

MINUTES OF MEETINGS
BETWEEN
THE JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF ENERGY AND PETROLEUM AND
RURAL ELECTRIFICATION AUTHORITY
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR ESTABLISHMENT OF RURAL ELECTRIFICATION MODEL
USING RENEWABLE ENERGY

The Japan International Cooperation Agency team composed of JICA Kenya Office and JICA Expert Team (hereinafter referred to as "JICA Team"), headed by Mr. Koji NODA, Senior Representative JICA Kenya Office held discussions with Ministry of Energy and Petroleum and Rural Electrification Authority (hereinafter referred to as "Kenyan Team") on February 13, 2015, during the 4th and final JCC for THE PROJECT FOR ESTABLISHMENT OF RURAL ELECTRIFICATION MODEL USING RENEWABLE ENERGY (hereinafter referred to as "the Project").

During the meeting both sides reported on the achievements of the Project since the terminal Evaluation conducted in October 2014 and exchanged views and concrete actions to ensure that the Project's outputs would be internalized and owned by the Kenyan side in order for the outcomes/impacts to be seen in the near future.

As a result of the discussions, Kenya Team assured JICA of close follow-up of agreed upon matters referred to in the Attachment.

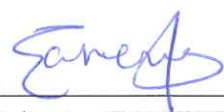
Nairobi, 13th February 2015



Mr. Koji NODA
Senior Representative
JICA Kenya Office



Eng. Isaac KIVA
Director, Renewable Energy
Ministry of Energy and Petroleum (MoE&P)



Eng. Ephantus KAMWERU
Manager, Renewable Energy
Rural Electrification Authority (REA)

ATTACHMENT

1. **Taking action in accordance with the recommendations made in the 4th JCC**
Both sides agreed to take action in accordance with the recommendations contained in the draft Project Completion Report (PCR) (February 2015). Attached in Appendix 1

2. **Operation and Maintenance (O&M) of solar PV systems installed at 5 pilot primary schools**
Both sides agreed that the MOEP and REA will be responsible for the O&M of the installed PV facilities in primary schools and health facilities under the Project, namely Olemoncho Primary school, Iltumtum Primary school of Narok, and Tuum Primary School, Illaut Primary School, Marti Primary School of Samburu, Illkinyetti Dispensary, Olkinyei Dispensary of Narok, and Latakweny Dispensary, South Horr, Angata Nanyokei of Samburu North.

MOEP and REA are to consider giving a stronger role to the County Governments to ensure daily O&M is carried out sufficiently.

3. **Dissemination of the established models (Financial/O&M/Technical model)**
MOEP and REA shall be responsible for adopting the established models and applying them into future solar PV projects in Kenya.

4. **Application of the models to the Rural Electrification Master Plan (REMP) and other related policies**
Both sides acknowledged that the established models, shall be incorporated into the Rural Electrification Master Plan (REMP) and other related policies at the time of updating in the future. Potential scope of application of the models, number of prospective project sites and projected annual O&M cost shall also be reflected in the policies.

5. **Updating the prepared Guidelines**
Both sides agreed that MOEP and REA shall continue updating the Guidelines jointly prepared by the REA and JICA for Solar PV Systems, Mini Hydropower (MHP), Biogas, and Wind. MOEP and REA will continue conducting overall monitoring for the existing installations for these technologies, utilizing these Guidelines.

6. **Distribution of the Guidelines**
Both sides agreed that MOEP and REA shall distribute the Guidelines to the concerned parties, County Governments and institutions where solar, MHP, biogas and wind facilities have been installed. JICA suggests that the existing County Offices of MoH and MoEST would be an efficient channel, and suggested that REA distributes several copies of each Guideline to the 47 Counties' MoH and MoEST Offices for their easy distribution. JICA further suggest that the same be done by

the first half of 2015 as a show of REA's commitment to providing support to the proper use of renewable energies in Kenya.

7. Cooperation with other Related Institutions

Both sides agreed that REA shall coordinate technical assistance to the County Governments including training of trainers of staffs in respective public health institutions and schools to enable them to operate solar PV systems.

