

**PEREZ-GUERRERO TRUST FUND FOR ECONOMIC AND TECHNICAL COOPERATION  
AMONG DEVELOPING COUNTRIES, MEMBERS OF THE GROUP OF 77 GOVERNMENT  
OF CHINA**

## **FINAL REPORT**

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**CAPACITY BUILDING ON MANAGEMENT AND UTILIZATION OF SOLAR ENERGY  
RESOURCE FOR IMPROVING LIVING-CONDITION IN RURAL AREA**



**Office of Mountain-River-Lake Regional Development Committee of Jiangxi Province  
(MRLSD)**

**SEPTEMBER, 2018**

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## 1. Project information:

**Title:** Capacity building on management and utilization of solar energy resource for improving living-condition in rural area

**Beneficiaries:** Lake Protection agencies including NGOs and government departments in China, India, Philippine, Sri Lanka; farmers and over 1000 households of rural area in India, Philippine, Sri Lanka.

**Duration of project:** 1 year

**Estimated starting Date:** June 2017

Team leader: Ms. Chen Kui ([ck@mrlsd.org.cn](mailto:ck@mrlsd.org.cn))

Team members: Ms. Mao Yuting ([myt@mrlsd.org.cn](mailto:myt@mrlsd.org.cn)), Mr Guochao Liao ([lgc@mrlsd.org.cn](mailto:lgc@mrlsd.org.cn))

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## **2. Abstract**

The project's aim is to enhance the institutional capacities in utilization of solar energy with special emphasis on the technologies and policies of rooftop PV system. Three major activities should be accomplished during the project period: 1) a training course on solar energy utilization, especially on DSPV, 2) A handbook of different PV policies and technologies in Jiangxi Province will be formulated and distributed to 1000 households in the rural area of participating countries and 3) a international application is co-developed by partner NGOs and MRLSD.

This report states the progresses and outcomes of the three activities. 3 managers and technicians from India, Philippine, Sri Lanka participated in the training course and the seminar. In the training course, the 3 persons obtained the knowledge of some methods and measures of solar energy utilization through lessons and pilot-project investigation. The evaluations of the training course reflected their satisfaction to the training contents and management.

### 3. Activities and outputs

#### 3.1 Activity - I: a training course on solar energy utilization, especially on DSPV, held in Nanchang city and Poyang Lake basin area

During 10-17 of November, 2017, 6 managers and technicians from Sri Lanka, India and Philippines have participated in the training course on alternative livelihood development.

##### 3.1.1 General aspects

The aim of training course on solar energy utilization held in Nanchang city and Poyang Lake Region is to improve the institutional capacities of solar energy utilization in rural area. Two project proposals on solar energy utilization should be developed by the selected organization from Sri Lanka, India and Philippines respectively and the proposals will be jointly submitted to pre-identified donors.

##### 3.1.2 Participants

6 representatives participated into the training course, among which two from EMACE Sri Lanka, two from India and two from Philippines. As same as MRLSD, EMACE Sri Lanka, SAVE of India and SCWP of Philippines are the members of the GNF-Living Lakes. Their objectives are focus on lake protection and stakeholder's benefices of lake areas. The participants'/trainees' information was presented in the table-1.

##### 3.1.3 The course

The training course was divided into two major sections: one section was field trip on the pilot models of solar energy utilization in Poyang Lake Region during 6<sup>th</sup> to 8<sup>th</sup> of September; the other section was lesson-learning and experience-sharing in the MRLSD building at 9<sup>th</sup> of September. In the section 1, three pilot models were introduced to the trainees. Those sites are all co-developed by Jiangxi provincial government, local government and the public. The schedule of the training course can see in table-2. The trainee and trainer attendee signature table can see in Annex-1.

