work Plan.
14. After the deliberation, the JCC adopted proposed activities (attacked as an ANNEX.I) and the Project extension itself
15. The extra-ordinary JCC, taking into account the aforementioned points, would recommend the MINICT, JICA, and ICT Project to take appropriate actions to process and conclude the Project extension.

(end)

Attachment

Annex - Proposed New Project Activities to be implemented during Project Extension (consolidated version)

Memorandum of Consent
on
Further Extension of the Project
and
Submission of the Project Monitoring Sheet version 6

In order to better support Rwanda's efforts to mitigate the effects of continued COVID-19 Pandemic, an extra-ordinary Joint Coordination Committee (JCC) was held on 17th of December 2020. The meeting discussed a potential for further extension of the ICT Innovation Ecosystem Strengthening Project in the Republic of Rwanda (the Project) with list of proposed activities to be implemented in addition to the current scope of the Project.

As has been noted under the minute of meeting of the extra-ordinary JCC meeting, the Ministry of ICT and Innovation (MINICT) and the Project Team, with the endorsement of the JCC members, have agreed the needs for further extension of the Project and implementation of proposed activities during the extension period. It is also agreed that the MINICT shall request the extension of the Project to the Japan International Cooperation Agency (JICA). The duration of the second extension shall be until March 2022 (with all implementation activities to be completed by February 2022) with The activities and cub-activities to be implemented have been incorporated within the Project Design Matrix (PDM - log-frame) and/or will be reflected under the future work plan of the Project.

In addition, the sixth semi-annual report in the form of Project Monitoring Sheet I (Form 3-2: Revision of Project Design Matrix) and Project Monitoring Sheet II (Form 3-3: Revision of Plan of Operation) that has been submitted to the JCC members during the extra-ordinary JCC. While the activities implemented from the 5th JCC which has been organized in August 2020 to November 2020 were limited, submission of the monitoring sheets were promised during the 5th JCC.

Accordingly, both parties also agreed the aforementioned documents, as well as the minute of the meeting, shall be submitted to JICA in line with the requirements set forth by JICA.

Kigali, January 29, 2021

Yves Iradukunda	Atsushi YAMANAKA
Chairperson, The Joint Coordinating Committee Permanent Secretary, MINICT	Chief Advisor, JICA ICT Innovation Ecosystem Strengthening Project

Attachment;

1. Monitoring Sheet I Form 3-2
2. Monitoring Sheet II Form 3-3
3. Project Design Matrix ver.2.0 20200806
4. Project Design Matrix ver. 3.0 20201221
5. List of proposed activities and sub-activities
6. Minutes of Meeting of the extra-ordinary JCC meeting (17^{h} of December 2020 - online)

Minutes of Meeting
of
The Fifth Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The extra-ordinary JCC meeting was convened on 17th of December, 2020 via teleconferencing tool where further extension of the project and resultant modification of the PDM was proposed to the JCC members for their review and approval. Organization of the JCC at this time was an extra-ordinary request as the regular JCC is planned to be held in Q1 2021, as has been agreed at the 5th JCC which was organized in August 2020.

2. The main focus of the discussion was proposed 2nd extension of the project which would extend the implementation period of the project until March 2022 (with all the implementation activities to be finalized by the end of February 2022). The Project has explained rational for the extension to be 1) and 2) . In addition, the Secretariat has presented summary of activities which the project has conducted in the last 3 months and the Project has presented proposed new activities to be implemented at the extension phase of the project.

3. Due to continued Global COVID-19 Pandemic, the extra-ordinary JCC was organized through teleconference system. Normally, the JCC is organized with prior technical committee retreat to review the project activities and get inputs/recommendations to the JCC but this was also not possible due to the Pandemic. Instead, the Secretariat held a teleconferencing with the technical committee members prior to the JCC with PS present. and asked to provide inputs through e-mail to the proposed new activities during the extension.

4. During the extra-ordinary JCC, the comments/inputs from the technical committee and initial responses from the project were presented to the JCC members. The inputs provided by the technical committee reflect many real challenges which some of the project supported initiatives are facing or will be facing in the future (e.g.; having competent personnel to manage the innovation centers). Some of the recommendations, however, are difficult to entertain by the Project alone as they fall in the area of recruitment of local human resources.