8. Participation to Technical Training, Seminar and Conference

Both sides agreed that REA shall arrange its staff to participate in collaboration with JICA's BRIGHT Project* in technical training, academic seminars and conferences offered at Jomo Kenyatta University of Agriculture and Technology (JKUAT).

*Project for Capacity Development for Promoting Rural Electrification Using Renewable Energy

9. Monitoring and Ex-Post Evaluation

In order to monitor progress on the points above, and to discuss solutions to any challenges which may arise, JICA suggested that JCC monitoring meetings take place for at least one year after Project completion every 6 months, namely August 2015 and February 2016. MOEP and REA agreed to such suggestion.

JICA explained that the ex-post evaluation by independent evaluation consultants is carried out after approximately three years of completion of technical cooperation projects which amount to over 200 million JPY. Since this Project has cost approximately 450 million JPY since its inception, it shall be subject to ex-post evaluation. The evaluation will be conducted along the 5 DAC evaluation criteria (relevance, efficiency, effectiveness, impact, sustainability), similar to joint reviews and evaluations carried out so far. MOEP and REA agreed to keep records of and provide input where necessary on the Project's history, progress, outputs, etc. when such ex-post evaluation is conducted.

(End)

Appendix 1: Recommendations for Rural Electrification using Renewable Energy draft
[Excerpt from Project Completion Report (PCR): February 2015]

Appendix 2: Copy of Work plan after Joint Terminal Evaluation (October 2014)



Appendix 1

Rural Electrification Authority

**Project for Establishment of
Rural Electrification Model
Using Renewable Energy
in
the Republic of Kenya**

**Project Completion Report
(Draft)**

February 2015

JICA Expert Team

NIPPON KOEI
Challenging mind, Changing dynamics

KRI International
Cooperation
KENYAN RURAL ELECTRIFICATION AUTHORITY

EIL

CHAPTER 5 RECOMMENDATIONS FOR OVERALL GOAL

5.1 Recommendations for Rural Electrification using Renewable Energy

Recommendation for rural electrification using renewable energy, namely solar PV, MHP, Biogas and Wind were summarized as below.

5.1.1 Renewable Energy

(1) Master Plan for Rural Electrification Using Renewable Energy

In the project, insufficient information about updated grid status caused difficulties to select candidate sites for pilot plants, because of insufficient information sharing. Although Master Plan for Rural Electrification (REMP) was formulated in 2009, the update work is limited and data availability is low. Data is updated only in spread sheet and updated geographical information is not available, which causes inefficient rural electrification works. Master plan for renewable energy, with integration of REMP, is required to avoid the duplication of works between grid electrification and off-grid programs.

The master plan is indispensable to accelerate rural electrification, and it is desirable to indicate the direction of renewable energy development in both grid area and off-grid area in the master plan. Once the master plan is created, it facilitates the promotion of rural electrification project for other donors as well. In addition, the database of un-electrified public facilities can be summarized in the master plan. Therefore, it is recommended for REA and MoE&P to prepare master plan for rural electrification using renewable energy.

(2) Application of Geographical Information System (GIS) database for rural electrification project

1) REA has to establish institutional framework to set up GIS database for rural electrification.

Currently, GIS database concerning electric facility is prepared on a piecemeal bases by related organizations such as existing distribution line data by Kenya Power and hydro power data by MoE&P, Database integration and creation of new database for off-grid planning is necessary. REA should establish institutional framework for GIS integration of rural electrification using renewable energy.

2) REA has to prepare GIS database for rural electrification using renewable energies

Not only for the government but also for international institutions or private donor, information of existing power grid and the future extension plan, existing isolated power supply system and potentials of renewable energy are essential for promoting the project. That information can be used for estimating power output and the financial feasibility.

REA should coordinate with Kenya Power to obtain GIS database for distribution lines and related power facilities

REA should prepare following GIS

- GIS database for un-electrified public facilities
- GIS database for existing isolated power system (Diesel, Solar PV, MHP, Biogas and Wind)
- GIS database for renewable energy potentials (MHP, Biogas and Wind)

3) REA has to establish working groups for updating the database

REA has to establish working groups for updating each GIS database with other relevant agencies related to renewable energy and rural electrification, such as MoE&P, Kenya Power, and KETRACO for updating the rural electrification database.

