

## Attachment B Minutes of Meeting

Attachment B-1	Minutes of JCC Meetings
Attachment B-1-1	1 <sup>st</sup> JCC in November 2012
Attachment B-1-2	2 <sup>nd</sup> JCC in October 2013
Attachment B-1-3	3 <sup>rd</sup> JCC in October 2014
Attachment B-1-4	4 <sup>th</sup> JCC in February 2015
Attachment B-2	Minutes of Monthly Meetings
Attachment B-3	Minutes of Progress and Information Sharing Meetings (National Level)
Attachment B-4	Minutes of Progress and Information Sharing Meetings (County/sub-county Level)
Attachment B-5	Minutes of Stakeholders' Meetings with Facility Staff and Management Committees
Attachment B-6	Minutes of Evaluation Meetings with Management Committees and Owners


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

The Project Operation Consultation Team (hereinafter referred to as "the Team"), organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Hiroshi Sumiyoshi, Director of Energy and Mining Division 2, JICA, from 29<sup>th</sup> December, 2012 to 30<sup>th</sup> December, 2012 for the purpose of discussing the scope modification of the Project for ESTABLISHMENT OF RURAL ELECTRIFICATION MODEL USING RENEWABLE ENERGY (hereinafter referred to as "the Project").

During its stay in Kenya, the Team had a series of discussions on the Project with the authorities concerned of the Government of the Republic of Kenya (hereinafter referred to as the "Kenyan side").

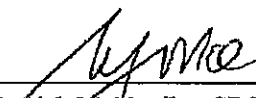
As a result, the Team and the Kenyan side (hereinafter referred to as the "both sides") agreed on the modified points of the scope of the Project, which are confirmed in the documents attached hereto.

Nairobi, November 30<sup>th</sup>, 2012




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Mr. Hiroshi Sumiyoshi  
Director, Energy and Mining Division 2,  
Japan International Cooperation Agency  
Japan



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Mr. Patrick M. Nyoike, CBS.  
Permanent Secretary  
Ministry of Energy  
The Republic of Kenya



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Mr. Zachary O. Ayieko  
Chief Executive Officer  
Rural Electrification Authority  
The Republic of Kenya

## ATTACHMENT

Modified points of the scope of the Project are as follows:

**1. Cancellation of the component for Rural Electrification Model for industrial facilities and pilot projects (Project component 3)**

**(1) Rural Electrification Model for industrial facilities**

In the beginning, the Project aimed to establish a practical model for electrification of industrial facilities using renewable energy through the implementation of the pilot project. For this purpose, the Project tried to utilize UNIDO's concept of electrification of rural facilities to promote industrial or productive activities based on UNIDO's rich experiences and know-how acquired from their own Energy Kiosk/Community Power Center projects. However, it turned out that it was difficult for UNIDO to work for the Project based on the contract with JICA Expert Team.

Additionally, survey of review of Energy Kiosk projects and lessons learnt indicate was defined that careful business plan for industrial activities should be prepared for a sustainable operation of business activities and power supply.

Accordingly, both sides confirmed that the component for Rural Electrification Model for industrial facilities (Project component 3) should be discontinued with immediate effect.

**(2) Reduction of the number of pilot projects**

Originally, both sides agreed that ten (10) pilot projects for public facilities and three (3) pilot projects for industrial facilities would be implemented in the Project to demonstrate feasibility of expected models and obtain useful lessons for establishment of effective rural electrification models, which could be widely spread in the country. However, as mentioned above, both sides agreed that the component of "Rural Electrification Model for industrial facilities" should be withdrawn from the Project. Accordingly, implementation of planned three (3) pilot projects was cancelled. As a result, the total number of pilot projects in the Project is ten (10) public facilities only.

**2. Project Design Matrix (PDM) and Plan of Operation (PO). Both sides agreed that the PDM and PO were revised as shown in Appendix 1 and 2.**

### 3. The new project component

Instead of the component for Rural Electrification Model for industrial facilities and pilot projects (Project component 3), both sides agreed that the Project should introduce more directly effective component for improvement of REA/MOEN's staff capacity as shown in Appendix 3.