<b>Basic information</b>	
<b>Trainees</b>	
Mr. Ekanayake Mudiyansele Abeyratna	Nationality: Sri Lanka President of EMACE Sri Lanka
Mr. Akila Abeyrathne	Nationality: Sri Lanka Engineer of EMACE Sri Lanka

Ms. Amy M. Lecciones	Nationality: Philippine Vice-President and Executive Director of Society for the Conservation of Philippine Wetlands, Inc. (SCPW)
Ms. Zenaida M. Ugat	Nationality: Philippine Corporate Secretary of Society for the Conservation of Philippine Wetlands, Inc. (SCPW)
Dr. Faheem Syeed Masoodi	Nationality: India Chief executive officer of South Asian Voluntary Association of Environmentalists (SAVE)
Mr. Gousiya Hussain	Nationality: India Board Member of South Asian Voluntary Association of Environmentalists (SAVE)
<b>Instructors</b>	
Mr. Dai Xingzhao	President of MRLSD
Mr. Zeng Xiaoliang	Associated Researcher of Jiangxi Electrical Power Design Institute
Dr. Rao Honghui	Agriculture University of Jiangxi Province
Mr. Ye Jianqing	Manager of Jinko Energy Co., Ltd.
<b>Coordinator</b>	
Ms. Chen Kui	Chief of International cooperation division of MRLSD
Mr. Liao Guochao	Project Manager of MRLSD
Ms. Mao Yuting	Project Manager of MRLSD

Table-1. The participants of the training course

**The schedule of the training course is as followed:**

Date and time		Activities	Food	Accommodation	comment
Sep. 5		Arrive in Nanchang	Jinxi Hotel	Jingxi Hotel	MRLSD will pick you up from the airport
Sep. 6	9:00-11:30	★MRLSD welcome session			MRLSD and each partner-country should introduce themselves and what they do by PPT at least 30 minutes
	15:00-17:30	★Visit Jiangxi Administration of Surveying Mapping and Geoinformation:  1)Visit the exhibition of surveying and mapping 2)Exchanging session 3)Dinner	The canteen of JASMG	Jingxi Hotel	Each partner-country should prepare exchanging content instructed below by PPT for at least 20 minutes
Sep. 7		Visit JinkoSolar	JinkoSolar enterprise	Shangrao Hotel	Take vehicle for 2.30 hour to JinkoSolar in Shangrao
Sep. 8	8:30-11:00	Visit massive solar power station on the way back	Jinxi Hotel	Jingxi Hotel	
	14:30-17:00	Visit Agricultural Machinery Market			
Sep. 9	9:00-11:30	Training course in MRLSD office:  1) Content about Solar power energy 2) Content about Agricultural Machinery	Jinxi Hotel	Jingxi Hotel	

	15:00-17:00	Workshop: 1)Discussion how to strengthen cooperation with each other 2)Filling the evaluation form for the training course 3)Training course closure session			
Sep. 10	9:00-17:00	Visit Poyang Lake wetland	Jinxi Hotel	Random restaurant	
Sep. 11		Departure from Nanchang			MRLSD will assign a vehicle to send you to airport

**What should the participants prepare for this training course:**

1. ★please introduce your institution and what your institution do for your country, and the project you are doing right now, etc. by a PPT form not less than 30 mins.
2. ★★an overview of the social, economic, and natural resources of the country, the region and the lake region respectively, including population, GDP, land area, agricultural land area , and current situation of industries;
3. ★the functions and administrative structure of the government departments dealing with land-use planning or remote sensing technology;
4. ★the current situation of regulatory agencies of the lake region and their job functions, and the lake region profile, with regard to freshwater area, precipitation, land utilization, wetland conservation, and sustainable development of water area ;
5. ★a brief introduction of universities and research institutes engaged in remote sensing technology research in your country; are there any influential enterprises with competitive surveying & mapping products or remote sensing products in your country?
6. ★We provide non-profit technical supports for public interest, which include: application of remote sensing in land suitability analysis, disaster and water resources monitoring, natural resources monitoring in agriculture, forestry and fruit industry, and etc.; organization of related personnel training for remote sensing technicians. You are welcome to put forward feasible technical demands based on the actual work of your organizations;
7. ★maps or traffic maps of the country, province, or lake region that are made publicly available; Books on land-use planning, remote sensing and information technology.