5. The project and JICA have pleaded the counterparts to lead the process of sustainability of these centers and advocate local partners (local Government and others for securing adequate resources) for securing resources pertaining to the operational cost of the centers, as these components will be difficult to entertain from the project due to the principle of the technical assistance framework.

6. Having pleaded for securing operational budget in the future, the Project explained that due to difficulty securing budget during the middle of the budget year and budget shortfall caused by the Pandemic, the Project has agreed to support limited renovation work at the Musanze Innovation

Center location to make sure that the operation of the innovation center could start with proper security (current set up has no wall in the proposed center which makes it not ideal for equipment security). This is in addition to the network and electricity installations which the Project has agreed to support at the Huye and Musanze center. In addition, due also to the mid-year difficulty, the Project has agreed to hire local technical/management personnel in the Q1 2021 until the end of June 2021at the proposed Musanze center with an agreement that the recruited and trained person will continue to support the Musanze center through local Government resource.

7. JCC members have also asked several points to be considered during the extension. One of the item is to come up with the strong sustainability plan for the 250Startups beyond 5th batch and strong operationalization of the local innovation centers. It has been noted that the joint team of MINICT, RISA, ICT Chamber, and 250Startups will spearhead the compilation of sustainability plan and will present initial idea in January 2021. The Project and JICA fully endorse the move and, in this respect, it is ideal that the Project extension will give the 250Startups with ample transition period.

8. JICA has proposed that it may be able to support 250Startups 6th batch to seek innovative solutions to support Rwanda's Pandemic Economic Recovery Plan (ERP). While the term of the support still needs to be discussed among the stakeholders, it is expected that the support will be aligned to further furnish independence of the 250Startups programme.

9. The reference of "limited support" was made for the 6th batch during the extra-ordinary JCC and some of the JCC members questioned the description. However, the intention of mentioning 'limited support' was to push the programme into more autonomous entity for anticipated project completion. It is anticipated that the scope of the 6th batch will be made available at the next ordinary JCC for discussion and approval.

10. After the JCC, some technical committee members have expressed some clarification regarding the localized incubation mechanism. While during the JCC, it was mentioned that to prepare for the "localized 250Startups at the regional centers" but it is in fact meant as activities pertaining to preparation for "incubation/entrepreneurship support" at the regional centers. Part of the reason for mentioning the name of 250Startups is that during the 5th JCC in August, there was a suggestion for the incubation program such as the 250STARTUPS programme to be part of the future national incubation standard to be adopted at various different institutions in Rwanda (e.g.; academic institutions, regional innovation centers, etc.). The idea was to reduce unnecessary overhead for creating different programme and have clear pathway toward different incubation stages and access to investment opportunities. However, as the recommendation is beyond the scope of the Project, amendment to the PDM was made to clarify the point.

11. While the ideal preparation process for the local incubation/entrepreneurship support still needs to be discussed among the stakeholders, it is envisioned that a similar approach will be taken as

compilation process of Innovation Center action plan where the local counterparts and stakeholders will be compiling a potential plan to be approved and adopted to be used as a future guidance.

12. There was also a recommendation from the JCC member about possibility of supporting renovation at Huye center. The Huye center has already been renovated by local Government budget and the Government has also assigned personnel to be part of the center. The Project has agreed to conduct networking installation and electricity installation as part of its renovation process to make sure that the center is operational. As the Project provides consumables as part of the training process, it is expected that the local innovation centers will design and build furniture as part of their training regimen.
13. Other proposed activities had no significant comments/inputs from the technical committee and has been incorporated into the PDM (the activities and resultant PDM has been simplified as many of the sub-activities could be conducted within future Work Break Down Structure/Work Plan.
14. After the deliberation, the JCC adopted proposed activities (attacked as an ANNEX.I) and the Project extension itself
15. The extra-ordinary JCC, taking into account the aforementioned points, would recommend the MINICT, JICA, and ICT Project to take appropriate actions to process and conclude the Project extension.

(end)

Attachment

Annex - Proposed New Project Activities to be implemented during Project Extension (consolidated version)

Memorandum of Consent

on

the Project Monitoring Sheet version 8

7th Joint Coordination Committee (JCC) of the ICT Innovation Ecosystem Strengthening Project (herein after denoted as the Project) was held on 8th of June 2021. The JCC meeting discussed the current status of the Project and to receive guidance from the JCC members to ensure smooth implementation of the Project for the remaining 8-month project implementation period.