4) Accessible GIS database for Donors and Investors

The database has to be opened to the organizations that are interested in electrification of public facilities in rural areas such as MoH, MoEST. This will attract donors and investors for funding of off-grid RE and facilitates overall off-grid program.

5) Incorporating to Master Plan for Rural Electrification Using Renewable Energy

Prepared database should be incorporated into the master plan for rural electrification using renewable energy mentioned above.

(3) Continuous Capacity Enhancement of REA's staffs

1) Participation to Technical Training, Seminar and Conference

REA has to arrange the staffs to participate in technical training, seminar and conference to enhance the capacity continuously. There are some institutions which have been conducting training programs, such as "solar PV course for professional" by JKUAT. It is recommended that REA arrange technical staffs to participate those training program.

2) Staff of Environment and Socio-economics

The staff in charge of environment and socioeconomics for planning and monitoring is limited in REA. Meanwhile, proponents of all development projects including government institution are required to take environmental procedure and obtain the environmental clearance. In addition, socio-economic data collection, involvement of communities and financial management of facility owners is necessary to be conducted in the process of planning and monitoring to enhance sustainability.

For smooth implementation of EIA/EA procedures and accumulation of such experiences and foster the relationship with NEMA for the future renewable energy projects, it is recommended to hire new staff or enhance the capacity of existing staff and to set up a environmental function (Section or Unit) for the future projects.

(4) Enhancement of Kenyan Private Sector

In order to ensure installation, construction and O&M of power generation system using renewable energy such as solar PV, MHP, Biogas and Wind, enhancement of private companies and industries in Kenya is important. It is necessary to create and provide training opportunity for capacity enhancement of technical human resources of private companies.

There are some domestic private companies manufacturing power generation system using renewable technologies, therefore by providing governmental support, REA and MoE&P can enhance private sectors in Kenya.

It is necessary to specify strictly the qualification of contractors including licence and training requirement for contractor's manager and technician. REA should conduct strict acceptance inspection of equipment and thorough checking with sufficient time at the inspection before completion.

(5) Quality Control by Construction Supervision

Renewable energy installation works include civil and electrical works. Poor quality of contractor's work will spoil overall project. Full-time engineer staff or consultant is required to be assigned for the construction supervision and management. Budget for such purpose needs to be secured in public projects. Construction work, testing and commissioning, and user training should be supervised by the engineer to ensure quality of works. Safety arrangement to prevent fire, electric shock, and any other accidents should carefully be conducted.

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5.1.2 Solar PV**(1) Securing Budget for O&M**

In the models, the profit from the battery charging service will be allocated to a part of O&M budget. Based on the results of monitoring, it is difficult to gain enough amounts of income for O&M from charging services due to the market size and existence of competitors. Furthermore, after grid extension to the charging service covered area, income from the charging service will decrease. To compensate deficiency of O&M budget, a part of the budget can be allocated from the other financial sources such as HSSF and FPEF and budget from the County Government. Therefore, it is recommended to REA for preparing the system for O&M under REA's budget or having MoU between Counties to secure budget for O&M.

However, in the future, O&M budget of solar PV systems has to be prepared under the budget of each County.

(2) Establishment of the county based O&M structure

There are many solar PV facilities which are not functioning well because appropriate O&M has not been conducted such as failure of controller or deterioration of battery and so on. It is recommended for each County to conduct O&M of solar PV system at public facilities in the future. Therefore, it is also necessary to develop the following structures;

1) Health Institution

- REA/MoE&P staff gives technical guidance on O&M for engineers of the County Health Office. It is recommended county health offices to give them opportunity of training in JKUAT.
- The engineer of the County Health Office trains operators on O&M of solar PV facilities and the daily inspection.