Table-2. The schedule of the training course





Fig 1. Opening ceremony by President Dai Xingzhao



Fig 2. Participants introduce their organization

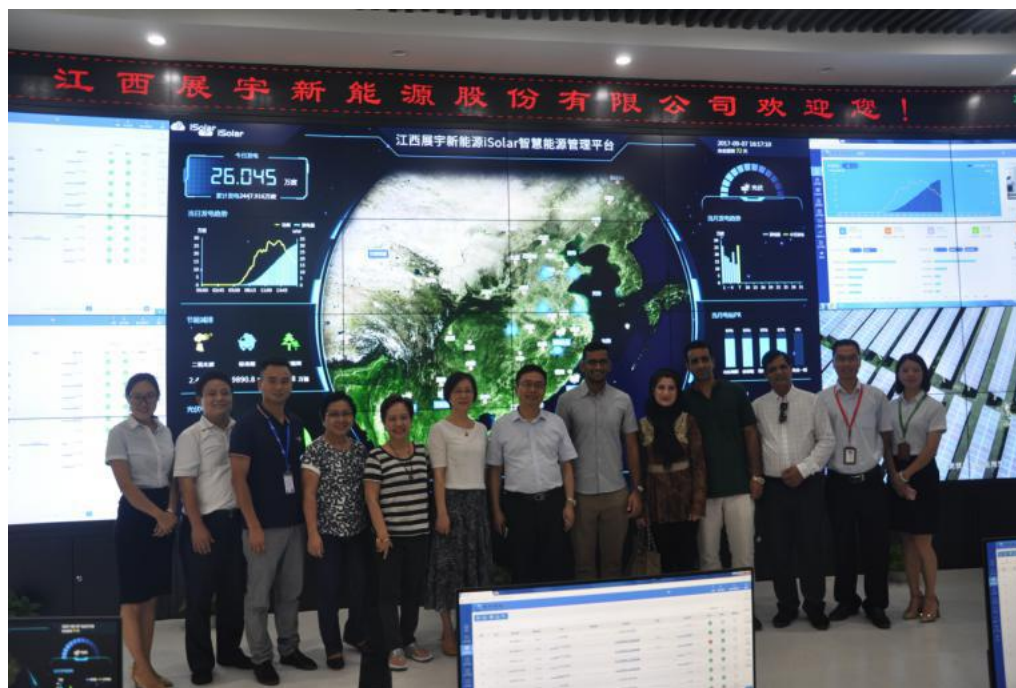


Fig 3. Visiting JinkoSolar



Fig 4. Visiting JinkoSolar solar power station



Fig 5. Visiting Bank of Garbage Exchange

In the section 2, two professionals were invited to work as instructors, namely: Mr. Zeng Xiaoliang, Dr. Rao Honghui, see Annex I. The two professionals have extensive experiences in solar energy management and technologies.



Fig 6. Mr. Zeng Xiaoliang presents Jiangxi solar energy development strategies and discusses with participants



Fig 7. Mr. Rao Honghui presents Jiangxi solar energy technologies and discusses with participants

During this section, all the participants also discussed the potential donors who would be interested in solar energy utilization for poverty alleviation in rural area, and concluded in table-3.

No.	Donors	Comments
1	Switch-Asia Programme	The aim SWITCH-Asia Programme is to promote Sustainable Consumption and Production (SCP) in Asia. It will provide up to 2 million euros each year to support Asian stakeholders to Change their life style and environmental protection by sustainable consumption and production.
2	Jiangxi Science and Technology Department	Jiangxi S&T Department set a fund for Belt & Road development. The fund is focus on making connection and set up technical demonstration in the countries of Belt & Road strategies. The fund is granted at most RMB 200,000 Yuan (about USD 29211 Dollars)
3	Ramsar Conservation on Wetland	The Ramsar Conservation Small Grand Fund (SGF) will be granted to 40.000 Swiss Frances (about USD 42584 Dollars) per project for wetland protection and biodiversity conservation each year. Any NGO engaged in wetland protection are able to apply the grants.
4	Global Nature Fund (GNF)	Global Nature Fund is a non-profit, private, independent international foundation for the protection of environment and nature. It provides EU 10,000 Euros funds to the members of Living Lakes Network for lake protection.
5	China International Science and Technology cooperation	China International Science and Technology cooperation will support some projects relevant to international technical cooperation each year, any organization of China are able to apply. We should pay attention to the new notices about proposal collection.

Table-3. The pre-identified donors

### 3.1.4 Course Evaluation

The course was evaluated by the trainees and by the mean of written assessment form. The form was designed to capture the opinions of trainees on the following issues: training contents, management, and suggestions to improve the course. According to the Assessment Forms, the trainees are all content with the course and they rate “very good” or “good” basically. The Assessment Forms are available in Annex 2.