Since October 2012, both sides held several detailed discussions on diverse dates regarding the change in this component. Finally, both sides agreed the new component should mainly focus on technical advisory work from JICA Expert Team to REA/MOEN staffs for improvement of REA/MOEN staff's capacity in the fields of rural electrification using renewable energy using micro-hydro power, wind power and Biogas.

### 4. JCC

Both sides agreed about JCC schedule, co-chairmanship, and Project progress report:

#### (1) Schedule

Joint Coordinating Committee (JCC) meetings are scheduled to be held 4 times within the project period, as tentatively indicated below.

- 2<sup>nd</sup> JCC: October 2013
- 3<sup>rd</sup> JCC: July 2014
- 4<sup>th</sup> JCC: February 2015

#### (2) Co-Chairmanship

In addition to the current JCC membership and structure, it is recommended that the position of co-chairman be created and represented by the CEO of REA to facilitate smooth coordination. It was agreed that PS, Ministry of Energy takes care of the JCC Chairmanship and can delegate whenever necessary.

#### (3) Report of Project Progress

Technical transfer to counterparts is a key aspect of JICA's technical cooperation projects. To demonstrate and confirm the progress of technical transfer, project progress needs to be presented by each Kenyan counterpart using prepared materials such as power point.

Eng. Khazenzi, Manager, Renewable Energy Division, REA mentioned that these issues should be one of the agenda of next Management Meeting.

### 5. Procurement of lanterns for Lot 1&2

REA / MoEn will procure LED lanterns for Lot 1 & 2 pilot projects.

### 6. Management Meeting

As JCC takes place only once a year, a more frequent decision-making body is necessary for smooth running of the Project. Practical issues are discussed and decided. The required members in Management Meetings to facilitate discussion are either of Project Managers and the Working Group.

**appendix 1**  
**PDM Version 2.1**  
**Date:2012/12/01**

**Project Title:** The Project for Establishment of Rural Electrification Model Using Renewable Energy

**Implementing Agency:** Rural Electrification Authority (REA) and Ministry of Energy (MoEn)

**Target Group: [Direct beneficiaries]** Staff of REA and MoEn, Staff of MoEd, MoPHS, District Education/Medical Officers in pilot project sites, Staff and users of public facilities of pilot projects in pilot project sites, other stakeholders to be confirmed