2) Schools

- MoEST HQ should assign more competent officers in County Education Offices who will supervise management of educational infrastructures. Then, they also should prepare opportunity of getting training and provide its proper budget for monitoring of schools solar systems in entire non-electrified area. It is recommended to county education offices to give opportunity of training in JKUAT.
- REA/MoE&P staff gives technical guidance on O&M for assigned officers of the County Education Office.
- The officers of the County Education Office train operators on O&M of solar PV facilities and the daily inspection.

5.1.3 MHP**(1) Preparation of Specification Standard**

The MoE&P is currently preparing the "Guideline Specification Standard for Development of Micro/ Small Hydropower in Kenya (scheduled to be KS1859)" with KBS scheduled to be draft up by 2015. It is very important to accelerate rural electrification through micro and small hydropower development. It is recommended to assure continuation of these activities.

(2) Small and Medium Scale Hydropower Development to be connected with Grid

The potential areas of hydropower development are limited around Mt. Kenya and the Western Kenya region, and these areas are overlapping with many target facilities to be electrified by grid in accordance with Rural Electrification Master Plan 2009. It is likely that rural electrification by MHP will finally be connected to the main grid in medium to long terms, even if they will be developed as off-grid systems in short to medium terms.

It is therefore, recommended that MHP shall be planned with a view to be connected with the grid. Furthermore, it is recommended that development of small and medium scale of hydropower shall have priority over MHP in view of scale merit and influence to ecology.

(3) Coordination with other Water Resources Development Plans

Water resources are precious natural resources for Kenya. Therefore, MHP development shall consider as one of the water resources utilization. It is recommended to strengthen coordination with Ministry of Environment, Water and Natural Resources, and WRMA in order to harmonize MHP development plan with other water resources development plans.

(4) Sharing of Hydrological Data with WRMA

Evaluation of river discharge is vital for proper planning of not only hydropower development but also all water resources development. WRMA is an executing agency of discharge measurement and compilation of river discharge. However, their observed data has uncertainties including many periods for which data is missing. It is recommended to share hydrological data with WRMA as well as WRMA to enhance their accuracy in measurements.

5.1.4 Biogas

(1) Selection of Optimal System by conducting Feasibility study

Not all available feedstock in a facility can be utilized in biogas production in terms of feedstock collection. Transportation of feedstock is costly in O&M and increases user's burden. Considering existing facility such as location of septic tank, toilet, cowshed, etc., optimal layout and feedstock should be arranged to minimize user's O&M and maximize economic benefit. Depending on situation, power generation can be excluded from the project scope and all biogas can be used exclusively for cooking to simplify the system, minimize the cost, and maximize the benefit. For such assessment, feasibility study should be conducted for biogas projects.

(2) Update of Guideline

Update work of guideline is necessary to be in accordance with the updated situation. Kenya Bureau of Standard is currently preparing the biogas standard. After the standard becomes effective, the contents need to be incorporated in the guideline.

(3) Conducting Overall Monitoring for Existing Biogas System

Many of existing biogas system implemented by various institutions had difficulties in operation due to lack of training and skilled operator, poor quality in construction, production of decreased amount of biogas, and inappropriate feedstock type. It is recommended to conduct monitoring for existing biogas system, identify issues and challenges, and feedback to increase efficiency of operation and optimize design in future biogas projects. Such findings should be shared among relevant organizations.

(4) Biogas Generation in Off-grid Areas

Feedstock production is inherently small and dispersed, and it is difficult to find skillful operator in off-grid area. Biogas generation project in off-grid area should be promoted only if sufficient feedstock and skilled operator is available in the target area. Sufficient potential and feasibility study should be conducted to assess sustainability. Biogas application for simple cooking fuel only might be most appropriate.

(5) Enhancement of County and Sub-county Capacity for Planning, Implementation, and Monitoring of Biogas Projects

Participation of County Government in project formulation, planning, design, supervision, and monitoring is necessary after the decentralization. Capacity enhancement of County and Sub-county is necessary for sustainable biogas promotion and implementation.