During the course of the JCC meeting, eighth semi-annual reports in the form of Project Monitoring Sheet I (Form 3-2: Revision of Project Design Matrix) and Project Monitoring Sheet II (Form 3-3: Revision of Plan of Operation) were submitted to the JCC members for their review and approval. Furthermore, various different advices to the project were given to the Project to ensure vigorous implementation of the project despite difficulties and delays posed by the COVID-19 pandemic.

Accordingly, both parties also agreed the aforementioned documents, as well as the minute of the meeting, shall be submitted to JICA in line with the requirements set forth by JICA.

Kigali, 4 th of August, 2021

MINISTRY OF ICT AND INNOVATION

Yves Iradukunda

Chairperson,
The Joint Coordinating Committee
Permanent Secretary, MINICT

Atsushi YAMANAKA

Chief Advisor,
JICA ICT Innovation Ecosystem
Strengthening Project

Attachment;

1. Monitoring Sheet I Form 3-2
2. Monitoring Sheet II Form 3-3
3. Minutes of Meeting of the extra-ordinary JCC meeting (8th of June 2021 - Hybrid)

Minutes of Meeting
of
The Seventh Joint Coordinating Committee
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The 7th JCC meeting was convened on 8th of June 2021 to allow JCC members to review the progress of the Project and to provide advisory inputs to support the project implementation. The 7th JCC was first regular JCC which was held in person (hybrid-style) since 5th JCC which was held in May 2019.

2. The main focus of the discussion at the JCC meeting was to report on the current progress of the Project and to receive guidance from the JCC members to accelerate implementation of the Project activities which were delayed due to COVID-19 related challenges.

3. Due to continued Global COVID-19 Pandemic, the 7th JCC was organized in a hybrid-model. However, technical committee retreat to review the project activities and get inputs/recommendations to the JCC was convened and many recommendations were made which facilitated the JCC meeting as a whole. Due to COVID-19 travel restrictions, preparation process for the previous two JCCs, including an extra-ordinary JCC to discuss extension of the project, was conducted on-line which hindered thorough preparation process.

4. During the 7th JCC, the recommendations from the technical committee were presented to the JCC members. The inputs provided by the technical committee reflected some of the real-life challenges which the project faced during the Pandemic and concrete mitigation measures to get the project to accelerate its implementation.

5. The Project reported that the highly anticipated local innovation centers are now being prepared for opening with first intensive training to be conducted at the Huye center in early June which is immediately followed by Agahozo Shalom Youth Village (ASYV). Another innovation center at Musanze is under project supported renovation process. The work is expected to be completed by end of June/July. Procurement process for the last remaining heavy items for Musanze center has started with verification of the progress of the center renovation. It is expected that the remaining items will be arriving in Rwanda by the end of August time frame.

6. In order to furnish more sustainability of these centers, various training activities are being planned by the project. These include management and operational training (conducted by Japanese professors), material based trainings (e.g.; woods, clothes, etc.), technical training, FabMaster's visits, community development, etc. Since the continued global pandemic has made the prospect of the 3rd country study tour highly unlikely within the remaining project duration, it has been recommended to divert the resources to enrich in-country training instead.

The Project will adjust the activities accordingly to realize the recommendations.

7. Within Output 1.2 incubation support, the project reported that the pandemic lock-down has caused serious slow-down in the progress of the incubation processes. While the 4th batch has been graduated despite the delay, the 5th batch is facing serious delay due to the Pandemic related restrictions as well as Telecom house renovation which eliminated physical venue for the 250Startups programme. RISA has been diligently searching for an alternative location for the programme but was not able to find a suitable location.

8. In order to ensure that the 5th batch will not incur further delay by the lack of a suitable venue, it has been requested that the Project secure a suitable venue as a temporary and emergency measure for the 5th batch cohort. It has been assured from the Project C/Ps that the C/Ps will continue its efforts to search for a suitable permanent venue for the 250Startups. The C/Ps has promised that the request is temporary and an alternative venue will be secured for the subsequent batch of incubation programme.