**[In-direct beneficiaries]** Local PV suppliers and technicians, power users in rural areas

**Project Site:** Kenya (Pilot project sites to be identified and confirmed)

**Project Period:** 2012– 2015 (3 years)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><b>Overall Goal:</b> Rural electrification models using renewable energy are disseminated in the country to improve the quality of Kenyan's life.</p>	<ul style="list-style-type: none"> <li>• Number of public facilities who apply and follow the model has increased all over the non-electrified areas in Kenya.</li> </ul>	<ul style="list-style-type: none"> <li>• Official reports of MoEn/REA</li> <li>• Financial management reports of the target facilities.</li> <li>• O&amp;M records of the target facilities</li> <li>• User survey</li> <li>• Household survey</li> </ul>	<p>There will be no drastic policy change in rural electrification in Kenya.</p> <p>Recommendations are adopted by relevant organizations.</p>
<p><b>Project Purpose:</b> Rural electrification models using renewable energy are established</p>	<ol style="list-style-type: none"> <li>1. The developed guidelines and manuals are adopted for the projects implemented by the REA and MoEn.</li> <li>2. The Outputs of the Project are incorporated into the Rural Electrification Master Plan (REMP)</li> <li>3. Renewable energy facilities installed by the Project are operated and maintained properly with sustainable manners.</li> </ol>		<p>REMP is regularly updated.</p>
<p><b>Outputs:</b> 1. A practical model for PV electrification of health service institutions in non-electrified areas is developed through pilot projects.</p>	<ol style="list-style-type: none"> <li>1-1. Target benefits of consumer/users are achieved at health service institutions of the pilot projects. <ul style="list-style-type: none"> <li>- The quality of night health service is improved by judgment of nurses and community people.</li> <li>- The expenditure for kerosene and LPG gas of the health institutions decrease by X %.(X will be fixed after cost calculation)</li> <li>- The target health institutions receive revenue from power provision service.</li> <li>- The target health institutions feel satisfaction with the electrification.</li> <li>- The number of households who charge up their LED lantern using the power provision service of the dispensary is up to Y. (Y will be fixed after detailed interview).</li> <li>- The inhabitants in surrounding community feel satisfaction with the electrification of the dispensary in general.</li> </ul> </li> <li>1-2. Number of awareness raising activities on installed solar PV system at target health institutions and community, at least 3 times for each Lot 1 sites and 2 times for Lot 2 sites.</li> <li>1-3. Number of trained staff in target health institution. At least 3 staff have accurate understanding and able to conduct proper O&amp;M of PV facilities.</li> <li>1-4. Number of periodical monitoring carried out by the monitoring team which formulated by counterpart agencies.</li> <li>1-5. Condition of management by health service institutions. <ul style="list-style-type: none"> <li>- Maintenance condition of pilot facilities and quality of O&amp;M report</li> <li>- Condition of balance sheet of pilot institutions and quality of account book</li> </ul> </li> <li>1-6. Number of financial reports which submitted to District Medical Officer(s) of the project sites.</li> </ol>	<ul style="list-style-type: none"> <li>• Project reports;</li> <li>• Records of institutions</li> <li>• Periodical monitoring report prepared by the monitoring team</li> <li>• Reports to District Medical Officer(s);</li> <li>• Questionnaire survey</li> </ul>	<p>Cooperation with related ministries, agencies and local governments is maintained.</p>
<p>2. A practical model for PV electrification of schools in non-electrified areas is developed through pilot projects.</p>	<ol style="list-style-type: none"> <li>2-1. Target benefits of consumer/users are achieved at schools of the pilot projects. <ul style="list-style-type: none"> <li>- The quality of education is improved by judgment of teacher and students.</li> <li>- The expenditure for kerosene and LPG gas of the schools decrease by X %. (X will be fixed after cost calculation)</li> <li>- The target schools receive revenue from power provision service.</li> <li>- The target schools feel satisfaction with the electrification.</li> <li>- The number of households who charge up their LED lantern using the power provision service of the dispensary is up to Y. (Y will be fixed after detailed interview).</li> <li>- The inhabitants in surrounding community feel satisfaction with the electrification of the school in general.</li> </ul> </li> <li>2-2. Number of awareness raising activities on installed solar PV system at target school and community, at least 3 times for each Lot 1 sites and 2 times for Lot 2 sites.</li> <li>2-3. Number of trained staff in target school. At least 3 staff have accurate understanding and able to conduct proper O&amp;M of PV facilities.</li> <li>2-4. Number of periodical monitoring carried out by the monitoring team which formulated by counterpart agencies.</li> <li>2-5. Condition of management by schools. <ul style="list-style-type: none"> <li>- Maintenance condition of pilot facilities and quality of O&amp;M report</li> <li>- Condition of balance sheet of pilot facilities and quality of account book</li> </ul> </li> <li>2-6. Number of financial reports which submitted to District Education Officer(s) of the project sites.</li> </ol>	<ul style="list-style-type: none"> <li>• Project reports;</li> <li>• Records of institutions</li> <li>• Periodical monitoring report prepared by the monitoring team</li> <li>• Reports to District Education Officer(s);</li> <li>• Questionnaire survey</li> </ul>	
<p>3. The Capacity of REA / MoEn to undertake project using MHP, Biogas and Wind technologies is</p>	<ol style="list-style-type: none"> <li>3-1. Number of trained REA / MoEn staff on renewable energy through manual development.</li> <li>3-2. Manuals are adopted and utilized by related ministries, agencies and local governments.</li> <li>3-3. Number of conducted seminar and training for technical transfer.</li> </ol>	<ul style="list-style-type: none"> <li>• Periodical monitoring report prepared by the monitoring team</li> </ul>	

enhanced.			
4. Necessary policy and institutional frameworks for spreading the models for rural electrification using renewable energy are recommended.	<p>4-1. Number of international workshop to share the model is held more than one (EAC conference).</p> <p>4-2. Number of technical transfer workshop given for engineers of MoEn and REA is held more than one.</p> <p>4-3. Number of recommendation that MoEn and REA make for the effective dissemination of RE is more than XX during the pilot project period.</p> <p>4-4. The number of the policies and regulations has increased to support the dissemination of the model.</p>	<ul style="list-style-type: none"> <li>• Project reports,</li> <li>• Periodical monitoring reports prepared by the monitoring team;</li> </ul>	