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(6) Interministerial Coordination and Donor-wise Knowledge Sharing

Biogas concerns various sector such as energy, agriculture, and environment. Lack of coordination among various promoters of biogas may be an obstacle for sufficient information sharing among ministries and donors, which will cause duplication of roles and objectives. Coordination among ministries and donors is necessary for efficient project implementation.

5.1.5 Wind**(1) Accumulate Experience of Wind Projects**

REA does not have enough experiences on wind power project. Therefore, it is necessary to implement the projects to accumulate experiences. Estimation of accurate wind speed, wind turbine property, and power output is most important for wind power development. Except the energy estimation, process of small wind power development is similar to that of solar PV project for public facilities. Therefore, through implementation of small scale wind project, experiences for wind power development and wind data have to be accumulated. After that, the projects using middle class wind turbine or diesel-wind hybrid system can be implemented easily using same procedure of power output estimation.

For possible generated energy assessment, wind energy software should be introduced and REA staffs should be trained for it.

(2) Establishment of O&M structure

Wind turbines interconnected with diesel generators are being operated and maintained by the staff of diesel power stations. However, O&M for small wind turbines installed at public facilities have to be conducted properly. It is recommended for REA to apply O&M structure of solar PV system to the O&M of small wind.

5.1.6 Grid Extension**(1) Policy and Standard Formulation for Grid Connection of Small Scale PV System**

After grid connection of public facilities, it is possible to continue to utilize existing PV system and reduce the power tariff of users with installation of simple change over switches.

In case of reverse flow, currently, the applicable capacity PV systems for FIT is above 500 kW, which is far larger than off-grid PV system for public facilities. Net metering system, which may be applicable for reverse flow from small scale PV system, is just started to formulate in Energy Policy and have not enforced yet. It is expected that several hundreds of off-grid PV systems will be connected to the grid in the future. Although guideline for grid connection was published by MoE&P, it is necessary for MoE&P to establish regulations and technical standards for grid connection including reverse flow for small PV system in off-grid areas, with enough coordination with Kenya Power. Related O&M structure is also necessary.

(2) Official Support for Grid Connection

The grid connection with reverse flow is not financially feasible for private business, and users can not provide initial investment for required equipment. Accordingly, it is necessary to conduct the work as public projects or donor projects. To reduce the cost, it is recommended to conduct bulk procurement to install necessary equipment.

(3) Database for PV Grid Connection

In relation to Section 5.1.1, REA should establish the GIS database for existing off-grid PV system, current status of grid connection and its plan with georeference information, and manage update works. This work will be the base for the works as mentioned (2) above.

5.2 Recommendations for the Model Dissemination

Models for rural electrification using renewable energy were developed by the Project. It has to be applied to rural electrification project using solar PV and disseminated by the counterparts in Kenya. Recommendations for the Model dissemination are summarized as follows

5.2.1 Revision of the Models

- (1) Developed models have to be revised by Renewable Energy Department of REA.

At the end of project, there was the projection of which REA would obtain O&M budget for solar PV system in the near future. REA has to revise the O&M structure in the model when the projection is enforced.

- (2) REA has to conduct the monitoring contentiously

REA has to monitor the operational situation of solar PV system through MoH and MoEST continuously in order to upgrade the model.

- (3) REA has to apply the model to other public institutions in rural area

Beside primary school and dispensary, REA has been promoting electrification of secondary school, polytechnic, health centres and so on. It is recommended that REA consider application of the model to those public facilities too. According to updated master plan as mentioned in Section 5.1.1, target areas and facilities possible for the model application should be selected. In addition, REA should coordinate and provide information to other donors and organizations so that the model can be applied to projects funded by them.

5.2.2 Distribution of the Guidelines

The models were summarized in the guidelines both for rural health institutions and schools. Therefore, REA has to distribute the guidelines to the concerned county government and institutions through MoH and MoEST.