9. In order to mitigate the delay and the lack of personal contacts/relationship building among the members of the 250Startups companies, an intensive retreat/boot-camps has been recommended by the JCC Technical committee and the Project will coordinate with the 250Startups team to conduct the boot-camp as soon as possible while making due consideration of Covid-19 restrictions.

10. It is discussed that the Project aims to complete 5th batch incubation process and to officially hand-over the incubation mechanism to the C/Ps as the Rwandan model of early incubation programme. In order to accomplish that, the Project will be supporting the 250Startups to compile its own sustainability plan with necessary legal, financial, and governance structures. The Project will support the initiative with legal, accounting, and other experts.

11. Within Output 2, it was requested that the Project to hire a new policy analyst as the previous policy analyst has left the position. Draft TOR has been compiled and upon receipt of inputs from the C/Ps, the recruitment process will commence at expedited manner.

12. During the JCC, it was also announced the results of the online learning Udemy for Government. The results were overall positive where many people took full advantages of the site during the COVID-19 pandemic and resultant lock-downs. While the results were positive, it was decided that the online based learning to be consolidated with other ongoing initiatives such as Corsera courses offered by RDB, Smart-Africa initiative, and other online learning environment. The project will instead concentrate on more OJT type trainings and policy formulation retreats. especially with the proposed “Policy Lab” which will be developed in the MINICT.

13. The output 3 related results and proposed activities were also discussed during the JCC. The result of the POC initiatives were also announced along with the difficulties encountered with the COVID-19 related restrictions.

14. It was also discussed that the planned physical networking events between Japanese and Rwandan companies would not be practical due to the global Pandemic. It is unfortunate that the physical networking sessions will not be conducted during the remainder of the project duration as the physical networking sessions were instrumental in concluding various different LOIs and MOUs between Japanese and Rwandan companies. However, the Pandemic restrictions imposed by both Rwanda and Japan make the activity impractical. The Project will, instead, concentrate its efforts on organizing virtual networking sessions and supporting 6 additional POCs.

15. Output 4 activities have also been discussed at the JCC. While use of social media are up and contents are available, the efforts of disseminating them often have been haphazard. The same could be said about the ICT sector's efforts to promote ICT achievements to the public. The project is intended to support the sector wide ICT advocacy efforts as much as possible and the streamlined work plan is must to make sure that the Project could effectively support the sector wide initiatives.

16. There was also reporting of the progress of the Rwandan model to the JCC members. The initiative is finally getting traction with approximately half of the targeted stakeholders were being interviewed. The enthusiasms of getting such oral history of the past 20 years and the informative results from the interviews were being shared among the JCC members. It has also been proposed by the JCC to turn some of the interviews into podcasts even prior to finalizing the document and audio-visual contents. The project will look into the possibility for converting some of the interviews into podcasts.

17. The Rwandan model is planned to have its draft report compiled by August 2021 and the preliminary results of the work to be show-cased at the forthcoming Transform Africa Summit. The accompanying audio-visual content may not be available during the TAS 2021 but it should be compiled as an input to be showcased at the Dubai EXPO and the TICAD-8 to be held in Tunisia in 2022.

18. The JCC was also informed from the Secretariat that the detailed WBS will be compiled by July and endorsed by the Secretariat to facilitate the project implementation for the final 8 months of Project implementation period.

(end)

Minutes of Meeting
of
The Project Final Reporting Meeting
for
The ICT Innovation Ecosystem Strengthening Project
in the Republic of Rwanda

1. The final reporting meeting for the ICT innovation Ecosystem Strengthening Project was convened on 11th of February 2022 to present JCC members and external experts with the overall achievements of the Project and to review the final outcomes of the Project.
2. Due to continued Global COVID-19 Pandemic, the final reporting meeting was organized in a hybrid-model, as in the 7th JCC which was held in June 2021. Many participants from the development partners joined the meeting through Zoom link prepared by the Project.
3. During the final reporting meeting, the recommendations for future actions beyond the Project duration were presented to the JCC members, counterparts, and some development partners (GIZ, KOICA-online, WB- online). The recommendations were first presented to the JCC technical committee for their comments prior to presented at the final reporting meeting.
4. The Project reported it has successfully implemented most of the activities envisioned and attained outputs and outcomes by the end of the Project. While almost all of the proposed PKIs were achieved by the end of the Project, the Project regrets that more enriched activities may have been conducted if difficulties associated with COVID-19 pandemic restrictions did not hinder many implementation activities.
5. Within Output 1.1 innovation hubs/FabLab supports, the Project reported following achievements:

   1. Established Three Innovation Hubs in Huye, Musanze, and Rwamagana (AYSV)

   Infrastructure is being strengthened and well prepared in Three Innovation Hubs:

   (1) Fully equipped with FabLab machine and equipment installed (such as Large CNC Router, Laser Cutter, Plasma Cutter, Small CNC, 3D Scanner, 3D Printers, Computerized Sewing Machine among others) with 5 computers each.

   (2) Technical Assessment on FabLab machine and equipment installation conducted both by Japanese experts and FabLab Kigali.

   (3) The Innovation Hubs are installed with electricity and internet, and in case of Musanze, the center is renovated.

   (4) Necessary personnel such as a manager, ICT and other technicians are assigned in each Innovation Hub in a collaboration with districts and RDB.

2. Conducted On-site Trainings for Innovation Hubs (Musanze, Huye, AYSV) in various ways (2021-2022)

(1) Conducted Awareness program and Launch of each Innovation Hubs in three Innovation Hubs.

(2) Conducted Capacity Building training program for three Innovation Hubs (Huye, AYSV, Musanze) gathered together in AYSV to introduce to and discuss about different types of Innovation Hubs/FabLabs, to collectively identify challenges, and to give insights on organizational management of Innovation Hubs/FabLabs by Japanese Experts (October, 2021).

(3) Overseas training on FabLab was cancelled due to the Pandemic situation of COVID-19 so that it was replaced by alternative in-country training program.

(4) Conducted 15 Days intensive Initial training for FabLab users in collaboration with FabLab Kigali (by Fab Masters who went to training in Hamamatsu in Japan) at three Innovation Hubs (Huye, AYSV, Musanze).

(5) Conducted Follow-Up Training as machine specific for assigned users at three Innovation Hubs in collaboration with FabLab Kigali (by some of the Fab Masters)

(6) Supported the candidates for Fab Academy (3 batches total of 13)

(7) Fab-X program has been identified to conduct in local language.

6. Within Output 1.2 incubation support, the project reported that the 6th cohort has finished and the Rwandan national incubation mechanism for early-stage Startups (pre-seed level) has successfully been created. The statistics of graduates of the incubation programme are impressive. While global track records of startup attrition is high with only 20%. On the other hand, 70% of the 250Startups programme incubated companies are operational and 80% of the people who went through the programme are employed. Testimony to the fact that the programme

7. The Project presented results of the Output 1.2 as indicated in the following table:

Output 1.2 – 1-2/1-3 Incubation Support for 250 Startups - Brief

	1st batch	2nd batch	3rd batch	4th batch	5th batch	6th batch
Start	Jun. 2018	Mar. 2019	Jul. 2019	Jan. 2020	Jan. 2021	Oct. 2021
Finish	Dec. 2018	Aug. 2019	Jan. 2020	Oct. 2020	Oct. 2021	Jan. 2022
No. of startups supported	8	10	10	10	10	10
Vision	Established					
Framework	Tried	Established				
Curriculum	Tried	Developed (law & finance)	Sharpening & developing (startups)	An online method was introduced.	Product development specialists & interns were introduced.	Weekly & monthly curriculum was developed.
Organization	individuals	Team developed	Organizing	Organized		
Monitoring	Tried	Systemizing	Systemizing	Systemized		
Partnership	0	3 (Westerwelle, RP Tumba, UR)		3 (RP, Genga Ventures, Raisin Ltd)	1 (AUCA)	

- 2 startups in the 1st cohort dropped out due to the gap between our service and their expectations.
- Due to COVID-19, the program of the 4th and 5th cohorts were mostly conducted online.
- The duration of the 6th cohort was shorter than the others but 250STARTUPS achieved the same goal with other cohorts by putting same resources within the shorter time.

9

8. The 250startups programme has been officially handed over to the Rwandan counterparts led by the ICT Chamber at the 250Startups 5th Demo Day for continuation and expansion of the programme beyond the Project duration.