<p><b>Activities:</b></p> <p>For Preparation</p> <p>0-1. Set up a Working Group (WG) consisting of 3 sub-groups for Outputs 1, 2 and 3, with clarified roles and functions of the counterpart personnel.</p> <p>For Output 1 (The health service institution model)</p> <p>1-1. Review policies, studies, surveys and projects related to electrification of health service institutions using Solar PV.</p> <p>1-2. Select 5 health institutions for pilot projects.</p> <p>1-3. Conduct capacity &amp; needs assessment of target communities, institutions and the private sectors in dealing with the operation and maintenance of renewable energy facilities and the management of energy supply services.</p> <p>1-4. Conduct capacity &amp; needs assessment of officers in relevant ministries, agencies and local governments in dealing with sensitization and education of communities, users, and service providers on renewable energy matters.</p> <p>1-5. Prepare detailed plans of the pilot projects consisting of "System design," "Sustainable O&amp;M" and "Sustainable financial plan."</p> <p>1-6. Organize stakeholders meetings to verify the detailed plans.</p> <p>1-7. Formulate the implementation plans of the pilot projects, including procurement, information &amp; knowledge dissemination, and stakeholders' training.</p> <p>1-8. Implement and monitor the projects' activities, and prepare policy recommendations with institutional framework to promote the health institution model(s).</p> <p>1-9. Monitor and report the progress of indicators to achieve Output 1.</p> <p>For Output 2 (School model)</p> <p>2-1. Review policies, studies, surveys and projects related to electrification of schools using Solar PV.</p> <p>2-2. Select 5 school sites for pilot projects.</p> <p>2-3. Conduct capacity &amp; needs assessment of target communities, institutions and the private sectors in dealing with the operation and maintenance of renewable energy facilities and the management of energy supply services.</p> <p>2-4. Conduct capacity &amp; needs assessment of officers in relevant ministries, agencies and local governments in dealing with sensitization and education of communities, users, and service providers on renewable energy matters.</p> <p>2-5. Prepare detailed plans of the pilot projects consisting of "System design," "Sustainable O&amp;M" and "Sustainable financial plan."</p> <p>2-6. Organize stakeholders meetings to verify the detailed plans.</p> <p>2-7. Formulate the implementation plans of the pilot projects, including procurement, information &amp; knowledge dissemination, and stakeholders' training.</p> <p>2-8. Implement and monitor the projects' activities, and prepare policy recommendations with institutional framework to promote the school model(s).</p> <p>2-9. Monitor and report the progress of indicators to achieve Output 2.</p> <p>For Output 3 (MHP, Biogas and Wind)</p> <p>3-1. Conduct inventory survey and review of existing renewable energy project (MHP, Biogas, Wind).</p> <p>3-2. Prepare manuals for rural electrification using renewable energy (MHP, Biogas, Wind)</p> <p>3-3. Conduct technical training for REA / MoEn staff on MHP, Biogas and Wind.</p> <p>3-4. Prepare technical recommendation for rural electrification using MHP, Biogas and Wind.</p> <p>For Output 4 (Policy recommendations)</p> <p>4-1. Implement and monitor the preparation activities of policy recommendations of Output 1,2 and 3.</p> <p>4-2. Organize workshop(s) on rural electrification models using renewable energy for information sharing with other stakeholders and donors in the energy sector of Kenya and East Africa.</p> <p>4-3. Formulate guidelines and manuals for the components of the health facilities and schools.</p> <p>4-4. Initiate and strengthen the concept of Academic-Private Sector Platform in collaboration with JICA Experts of "the Project for Capacity Development for Promoting Rural Electrification Using Renewable Energy."</p> <p>4-5. Monitor and report the progress of indicators to achieve Output 4.</p>	<p><b>Inputs ( Means and Cost)</b></p> <p><b>Japanese Side</b></p> <p>A. Dispatch of Experts &lt; Short-term Experts&gt;</p> <ul style="list-style-type: none"> <li>• Team leader / Wind power generation</li> <li>• Sub leader / Rural electrification / Micro-hydro power</li> <li>• Photovoltaic power generation</li> <li>• Biomass/gas power generation</li> <li>• Financial management</li> <li>• Socio-economic survey and community mobilization</li> <li>• Procurement and supervision of pilot projects</li> <li>• Environmental and Social Considerations</li> </ul> <p>B. Training of Kenyan personnel (in Japan, in the third country)</p> <ul style="list-style-type: none"> <li>• Counterpart Training, and/or</li> <li>• Group Training Course for Rural Electrification by Renewable Energy</li> </ul> <p>C. Provision of Equipment.</p> <ul style="list-style-type: none"> <li>• Equipment for pilot projects of health service institutions</li> <li>• Equipment for pilot projects of schools</li> <li>• Equipment for pilot projects of industrial development</li> </ul> <p>Other equipment will be specified depending on the requirement for effective implementation of the Project.</p> <p>D. Local Cost (Seminars, meetings, trainings, local and international consultants, etc.)</p> <p><b>Kenyan Side:</b></p> <p>A. Assignment of counterpart personnel</p> <p>B. Provision of office space and facilities at REA (office for JICA experts and Working group members.)</p> <p>C. Allocation of counterpart budget</p>	<p>MOE and REA continue to be responsible for rural electrification in Kenya.</p> <p>Related ministries (MOPHS, MOE, MOI), agencies and local governments take part in the Project actively.</p> <p>Target communities, institutions, and private sectors agree the Project Purpose and take part in the Project actively. EIA procedures do not take longer than planned.</p> <p>Security is maintained</p> <p><b>Pre-conditions</b></p> <p>Related ministries (MOPHS, MOE, MOI), agencies and local governments agree the Project Purpose and accept their roles in the Project implementation.</p> <p>Counterpart, budget, office space and facilities necessary for the Project are allocated</p>
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**Appendix 3**