5.2.3 Cooperation with other Relating Institutions

- (1) County Government

- 1) REA has to coordinate technical assistance to the county governments including training of trainers of staffs in respective public health institutions and schools to enable them operate solar PV systems.
- 2) In case that the target public facilities meet required condition of the charging service, REA has to provide training of trainers targeting county officers for the financial management of charging service accounting for staffs in respective public institution to enable them operate solar PV systems in sustainable manner.
- 3) REA has to share with county governments any training information on the solar PV systems such as the training conducting at JKUAT with the County government.
- 4) REA has to prepare for signing of any arrangement agreed between REA and the County Health Offices delineating the responsibilities of each Party during O&M of the solar PV systems.

- (2) MoH

- 1) REA has to prepare a list of un-electrified public health institutions in entire country in consultation with MoH.
- 2) REA has to conduct socio-economic survey to identify the health institutions for application of the charging service model in accordance with the guideline in consultation with MoH.
- 3) REA has to prioritize public health institutions to prepare plan for the application of charging service model.

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- 4) REA distributes "Guideline of Solar PV System for Health Institutions" to the County Health Offices through MoH.
- (3) MoEST
- 1) REA has to conduct socio-economic survey to identify the schools for application of the charging service model accordance with the guideline in consultation with MoEST.
 - 2) REA has to prioritize schools to prepare plan for the application of charging service model.
 - 3) REA distributes "Guideline of Solar PV System for Schools" to the County Education Offices through MoEST.

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Appendix 2

	October	November	December	January	February
1 MoU					
1-1 Finalization of Draft MoU (MoEST, County)					
1-2 Hold a Meeting & Submit the Draft MoU (MoEST, County)					
1-3 Negotiation & Signed on the MoU (MoEST, County)					
1-4 Preparation and Finalization of Draft MoU between MoH					
1-6 Hold a Meeting & Submit the Draft MoU (MoH)					
1-7 Negotiation and Signed on the MoU (MoH)					
2 Guidelines (MHP, Biogas, Wind)					
2-1 Attendance Lists & Invitation Letters					
2-2 Meeting for Guidelines Validation Workshop					
2-3 Draft Guideline					
2-4 Guideline Validation Workshop					
2-5 Comment of Guideline					
2-6 Revision of the Guidelines					
2-7 Finalization of the Guidelines					
3 JKUAT Conference					
3-1 Preparation (Poster & Presentation Materials)					
3-2 JKUAT Conference					
4 International Workshop					
4-1 Finalization of Schedule					
4-2 Preparation of Invitations & Sending					
4-3 Arrangement					
4-4 Coordination					
4-5 Preparation of Presentation Materials (REA)					
4-6 International Workshop					
5 Finalization of Model					
5-1 Weekly Meeting (Eng. Karanaru and/or Eng. Muijithi)					
5-2 Finalization of Model					
5-3 Update REA Performance Contract 2015/2016 or REMIP					
6 Evaluation Meeting & Info. Sharing Meeting (REA and MoEST staff have to be participated)					
Kajiado					
Narok					
Samburu					
MoEST					
MoH					
7 Documents					
Project Completion Report					
Guidelines / Manual (Solar FV)					
Guidelines (MHP, Biogas, Wind)					
8 4th JCC					

Event	JKUAT Conference	Guideline Workshop	JKUAT Conference	International Workshop (22 - 26)	JCC(2/13)	P/C Report Guidelines (3/6)
JET						
Del						
Samejima						
Bista						
Nakagawa						
Kitauchi						
Shimomukai						

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Project for Establishment of Rural Electrification Model Using Renewable Energy

Venue: MoE&P Boardroom (Nyayo House)

Meeting Called By	JICA Kenya
Date	13th February 2015
Type Of Meeting	4th JCC Meeting
List Of Attendees	<ol style="list-style-type: none"> 1. Eng. Samson Kasanga- MoE&P 2. Eng. James Muriithi- REA 3. Mr. Semekiah Ongonga- REA 4. Mr. Koji Noda- JICA Kenya 5. Ms. Minoru Chitani- JICA Kenya 6. Mr. Evanson Njenga- JICA Kenya 7. Dr. Tsutomu Dei- JET 8. Mr. Yoshiaki Samejima- JET 9. Ms. Yuka Nakagawa- JET 10. Mr. Ken Shimomukai- JET
Agenda	<ol style="list-style-type: none"> 1. Welcome and Introductions 2. Confirmation of the 3rd JCC Minutes 3. Overall Progress in Project implementation based on Terminal Evaluation recommendations 4. Update of Management issue of JICA/REA Project 5. Concluding Remarks

SUMMARY OF DISCUSSION

1. Eng. Kasanga (the chair) called the meeting, made remarks about the Project and moved on to the agenda, whose contents were introduced by Ms. Chitani.