### 3.1.5 Output and Next step

The training course was successfully introduced solar energy utilization of Jiangxi Province for the trainees. Some measures are considered to be feasible and practicable for some stakeholders of lakes in Sir Lanka, India and Philippine.

The two organizations (EMACE of Sri Lanka and SAVAE of India) should develop proposals on solar energy development and other areas they concerned respectively, and MRLSD will provide the consultants and technical supports for them. These two proposals will be submitted to pre-identified donors (see table-3).

## **3.2 Activity - II: A handbook of different PV policies and technologies in Jiangxi Province will be formulated**

### **3.2.1 General aspects**

The objective of making the handbook is helpful for the participated organizations to extend the knowledge what they learned in China to the stakeholders of their countries. The content of handbook provide information about the solar energy development policies and technologies of Jiangxi Province, the creative solar energy modes and related enterprises are mentioned in the handbook, which is helpful for Jiangxi to promote the international cooperation with the initiatives of Belt & Road .

### **3.2.2 Participants**

Two MRLSD staffs (Ms. Mao Yuting and Mr. Liao Guochao) and 2 experts (Mr. Ye Jianqing and Dr. Rao Huihong) of solar energy in Jiangxi province. (See Table-1)

### **3.2.3 The handbook**

The content of the handbook is focus on solar energy projects and modes in Jiangxi Province. These projects are very successful to demonstrate to other areas to learn and study how to use solar energy to be an alternative solution for coal and gas instead. The handbook is also mainly relative to the rooftop PV power station. The government takes three cooperated measures to promote the solar energy utilization by encouraging the public to install rooftop PV power generation. The project of installing rooftop PV power generation is named thousand household rooftop PV power programme. The three cooperated measures are 1) cooperated contract mode, make a contract between government and the household to install rooftop PV power generation free and make a supplementary electricity payment; 2) government construction mode, the government invest to construct rooftop PV power station on the rooftop of some governmental estates and facilities; 3) the household invests themselves mode, the households invest to construct the PV power generation by themselves and register to the Energy Bureau for unified standard, so that the households can generate electricity to use and supply for their house and the extra electricity send to the public power grid to exchange electricity fees. (See Annex-3)

### **3.2.4 Outputs and Next step**

The one thousands handbooks was printed out and parceled to the participated NGOs of Sri Lanka, India and Philippine. The three NGOs (EMACE Sri Lanka, SCPW of Philippine and SAVE of India) handed

out the handbooks to the stakeholders and their target groups, including renewable energy NGOs, governmental officers, enterprise managers and some initiative farmers.

The next step is to encourage the participated NGOs to promote the solar energy utilization cooperation between China and Sri Lanka, Philippine and India, to try to blend their countries economic development policy with the goals and strategies of Chinese Belt & Road initiatives. This is a chance for the target groups to have a basic understanding the Chinese international development expectation, which is to make business and cooperation to promote the mutual prosperity.

### **3.3 Activity – III: A international application is co-developed by partner NGOs and MRLSD**

#### **3.3.1 General aspects**

- 1) One project proposal on Solar Energy utilization is developed jointly by MRLSD and SAVE of India and submitted to pre-identified donors.
- 2) One project proposal on environmental protection is developed jointly by MRLSD and EMACE of Sri Lanka and submitted to Jiangxi Department of Science and Technology to promote a further cooperation by a project of “Sino-Sri Lanka water environment technical cooperation and demonstration”.

#### **3.3.2 Participants**

The project application is made by the personnel in the table-4.

<b>NO</b>	<b>Name</b>	<b>specialty</b>	<b>Organization</b>
1	Mr. DAI Xingzhao	Agricultural Mechanics	Promotion Association of Mountain-River-Lake Regional Sustainable Development of Jiangxi Province
2	Ms. CHEN Kui	Integrated Watershed Management	Promotion Association of Mountain-River-Lake Regional Sustainable Development of Jiangxi Province
3	Mr. LIAO Guochao	NGO capacity development	Promotion Association of Mountain-River-Lake Regional Sustainable Development of Jiangxi Province
4	Ms. MAO Yuting	Project management	Promotion Association of Mountain-River-Lake Regional Sustainable Development of Jiangxi Province
5	Mr. Ekanayake Mudiyansele	Environmental protection	EMACE of Sri Lanka

	Abeyratna		
6	Mr. Akila Abeyrathne	Engineering	EMACE of Sri Lanka
7	Dr. Faheem Syeed Masoodi	Computer Science	SAVE of Inida
8	Mr. Gousiya Hussain	Computer Science	SAVE of Inida

Table-4. Participants of international co-project application

#### 3.3.4 Outputs

Two project proposals in solar energy development and environmental protection were developed by SAVE and EMACE and submitted to GNF and Jiangxi Department of Science and Technology respectively, MRLSD provides technical supports in the two projects, see Annex -4.