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

**OUTPUTS**

Output 1: Manuals are prepared for electrification of facilities using wind, biogas/biomass and mini/micro-hydro systems

Output 2: The technical capacity of REA's staff to implement wind, biogas/biomass and mini/micro-hydro generation projects is enhanced

Output 3: Wind, biogas/biomass and mini/micro-hydro generation projects implemented by REA are sustainable

Output 4: Existing information on renewable energy development projects in Kenya is consolidated

**1. MICRO-HYDRO****1.1 Components of JICA Assistance****1.1.1 Technical review and assessment**

## 1) Activity

- i. Review of developed mini and micro-hydro projects and plans.
- ii. Collection and compilation of information related to mini/micro-hydro projects in Kenya
- iii. Summarizing of results, extraction of lessons learned and recommendations

## 2) Expected results

- i. REA's capacity to undertake technical review and assessment is enhanced
- ii. Guidelines for technical review and assessment are developed and applied
- iii. Up to date inventory of projects is developed, applied and managed
- iv. The evaluation results are reflected in the manual, including components such as situational analysis and future trends of mini/micro hydro power technologies in Kenya.

**1.1.2 Technical transfer seminars**

## 1) Activity

- i. Prepare and conduct technical transfer seminars for counterpart staff in charge of mini/micro hydropower development

## 2) Expected result

- i. REA's capacity to undertake project implementation and dissemination of mini/micro hydro power is enhanced
- ii. Guidelines for developing training materials, understanding mini/micro-hydro





### **2.1.2 Technical review and assessment of Projects**

#### 1) Activities

- i. Monitoring of Moi and Mang'u biogas systems (implemented in 2011) and assessment of system performance (Mang'u is operational, with environmental concern whereas Moi is not operational)
- ii. System analysis and recommendations for existing issues (reviving operations, addressing overflow of effluent, etc.)

#### 2) Expected Results

- i. Operation and environmental concerns faced by REA are diminished based on recommendations provided.
- ii. REA's capacity to undertake technical review and assessment is enhanced.
- iii. The monitoring and evaluation results are reflected in the manual, including components such as planning, operation and trouble shooting

### **2.1.3 Technical review and recommendations for Planning, Design and Specification**

#### 1) Activity

- i. Technical support to be provided in reviewing plans, designs and specifications

#### 2) Expected Results

- i. Technical knowledge is transferred to counterparts
- ii. Guidelines for planning, design and determination of specifications are developed and applied

### **2.1.4 Monitoring and recommendations for construction supervision of the contractor**

#### 1) Activities

- i. Technical support in supervision of ongoing construction at project sites
- ii. Recommendations on technical items and quality control requirements to be observed by the contractor.