2, 3 and 4

Mr. Njenga went through the following items:

- Taking action in accordance with the recommendation made in the Joint Terminal Evaluation Report
- Signing of Memorandum of Understanding (MoU) on Operation and Maintenance (O&M) of solar PV systems (inclusive of the pilot sites of the Project)

Mr. Njenga: For the MoU with MoEST, REA's position is not to pursue. For the MoU with MoH, REA's position is to pursue and wait for comments from the Office of Attorney General.

Eng. Kasanga: O&M is for over 2,000 institution where the government has been installing solar PV system since 2005. However, it is difficult to know exactly when and which action will be taken for O&M. The laptop programme is another project, and to conclude on this Project, it is MoE&P's opinion to talk of O&M for 10 sites within the Project. MoE&P and REA will conduct O&M for 10 pilot sites in consultation with the counties.

Ms. Chitani: Will MoE&P have 47 different contracts for 47 counties?

Eng. Kasanga: MoE&P will be contracting with localized contractors to establish time and cost efficiency.

- Dissemination of the established models (Financial/O&M/Technical model)

Dr. Dei: JET has produced guidelines and the validation workshop was also held. JET also asked REA to update as necessary (especially the financial part).

Eng. Kasanga: MoE&P needs to sit down and look at them, so that it can adopt.

- Application of the models to the Rural Electrification Master Plan (REMP) and other related policies

Eng. Kasanga: Rural electrification is mainly grid extension. MoE&P will see how the models will fit in the policies. Now that the financial resources will be at counties, they will build technical capacity and MoE&P will continue to advise them technically in the meantime. For laptop programme, REA will hand over the ownership to the respective schools by June 2015.

- Distribution of the Guidelines

MoE&P and REA will distribute the Guidelines to the concerned parties, County Governments and institutions where MHP, biogas and wind facilities have been installed.

- Cooperation with other related institutions

MoE&P and REA will coordinate technical assistance to the County Governments including training of trainers of staffs in respective public health institutions and schools to enable them to operate solar PV systems.

- Participation to Technical Training, Seminar and Conference

MoE&P and REA will arrange its staff to participate in collaboration with JICA's BRIGHT Project in technical training, academic seminars and conferences offered at JKUAT.

- Monitoring and Ex-Post Evaluation

Mr. Njenga: The ex-post evaluation will be carried out, and MoE&P and REA are requested to report on the status of the 10 pilot sites.

Eng. Kasanga: MoE&P will welcome the evaluation; MoE&P however may not be grasping the best picture at the time of evaluation.

5. Concluding Remarks

Eng. Kasanga thanked the members present and JICA for affording such a cooperation project.

Attendant List

Project for Establishment of Rural Electrification Model using Renewable Energy in Kenya

Meeting Title: 4th JCC Meeting

Venue: MoERP (Nyaya House)

Date: 13th Feb 2015

Time: 10:15 am

SN	Name	Organization	Title	Mobile or E-mail	Signature
1	Samson Kasanga	MoERP	ADRE		
2	Koji Noda	JICA	Jr. Rep.		
3	TSUTOMU DET	JET	Team Leader		
4	Evanson Njiru	JICA, Kenya	Consultant		
5	Ken Shimomura	JET	Coordinator		
6	MINORI CHITANI	JICA Kenya	Representative		
7	Yuka Nakagawa	JET	Bio-gas Expert		
8	Remekiah Onyango	REA	Assistant Engineer		
9	Eng. James Muriithi	REA	SE		
10	Yoshiaki SAMEJIMA	JET	Deputy Team Leader		
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