9. The Project presented results of Output 2. – Policy capacity development support for the officers and leadership of Ministry(ies) and relevant agencies. During the course of the Project implementation period, the Project has supported 7 in-person and 2 online trainings (Physical - Effective Writing, Policy Analysis, Research and Data, Project management training, Leadership training, and High Level Leader Policy Analysis Training, Research and Data Analysis) (Online - Building University-Industry Relations and Udemy for Government).

10. The experience of online learning course, Udemy for Government was overall positive one where many people took full advantages of the service during the COVID-19 pandemic and resultant lock-downs. While the results were positive, going beyond the project, it was decided that the online based learning to be consolidated with other ongoing Rwandan initiatives such as Corsera courses offered by RDB, Smart-Africa initiative, and other online learning environment.

11. Additional High-Level Policy Analysis trainings for CDOs & High-Level Leaders and Leadership/Management trainings are being supported by JICA Rwanda Office in the month of

February/Early March.

12. During the course of the Project, Policy Advisor and Policy Analyst provided continued support to substantiate Policy/Strategy related documents (e.g.; JSR and other policy documents) throughout the Project duration.

13. Udemy for Government has concluded with positive results including many taking non-technical trainings as well as technical trainings. It was effective during the COVID-19 lock-down

14. SWG has been supported by both the Project and JICA country office throughout the Project duration. However, more organized SWG will be key to coordinating development partners and to further strengthening the innovation ecosystem,

15. The output 3 related results and proposed activities were also presented during the JCC. The result of the POC initiatives were also announced along with the difficulties encountered with the COVID-19 related restrictions. *These activities are listed under the Project final reporting session presentation slide attached with the minute.

16. Output 4 activities results have also been discussed at the final reporting meeting. The Project reported various different in-person and on-line advocacy activities which were conducted during the course of the Project duration. These include advocating project activities, results, and Rwandan experiences at various different international fora such as Transform Africa Summit, YouthKonnekt, TICAD, United Nations Internet Governance Forum (IGF), Africa Tech Summit, etc. These are in addition to the 250Startups and Rwandan Companies Japan business networking tours which organized different networking and advocacy activities.

17. There was also reporting of the progress of the Rwandan model (compilation of 20 years' journey of Rwandan ICT for Development initiatives) to the JCC members. The compilation is now at the final drafting stage and the first draft will be shared among the Rwandan experts for proof-reading. Upon proof-reading the document, the report will be validated online and will be finalized into pdf format for distribution.

18. The Rwandan model documents are planned to be targeted for both internal and external audiences. The Rwandan experiences and lessons-learned would be useful for the countries which want to utilize ICT as a tool for its development and transformation. For the domestic audiences, especially the new leadership, many of the past decisions and activities pertaining to the ICT implementations in Rwanda is not well known. Upon completion, these documents, along with the archival recording of interviews, will be handed over to the Ministry of ICT and innovations to be kept for future generations.

19. The final reporting meeting has also recommended following activities to be implemented beyond the Project duration:

Output 1: Promotion of ICT Innovation

[1-1 Innovation Centers Expansion/Strengthening]

1. **Complete creation of action/business oriented plan for each Innovation Hub/FabLabs:**
   The project/business oriented plan shall be build onto the project supported action plans with specific goal and potential sustainability scheme that would also contribute to the collective goal among all three innovation hubs in a long run.
2. **Strengthen capacities of three Innovation Hubs/FabLabs both individually and collectively to enable management of the Hubs sustainably:**
   These include logistics such as a flow of consumables, maintenance mechanism, control of membership and registration of users, and finally to establish overall governance framework for each Hub.
3. **Create culture of innovations and entrepreneurships at each Innovation Hubs/FabLabs:**
   It is important to mainstream both Innovation and entrepreneurship at both Hub's management level and at individual FabLab users' level.
4. **Establish mechanism for maintenance of FabLab machines and equipment in all Innovation Hubs:**
   Create mechanism which would allow Hub staff and power-members to maintain equipment themselves.
5. **Create community of Innovation Hubs/FabLabs users:**
   Community of users shall have fundamental rules and regulations of conducts as well as organizational culture of mentorship and sense of community in each Innovation Hub towards better care of equipment and machine.
6. **Share skills and knowledge based on the experiences of all Innovation Hubs/FabLabs:**
   The sharing knowledge shall include all hubs that include FabLab Kigali through open dialogue, workshops and continuous on-site trainings.
7. **Create local training program to be run at each Innovation Hub/FabLabs:**
   The training program at each Innovation Hub/FabLabs shall be created in coordination with the forthcoming Fab-X program.

