



Solar Home System

Installed by

CMES

# Area Covered:

1. Kayetpara, Sreepur, Gazipur
2. Razabari, Rajendrapur, Gazipur
3. Shokhipur, Tangail
4. Suruj, Tangail
5. Kuripara, Sirajgonj
6. Deuty, Rangpur
7. Ranirbandar, Dinajpur
8. Ghontaghor, Dinajpur
9. Puthia, Rajshahi

10. Elaipur, Nachol, Chapainowabgonj

11. Jaldhaka, Nilphamary

12. Malgara, Lalmonirhat

13. Fulbari, Kurigram

14. Khasherhat, Patuakhali

15. Amtoli, Borguna

16. Pathorghata, Borguna

17. Amua, Jhalkathi

18. Atpara, Netrokona

19. Purbodhola, Netrokona

# The Systems are:

<b>System Power</b>	<b>Usable Load</b>	<b>Package Price</b>	<b>No. of Installation</b>
85 Wp	7 Nos of Tube light (Each 10W) & 1 nos of Television (Black & White)	39,800/-	912
75 Wp	6 Nos of Tube light (Each 10W) & 1 nos of Television (Black & White)	36,500/-	590
65 Wp	5 Nos of Tube light (Each 10W) & 1 nos of Television (Black & White)	32,500/-	1215
50 Wp	4 Nos of Tube light (Each 10W) & 1 nos of Television (Black & White)	26,500/-	1415
40 Wp	3 Nos of Tube light (Each 10W) & 1 nos of Television (Black & White)	21,000/-	2007
20 Wp	2 Nos of CFL light (Each 5W)	12,500/-	911
10 Wp	4 Nos of LED light (Each 2W)	9,000/-	20
		<b>Total</b>	<b>7070</b>

# Plan for Next Three Years

	2012	2013	2014	Total
Installation of SHS	2000	3000	4000	9000
No. of new unit offices to be opened	4	4	6	14
No. of Customers to be trained	1500	2000	2500	5500
No. of Staffs to be Trained	40	60	80	180

# Challenges in Implementation

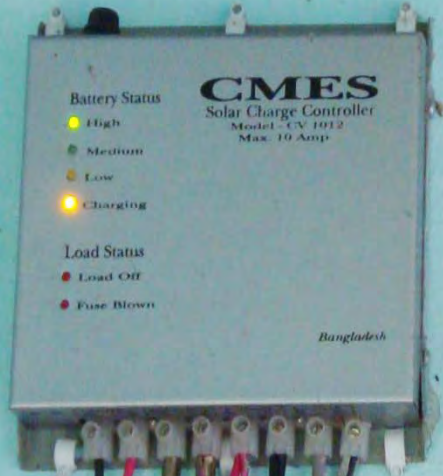
- Customer does not want to pay their installment due in time.
- They misuse the battery part.
- Many customer not enough literate, so don't want to understand rules for the maintenance of the battery, Charge controller etc.
- The distance of customers house sometime so far from the units.
- Lack of proper infrastructure in the remote village.
- They can not follow the user guide
- After being trained and experience staff leave the job.

# Suggestions for Improvement

- Continuous positive monitoring.
- Proper utilization of all resources.
- Make a strong communication with customer.
- Customers training
- Staff training.
- Provide user friendly solar manual.
- Special training for the staff.
- Ensure to supply quality product.