#### 4. Finance

The bellowed table lists the actual expenses for the funding from PGTF (\$32,000 USD).

<b>expenditures</b>	<b>Actual</b>	<b>budget</b>
Training (including labor service, training fee, conference fee, meal and accommodation)	15,606.63	17,000.00
International consultants	6410.45	4,000.00
International travel	7,191.60	7,000.00
Reporting costs (including labor service, administrative expenses)	3,543.68	3,624.00
Execution fee (1%)	0.00	376.00
<b>In total</b>	<b>32752.36</b>	<b>32,000.00</b>

The table below is show the detailed expenditure for the project.

<b>Date</b>	<b>Content</b>	<b>Expenditure in US (Dollar)</b>
April. 2017	Labor Service	1044.78
August. 2017	Conference fee	1891.34
	Consultation	1641.79
September. 2017	Transportation	3694.63
	Training fee	3462.69
	Administrative expenses	728.00
	Meal and accommodation	1781.57
November. 2017	Transportation	1032.41
December. 2017	Consultation	4768.66
	Transportation	6616.79
	Labor service	2149.25
May. 2018	Transportation	920.45
July. 2018	transportation	414.18
	Labor service	1074.63
August. 2018	Administrative expenses	696.27
	transportation	517.31
November. 2018	transportation	317.61
<b>In total</b>		<b>32752.36</b>

## Annex-1. The training course attendee signature

### 签到表/ PARTICIPANTS LIST

NO.	姓名/NAME	单位、职务/UNIT & TITLE	联系方式/CONTACTS	签名/SIGNATURE	备注 /REMARKS
1.	Dr. Faheem Syeed Masoodi	印度自愿者环保协会、执行主任 Chief executive officer, South Asian Voluntary Association of Environmentalists	Mobile: +91-9596312343 Phone: +91-194-2497344 E-mail: masoodifahim@uok.edu.in		
2.	Gousiya Hussain Pandow	印度自愿者环保协会、理事 Board member, South Asian Voluntary Association of Environmentalists	Mobile: +91-9469064365 ; hone: +91-194-2497344 E-mail: gousiya29@gmail.com		
3.	Abeyratna Ekanayake Mudiyansele	斯里兰卡教育-环保-妇女儿童权益基金会、执行主任 Executive Director, EMACE Foundation of Sri Lanka	Telephone: 0094777913393 E-mail: emacefoundation@gmail.com sunfuel@sitnet.lk		
4.	Akila Suvin Daksith Abeyrathne	斯里兰卡教育-环保-妇女儿童权益基金会、工程师 Engineer, EMACE Foundation of Sri Lanka	Telephone: 0094777913393 E-mail: emacefoundation@gmail.com sunfuel@sitnet.lk		
5.	ZENAIDA M. UGAT	菲律宾湿地保护协会、秘书长 Corporate Secretary, Society for the Conservation of Philippine Wetlands, Inc.	Telephone: 0926 626 7003; 63 2 637 2409; zeni.ugat@gmail.com; zeniugat@wetlands.ph		
6.	AMY MORADO LECCIONES	菲律宾湿地保护协会、执行主任 Vice-president & Executive Director, Society for the Conservation of Philippine Wetlands, Inc.	Telephone: (+63) 9175444096; (+632) 637-2409; amy_lecciones@yahoo.com		
7.	曾小亮	江西省电力设计院	18379137295		
8.	饶洪辉	江西农业大学	13479157865		

## Annex-2. Assessment Forms for the training course

**Assessment Form of Training Course on  
Capacity building on management and utilization of solar  
energy resource for improving living-condition in rural area**

Location: Nanchang City of Jiangxi Province  
Duration: 05-11 September, 2017  
Thank you for your participation and cooperation. Please answer the questions belloved for reference.