[1-2/1-3 Incubation Support [250STARTUPS]

1. **Seek active involvement of the counterpart in operation:**

   The project was successfully developed the capacity of the staff and established the cohesive team for operation of 250STARTUPS. However, it was mostly operated by local staff hired by the project, though the counterpart organizations have contributed whatever they can. Therefore, it may be unfortunately difficult to keep running the program after the project

completion unless the counterpart organizations find a way to secure resources to keep the staff for the program.

2. **Create funnel structure (feeder mechanism for innovators):**
   Under the assumption that Rwanda has many pre-seed startups with ideas and prototypes but without knowing how to do business, the Project supported ICT Chamber to develop 250STARTUPS to grow startups from pre-seed to investable level. However, it was always a concern whether the program was able to secure 10 good startups per cohort as it was difficult to find startups at the right level for the program. Also, the startups completed our program, who successfully made a business plan and obtained some paying customers, still need support for the expansion of their businesses. Therefore, it is important to increase the number of pre-seed level startups perhaps in collaboration with colleges and universities and to strengthen the connection with investors and other incubators, though the Project already developed the funnel structure with some of the academia and incubation organizations.

Output 2: Formulation of Policy Framework

[Institutional Capacity Building/Formulation of Policy Framework]

1. **Support Policy, Management, Leadership and Team-builing related trainings/sessions in intensive manners for the Ministerial officers and relevant stakeholders:**
2. **Establish strong SWG coordination mechanism along with clear sector workplan:**
   The SWG is a key to coordinating different initiatives supported by donor partners

Output 3: Business Matching b/w Rwanda and Japan

[Business Matching between Rwanda and Japan]

1. **Continue Business ties with Japan through private sector initiatives:**
   Forming a council that formed by different stakeholders aiming to be core to monitor progress of engagements and discussions will be necessary.
2. **Replicate POC between Rwandan companies and companies outside:**
   The POC was a novel way of forging partnerships between different economies. This may be replicated by other partners

Output 4: Disseminating Experience of the Project

[Disseminate experiences of the Project]

1. **Disseminate ICT for Development experiences of Rwanda in the past 20 years both internal stakeholders and external partners:**
   Disseminating Rwandan experience to other countries could allow other countries learn from Rwandan experiences and at the same time would allow Rwanda to reinforce its position as an ICT/POC hub of the continent. Moreover, the experience could be utilized as a reflection of Rwandan achievements internally and become basis for discussion to formulate how Rwanda should proceed with ICT enabled development in the next decade.

General: Management Structure of the Project

[Management structure of the Project]

1. **Continue activities with Project Secretariat to prepare for forthcoming second phase Project:**
   Project Secretariat was instrumental in coordinating the Project. The Project Secretariat should continue its activities and create a plan for the second phase project to allow smooth commencement of the second phase of the Project

20. After the recommendations given by the Project, the floor was opened for Q&A session. KIC has asked question about incubation conducted by 250Startups which the 250Startups general manager has clarified. WB has asked question about potential next phase of the JICA project which include potential financing scheme which JICA representative clarified as much as they could at this stage. ICT Chamber CEO has also made commentary and appreciation about the Project which made some of the key ICT Chamber initiatives to be realized and the continued JICA support in the area of ICT. At the end of the Q&A session, PS has sought comments from the development partners for potential collaborations for some of the initiatives which the Project is leaving behind to the Rwandan counterparts and KOICA made an intervention explaining some of the KOICA initiatives which are align to some of the activities conducted by the Project.
21. At the end of the Project Final reporting meeting, announcement was made about way forward which include the following three activities:
    General: Management of the Project
    1. JCC recommendations will be reflected into Draft Final Report which will be shared on Monday
    2. Secretariat will follow up with MIN-ICT and counterparts for post-project activities.
    3. Secretariat will prepare for second phase project to enable smooth start of the new project.

(end)