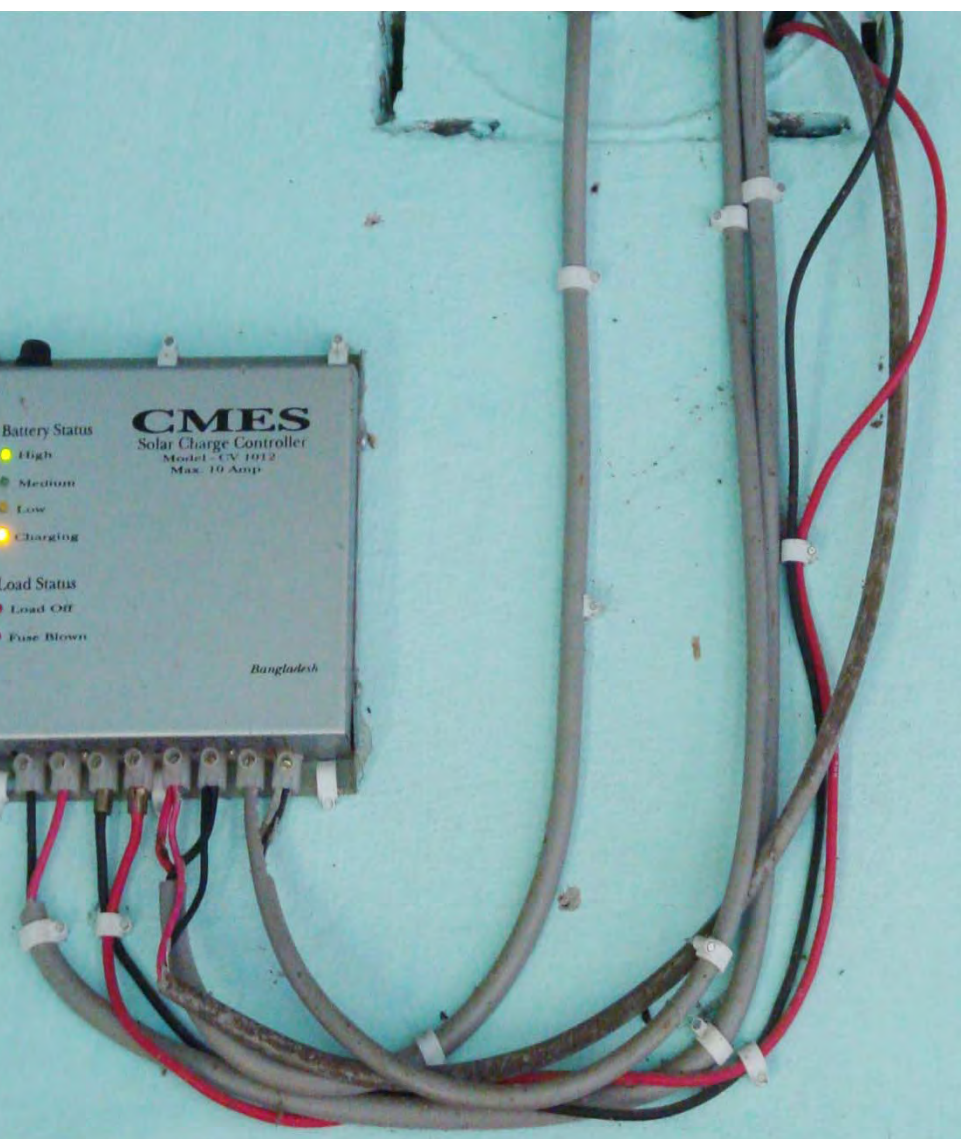


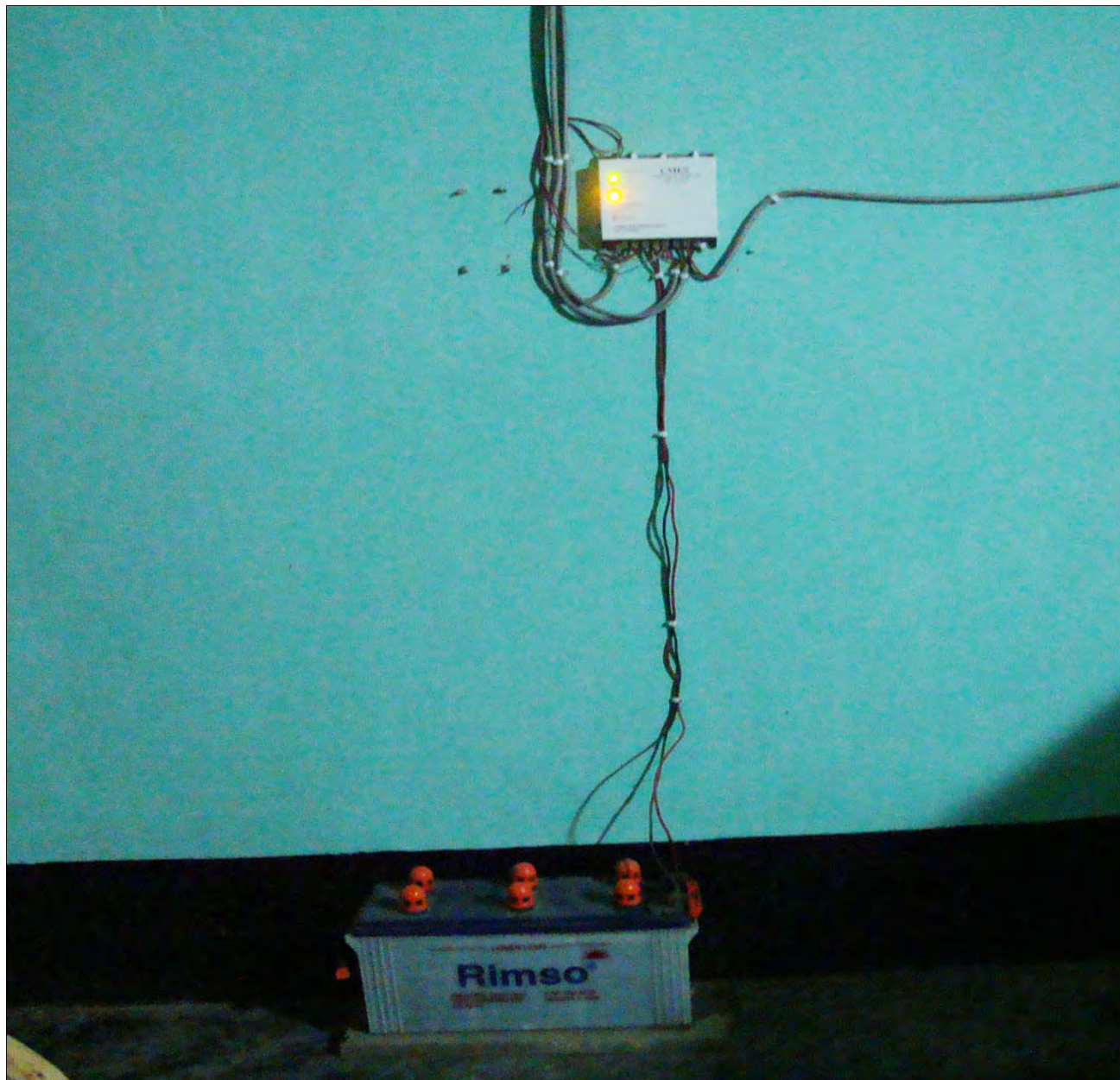


- Battery Status
- High
  - Medium
  - Low
  - Charging
- Load Status
- Load Off
  - Fuse Blown

**CMES**  
Solar Charge Controller  
Model CV 1012  
Max 10 Amp

Bangladesh

















# Introducing small Solar powered water pump in Bangladesh

CMES

## **Overall Objective:**

To Produce, disseminate and test solar drive systems for pumping water in developing countries.

## **Specific Objective:**

The pilot project should prove the reliability of the solar driving system for small pumps in the field test and its adequacy for the needs of small farmers in terms of performance, water output, and connectivity to existing pumps as well as its affordability for small scale farmers.

## **Duration of the Project**

Total : July 2011 to December 2012

# Advantages of Solar Pump System

- Cost-effective for long term basis
- No need of any costly Fuel
- No need of physical labor/maintenance
- Light weight, Portable
- No sound, no heat
- Eco friendly, no pollution, no carbon di oxide
- More efficient Solar Pump system & the Motor
- Can be used where there is no Power grid electricity
- No Electric shock hazard
- Cutting edge Technology

# Location of the Project

No	Unit	District	Upzilla
1	Deuti	Rangpur	Pirgacha
2	Joldhaka	Nilfamari	Joldhaka
3	Ranirbondor	Dinajpur	Chirirbondor
4	Mithapukur	Rangpur	Mithapukur

# How farmers can be benefited

- Help in development of irrigation process for cultivation vegetables by lifting water by Solar Drive System instead of hand pumps (physical labor)