Subject	No.	Question	Selection			
Training contents	1.	If the training contents are integrated and systemic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
	5.	If the project helpful for your future work?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your Comments	<p>Overall the training course was organized in a very efficient way both practical and too informative in terms of solar energy utilization. All the best of the future. Looking forward to the future.</p> <p>Signature: <i>Gouxi</i> Date: 09/11/17</p> <p>Further participation in the sessions like same.</p>					

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Location: Nanchang City of Jiangxi Province  
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Thank you for your participation and cooperation. Please answer the questions belloved for reference.

Subject	No.	Question	Selection			
Training contents	1.	If the training contents are integrated and systemic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
	5.	If the project helpful for your future work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your Comments	<p>Overall good programme. Looking forward for positive cooperation between Sri Lanka and China.</p> <p>Akile Sewin Sri Lanka. Signature: <i>Akile Sewin</i> Date: 09/09/2017</p>					

**Assessment Form of Training Course on  
Capacity building on management and utilization of solar  
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Location: Nanchang City of Jiangxi Province

Duration: 05-11 September, 2017

Thank you for your participation and cooperation. Please answer the questions bellowed for reference.

Subject	No.	Question	Selection			
Training contents	1.	If the training contents are integrated and systemic?	☐ Yes ☐ No			
	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R? (bell & road)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
5.	If the project helpful for your future work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Your Comments	<p>Very useful programme. technology &amp; innovations will help to develop our country. please link manufacturing company with us for further cooperation. Thank you.</p> <p>Abeysinghe E.M emacefoundation@gmail.com SRI LANKA</p> <p>Signature: <i>Abeysinghe E.M</i> Date: 09/09/2017</p>					

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energy resource for improving living-condition in rural area**

Location: Nanchang City of Jiangxi Province

Duration: 05-11 September, 2017

Thank you for your participation and cooperation. Please answer the questions bellowed for reference.

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	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R? <i>Bell and Road</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
5.	If the project helpful for your future work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Your Comments	<p><i>should be</i> Suggestion; lectures <sup>at the start of the training</sup> to give context to the field visit.</p> <p>- There should be a lecture on OBOR to orient the participants.</p> <p>- Overall, the training was very informative and will help us in our work and further cooperation with MRLSD. Thank you very much!</p> <p>Signature: <i>Amy M Sevin</i> Date: 9/9/2017</p>					

**Assessment Form of Training Course on  
Capacity building on management and utilization of solar  
energy resource for improving living-condition in rural area**

Location: Nanchang City of Jiangxi Province

Duration: 05-11 September, 2017

Thank you for your participation and cooperation. Please answer the questions belollowed for reference.

Subject	No.	Question	Selection			
			Very Good	Good	Just Ok	Poor
Training contents	1.	If the training contents are integrated and systemic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
	5.	If the project helpful for your future work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your Comments	<p>How our country gets in to China B&amp;R is not very clear yet, it needs further study &amp; research/discussion.</p> <p>It would have been perfect, I think if Mr. Zeng's presentation was made before we went to Jinko.</p> <p>Signature: <i>Zenaida M. Ugat</i></p> <p>Date: 10 Sep 2017</p>					

**Assessment Form of Training Course on  
Capacity building on management and utilization of solar  
energy resource for improving living-condition in rural area**

Location: Nanchang City of Jiangxi Province

Duration: 05-11 September, 2017

Thank you for your participation and cooperation. Please answer the questions belollowed for reference.

Subject	No.	Question	Selection			
			Very Good	Good	Just Ok	Poor
Training contents	1.	If the training contents are integrated and systemic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	2.	Training courses	Very Good	Good	Just Ok	Poor
		First day for welcome session and exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Land trip: Solar energy power station and enterprise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on solar energy utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Lectures on agriculture machinery utilization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Seminar on further cooperation, esp. on B&R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.	Trainee	Very Good	Good	Just Ok	Poor
		Mr. ZENG Xiaoliang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dr. RAO Honghui	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Very Helpful	Helpful	Less Helpful	No Help	
	5.	If the project helpful for your future work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6.	If the project helpful for promoting the cooperation between China and your country in the related area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management			Very Good	Good	Just Ok	Poor
	7.	Management of training organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8.	Accommodation condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9.	Food arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	10.	Vehicle arrangement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your Comments	<p>The Overall Organization was quite satisfactory. The organizers team &amp; Jinko company from were very helpful &amp; professional. Few more lectures on cooperation and adaptation of technologies would have been very helpful. A thorough discussion on project aspects.</p> <p>Signature: <i>M. ...</i></p> <p>Date: 10/09/2017</p> <p>Our country at non government level could have been beneficial to the participants. It's somewhat quite satisfactory organization of the programme &amp; optimistic about future cooperation. <i>Jhomas</i></p>					