#### 2) Expected Results

- i. REA's capacity to provide supervision and quality assurance in construction and contractor management is enhanced.
- ii. Guidelines for construction supervision and quality control are developed and applied

### **2.1.5 Monitoring and recommendations for commissioning and user training**

#### 1) Activities

- i. Technical support in monitoring of commissioning tests and user training conducted by the contractor
- ii. Recommendations on requirements for commissioning tests and training

#### 2) Expected Results

- i. REA's capacity to manage contractors is enhanced
- ii. Users' ability to perform operation and maintenance sustainably is enhanced as a result of appropriate and sufficient training.
- iii. Guidelines on commissioning tests and user training are developed and applied

**2.1.6 Monitoring and recommendations on operation and maintenance**

1) Activities

- i. Monitoring of operation and maintenance of biogas generation systems implemented in the 2012 financial year (August 2012- July 2013)
- ii. Summarizing of results, extraction of lessons learned and recommendations

2) Expected Results

- i. Technical knowledge is transferred to counterparts
- ii. Guidelines for monitoring items and improvement of operation and maintenance conditions are developed and applied.

**2.1.7 Preparation of manuals on planning, design and end-user training**

1) Activity

- i. Guidelines will be reviewed and documented in form of manuals, based on 1.1.

2) Expected Result

- i. Comprehensive manuals for rural electrification using biogas technologies are developed and applied.

**2.2 Work Plan**

The work plan is as shown in the table below.

Schedule	2013												2014												2015			
	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		
1 Site survey for planned REA Projects and advise for planning				■	■																							
2 Technical advises for past and on-going REA's biogas project sites				■	■																							
3 Review and advise for planning, design, Specification of REA projects				■	■	■	■																					
4 Monitoring and advise for REA about construction supervision							■	■	■	■	■	■																
5 Monitoring and advise for REA about tests and user training by contractor										■	■	■	■	■	■													
6 Monitoring and advise for REA about Operation and Maintenance																■	■	■	■	■	■	■	■	■	■	■	■	
7 Preparation of planning/design and User's Manual																												
REA's Biogas Project																												
Bid document preparation Tender Construction, Commissioning, Training Supervision Monitoring																												
Dispatch of Japanese Expert (Original)				■	■	■	■																					6.0
Dispatch of Japanese Expert (Revised)				■	■	■	■																					4.5
Output				△						△	▲				△						▲	△				▲	△	
				PR(2)						PR(3)	Draft Planning/Design Manual				PR(4)						Draft User's Manual	PR(5)				Final Manuals	CR	

### **3. WIND**

#### **3.1 Components of JICA Assistance**

##### **3.1.1 Technical review and assessment**

###### **1) Activity**

- i. Review of developed wind projects including: micro wind systems for public facilities, small wind-diesel hybrid systems and large scale grid connected systems
- ii. Review of wind energy development plans with counterparts
- iii. Summarizing of results, extraction of lessons learned and recommendations

###### **2) Expected results**

- i. REA's capacity to undertake technical review and assessment is enhanced
- ii. Guidelines for technical review and assessment are developed and applied
- iii. The evaluation results are reflected in the manual, including components such as situational analysis and future trends of wind technologies in Kenya.

##### **3.1.2 Technical transfer seminars**

###### **1) Activity**

- ii. Prepare and conduct technical transfer seminars for counterpart staff in charge of wind energy development

###### **2) Expected result**

- iii. REA's capacity to undertake project implementation and dissemination of wind power is enhanced
- iv. Guidelines for developing training materials, understanding wind technologies, estimation of power output and design of wind hybrid system are developed and applied

##### **3.1.3 Preparation of manuals on wind power development**

###### **1) Activity**

- i. Guidelines will be reviewed and documented in form of manuals, based on 2.1

###### **2) Expected result**

- i. Comprehensive manuals for rural electrification using wind technologies are developed and applied.