- Development of the livelihood of small and terminal Farmers by increase Crop production by using modern solar pump irrigation system.
- Modification and Stabilization the modern technology by real Piloting research.
- To minimize the running cost by one time Investment.
- To save our environment.

# Nos. of Pump system

- Deuty – Rangpur – 13 Vane Pumps
- Jaldhaka – Nilphamari – 13 Vane Pumps
- Ranirbandar – Dinajpur – 14 Vane Pumps
- Mithapukur – Rangpur – 15 Vane Pumps
- Mithapukur – Rangpur – 25 other pumps

Total 80 Solar Pump systems

# Target group / Customer

- Small Farmers in rural areas not having access to grid electricity and growing only vegetables (where small scale irrigation needed).
- Our Target area is the northern Districts of Bangladesh where water table is within 21 feet (so that our Vane Pump can work).
- Select cluster type lands (for easy monitoring).

# Recent activities in field

We are now in the process of daily pumping and delivery of irrigation water, monitoring of the systems and the irrigation operations.

That we will complete our Phase 1 very soon with satisfaction & success.

CMES will then go for the Phase 2 work.













ଓଡ଼ିଶା ସରକାରଙ୍କ ଦ୍ଵାରା  
ସୋଲାର ପାଣି ପମ୍ପ ପ୍ରକଳ୍ପ  
କଳାଜାକା ହରିମିଠା, ମିଳାଧରା  
ପାଠକ ନମ୍ବର - ୧୮













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সেন্টার ফর ম্যাস এডভান্স ইন সার্কেল (সিএমইএস)  
সোলার পাম্প ফিল্ড টেস্টিং  
জলঢাকা ইউনিট, নীলফামারী  
পাম্প নং - ২৩

THANK YOU