# Annex-3. The outlook and content of the handbook

**Projects and Modes of Photovoltaic Power Utilization in rural area of Jiangxi Province, China**

MRLSD @ 2017

Prismation Association for Mountain-River-Lake Regional Sustainable Development (MRLSD)  
 Address: North: 10th Road, Governmental Complex, Nanchang  
 Jiangxi Province, China  
 Website: www.mrlsd.org.cn

**Jingxihengfeng-yangjie 50 MW ground photovoltaic power**

1. Jingxi Hengfeng Yangjie 50 MW ground photovoltaic power project is the first domestic "agricultural photovoltaic, water photovoltaic, ground photovoltaic" three-in-one photovoltaic power plant, to give the largest photovoltaic power station in Jiangxi Province. The project allowed the mode of rearing, sowing and harvesting, which reduced vegetation, covered sowing and cultivation in that area. The implementation of photovoltaic project is not only conducive to capture the local ecological benefits of Jiangxi, promote industrial upgrading, but also conducive to local ecological environment protection.



**China energy saving Lanying 20 MW Agricultural greenhouse photovoltaic**

1. China Energy Conservation Lanying Photovoltaic Agricultural Technology Co., Ltd. entered in the industrial of photovoltaic power plant and agricultural greenhouse power plant project in Lanying, Jiangxi Province. This project is a combination of solar photovoltaic power generation and modern agricultural greenhouse. The project is designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.



**20 MW Jiangxi Yanzhengyuan 20 MW Agricultural greenhouse photovoltaic power station**

1. The first Jiangxi and first commercial project of the province and the first and only project in the province to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.



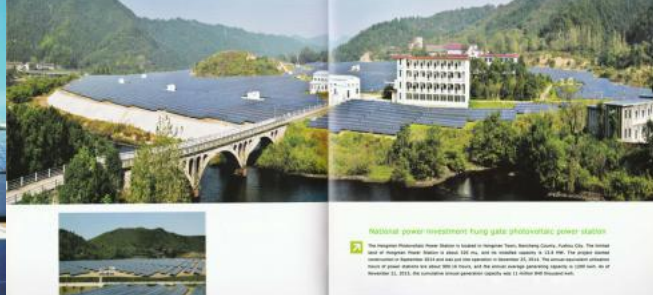
**100 MW photovoltaic power plant in Jiangxi Province**

1. The project is a combination of solar photovoltaic power generation and modern agricultural greenhouse. The project is designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.



**National power investment Jiangxi gate photovoltaic power station**

1. The project is a combination of solar photovoltaic power generation and modern agricultural greenhouse. The project is designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.



**China's first demonstration for building greenhouse and 20 MW photovoltaic power plant**

1. The project is a combination of solar photovoltaic power generation and modern agricultural greenhouse. The project is designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.



**Demonstration Project of 0.5 MW Photovoltaic Agricultural Greenhouse in Jiangxi Rural PaperCo Ecological Science, Technology and Culture Grand View Garden**

1. The project is a combination of solar photovoltaic power generation and modern agricultural greenhouse. The project is designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops. The project is also designed to be combined with the local soil and climate conditions, which can be used for growing vegetables, fruit trees and other crops.









### Solar Power Energy

Fossil energy accounts for more than 90% of China's energy consumption structure **90%**

Small fossil, represented by coal and oil, can still be conservatively extracted for **100 years**

Solar energy in the world's 1 hour can meet the world's energy demand for **1 year**

By 2050, solar PV will reach more than 10% of the world's electricity supply **10%**

By 2060, more than 20% **25%**

By 2080, more than 40% **40%**

#### **Annex-4. Project Proposals**

1. Project proposal of SAVE of India and MRLSD: CLEAN ENERGY AND LIVELIHOOD
2. Project proposal of EMACE Sir Lanka and MRLSD: Sino-Sri Lanka water environment technical cooperation and demonstration