### 3.2 Work Plan

Project	2013												2014													
	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
	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
2-1. Review of developed wind project and development plan in Kenya with counterpart of REA				■	■											■	■									
2-2. Conduct technical transfer seminar on wind technology for REA / MoEn staff										■												■				
2-3. Prepare the manuals for wind power development with counterpart. The manual are used in related division of REA / MoEn.				■	■	■										■	■					■	■	■		
Dispatch of Japanese Expert (Original)				■	■	■			■	■	■					■	■				■	■	■			■
Dispatch of Japanese Expert (Revised)				■	■	■			■	■	■					■	■				■	■	■			■
Output									▲		△										△			▲		

## Project for Establishment of Rural Electrification Model Using Renewable Energy

<b>1st JCC Meeting</b> <span style="float: right;"><b>Date: 30<sup>th</sup> November 2012</b></span>	
<b>Organizations: JICA, REA, MoEn and JICA Expert Team</b>	
<b>Meeting Called By</b>	JICA Project Team
<b>Type Of Meeting</b>	Project Management Meeting
<b>List Of Attendees</b>	<ol style="list-style-type: none"> <li>1. PS. Patrick Nyoike –MoEn</li> <li>2. Eng. Isaac Kiva- MoEn</li> <li>3. Eng. Samson Kasanga- MoEn</li> <li>4. Eng. Raphael Khazenzi- REA</li> <li>5. Eng. James Muriithi-REA</li> <li>6. Caroline Kelly- REA</li> <li>7. Hannington Gochi- REA</li> <li>8. Peninah Wambui- REA</li> <li>9. Mari Kato- JICA Kenya</li> <li>10. Evanson Njenga- JICA Kenya</li> <li>11. Kazumasa Sanui– JICA Kenya</li> <li>12. Hinashi Sumiyoshi- JICA Tokyo</li> <li>13. Kunio Asai- Project Team (Solar PV)</li> <li>14. Tsutomu Dei- Project Team (Wind)</li> <li>15. Yuka Nakagawa- Project Team (Biogas)</li> <li>16. Yuichi Ueda- Project Team (Micro-hydro)</li> <li>17. Hidehito Wakabayashi- Project Team (Finance)</li> <li>18. Kenji Igarashi- Project Team (Environment &amp; Social)</li> <li>19. Yoko Kitauchi- Project Team (Social and Community Mobilization)</li> <li>20. Yuiji Otake- BRIGHT Project</li> <li>21. Ken Shimomukai- Project Team (Coordination)</li> <li>22. Aisha Abdulaziz- Project Team (Assistant- Team Leader)</li> <li>23. Richard Njihia- Project Team (Assistant- Solar PV)</li> </ol>
<b>Agenda</b>	<ol style="list-style-type: none"> <li>1. Welcome address by PS MoEn (JCC chairperson)</li> <li>2. Remarks from JICA</li> <li>3. The role of JCC in the project management structure</li> <li>4. Overall progress in project implementation</li> <li>5. Revised project planning documents: PDM, PO and WP</li> <li>6. Progress report on public solar PV systems</li> <li>7. Update on Management</li> <li>8. Procurement of rechargeable lanterns for lot 1 &amp; 2</li> <li>9. Concluding remarks</li> </ol>

## 10. AOB

**Summary of Discussion****1. Welcome address by PS MoEn (JCC chairperson)**

The chair welcomed members to the 1<sup>st</sup> JCC meeting after a round of introductions and gave a synopsis of the energy situation in Kenya; including the kerosene-free campaign, ongoing cooperation project for geothermal development and the government's commitment to electrification and energy access.

**2. Remarks from JICA**

The meeting was informed about JICA's survey, its objectives and outcomes. A brief overview of the findings was provided and the meeting informed of JICA's concerns and recommendations in regards to the proposed projects. It was noted that implementation of Lot 3 sites was cancelled due to a number of limitations in experience, time and partnership. JICA briefed the meeting on the decision to cancel the pilot projects for micro-hydro, wind and biogas technologies due to results of the study conducted on existing CPCs and the delay in engaging UNIDO.

The study was shared with counterparts for review and it was recommended that an additional ToR be developed for purposes of recommending solutions and showcasing successful projects.

**3. The role of JCC in the project management structure**

The structure and function of the JCC was explained, with the role of the PS being confirmed as that of chairperson/convener. Due to concerns over the availability of the PS, it was proposed and adopted that the director of the renewable energy department of MoEn would chair the JCC in the absence of the permanent secretary.

**4. Overall progress in project implementation**

Due to the cancellation of pilot projects for Lot 3, the discussion was limited to Lot 1 & Lot 2. The project team confirmed that preparation of bidding documents was finalized and the tender process was planned for January 2013 by JICA Kenya. The timeline for implementation of Lot 1 pilot projects was provided as April-June 2013. It was noted that the time was adequate for monitoring and revision of the project design concept should the need arise.

**5. Revised project planning documents: PDM, PO and WP**

Revisions to the project planning documents were highlighted in relation to the cancellation of Lot 3. It was highlighted that objectives and activities related to implementation of the Lot 3 pilot sites had been changed from implementation to technical transfer to counterpart staff. All output 3 items in all the documents were flagged as having been revised.

These changes were noted, accepted and adopted.

## **6. Progress report on public solar PV systems**

The project team shared the site selection information for Lot 1 & Lot 2 pilot projects. The importance of socio-economic surveys was reiterated and noted, with the project team being requested to share the results/documentation with counterparts.

The project team clarified that the focus for Lot 2 pilot projects would be charging of lanterns and batteries as mobile phone charging services were undertaken by private businesses and the project would not like to be in competition with the community.

The project team was also requested to share the solar PV manual once it was finalized.

## **7. Update on Management Issues**

### **Working Group**

The project team requested for revision of the working group composition, which was accepted. However, it was noted that the number of staff in REA's renewable energy department was small and it was therefore agreed that each member of staff would routinely contribute 8 hours a week to the project. It was additionally noted that the counterpart staff would be excused from this requirement when REA's work load was higher, for instance, when staff would be required to conduct site visits.

It was agreed that the working group (management meetings) would be convened once a month during the project team's dispatch period and the meetings would feed back to the JCC.

### **JCC Schedule**

The schedule was adopted as October 2013, July 2014 and February 2015. These were approved as milestones and it was noted that the JCC could be convened on different dates should the need arise. Such recommendations would be expected based on the outcomes of the management meetings.

### **Co-chairmanship**

It was proposed and adopted, that the director of the renewable energy department of the MoEn would chair the JCC in the absence of the permanent secretary. It was therefore not necessary to establish a co-chairmanship.

### **Progress Report**

It was agreed that counterpart staff would engage in preparation of materials such as PowerPoint



### Attendant List

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

**Meeting Title:** 1st JCC Meeting

**Venue:** Nyayo House, MoEn

**Date:** 2012/11/30

**Time:** 9:00am

SN	Name	Organization	Title	Mobile or E-mail	Signature
1	Ken Shimomukai	JICA Expert Team	Project Coord		
2	Yuka Nakagawa	"	Biomass/Progas		
3	TSUTOMU DEE	"	Team leader		
4	Kunio Asai	"	PV technology		
5	Hidekito Wakabayashi	"	Finance		
6	RICHARD N. MBIU	Project Assistant	PV Technology		
7	Aid. Abdulaziz	"	Team leader's Assi		
8	Taichi UEDA	JICA Expert Team	Micro hydro		
9	Yoko Kitauchi	JICA Expert Team	Con. Development/ monitoring		
10	Kenji IGAKAWA	"	Environment & Social Consideration		
11	Hannington Gochi	REA	S-TECH		
12	Eng. R.M. KHAZENZI	REA	MANAGER RE		
13	E. Nyasa	JICA,	Consultant		
14	MARI LATO	JICA	Representative		
15	Caroline Kelly	REA	Asst R/E officer		
16	FENINAH KAROMOH	REA	ENVIRONMENTAL SCIENTIST		
17	ENG. JAMES MWAITI	REA	SWA-ENGINEER		
18	Kazumasa Sawai	JICA Kenya	Senior Rep.		
19	Hiroshi Sumiyoshi	JICA HQ	Director, Energy		
20	Patricia Nyorke	MOE	PS		
21	Eng Isaac Kiva	MOE	Ag. BRE		
22	Y. Otake	Bright Project	Chief Advisor		
23	Eng. Samson Kasongo	MOE	Asst. Director		
24					
25					